

Performance Plan

Poland

Third Reference Period (2020-2024)

Status: Draft performance plan containing revised RP3
targets (Art. 3 of IR 2020/1627 & Art. 12 of IR
Date of issue: 6th August 2021

Table of Content

1 INTRODUCTION

- 1.1 THE SITUATION
- 1.2 TRAFFIC FORECASTS
- 1.3 STAKEHOLDER CONSULTATION
- 1.4 LIST OF AIRPORTS SUBJECT TO THE PERFORMANCE AND CHARGING REGULATION
- 1.5 SERVICES UNDER MARKET CONDITIONS
- 1.6 FAB PROCESS
- 1.7 SIMPLIFIED CHARGING SCHEME

2 INVESTMENTS

3 PERFORMANCE TARGETS AT LOCAL LEVEL

- 3.1 SAFETY TARGETS
 - 3.1.1 *Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs*
- 3.2 ENVIRONMENT TARGETS
 - 3.2.1 *Environment KPI #1: Horizontal en route flight efficiency (KEA)*
- 3.3 CAPACITY TARGETS
 - 3.3.1 *Capacity KPI #1: En route ATFM delay per flight*
 - 3.3.2 *Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight*
- 3.4 COST-EFFICIENCY TARGETS
 - 3.4.1 *Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS*
 - 3.4.2 *Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS*
 - 3.4.3 *Pension assumptions*
 - 3.4.4 *Interest rate assumptions for loans financing the provision of air navigation services*
 - 3.4.5 *Restructuring costs*
 - 3.4.6 *Additional determined costs related to measures necessary to achieve the en route capacity targets*
- 3.5 ADDITIONAL KPIS / TARGETS
- 3.6 INTERDEPENDENCIES AND TRADE-OFFS

4 CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

- 4.1 CROSS-BORDER INITIATIVES AND SYNERGIES
 - 4.1.1 *Planned or implemented cross-border initiatives at the level of ANSPs*
 - 4.1.2 *Investment synergies achieved at FAB level or through other cross-border initiatives*
- 4.2 DEPLOYMENT OF SESAR COMMON PROJECT
 - 4.2.1 *Common Project One (CP1)*
- 4.3 CHANGE MANAGEMENT

5 TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

- 5.1 TRAFFIC RISK SHARING PARAMETERS
- 5.2 CAPACITY INCENTIVE SCHEMES
 - 5.2.1 *Capacity incentive scheme - Enroute*
 - 5.2.2 *Capacity incentive scheme - Terminal*
- 5.3 OPTIONAL INCENTIVES

6 IMPLEMENTATION OF THE PERFORMANCE PLAN

- 6.1 MONITORING OF THE IMPLEMENTATION PLAN
- 6.2 NON-COMPLIANCE WITH TARGETS DURING THE REFERENCE PERIOD

7 ANNEXES

- ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)**
- ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)**
- ANNEX C. CONSULTATION**
- ANNEX D. LOCAL TRAFFIC FORECASTS
- ANNEX E. INVESTMENTS**

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES

ANNEX J. OPTIONAL KPIs AND TARGETS

ANNEX K. OPTIONAL INCENTIVE SCHEMES

ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME

ANNEX M. COST ALLOCATION

ANNEX N. CROSS-BORDER INITIATIVES

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX S. INTERDEPENDENCIES

ANNEX T. OTHER MATERIAL

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

ANNEX Z. CORRECTIVE MEASURES*

** Only as per Article 15(6) of the Regulation*

Signatories

Performance plan details	
State name	Poland
Status of the Performance Plan	Draft performance plan containing revised RP3 targets (Art. 3 of IR 2020/1627 & Art. 12 of IR 2019/317)
Date of issue	6th August 2021
Date of adoption of Draft Performance Plan	
Date of adoption of Final Performance Plan	

We hereby confirm that the present performance plan is consistent with the scope of Regulation (EU) No 2019/317 pursuant to Article 1 of Regulation (EU) No 2019/317 and Article 7 of Regulation (EC) No 549/2004.

Name, title and signature of representative	
Minister of Infrastructure	
Director General of Civil Aviation of the Republic of Poland	

Additional comments	

Document change record		
Version	Date	Reason for change

SECTION 1: INTRODUCTION

1.1 The situation

- 1.1.1 - List of ANSPs and geographical coverage of services
- 1.1.2 - Other entities in the scope of the Performance and Charging Regulation as per Article 1(2) last para.
- 1.1.3 - Charging zones (see also 1.4-List of Airports)
- 1.1.4 - Other general information relevant to the plan

1.2 - Traffic Forecasts

- 1.2.1 - En route
- 1.2.2 - Terminal

1.3 - Stakeholder consultation

- 1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan
- 1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan
- 1.3.3 - Consultation of stakeholder groups on the performance plan

1.4 - List of airports subject to the performance and charging Regulation

- 1.4.1 - Airports as per Article 1(3) (IFR movements $\geq$ 80 000)
- 1.4.2 - Other airports added on a voluntary basis as per Article 1(4)

1.5 - Services under market conditions

1.6 - Process followed to develop and adopt a FAB Performance Plan

1.7 - Establishment and application of a simplified charging scheme

- 1.7.1 - Scope of the simplified charging scheme
- 1.7.2 - Conditions for the application of the simplified charging scheme

Annexes of relevance to this section

- ANNEX C. CONSULTATION
- ANNEX D. LOCAL TRAFFIC FORECASTS
- ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME

1 - INTRODUCTION

1.1 - The situation

NSA(s) responsible for drawing up the Performance Plan	Polish Civil Aviation Authority acting as NSA

1.1.1 - List of ANSPs and geographical coverage and services

Number of ANSPs	5	
ANSP name	Services	Geographical scope
Polish Air Navigation Services Agency (PANSa)	ANSP (ATS, CNS, AIS, SAR coordination)	Flight Information Region Warszawa, all airports concerned
Institute of Meteorology and Water Management - National Research Institute (IMWM)	METEO	Flight Information Region Warszawa (excluding EPRA TMA and CTR/ATZ, EPSY TMA and CTR/ATZ, EPBY TMA and CTR/ATZ)
Radom Meteo sp. z o.o.	METEO	EPRA TMA and CTR
Warmia i Mazury sp. z o.o.	ATS (AFIS), CNS (COM), METEO	EPSY METEO: TMA, CTR and ATZ, AFIS: ATZ
Port Lotniczy Bydgoszcz S.A.	ATS (AFIS), METEO	EPBY METEO: TMA, CTR and ATZ, AFIS: ATZ

Cross-border arrangements for the provision of ANS services

Number CB arrangements where ANSPs provide services in an other State	1
ANSPs providing services in the FIR of another State	
ANSP Name	Description and scope of the cross-border arrangement
PANSa	In order to reduce the number of coordinations for traffic in AWY L867, a separate area named SOUTH OF DESEN has been established within the PRAHA FIR. This area can be delegated to WARSZAWA ACC and in such case WARSZAWA ACC is responsible for the provision of air traffic control and flight information services within this area. It is based on Letter of Agreement between ANS of the Czech Republic and PANSa and AIP POLAND ENR 2.1.2.

Number CB arrangements where ANSPs from another State provide services in the State	3
ANSPs established in another Member State providing services in one or more of the State's FIRs	
ANSP Name	Description and scope of the cross-border arrangement
LVF Group Air Navigation Services (ATCC Malmö)	In order to reduce the number of coordinations over the Baltic high sea, separate areas have been established, within the WARSZAWA FIR. These areas named MIDSEA and RÖNNE SOUTH can be delegated to ATCC MALMÖ and in such case ATCC MALMÖ is responsible for the provision of air traffic control and flight information services within these areas. It is based on Letter of Agreement between ATCC MALMÖ and ACC WARSZAWA and AIP POLAND ENR 2.1.2.
ANS of the Czech Republic (ACC Praha)	In order to reduce the number of coordinations, a separate area WEST of OKX has been established within the WARSZAWA FIR. This area may be delegated to PRAHA ACC and in such case PRAHA ACC is responsible for the provision of air traffic control and flight information services within this area. In order to reduce the number of coordinations for traffic in the AWY, a separate area SOUTH of KŁODZKO has been established within the WARSZAWA FIR. This area can be delegated to PRAHA ACC and in such case PRAHA ACC is responsible for the provision of air traffic control and flight information services within this area. It is based on Letter of Agreement between ANS of the Czech Republic and PANSa and AIP POLAND ENR 2.1.2.
Austro Control GmbH via DFS Deutsche Flugsicherung GmbH	In order to reduce the number of coordinations for flights at Heringsdorf Airport (CTR), the area named CTR Heringsdorf can be delegated to ACC BREMEN and in such case ACC BREMEN is responsible for the provision of air traffic control and flight information services within this area. It is based on Letter of Agreement between ACC BREMEN and ACC WARSZAWA. DFS Deutsche Flugsicherung GmbH (ACC BREMEN) delegated provision of air traffic control and flight information services within this area (CTR Heringsdorf) to Austro Control GmbH as stated in AIP POLAND ENR 2.1.2.

1.1.2 - Other entities in the scope of the Performance and Charging Regulation as per Article 1(2) last para.

Number of other entities	2	
Entity name	Domain of activity	Rationale for inclusion in the Performance Plan
Civil Aviation Authority of the Republic of Poland (NSA)	Supervision	Only the part of Polish CAA's budget attributable to activities on supervision of Air Navigation Service Providers related to NSA & partially MS obligations are included in the costs bases for air navigation charges. This is in line with Polish Aviation Act and EU Single European Sky Regulations.

EUROCONTROL	Other/Network	Part of EUROCONTROL budget attributable to Poland's cost base.

1.1.3 - Charging zones (see also 1.4-List of Airports)

En-route	Number of en-route charging zones	1
En-route charging zone 1	Poland	
Terminal	Number of terminal charging zones	2
Terminal charging zone 1	Poland - EPWA	
Terminal charging zone 2	Poland - Others	

1.1.4 - Other general information relevant to the plan

Due to the crisis caused by COVID-19, Polish ANSPs were put in a difficult situation in 2020. It was caused both by a significantly lower level of air traffic and existing obligations to provide uninterrupted air navigation services. As a consequence, ANSPs faced problems in several areas of their functioning, including operational, staffing and economic.

In response to the COVID-19 pandemic ANSPs were taking measures aimed at mitigation of the negative impact of the crisis situation. As a consequence, ANSPs were operating in a limited configuration due to the significant decrease in air traffic volume. The duty hours of the operational and engineering staff were reduced respectively. Many of staff training and equipment maintenance plans were postponed due to the introduced physical distancing rules. Some facilities were put in a "sleep" mode due to the absence of operational need and staff availability.

Taking into consideration all above mentioned actions, the situation concerning individual KPI was diverse as indicated below:

KPA SAFETY: COVID-19 pandemic situation did not affect dramatically the safety level of the services provided by ANSPs. The ANSPs have successfully implemented a set of measures to achieve performance targets. Data indicate that safety has remained at a very high level.

KPA ENVIRONMENT: An improvement in the en-route horizontal flight efficiency indicator (KEA) was reported in 2020. In Poland the value of the KEA was achieved at the level of 1.67% with the planned target value of 1.85%. In relation to terminal traffic, an improvement has also been reported. However, these positive results were caused by a significant reduction of the air traffic volume.

KPA CAPACITY: The year 2020 should be divided into two periods: before COVID, covering months from January to mid-March 2020, and the time of COVID pandemic in the remaining period of the year. During the first period a high level of delays was noted, while during the second – a significant reduction in the number of operations was reported, which significantly improved the situation in this KPA. As a result, the delay at the end of the year in Poland was 0 minutes/flight with a target of 0.30 minutes/flight. Similarly, good results in terminal traffic delays were recorded. In case of Poland, the national target was 0.45 minutes/flight, while the actual result was 0.02 minutes flight.

KPA COST EFFICIENCY: In the area of cost-efficiency, both in terms of en-route and terminal charges, the 2020 targets for the COVID-19 pandemic reason have not been achieved. In the area of en-route charges, the total number of service units (TSU) decreased in 2020 compared to 2019 by 56.8%, i.e. from 4.971.806 in 2019 to 2.145.811 in 2020 with a nominal decrease in total ANSP's costs in 2020 by 3.1%, and in constant prices from 2017 by 5.3%. Similarly, in the area of terminal charges at EPWA airport, i.e. in the first zone of terminal charges, the number of TSUs decreased in 2020 compared to 2019 by 59.5%, i.e. from 107.857 in 2019 to 43.367 in 2020, with a nominal decrease total costs in this area in 2020 by 21.9%, and in constant prices from 2017 by 24.1%. On the other hand, in the area of terminal charges in the second zone, the number of TSUs decreased in 2020 compared to 2019 by 55.0%, i.e. from 138.516 in 2019 to 62.352 in 2020, with a nominal decrease in total costs in 2020 by 2.9%, and in constant 2017 prices by 5.3%.

As indicated in the latest STATFOR forecast (May 2021), achievement of air traffic volumes recorded before 2019 will be possible in the latest years of RP3, assuming that the range of COVID-19 remains low and passengers will regain confidence in use of air transport.

It will create the situation when the biggest challenge for next years of the RP3 is to provide navigation service to meet requirements of pre-COVID-19 air traffic level. For the description of the macroeconomic situation, see Annex R.

Relevant local circumstances with high significance for performance target setting and updated view on the impact of the COVID-19 crisis on the operational and financial situation of ANSPs covered in the performance plan

Additional comments
Not applicable.

1.2 - Traffic Forecasts

1.2.1 - En route

En route Charging zone 1

Poland

En route traffic forecast

STATFOR Base forecast MAY 2021 (Flight Plan 2017-19, Actual Route 2020-2024)

STATFOR Base forecast MAY 2021 (Flight Plan 2017-19, Actual Route 2020-2024)	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	793	872	912	377	390	643	781	888	-0,5%
IFR movements (yearly variation in %)		10,0%	4,7%	-58,7%	3,6%	64,7%	21,5%	13,7%	
En route service units (thousands)	4 291	4 666	4 972	2 146	2 241	3 496	4 186	4 802	-0,7%
En route service units (yearly variation in %)		8,8%	6,6%	-56,8%	4,4%	56,0%	19,8%	14,7%	

1.2.2 - Terminal

Terminal Charging zone 1

Poland - EPWA

Terminal traffic forecast

STATFOR Base forecast MAY 2021

STATFOR Base forecast MAY 2021	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	85,6	93,6	97,1	39,9	43,0	68,1	85,9	96,4	-0,1%
IFR movements (yearly variation in %)		9,4%	3,7%	-58,9%	7,7%	58,5%	26,0%	12,2%	
Terminal service units (thousands)	90,7	102,6	107,0	43,4	46,2	75,2	96,1	108,7	0,3%
Terminal service units (yearly variation in %)		13,2%	4,3%	-59,4%	6,3%	62,8%	27,8%	13,1%	

Terminal Charging zone 2

Poland - Others

Terminal traffic forecast

STATFOR Base forecast MAY 2021

STATFOR Base forecast MAY 2021	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	106,6	119,5	124,2	57,2	59,2	92,0	113,5	124,3	0,0%
IFR movements (yearly variation in %)		12,1%	3,9%	-54,0%	3,4%	55,5%	23,4%	9,5%	
Terminal service units (thousands)	113,4	130,9	137,4	59,2	60,9	100,8	125,7	138,9	0,2%
Terminal service units (yearly variation in %)		15,4%	5,0%	-56,9%	3,0%	65,4%	24,7%	10,5%	

1.3 - Stakeholder consultation

1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan

Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan
During meetings held with stakeholders Polish NSA presented proposals of the changes to the Performance Plan developed in 2019, resulting from changes caused by COVID-19 pandemic. Discussions were focused on Key Performance Areas targets, including environment, safety, capacity and cost-efficiency, and additionally on the incentive scheme mechanism. During the consultation the priorities and requirements were discussed and there was an opportunity to incorporate them in the plan. Stakeholders agreed with many of NSA proposals, nevertheless there were also areas of disagreement. Discussion during the meetings was open and created room for stakeholders to present their positions and expectations. Polish NSA conducted meetings on following dates: - 27 May 2021; - 28 June 2021. Details concerning the results of the meetings are provided in the Annex C.

1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	No	
Charging policy	Yes	
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Select	
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	
Establishment or modification of charging zones	Select	
Establishment of determined costs included in the cost base for charges	Yes	
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	Select	
Where applicable, decision to apply the simplified charging scheme	Select	
New and existing investments, and in particular new major investments, including their expected benefits	Yes	

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	PANSA (ATS, CNS, AIS, SAR coordination provider), Warmia i Mazury sp. z o.o. (AFIS, COM, MET provider), Port Lotniczy Bydgoszcz S.A. (AFIS, MET provider), Radom METEO (MET provider) and the Institute of Meteorology and Water Management – National Research Institute (MET provider).
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	
Additional comments	

#2 - Airspace Users	
Stakeholder group composition	Pending 31 August 2021 consultations

Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#3 - Professional staff representative bodies	
Stakeholder group composition	Pending 31 August 2021 consultations
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#4 - Airport operators	
Stakeholder group composition	Pending 31 August 2021 consultations
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#5 - Airport coordinator	
Stakeholder group composition	Pending 31 August 2021 consultations
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#6 - Other (specify)	
Stakeholder group composition	Pending 31 August 2021 consultations

Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

1.4 - List of airports subject to the performance and charging Regulation

1.4.1 - Airports as per Article 1(3) (IFR movements ≥ 80 000)

ICAO code	Airport name	Charging Zone	IFR air transport movements			
			2016	2017	2018	Average
EPWA	Warsaw/Okecie	Poland - EPWA	153 805	171 059	187 235	170 700

1.4.2 Other airports added on a voluntary basis as per Article 1(4)

Number of airports	14		
ICAO code	Airport name	Charging Zone	Additional information
EPKK	Kraków-Balice	Poland - Others	Average IFR movements in 2016-2018: 49 897
EPGD	Gdańsk im. Lecha Wałęsy	Poland - Others	Average IFR movements in 2016-2018: 40 394
EPKT	Katowice-Pyrzowice	Poland - Others	Average IFR movements in 2016-2018: 32 499
EPWR	Wrocław-Strachowice	Poland - Others	Average IFR movements in 2016-2018: 27 247
EPPO	Poznań-Ławica	Poland - Others	Average IFR movements in 2016-2018: 20 750
EPRZ	Rzeszów-Jasionka	Poland - Others	Average IFR movements in 2016-2018: 8 467
EPSC	Szczecin-Goleniów	Poland - Others	Average IFR movements in 2016-2018: 5 701
EPBY	Bydgoszcz	Poland - Others	Average IFR movements in 2016-2018: 3 598
EPMO	Warszawa/Modlin	Poland - Others	Average IFR movements in 2016-2018: 19 196
EPLL	Łódź	Poland - Others	Average IFR movements in 2016-2018: 4 139
EPLB	Lublin	Poland - Others	Average IFR movements in 2016-2018: 3 856
EPZG	Zielona Góra-Babimost	Poland - Others	Average IFR movements in 2016-2018: 855
EPRA	Radom-Sadków	Poland - Others	Average IFR movements in 2016-2018: 1 031
EPSY	Olsztyn-Mazury	Poland - Others	Average IFR movements in 2016-2018: 1 349

Additional comments
In Poland only Warsaw Chopin Airport (EPWA) has more than 80.000 IFR movements per year, so the Performance and Charging Regulation (Implementing Regulation 2019/317) directly applies to this airport. In addition, based on the decision of the Minister of Infrastructure, Poland acted in line with the Article 1.4. of the Regulation 2019/317; therefore it was decided to apply the provisions of the Regulation to the terminal ANS at fourteen regional airports (Kraków-Balice, Gdańsk im. Lecha Wałęsy, Katowice-Pyrzowice, Wrocław-Strachowice, Poznań-Ławica, Rzeszów-Jasionka, Szczecin-Goleniów, Bydgoszcz, Warszawa/Modlin, Łódź, Lublin, Zielona Góra-Babimost, Radom-Sadków and Olsztyn-Mazury) with fewer than 80.000 IFR movements per year, as they are part of the common Terminal Charging Zone - TNC-Other. For actual figures of IFR MVS for regional airports, see: EUROPEAN ANS Performance Data Repository http://ansperformance.eu/data/performancearea/

1.5 - Services under market conditions

Number of services under market conditions	0

1.6 - Process followed to develop and adopt a FAB Performance Plan

Description of the process
Not applicable

1.7 - Establishment and application of a simplified charging scheme

Is the State intending to establish and apply a simplified charging scheme for any charging zone/ANSP?	No

SECTION 2: INVESTMENTS

2.1 - Investments - Polish Air Navigation Services Agency (PANSa)

- 2.1.1 - Summary of investments
- 2.1.2 - Detail of new major investments
- 2.1.3 - Other new and existing investments

2.2 - Investments - Institute of Meteorology and Water Management - National Research Institute (IMWM)

- 2.2.1 - Summary of investments
- 2.2.2 - Detail of new major investments
- 2.2.3 - Other new and existing investments

2.3 - Investments - Radom Meteo sp. z o.o.

- 2.3.1 - Summary of investments
- 2.3.2 - Detail of new major investments
- 2.3.3 - Other new and existing investments

2.4 - Investments - Warmia i Mazury sp. z o.o.

- 2.4.1 - Summary of investments
- 2.4.2 - Detail of new major investments
- 2.4.3 - Other new and existing investments

2.5 - Investments - Port Lotniczy Bydgoszcz S.A.

- 2.5.1 - Summary of investments
- 2.5.2 - Detail of new major investments
- 2.5.3 - Other new and existing investments

Annexes of relevance to this section

ANNEX E. INVESTMENTS

NOTE: The requirements as per Annex II, 2.2.(c) are addressed in item 4.1.2

2.1 - Investments - Polish Air Navigation Services Agency (PANSA)

2.1.1 - Summary of investments

Number of new major investments	12

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	01440701_Campus	722 261 693,19	167 859 621	549 906	631 355	665 177	2 288 368	7 156 864	40	93%	7%	after RP3
2	02440701_Communication_systems	54 777 201,50	40 095 848	114 013	579 999	1 842 991	3 166 642	4 616 139	00/15/20	100%	0%	2024, after RP3
3	03440701_ITEC	274 984 161,16	170 534 161	1 035 326	1 666 984	2 621 440	5 327 066	7 291 415	10	100%	0%	after RP3
4	06440701_VCS_system	34 620 195,72	14 820 196	0	21 718	113 374	317 136	734 581	05/15	100%	0%	after RP3
5	21440701_ATM_OPS_Centre_Poznan	92 335 658,74	4 447 011	4 611 003	5 156 274	6 024 362	5 955 829	5 861 950	07/20/40	100%	0%	2021, 2022
6	IP470701_U-Space_Program	29 110 511,63	11 242 540	52 467	210 573	520 573	859 003	1 150 560	10	0%	100%	after RP3
7	IT170202_Tower_at_the_Central_Hub_Airport	61 538 020,32	38 020	0	0	0	0	1 121	15/40	30%	70%	after RP3
8	IT430803_Radar_PSR/MSSR_Gdańsk	24 966 688,34	24 960 773	339	982	134 952	868 480	2 574 887	15/20	100%	0%	2024
9	IT430900_Modernization_of_the_ATM_system_2	101 011 895,22	34 821 457	261 369	1 152 209	3 024 868	4 225 617	4 095 759	10/15	88%	12%	2022
10	IT440732_MLAT_system_for_FIR_Warsaw	35 950 118,80	22 683 430	0	3 420	98 717	464 541	1 948 517	10	90%	10%	after RP3
11	IR470209_CWP_TWR	32 313 561,60	8 445 298	37 760	85 433	317 115	376 595	518 744	07/10/40	88%	12%	after RP3
12	IT430404_Server_Business_Infrastructure	25 985 556,32	20 795 077	0	33 276	564 639	2 270 703	4 325 434	05	81%	19%	recurring
Sub-total of new major investments above (1)		1 489 855 263	520 743 432	6 662 184	9 542 222	15 928 209	26 119 979	40 275 970				
Sub-total other new investments (2)		822 072 250	406 576 722	4 446 137	8 642 821	21 397 508	37 254 372	47 252 183		86%	14%	
Sub-total existing investments (3)				178 560 981	178 047 754	167 982 237	152 833 158	139 503 851		84%	16%	
Total new and existing investments (1) + (2) + (3)		2 311 927 513	927 320 154	189 669 302	196 232 797	205 307 953	216 207 510	227 032 004				

* The total % enroute+terminal should be equal to 100%.

2.1.2 - Detail of new major investments

NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives on new major investments.

Name of new major investment 1	01440701_Campus	Total value of the asset	722 261 693,19 PLN

Description of the asset	The aim of the project is to build a new PANSA headquarters. The project includes construction of a new ACC and APP OPS room to take over all operational functions of the current facility in Warsaw (excluding EPWA TWR and Training Center). The new Campus will become the place from which the majority of air traffic (ACC, APP) and auxiliary services for Poland will be performed. The new Campus will replace the existing facilities of the PANSA used to that end. Current PANSA premises do not provide enough space and are functionally not sufficient and their technical limitations prevent further development. The following main functionalities are planned at the Campus: • Significantly larger ACC OPS room enabling installation of new ATCO workstations necessary to open more sectors wherever the need arises, also correlated with the Solidarity CTH investments. • Creation of new autonomous APP OPS rooms (currently APP and ACC OPS rooms in Warsaw premises are combined with very limited space and technical possibilities for development). • Construction allowing for installation of technical equipment outside OPS room – improving ATCO working conditions. • Infrastructure for creation of a Big Data Centre - application of solutions ensuring data security. • Providing space for future virtual airport control towers (rTWR). • Creating infrastructure for development of other technologies. • Facilities for crisis prevention and management. • Solutions supporting new technologies and required level of safety and security, as well as energy savings. New Campus will house installation of the new ATM system - ITEC, which due to technical limitations cannot be installed in the current Warsaw buildings. The total value of the assets increased (in comparison with 2019 CAPEX forecast), as a result of the accomplishment of the project development phase of the investment. It should be emphasized that until the design documentation was accomplished, the value of the investment was an estimation and was based on the indicative price estimation method. As a result of the completion of the design phase the priced bill of quantities was prepared, and the total value of the investment has been made more realistic taking into account the actual (at the time of preparing the documentation) valuation of the applied solutions against the estimated valuation. Due to the COVID-19 pandemic, the investment schedule has been revised and phased approach has been foreseen to the Campus construction. The construction schedule and phasing is closely correlated with the schedule of the ATM system (ITEC) implementation. The schedule and detailed elements of each phase can be subject to further refinements. At the current stage the following phases are considered: I phase - The operational building A and B, which includes technical building with the power supply, compressive underground infrastructure (waste water and rain water sewer network, water mains), fire-protection systems that allow early fire detection (SAP), a fire-extinguishing system located in the premises that are most critical for operations, utilities i.e. electricity, gas, water, sewage system, access and internal roads as well as parking places and guard-houses for security; the planned start of the stage is 2023, and the planned completion date after RP3 (2029). II phase - HQ building with a underground staff car park; planned start of the stage is after RP3. III phase - The warehouse and social housing; planned start of the stage is after RP3. Preparation of time and work schedule for the first phase of the project (construction of operational elements of the facility) is currently ongoing.	
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No	
Level of impact of the investment	Network	Yes
	Local	Yes
	Non-performance	
Quantitative impact per KPA	Safety	Improving safety in FIR Warsaw through elimination of “single points of failure” and prevention of any possible failures in the main ATM system (reduced risk of ATM system and database failure). Ensuring the continuity of ANS provision and security along the increase in air traffic. Improving safety through increased system resilience to cybersecurity threat. Improvement of work standards in CWP, including improvement of ATCO working conditions, the ability to implemented a new ATM system without distrupction or interruption of air operations.
	Environment	Possibility of opening additional sectors will have positive impact on flight trajectories (shorter routes and optimisation of flight profile)
	Capacity	Improved ability to adapt to air traffic flows and increase of airspace capacity through additional workstations (possibility to open additional ACC sectors) and implemented new ATM system. Allowing for uninterrupted air operations - reduced risk of irregularities (reduced cost of delays/interruptions). Ability to implemented a new ATM system without distrupction or interruption of air operations.

	Cost Efficiency	Cost-effectiveness, obtained from the implementation of solutions for new infrastructure (e.g. energy saving infrastructure). For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.
Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	No	
Investment in ATM systems	No	The campus construction itself does not constitute investment in ATM system. However, new campus is a compulsory element for ITEC implementation in PANSa - the current HQ does not meet the infrastructure requirements for system installation. Therefore campus should be considered as enabler to the new ATM system implementation.
If investment in ATM system, type?	Click to select	Not applicable.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select	Not applicable.

Name of new major investment 2	02440701_Communication_systems	Total value of the asset	54 777 201,50 PLN
Description of the asset	The project is directly related to new ATC centres: Campus and ATM OPS Centre Poznań aimed at providing ACC and APP services, and to the new ATM system. The project goal is to provide the newly-built air traffic control centres with the necessary communication infrastructure/systems (G-G, A-G) for both voice and data transmission. A part of the project is building new radio-communication stations for ATS (ACC). Additionally, the project requires installation of necessary technical equipment such as: structured cabling, rack cabinets and a power system for devices installed in cabinets, etc. The project covers only COM system for en-route services – does not include TWR units. Providing the Poznań ATC Center and the ATC Center in Reguły with the necessary systems for voice communication and data transmission is a precondition for achieving operational capabilities by the Poznań ATC Center and the ATC Center in Reguły. The following main functionalities are planned: • Creation of infrastructure necessary for digital data transmission, • Creation of reliable, professional voice and data transmission systems, improving efficiency of ATCO work and enabling reducing reaction time, * Equipment and infrastructure necessary for new radiolocation centre, • Enabling implementation of new technologies and system solutions, including satellite communication. The communication systems are precondition for achieving full operational efficiency of the new ATC centres - current ATC facilities in Warsaw do not provide sufficient space or technical possibilities for implementation of new technologies. Final costs are not available yet, but to provide reliable estimation current value is based on information collected from the ATM system provider in 2021.		
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No		
Level of impact of the investment	Network	Yes (as the new Campus and ATC OPS Centre Poznań)	
	Local	Yes	
	Non-performance		
Quantitative impact per KPA	Safety	Securing continued access to services. Ensuring the safety of operations by securing ground and air-to-ground communication. Safety level maintained along traffic growth. Improving safety through reduction of reaction time to operational events and increasing situational awareness of ATCOs.	
	Environment	No impact	
	Capacity	Ensuring continuity of ANS in case of ATC centre in Warsaw failure (contingency provision). Increased airspace capacity through enabling operational implementation of new ATC centres. Reduced risk of irregularities resulting in lower cost of delays.	

	Cost Efficiency	Benefits should be considered in conjunction with the Poznań ATC Centre and the ATC Centre in Reguły. For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.
Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	No	
Investment in ATM systems	No	The communication systems itself do not constitute investment in ATM system. However, the project is directly related to ATC centres and should be considered as enabler to putting into operation new ATC centres, which are a condition for the new ATM system implementation.
If investment in ATM system, type?	Click to select	
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	Although the investment does not constitute investment in ATM system, the following links to ATM MP can be identified: ATM MP/LSSIP: COM11; ITY-AGVCS2; The investment falls under a digitalisation thread and contributes to the idea of Digital European Sky concept.

Name of new major investment 3	03440701_iTEC	Total value of the asset	274 984 161,16 PLN
Description of the asset	The project covers new iTEC core ATM system planned to be installed in the new ATM OPS Center in Poznan and new Campus. iTEC system will be based on the system platform PEGASUS_21 and key components acquired as part of iTEC cooperation, which are jointly developed and financed by a group of leading ANSPs in Europe. Currently, the scope of cooperation includes iFDP modules (Flight Plan Data Processing), iCWP (Controller Working Position) and iMAS (Middleware), but further convergence is foreseen to elaborate a single operational concept and uniform ATM system. iTEC will be primarily dedicated to ACC and APP units – TWR units are to be supported by other systems (following implementation of Electronic Flight progrEss Strips and Virtualization of ATS airport services). The following main functionalities are planned: • Modern system, based on common, uniform open code standards (easier development and extension than P_21), • Full interoperability (incl. Flight Object Interoperability, SWIM), • 4D flight trajectory, • Flexible airspace structures management with increased number of elementary structures, • Advanced trajectory modelling /management algorithm, enabling full cross-border FRA implementation, • Virtualization (independent of equipment and facilities), • Increased reliability, • Test/validation environment for SESAR2020 R&D solutions and trainings. Positive impact is expected through: modular architecture, cheaper and faster implementation of new technologies, virtualization/reliability/flexibility of the system, more efficient international cooperation, easier implementation of new SESAR solutions. The project will be implemented in two stages. The first is the new ATM contingency system in ATC Center Poznań (delivery, installation and implementation of the first version in ATC Center Poznań for testing, validation and ATCO training), while the second includes implementation of the new ATM system in new Campus (an upgrade version to support the complexities of the airspace in this area). The total value of the asset increased as a result of change in valuation and scope. Current concept of installing the system in Poznań ATC Center assumes system based on iTEC V3 components, while earlier iTEC V2 was considered. The total value of the asset was revised but the value of the asset allocated to ANS in the scope of the RP3 PP is not expected to change, as large part of the project will extend beyond the RP3 timeframe.		
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No	The new ATM system will include functionalites mandated by CP1 - it will continue with fuctionalities listed under PEGASUS system upgrade 2 below.	
	Network	Yes, Medium. Final deployment in the new Campus might be related with transitional capacity regulations. On the other hand the system implementation is expected to improve operational performance in FIR Warszawa, thereby positively impacting the whole network.	

Level of impact of the investment	Local	Yes, High. Enterprise architecture affected. The system implementation is expected to improve operational performance in the whole FIR Warszawa.
	Non-performance	Yes, High. Availability of a georedundant centre is critical for medium to long-term continuity of operations after a critical breakdown.
Quantitative impact per KPA	Safety	Maintenance of safety level along the increasing traffic through high system reliability with reduced time for possible failure identification and elimination and reduction of risk of ATM system failure. Improved safety through improving situational awareness of ATCOs and better potential aircraft conflict detection.
	Environment	Shorter flight trajectories (increased number of elementary structures with optimised shape, flexible sectors management, cross-border FRA) will allow to reduce operating (non-fuel) costs for aircraft operators and reduce CO2 and other emissions, positively influencing related costs for the aircraft operators (e.g. ETS). Reduced holding time due to work on sectorless airspace levels.
	Capacity	System development offers better operational efficiency. Increased airspace capacity through increased number of elementary structures and flexible sectors management. Allowing for increased number of ATCO workstations/sectors open. Reduced leadtime for implementation of changes. Further capacity increase through implementation of SESAR2020 solutions which are currently R&D.
	Cost Efficiency	Improving cost-efficiency through: sharing the costs of development and maintenance of the ATM systems, sharing server maintenance costs. Better control over costs in the event of a change in the system (as compared to P_21). Reduction of costs through lower system modernisation costs (as compared to P_21), reduction of cost of new workstations (no costs for a single seat license), reduction of infrastructure (hardware) costs due to virtualisation. Avoidance of exponentially rising costs in case of P_21 maintenance after RP3. For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.
Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	Yes	The system deployed in the new centers will have the core components upgraded to the versions developed within the iTEC alliance. PANSA is part of iTEC Collaboration, alliance aiming at development of common ATM system amongst all partners (DFS, NATS, ENAIRE, LVNL, AVINOR, PANSA, ON and INDRA). The system deployed in the new centers will have core components which will be part of iTEC Collaboration common activities and projects. PANSA and SE OroNavigacija, both as iTEC Collaboration partners and Baltic FAB partners cooperate in the frame of SDM governed implementing projects to deploy PCP and CP1 framework.
Investment in ATM systems	Yes	
If investment in ATM system, type?	New system	iTEC system will be based on the system platform PEGASUS_21 currently used by PANSA.

If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	iTEC core components are enablers for the medium to long-term Master Plan subjects, especially: • ATC15.2 - Arrival Management Extended to En-route Airspace • ATC17 - Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer • ATC18 - Multi Sector Planning En-route - 1P2T • OD-5 – Virtual Centre concept, CWP and service interface • FCM08 - Extended Flight Plan The investment is linked with and supports the implementation of the following ATM Functionalities of the PCP/CP1 regulation: • AF#3: Flexible ASM and FRA • AF#5 - Initial SWIM - o Sub-AF 5.3 Aeronautical information exchange - o Sub-AF 5.4 Meteorological information exchange - o Sub-AF 5.5 Cooperative network information exchange - o Sub-AF 5.6 Flight information exchange (FO) • AF#6: Initial Trajectory Information Sharing; • AF#6.1: Initial Trajectory Information Sharing;

Name of new major investment 4	06440701_VCS_system	Total value of the asset	34 620 195,72 PLN
Description of the asset	The project covers VCS system (technical devices) for FIR Warsaw (directly related to PANSA new ATC centres: in Poznan and the new Campus, aimed at providing ACC and APP services) with dedicated communication infrastructure. The project consists of equipping the air traffic controller stations in these two new OPS centres with the VCS (Voice Communication System) system, integrating all available communication systems. The following main functionalities are planned: • Integration of aeronautical communication networks (radio and fixed) with access from all ATCO workstations, • Recording of all communication at ATCO workplace – required for occurrence investigation, • VCS system in ATC OPS Centre Poznań reflecting system implemented in current ATC OPS room in Warsaw to facilitate prompt shifting of operations in case of Warsaw location unavailability (contingency), • Additional functionalities in OPS room in Campus – integration of VCS with ATM system, • Implementation of Voice over IP functionality supporting flexible access management. The VCS system is required for operational implementation of the new ATC (ACC, APP) centres - current ATC facilities in Warsaw do not provide sufficient space for installation of new technologies. The schedule was adjusted to the implementation schedules of the Poznań ATC Center and the Reguły ATC Center.		
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No		
Level of impact of the investment	Network	Yes (as the new Campus and ATC OPS Centre Poznań)	
	Local	Yes (as the new Campus and ATC OPS Centre Poznań)	
	Non-performance		
Quantitative impact per KPA	Safety	Maintenance of safety-level through availability of modern, reliable communication systems, providing good situational awareness of ATCOs.	
	Environment	No impact.	
	Capacity	Ensuring continuity of ANS in case of ATC centre in Warsaw failure (contingency provision). Increased airspace capacity through enabling operational implementation of new ATC centres. Reduced risk of irregularities resulting in lower cost of delays.	
	Cost Efficiency	No impact. Benefits should be considered in conjunction with the Poznań ATC Centre and the ATC Centre in Reguły. For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.	

Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	No	
Investment in ATM systems	No	The VCS system itself does not constitute investment in ATM system. However, the project is directly related to ATC centres and should be considered as enabler to the new ATM system implementation.
If investment in ATM system, type?	Click to select	Not applicable.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	Although the investment does not constitute investment in ATM system, links with ATM MP can be identified: the investment falls under a digitalisation thread and contributes to the idea of Digital European Sky concept.

Name of new major investment 5	21440701_ATM_OPS_Centre_Poznan	Total value of the asset	92 335 658,74 PLN
Description of the asset	Construction of an ATC Centre Poznań with required operational and technical infrastructure. ATC Centre Poznań will be the contingency centre for Warsaw FIR (in the future for the Campus), including for EPWW ACC and other regional APP centres. The project consists of building a backup center for air traffic control services located in Warsaw and main center for the approach control services (APP) for Poznan TMA. The project includes preparation of design documentation and construction of a new ATC Centre in Poznań together with technical infrastructure allowing further development of ATM system, development of R&D projects for further CNS/ATM improvement, support to new functionalities implementation. The following main functionalities are planned: • primary location for Poznań APP services and Poznań FIS services, • backup center for EPWW ACC and other regional APP centres (Warsaw, Kraków, Gdańsk) enabling services continuity up to 100% (current EPWW contingency abilities: up to 30% of 2019, • environment for testing/validating and developing of new iTEC ATM system enabling acceleration of iTEC implementation as PANSa main ATM system. • providing space for the development of new technology NAVIHub (center for research, development and innovation in ATM), and future virtual airport control tower centre (RTC). The total value of the asset slightly increased since 2019 due to the need for additional works necessary for putting the center into operation - the need arose during the works. Small change of schedule (due to COVID).		
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No		
Level of impact of the investment	Network	Yes	
	Local	Yes	
	Non-performance		
Quantitative impact per KPA	Safety	Improving safety in FIR Warsaw through elimination of "single points of failure" and ensuring the continuity of ANS provision (contingency centre).	
	Environment	Avoiding negative impact of possible Warsaw ACC center closure on flight trajectories and thereby avoiding higher emissions and related costs and increased operating (non-fuel) costs for aircraft operators.	
	Capacity	Ensuring continuity of ANS in FIR EPWW, including preventing significant limitation of EPWW capacity in case of ACC OPS room failure (contingency). Reduced risk of irregularities (lower cost of potential delays). If Warsaw traffic control centre was closed, 70% of air traffic would be negatively affected (canceled flights, delays).	
	Cost Efficiency	Lower future iTEC implementation costs as the main PANSa ATM system in the campus. For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.	

Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	No	
Investment in ATM systems	No	
If investment in ATM system, type?	Click to select	Not applicable.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The investment will support overall digitalization of ATM.

Name of new major investment 6	IP470701_U-Space_Program	Total value of the asset	29 110 511,63 PLN
Description of the asset	The name of the investment refers to U-space/ UAV environment for ease of internal processes in PANSa – despite this name, the scope of the investment does not cover full set of functionalities related to U-space/ UAV environment, but especially those related to ensuring efficient procedural and cooperative interface with ATC/ATM, as covered by PANSa ANS/ATM certificate. The investment aims at deployment of the ATC interfacing system in line with the SESAR U-space Blueprint and the investment predictions expected from ANSPs on basis of the document European ATM Master Plan: Roadmap for the safe integration of drones into all classes of airspace. This is reflected in the new edition of ATM Master Plan (ver 2020). The U-space programme at PANSa includes two projects: "Unmanned Traffic Management integration with ATM systems" and "Tracking of UAVs". Growing number of UAV flights in Controlled Zones (CTRs) showed the need for digitisation of the coordination process and the simplification of flight approval process. The system's primary goal is to support Air Traffic Controllers in providing safe air navigation services to manned aircraft and ensuring separation. The project constitutes a support to PANSa Tower Systems Development (TWR) plans, as well as a requirement and service to aerodrome control services. PansaUTM system along with the other interoperable systems for ATCOs like the Electronic Flight progrEss Strips (EFES) system and PANDORA aeronautical information display system, is considered to play a significant role in ensuring safe, continuous, smooth and efficient air navigation in Polish airspace for all airspace users. The PansaUTM system is currently operationally running on all 15 TWRs and 5 FIS sectors in Poland supporting operational and situational awareness of operational staff, managed by the dedicated UAS Operations Department at PANSa. The PansaUTM system might be subject of possible integration with other ATM systems in the future such as ITEC system of FIS electronic flight strips. The investment project will cover the following assets: • The system (intangible asset), which supports procedural and collaborative interface with existing ATM system to facilitate coordination of manned traffic and support ATS work providing required additional information on UAVs and its additional development to new versions due to the change of regulations concerning drone operations (including National and European regulations); • Infrastructure and systems for UAVs tracking (excluding detection). The following main functionalities are planned: • Digitisation and automation of UAV flight coordination with PANSa digitising the procedural and collaborative interface with ATC, • Visualisation of UAV operations on display supporting the provision of air navigation services for manned aircraft, • Potential conflict situation identification and emergency management function informing non-verbally on ie. loss of control of the UAV which minimizes the risk of separation minima infringement to manned aircraft. Investment is necessitated by dynamic increase of UAV operations especially in controlled zones and still current safety concerns regarding unattended drones which might interfere with safe air navigation services provision. The project does not include UAV traffic management services (understood as those outside of the scope of ATM/ANS definition in SES Regulations), as well as UAV detection and drone defence systems, which are currently out of scope ANSPs agenda and function. Since 2019 update of the value and schedule was done due to changes in the project execution.		
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No		
Level of impact of the investment	Network	Yes	
	Local	Yes	
	Non-performance		

Quantitative impact per KPA	Safety	Maintaining level of safety along the dynamic increase in UAV traffic through improved situational awareness of ATCOs (more accurate prediction of potential collisions through identification of UAV position and visualisation of flight trajectory). Reduced workload for ATCOs through automation and digitalisation of procedural ATC interface. The system will be a core element of U-space concept implementation, in line with the latest edition of ATM Master Plan, as a single point of truth which will provide the reliable information to ATCOs to support air navigation service provision as defined in Article 2 (4) of Regulation (EC) No 549/2004. It would help to obtain information on cooperative and help to identify non-cooperative drones, which occasionally are reported to ATC by manned aircraft air crew and might endanger the existing level of safety of manned aircraft operators (current airspace users). The system is aimed at minimisation of number of incidents related to drones and potential hazard of uncooperative drones by providing the interface to ATC from expected different U-space service providers on the market. Tracking would help preserve the airspace infringements in the airports' controlled zones, decreasing number of potential incidents, which might cause missed approaches and delays and related unnecessary costs for impacted stakeholders. The project excludes UAV detection and drone defence systems, which are currently out of scope of ANSPs agenda and function.
	Environment	UAVs tracking would bring additional information on current position of the UAV, which would be an asset in decision making process of ATCOs concerning the possibly impacted manned traffic in controlled airspace, limiting potential holdings on approach/go-arounds (missed approaches) or waiting time before departure and thereby leading to lower emissions. Limiting risk of negative operational consequences (diversions, holdings) in case of incursion of aircraft into controlled zones – reduced fuel burn and related costs in case of holdings.
	Capacity	Digitisation of the UAV flight coordination process at Controlled Zones (CTRs) would reduce time needed for granting the permission, increase the number of possible flights and lower the workload of the ATCOs due to introduction of 2-way non-verbal communication between ATCO and the UAV operator. It would eliminate the voice coordination. The tracking methods to be eventually introduced to the system would help to increase capacity and to identify the true location of the UAVs. Greater awareness of UAV traffic around airports and interface with ATM systems will preserve the airspace infringements in the controlled zones and separation minima infringements, and as a result would decrease potential incidents which might cause missed approaches and delays. Limiting risk of negative operational consequences (diversions, holdings) in case of incursion of aircraft into controlled zones – reduced delays.
	Cost Efficiency	Lower workload related to the flight coordination process – both for TWR ATCO and for PANSa staff issuing permissions for UAV operations in Controlled Zones. Avoiding potential ATCO number increase dedicated to UAV traffic services. For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.
Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	Yes	Partnership with HAWK-E/ Droneradar until the end of 2020. Currently without partnership.
Investment in ATM systems	No	Partly as the Interface with the ATC and integration with ATM systems.
If investment in ATM system, type?	Click to select	Not applicable.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select	Investment in line with investment predictions expected from ANSPs on the basis of the document European ATM Master Plan: Roadmap for the safe integration of drones into all classes of airspace as incorporated to the latest edition of the ATM Master Plan (interface with ATC service).

Name of new major investment 7	IT170202_Tower_at_the_Central_Hub_Airport	Total value of the asset	61 538 020,32 PLN
Description of the asset	New Tower for Central Hub - construction of a new Tower building with supporting facilities and systems. The scope of the project includes design works, construction works, purchase of technical equipment and operational implementation. Related assets include TWR building, power supply systems, utilities infrastructure, furniture, equipment related to administrative and social functionalities as well as basic ATCO stations equipment (without ATC-related systems). The task schedule is closely correlated with the Solidarity CTH investments.		

The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No	
Level of impact of the investment	Network	Yes
	Local	Yes
	Non-performance	
Quantitative impact per KPA	Safety	The tower will contribute to the overall safety at the airport.
	Environment	
	Capacity	TWR is necessary to provide ATS Services at the airport. The airport is planned to provide required capacity in the light of air traffic increase in the region. Therefore the TWR infrastructure needs to be considered as an integral element of providing capacity to accommodate growing traffic to/from Poland/region. It is aimed at enabling aircraft operations at the new hub airport to be built in the light of limited Warsaw Chopin Airport capacity.
	Cost Efficiency	For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.
Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	No	
Investment in ATM systems	No	
If investment in ATM system, type?	Click to select	Not applicable.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select	Not applicable.

Name of new major investment 8	IT430803_Radar_PSR/MSSR_Gdańsk					Total value of the asset		24 966 688,34 PLN	
Description of the asset	New radar PSR/MSSR (replacement of currently used radar PSR/MSSR) with associated infrastructure. The project covers design and installation of radar facility, including construction of necessary building elements as well as communication lines, construction of technical building with supporting power supply and telecommunication connections and road access and fence. New Mode-S functionality is planned to be introduced. The project includes the construction of radar facilities for the needs of approach control (with the possibility of using it also for area control). The following main functionalities are planned: • PSR/MSSR surveillance in Gdańsk TMA, • Mode-S functionality. Replacement required to ensure reliability of SUR infrastructure and service continuity. As a result of the COVID-19 pandemic, the decrease in air traffic and the need to reduce capital expenditure, the schedule for the task execution was extended.								
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the Single European Sky							
	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability		

Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)							Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky	
Benefits for airspace users and results of the consultation of airspace users' representatives	Please see Annex E.							
Joint investment / partnership	No							
Investment in ATM systems	No							
If investment in ATM system, type?	Click to select	Not applicable.						
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The investment falls within the ATM MP (edition 2020) i.e. the Essential Operational Change concerning CNS infrastructure and services that seeks to optimize CNS infrastructure across Europe. The optimisation process should be consistent with the CNS Roadmap (as included in the ATM Master Plan), targeting surveillance architecture, with cost and spectrum efficiency, composed of ADS-B and a Minimal Operational Network including Mode S radars and Multilateration systems. The investment is also linked and supports the ADS-B implementation plan.						

Name of new major investment 9	IT430900_Modernization_of_the_ATM_system_2					Total value of the asset		101 011 895,22 PLN	
Description of the asset	Continuation of maintenance and development of Pegasus_21 ATM system installed in 2013 (the existing core ATM system in PANSAs). Scope of changes foreseen for RP3 covers, i.a. implementation of third layer of vertical split, increasing number of ATCO workstations, support to full Mode-S implementation, ongoing implementation of recommendations following incident investigation, implementation of functionalities supporting coordination with TWR electronic flight strips system and implementation of changes supporting cross-border OLDI shortcuts (precondition for cross-border FRA). The following main functionalities are planned: • implementation of multilayer vertical split with increased number of ACC sectors open; • possible activation of larger number of areas and functionalities supporting tactical shortcuts; • improved activation and visualisation of alerts on ATCO display, following safety recommendations, supporting early conflict detection and resolution; • support to aircraft identification using Mode-S functionalities; • integration with TWR systems (electronic strips); • voiceless communication, communication directly with the application which will speed up ATCO work. A new contract with the system supplier was signed in Dec 2020. The contract value (higher by apr. 10 million PLN) includes new functionalities related to the improvement of the ATM system and the improvement of communication between P_21 and the implemented electronic flight strips (EFES tower system).								
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	The scope of the upgrade project includes support for, but is not limited to, the following regulations: Regulation No 1207/2011, 1028/2014 and 2017/386 - Surveillance Performance & Interoperability (SPI) Regulation No 1206/2011 and 2020/587 - Aircraft Identification (ACID)							
	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability		

Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)							Regulation No 1207/2011, 1028/2014 and 2017/386 - Surveillance Performance & Interoperability (SPI) Regulation No 1206/2011 - Aircraft Identification (ACID)	
Benefits for airspace users and results of the consultation of airspace users' representatives	Please see Annex E.							
Joint investment / partnership	No							
Investment in ATM systems	Yes							
If investment in ATM system, type?	Overhaul of existing system							
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The investment supports digitalisation and the overall idea of the Digital European Sky. It also supports the CNS optimisation/rationalisation as highlighted in the ATM MP (edition 2020). The investment is linked with the ATM MP L3 objectives such as AOM21.2 - Free Route Airspace - improved cross-border support, ITY-ACID - Aircraft Identification (related to reg. 1206/2011); And on top of this, it is linked with CP1, i.e.: AF#3: Flexible ASM and FRA and AF#6: Initial Trajectory Information Sharing.						

Name of new major investment 10	IT440732_MLAT_system_for_FIR_Warsaw					Total value of the asset		35 950 118,80 PLN
Description of the asset	Implementation of MLAT system for FIR Warsaw – investment is an element of SUR modernisation and development in PANSa to ensure continuity of ANS through multiple radiolocation coverage in FIR Warsaw (in particular SUR for APP and better coverage for ACC) and to implement Mode-S functionalities. The following main functionalities are planned: • improvement of SUR coverage, especially for APP control at major airports, with required redundancy level (minimum of double coverage, supporting service continuity in case of radar failure or service/replacement activities); • Mode-S implementation; • support to ADS-B implementation in line with SESAR programme, optimising SUR infrastructure; • improved resilience interference, and improved coverage at lower altitude in hilly areas; • enabler for reduced separation in TMAs. As part of the RP3 PP revision, the schedule and scope of individual stages of the project were verified, taking into account, on the one hand, the need to postpone the costs incurred, and on the other hand, the experience of implementing the MLAT infrastructure in EPWA and the necessity to decommission obsolete radars operating significantly beyond the standard assumed operating life, as well as the assumption of successive achievement of operational benefits. There are some changes in the material scope and changes in the schedule of incurring expenses.							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the Single European Sky						
	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	

Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)							Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky	
Benefits for airspace users and results of the consultation of airspace users' representatives	Please see Annex E.							
Joint investment / partnership	No							
Investment in ATM systems	No							
If investment in ATM system, type?	Click to select	Not applicable.						
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The investment falls within the ATM MP (edition 2020) i.e. the Essential Operational Change concerning CNS infrastructure and services that seeks to optimize CNS infrastructure across Europe. The optimisation process should be consistent with the CNS Roadmap (as included in the ATM Master Plan), targeting surveillance architecture, with cost and spectrum efficiency, composed of ADS-B and a Minimal Operational Network including Mode S radars and Multilateration systems. The investment is also linked and supports the ADS-B implementation plan.						

Name of new major investment 11	IR470209_CWP_TWR		Total value of the asset	32 313 561,60 PLN
Description of the asset	The CWP TWR project consists in the modernisation of TWR in FIR Warszawa in the scope of unifying working positions through the use of technology that allows the necessary minimum technical equipment to be left at workstations. The scope of the project has been extended as compared to initial RP3 assumptions. The figures above reflect the currently estimated CAPEX and related cost for the project and its value estimate was updated. Implementation of the CWP TWR project will enable remote data exchange in the future, based on free access to operational data obtained from various sources (a/c, airport, other airport, ultimately Network Manager and any other interested air traffic control unit), transmitted to the right places in real time. The following main functionalities are planned: • unification of the TWR working position; • minimising the number of technical devices in the TWR operating room (transferring them to the technical room), which will limit the number of technical interventions in the operating room; • adaptation for the implementation of modern air traffic management systems in the future; • facilitation of flexible change of ATCO roles at TWR, including adding or merging positions; • the CWP will eliminate the need to add new equipment (monitors) when introducing and developing new systems (e.g. SMGCS) in the future. The project is set up to ensure full ATC provision up to and during the period of refurbishment. The project includes installation of full coverage ATC alternative facilities and contingency for all activities required to successfully complete the project.			
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No			
Level of impact of the investment	Network			
	Local	Yes		
	Non-performance			

Quantitative impact per KPA	Safety	Improvement of ATCO situational awareness due to simplification and unification of display systems. Minimizing the number of technical devices in the TWR operating room (transferring them to the technical room) will limit the number of technical interventions in the operating room. As a consequence, the number of working hours of the TWR controller in arduous conditions caused by the repair / maintenance of technical devices in the operating room will significantly decrease and the quality of service will be maintained even in case of installing additional devices. The unification of the TWR working position will allow for the continuity of work without the effect of the employee's initial adaptation to a different arrangement of the workplace. Facilitation of contingency provision between towers.
	Environment	
	Capacity	Facilitation of installation of ATC supporting systems and data exchange aimed at capacity maintenance/improvement - operating positions will be adapted to the implementation of modern air traffic management systems in the future. Unification and standardization of work stations will enable efficient role management at the operational position and facilitates contingency plans, also between towers.
	Cost Efficiency	Elimination of future need to install additional displays for the purpose of new ATC support systems at TWRs - enabler to flexible software evolution. Support to flexible role management at TWRs and thereby efficiency in ATC personnel management, allowing avoidance of TWR ATCO increase. For quantitative impact of RP3 major investments (result of CBA analysis expressed in NPV) please see Annex E.
Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	No	
Investment in ATM systems	No	
If investment in ATM system, type?	Click to select	Not applicable.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The investment will support overall digitalization in ATM.

Name of new major investment 12	IT430404_Server_Business_Infrastructure	Total value of the asset	25 985 556,32 PLN
Description of the asset	The project includes server infrastructure that needs to be replaced or supplemented. Currently the project is directly related to the new ATM System in ATC centres and server business infrastructure (hard technical devices) for FIR Warsaw. The project covers purchase of the necessary server infrastructure for ATM system. In 2021 the new ATM system contractor in Platform Definition Document specified the hardware equipments necessary for its installation. As a result, there was a need to plan new specialized servers, matrices with software. The value of the project above reflect the estimated cost as detailed cost estimation is not yet available. The total value of assets increased, as a result of change currently it is as a major investment in the meaning of Regulation 2019/317. Final costs are not available yet, but to provide reliable estimation current value is based on information collected from the ATM system provider in 2021.		
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No		
Level of impact of the investment	Network		
	Local	Yes	
	Non-performance		
Quantitative impact per KPA	Safety	Benefits to be considered are the ones listed for new ATM system and modernization of ATM system above.	
	Environment	Benefits to be considered are the ones listed for new ATM system and modernization of ATM system above.	
	Capacity	Benefits to be considered are the ones listed for new ATM system and modernization of ATM system above.	
	Cost Efficiency	Benefits to be considered are the ones listed for new ATM system and modernization of ATM system above.	

Results of the consultation of airspace users' representatives	Please see Annex E.	
Joint investment / partnership	No	
Investment in ATM systems	No	The server infrastructure itself do not constitute investment in ATM system. However, The project is directly related to the new ATM System should be considered as enabler to the new ATM system implementation.
If investment in ATM system, type?	Click to select	Not applicable.
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The investment will support overall digitalization in ATM.

2.1.3 - Other new and existing investments

2.1.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

PANSA defined 6 programmes containing combined and separate deployment projects/ initiatives. Existing investments are dedicated to completing projects in progress, which aim to support the 4 KPAs (capacity, cost-efficiency, environment and safety) or to keep the business operations running/service continuity. The other investments (not listed under the main investments above) complement the new/major ones in the wider context of PANSA strategic plan, which aiming at transforming PANSA so that it is ready for the challenges stemming from the Single European Sky development. Other new and existing investments are related to replacement of equipment at life-end (often also upgrading the equipment taking into account European regulatory developments and technological developments), to infrastructure optimization, IT and rolling stock required to provide continuity of air navigation services. The other new investments (totalling 429 368 819 PLN of CAPEX over RP3) include communication ground stations necessary for airspace developments aimed at capacity improvement, Traffic Complexity Tool development, DVOR/DMEs, ILs/DMEs, voice communication systems, WAN modernization, investments related to cybersecurity, virtual airport control towers (rTWR), radars etc. - Facilities - many projects are already ongoing or will be launched during the RP3 period. These projects aim at either maintaining existing facilities in operational conditions or at building new facilities (towers, technical buildings) to replace obsolete ones. There investments will last during the RP3 period and beyond. - Airspace projects - these are all the projects implementing new air navigation concepts, as well as all the airspace changes needed to provide optimum/high quality service and required capacity to all airspace users. There investments are ongoing and will last during the RP3 period and beyond. - Virtual control tower - development of a digital tower solution in order to prepare for future tower service provision model. Large majority of these investments is related to capacity - either for ER traffic or in terminal airspace (84% of total PANSA RP3 CAPEX is related to the capacity KPA). Some investments are related to safety in the Polish airspace. The planned investment projects include implementation of functionalities foreseen by the Common Project One and ATM Plan. With regards to existing investments, they cover the depreciation costs and cost of capital related to projects implemented before RP3.

2.1.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	6

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	IT430804_Radar_PSR/MSSR_Kato wice	23 077 779	22 918 006	126	563	83 906	730 660	2 242 873	The project includes construction of radar facilities for the needs of approach control (with the possibility of using it also for area control) which should be implemented in 2024.

2	IP470810_Modernization_TWR_Wroclaw	18 680 002	18 494 998	9 080	141 343	386 535	844 846	949 646	The project concerns construction of additional two technical buildings beside the current TWR in Wroclaw. One of them would be a technical building for server room and workplace for technical personnel. The other one would serve as a guardhouse, power generator room, power switchboard. The project should be implemented in 2023.
3	IT480910_Radar_PSR/MSSR_Radom	18 002 704	18 002 704	0	864	485 286	1 671 709	2 141 831	The project includes construction of new radar facilities for the needs of approach control (with the possibility of using it also for area control) which should be implemented in 2023.
4	IA480139_A-SMGCS	22 474 701	22 474 701	0	0	0	93 459	375 732	The project includes new Radar SMR-2 at Warsaw Chopin Airport with supporting infrastructure, ASMGCS system (level 2+) with working positions for ATCOs in Warsaw Tower building, integration with other systems used by PANSO. Implementation is foreseen by the end of 2024. However, due to conditions related to the construction of the STH and the currently unknown scope of activity of Chopin Airport, possible alternative implementation formulas and the method of achieving the necessary functionalities are also considered, provided that they will allow for flexible adaptation to the changing needs of users depending on the scenarios, the construction schedule of STH and the future of Warsaw Chopin Airport. Final decision on the concept is pending.
5	IR470208_Virtualization_of_ATS_airport_services	19 022 413	22 413	0	0	0	0	553	The investment aims at integration of the existing systems operating independently within a single system (integration, processing and display of data from various sources). The system will provide data exchange necessary for ATCO/FIS work with technical and operational infrastructure. The project is directly related to the ATM system and EFES. As a result of the COVID-19 pandemic, the decrease in air traffic and the need to reduce capital expenditure, the tasks carried out under the project were verified, and internal resources possible to perform the task were identified. The project should be fully implemented after RP3.
6	IT460721_Modernization_of_the_network_infrastructure	19 424 627	8 541 032	95 627	450 045	886 916	1 369 375	1 779 949	The project includes modernization of the WAN network for FIR Warszawa, a new firewall in Warsaw, continuous replacement of access network architecture to CNS facilities. It covers preparation of the network for the migration of radio communication to VoIP transmission. It is expected to simplify the connection of potential new locations to PANSO network. The project is continued in RP3. It will be implemented in stages until the end of 2023 and after RP3.

2.2 - Investments - Institute of Meteorology and Water Management - National Research Institute (IMWM)

2.2.1 - Summary of investments

Number of new major investments	0

2.2.3 - Other new and existing investments

2.2.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

The new investments will allow for the alignment of current requirements for meteorological services in Europe with applicable data transmission standards, which in turn will unify products for airspace users. The investment in AWOS backup systems at selected airports will increase the safety of air operations in difficult weather conditions. Additional investments in AWOS infrastructure (i.e spare parts) will improve system reliability and will have a positive impact on the security and continuity measures of service provided. Involvement in the development of new products dedicated to the meteorological services used by ATC services will improve the decision making process which may significantly reduce the delays that result from suddenly changing weather conditions.

2.2.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	7

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	Purchase of AWOS back up systems	1 296 000	1 296 000		1 296 000				Currently used AWOS get old and exploit. There is a high to need to secure servers stability and reliability. IMWM prepares for the purchase of back up systems one at a time. This investment is spread over the following years.
2	Upgrading Aeronautical Meteorological Stations with lighting detectors	2 500 000	2 500 000		2 500 000				New investment carried out on the basis of the IMWM Management's decision to use the investment funds saved in the previous year. This investment results in AWOS hardware, software and terminal modernization. Lighting detectors provide a back up for PERUN system that is used by forecasters and observers (Polish lightning detection and location system). This investment was not included in IMWM's Business Plan for years 2021-2021 last updated in July 2021.
3	Modernization of currently used AWOS	1 000 000	1 000 000			1 000 000			Before purchasing back up systems some of currently used AWOS systems require necessary modernization in order to work reliably.

4	Purchase of a new AWOS for Aeronautical Meteorological Station in Cracow	1 000 000	1 000 000			1 000 000			Currently used AWOS system requires to be exchanged completely.
5	Purchase of AWOS back up systems	2 000 000	2 000 000				2 000 000		Currently used AWOS get old and exploit. There is a high to need to secure servers stability and reliability. IMWM preapres for the purchase of spare systems one at a time. This investment is spread over the following years.
6	Purchase of AWOS back up systems	1 000 000	1 000 000					1 000 000	Currently used AWOS get old and exploit. There is a high to need to secure servers stability and reliability. IMWM preapres for the purchase of back up systems one at a time. This investment is spread over the following years.
7	Modernization of software and hardware in forecasting offices and Aeronautical Meteorological Stations	1 000 000	1 000 000					1 000 000	Necessary modernization due to hardware and software ageing proces

2.3 - Investments - Radom Meteo sp. z o.o.

2.3.1 - Summary of investments

Number of new major investments	0

2.3.3 - Other new and existing investments

2.3.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

Radom Meteo does not plan any investments above 5M EUR in RP3. Other investments planned for RP3: Extension of the meteorological parameters measurement system AWOS to category II with the option of parameters measurement in 3 points - 3 point in the center of the runway measuring RVR. This investment will allow the operations to be carried out in accordance with Category II of ILS. After the extension, the AWOS system will measure among other things wind speed and direction, height of the cloud base and visibility along the all runway. This type of solution will significantly increase the safety of air traffic at the airport and it is necessary for the airport to receive higher security categories (CAT II). The planned extension of the AWOS system is compatible with the general plan for the development of the Radom-Sadków airport and is planned to be implemented in early 2023.

2.3.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	6

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	AWOS - Software	270 000	268 380	0	0	0	59 306	63 529	For description, see 2.3.3.1.
2	AWOS - Equipments and servers	175 000	173 950	0	0	0	21 500	25 149	For description, see 2.3.3.1.
3	AWOS - Sensors	125 000	124 250	0	0	0	15 357	17 964	For description, see 2.3.3.1.
4	AWOS - Installation	120 000	119 280	0	0	0	14 743	17 245	For description, see 2.3.3.1.
5	Office equipment for Aerodrome Meteorological Office	90 000	89 460	0	0	0	11 057	12 934	For description, see 2.3.3.1.
6	Software for weathermen for preparing climatological information	135 000	134 190	0	0	0	29 653	31 764	For description, see 2.3.3.1.

2.4 - Investments - Warmia i Mazury sp. z o.o.

2.4.1 - Summary of investments

Number of new major investments	0

2.4.3 - Other new and existing investments

2.4.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

Warmia i Mazury does not plan any investments above 5M EUR in RP3.
Other investments planned for RP3:
Modernization of the existing teleinformation infrastructure - due to the technological progress and requirements concerning the installation of more modern, technologically advanced and guaranteeing security of radio communication systems for the ANS, it will be necessary to modernize the existing teleinformation infrastructure at the Olsztyn-Mazury Airport Control Tower. Replacement of the active devices (switches) will increase the level of reliability and availability of necessary network services, thus ensuring the security of the L2 layer at a higher level.
Warmia i Mazury also plans to purchase the technical vehicle - for the purpose of proper implementation of tasks related to the provision of air navigation services, together with service equipment, which is necessary for the radiocommunication measurements while in motion in the entire maneuvering area and outside the airport area, including systems distributed between TWR buildings and the Terminal.
Warmia i Mazury intends to increase the safety of AFIS provision, by purchasing the software, cameras and other remote equipment, which is planned to be funded in 75% by grants and subsidies in order to significantly limit the costs incurred by airspace users.

2.4.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	4

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	Technical vehicle with equipment (COM)	290 000	290 000	0	17 954	70 045	67 211	64 377	The vehicle is essential for the radiocommunication measurements and proper provisions of ANS. Equipped with service accessories, it will enable performing quick repairs and the swift access to the server rooms which are located in two different places at EPSY airport due to safety reasons concerning data storage.
2	Extension and adaptation of Network Infrastructure (COM)	260 000	260 000	0	16 097	62 799	60 258	57 717	The investment is focused on the adaptation of the current infrastructure to the modern standards. These include changes of i.a. routers, converters, active devices (switches) and wiring. As far as cybersecurity is concerned, the NGFW (Next Generation Firewall) is planned to be installed, as well as the implementation of the systems enabling adaptation of the two independent Internet Service Providers to prevent any disruptions in network connection.

3	Extension of Surface-to-Air Radio Communication Systems (COM)	140 000	140 000	0	0	20 499	19 815	19 131	Changes of elements needed to ensure the continuity and reliability of the provision of ANS.
4	ICT Equipment to increase the safety of AFIS provision (AFIS)	6 000 000	1 500 000	0	0	0	0	399 319	Cameras, software and other remote equipment purchased in order to increase the safety of AFIS provision.

2.5 - Investments - Port Lotniczy Bydgoszcz S.A.

2.5.1 - Summary of investments

Number of new major investments	0

2.5.3 - Other new and existing investments

2.5.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

Port Lotniczy Bydgoszcz does not plan any investments above 5M EUR in RP3. Other investments planned for RP3:

Investment name: Modernization of the tower of the former Military Airport with furniture, terrestrial communication equipment, teletechnical lines, water supply connection, as well as protection and access control system. Total cost on Bydgoszcz Airport side 3 900 000 PLN (investment is partially financed by Bydgoszcz Airport and partially by PANSA).

Investment justification: Air traffic control services (and ultimately AFIS services) currently work in a place that is only temporarily adapted to this type of functions, which was reflected in non-conformities resulting from inspections carried out by Polish CAA inspectors. The new tower will fulfill the requirements of supervision and control of air operations provided by air navigation services, i.e. AFIS, MET, which will increase the level of safety of the provided above services. It will enable the introduction of new technologies and procedures as a part of the efforts to integrate the services provided. PL Bydgoszcz plans to recover the costs incurred for the construction of the tower over a time of several reference periods. In connection with the above, as well as the fact that PL Bydgoszcz as an entity is legally responsible for ensuring the smooth and safe operation of the airport plans to carry out the above investment. As this building will be also used for ATC services provided by PANSA, it was agreed that PANSA will cover part of the total costs, while PL Bydgoszcz will cover the rest which amounts to 3 900 000 PLN.

2.5.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	1

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	TWR EPBY Modernization	4 317 155	4 317 155	0	0	0	180 145	680 462	For details, see 2.5.3.1. The total asset value consist of 3 900 000 PLN of TWR modernization and 417 155 PLN of other supporting infrastructure.

SECTION 3: PERFORMANCE TARGETS AND MEASURES FOR THEIR ACHIEVEMENT

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #x

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #x

3.4.3 - Pension assumptions

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

3.4.5 - Restructuring costs

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

3.5 - Additional KPIs / Targets

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

3.6.2 - Interdependencies and trade-offs between capacity and environment

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

3.6.4 - Other interdependencies and trade-offs

Annexes of relevance to this section

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX J. OPTIONAL KPIs AND TARGETS

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

SECTION 3.1: SAFETY KPA

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

- a) Safety national performance targets
- b) Detailed justifications in case of inconsistency between local and Union-wide safety targets
- c) Main measures put in place to achieve the safety performance targets

Annexes of relevance to this section

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

3 - PERFORMANCE TARGETS AT LOCAL LEVEL

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

a) Safety performance targets

Number of Air Traffic Service Providers		3					
PANSA		2020A Actual	2020 Target	2021 Target	2022 Target	2023 Target	2024 Target
	Safety policy and objectives	C	C	C	C	C	C
	Safety risk management	D	C	C	C	C	D
	Safety assurance	C	C	C	C	C	C
	Safety promotion	D	C	C	C	C	C
	Safety culture	D	C	C	C	C	C
	Additional comments						
Warmia i Mazury sp. z o.o.		2020A Actual	2020 Target	2021 Target	2022 Target	2023 Target	2024 Target
	Safety policy and objectives	C	C	C	C	C	C
	Safety risk management	C	C	C	C	C	D
	Safety assurance	C	C	C	C	C	C
	Safety promotion	C	C	C	C	C	C
	Safety culture	C	C	C	C	C	C
	Additional comments						
Port Lotniczy Bydgoszcz S.A.		2020A Actual	2020 Target	2021 Target	2022 Target	2023 Target	2024 Target
	Safety policy and objectives	C	C	C	C	C	C
	Safety risk management	C	C	C	C	C	D
	Safety assurance	C	C	C	C	C	C
	Safety promotion	C	C	C	C	C	C
	Safety culture	C	C	C	C	C	C
	Additional comments						

b) Detailed justifications in case of inconsistency between local and Union-wide safety targets

There is no inconsistency between local and Union-wide safety targets.

* Refer to Annex O, if necessary.

c) Main measures put in place to achieve the safety performance targets

Since the beginning of the RP3 PANSA consequently and continuously improves safety. This can be confirmed by the Effectiveness of Safety Management (EoSM) indicator, which is still rising. Although the RP3 EoSM levels, based on CANSO Standard of Excellence, are higher than respective levels based on RP2 EASA questionnaire, the mentioned indicator in case of PANSA has already reached the targets set for the RP3.

Over 2020 PANSA continued implementation of improvements initiated in RP2 and consequently implemented measures listed in internal "SMS development roadmap".

The measures implemented in 2020 included:

- review and mapping of processes;
- safety culture review (results of which were implemented in the above mentioned SMS development roadmap);
- update of safety training modules for managerial level and continuation of safety trainings for PANSA employees;
- safety promotion (including quarterly publication of Safe Sky bulletin, information campaign preceding implementation of eTOKAI reporting system, publication of safety reports for FIR Warszawa);
- update of safety recommendations register to include new functionalities, implementation of new system for monitoring execution of safety requirements following from implementation of changes in functional system, initiation of works aimed at implementation of new Safety Assessment Information Tool;
- continuation of best practices exchanges with national and international organisations and entities.

Further developments are focused on achieving RP3 PP requirements and ensuring compliance with EU IR 2017/373.

Bydgoszcz Airport (EPBY) and Warmia i Mazury (EPSY) were included in performance scheme in 2020. Year 2020 was the first year, in which both ANSPs were assessed in terms of reaching safety targets set for RP3. In order to achieve assumed goals – EPBY and EPSY undertook numerous measures, among others:

- implementation of SMS related requirements, documents and procedures, compliant with national and international law, including development and maintenance of Safety Policy and Just Culture Policy,
- ensuring SMS training for all staff and contractors,
- appointment of Safety Manager, Safety Committee and Safety Review Board,
- regular organisation of Local Safety Meetings,
- development of safety management indicators,
- promotion of proactive attitude of the employees regarding safety in the organisation,
- conducting internal audit of the SMS and regular safety surveys,
- development of annual business plan containing information on safety related investments,
- sharing best practices, e.g. via SMS Data Exchange Forum etc.

Above EoSM targets levels for 2020 have not yet been verified by EASA. Therefore, they are set based on PL CAA assessment.

SECTION 3.2: ENVIRONMENT KPA

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

- a) Environment national performance targets
- b) Detailed justifications in case of inconsistency between national targets and national reference values
- c) Main measures put in place to achieve the environment performance targets

Annexes of relevance to this section

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

a) National environment performance targets

	2020A	2020	2021	2022	2023	2024
National reference values	1,67%	n/a	1,65%	1,65%	1,65%	1,65%
		2020	2021	2022	2023	2024
		Target	Target	Target	Target	Target
National targets		1,85%	1,65%	1,65%	1,65%	1,65%

b) Detailed justifications in case of inconsistency between national targets and national reference values

There is no inconsistency between local and Union-wide Environment targets.
For more information see Annex P.

** Refer to Annex P, if necessary.*

c) Main measures put in place to achieve the environment performance targets

FRA implementation within Warszawa FIR (POLFRA – implemented as of February 2019 from FL095, 24/7) is considered as a major step in facilitating improvement in the environment KPA.

Following implementation of POLFRA, over 2020 the following further changes aimed at offering the shortest possible routes to the airspace users were implemented:

- implementation of new FRA point LAJQU in POLFRA to allow shorter circumnavigation of military area D24Z (accommodating requests received from airspace users),
- implementation of new coordination FRA (Entry/Exit) point (POZUM) at PL/DE border in cooperation with DE/DFS – initially in 2020 made available for arrivals to EPWA and EPMO, over 2021 the use extended to other traffic,
- development of AFUA concept in Warsaw FIR, including implementation of reduced size of FBZ/Flight buffer zones from 5NM to 2.5 NM and reduced required tactical distance between segregated areas and GAT in en-route controlled airspace from 3.5 NM to 2.5NM.

Over 2020–2021 reorganisation of TMAs in Warsaw FIR took place, in order to allow Continuous Descent Approach (CDA) operations from more directions than available earlier. CDA techniques are also expected to reduce fuel consumption and CO2 emissions and improve cooperation with airports in order to reduce the nuisance of air transport for local communities.

Additional measures planned to be put in place over the remaining years of RP3 to further facilitate environmental improvements include the following:

- 1) Further implementation of AFUA concept in FIR Warszawa:
 - a. Improvement/automation of exchange of information about military activity in segregated areas, especially on tactical level. Update of coordination procedures and local ASM support tool/system which will reduce time required to release segregated areas back to civil traffic – 2021/2022;
 - b. Implementation of close cooperation between AMC Poland and FMP Warszawa in order to reduce as much as possible negative influence of segregated areas on civil traffic. Implementation of new coordination procedures taking into account forecasted demand of civil traffic on segregated airspace allocation in time on day of the operations – 2021/2022.
- 2) Development of FRA:
 - a. extension of POLFRA to TMAs with upper limit above FL195 (FRA to be implemented above FL195),
 - b. Implementation of cross-border FRA in FAB Baltic area – between ACC Warszawa and ACC Vilnius – 2022 (currently in validation phase and preparation for implementation),
 - c. Implementation of cross-border FRA operations between ACC Warszawa and ACC Bratislava to allow seamless FRA operations with South East, Central and North Europe – 2022,
 - d. Implementation of cross-border FRA between Baltic FAB and FAB DK-SE – 2023,
 - e. Possible implementation of cross-border FRA operations between Poland and possibly Ukraine (subject to further confirmation by BG and RO as well as analyses with respect to UA) – 2024 (Poland is also open to possible future development of cross-border FRA operations with FRACZECH – subject to outcome of further analyses and decisions on the CZ side),
- 3) Other airspace developments
 - a. Reorganisation of ACC Warsaw sector configuration following implementation of three layer division – this can reduce risk of negative impact of possible congestion in ACC sectors on the distance flown – phased implementation starting 2022/2023,
 - b. Cross-border coordination between Poland and Ukraine offering optimised trajectories between Middle East and Europe/North America. New trajectories can offer approximately 10 minutes of flight time savings. Additional savings in fuel consumption and CO2 emissions are expected.

In order to further reduce already one of the lowest values of KEA indicator among European ANSPs, the above initiatives were taken into account when establishing the revised RP3 target for Poland. However, it needs to be stressed that – despite the above initiatives – limited improvement of the horizontal en-route flight efficiency over the RP3 in Poland should be expected.

SECTION 3.3: CAPACITY KPA

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

- a) Capacity national performance targets
- b) Detailed justifications in case of inconsistency between national targets and national reference values
- c) Main measures put in place to achieve the target for en-route ATFM delay per flight
- d) ATCO planning

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

- a) Capacity national performance targets
- b) Contribution to the improvement of the European ATM network performance
- c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

Annexes of relevance to this section

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
National reference values	0,00	n/a	0,07	0,12	0,12	0,12

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National targets	0,30	0,07	0,12	0,12	0,12

b) Detailed justifications in case of inconsistency between national targets and national reference values

There is no inconsistency between National reference value and National target for 2022. The local CAPACITY targets for 2023–2024 will be developed based on latest European Network Operations Plan.

** Refer to Annex Q, if necessary.*

c) Main measures put in place to achieve the target for en-route ATFM delay per flight

PANSA has established a set of measures focused on the positive impact on the capacity performance in the following areas:

- the staffing area:
- the airspace area:
- the operations area.

For more information please see Annex Q.

** Refer to Annex Q, if necessary.*

d) ATCO planning

	Actual			Planning			
Warsaw (EPWW ACC)	2018	2019	2020	2021	2022	2023	2024
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)	7,00	6,00	1,25	5,25	10,00	6,00	5,00
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)	5,50	2,00	4,00	4,00	0,00	0,00	0,00
Number of ATCOs in OPS planned to be operational at year-end (FTEs)	170,75	174,75	172	173,25	183,25	189,25	194,25

Additional comments

Data presented in the above table include SUP ATM for all years (numbers for 2018–2019 were adjusted accordingly).

COVID-19 pandemic and related traffic drop resulted in delay in the planned increase of ATCO as compared to initial 2019 draft RP3 PP (low traffic levels led to prolonged OJT training process). Moreover, over 2020 three ATCOs were moved to other duties (due to internal needs) and are now disclosed under PRU category 2 (ATCOs on other duties), although they continue to support OPS working part-time on duty (not included in the FTEs numbers in the table above).

Following the pandemic outbreak, ATCO employment plans were revised and adjusted to currently predicted traffic levels for 2022+. The required number of ACC ATCOs was estimated using EUROCONTROL NEST tool. The estimates considered planned airspace developments, including multilayer division of airspace planned to be implemented in stages starting from 2022. They also take into account the fact that over RP2 ATCO number increase did not respond adequately to significant traffic growth – assuming that traffic in EPWW would be back to 2019 levels around 2024 – increase in ATCO numbers as compared to 2019 is required. It also needs to be stressed that NM under the NOP planning process for 2022+ advises ANSPs to consider scenario 1 of STATFOR May 2021 traffic forecast as the assumption for capacity planning. As there is a close link between capacity required to be provided and the resources available in this respect, this needs to be duly considered in ATCO numbers planning process.

PANSA undertook measures aimed at increasing effectiveness of ATCO recruitment and training processes to ensure availability of required number of ATCOs.

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
	Actual	Target	Target	Target	Target	Target
National targets	0,02	0,45	0,02	0,21	0,24	0,23
Additional comments	Poland decided to establish the incentive scheme for the terminal capacity target only at the national level. The pivot value will be modulated for calculation of the capacity incentive scheme and limit the incentive to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. The forecast of terminal delays, prepared by PANSa, was based on data analysis and assumptions valid at the time of preparing the forecast, including terminal delays generated in the period from January to June 2021. The forecast of the delay rate has been prepared taking into account the baseline scenario 2 of the STATFOR forecast of May 2021.					

Airport level	EPWA-Warsaw/Okęcie	0,04	0,95	0,04	0,42	0,39	0,38
	Airport contribution to national targets						
	EPKK-Kraków-Balice	0,04	0,06	0,02	0,04	0,25	0,23
	Airport contribution to national targets						
	EPGD-Gdańsk im. Lecha Wałęsy	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPKT-Katowice-Pyrzowice	0,00	0,02	0,00	0,02	0,16	0,11
	Airport contribution to national targets						
	EPWR-Wrocław-Strachowice	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPPO-Poznań-Ławica	0,00	0,08	0,00	0,11	0,10	0,09
	Airport contribution to national targets						
	EPRZ-Rzeszów-Jasionka	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPSC-Szczecin-Goleniów	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPBY-Białystok	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPMO-Warszawa/Modlin	0,01	0,24	0,00	0,37	0,34	0,31
	Airport contribution to national targets						
	EPLL-Łódź	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPŁB-Lublin	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPZG-Zielona Góra-Babimost	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPRA-Radom-Sadków	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						
	EPSY-Olsztyn-Mazury	0,00	0,00	0,00	0,00	0,00	0,00
	Airport contribution to national targets						

b) Contribution to the improvement of the European ATM network performance

Warsaw Chopin Airport has been implementing the Airport Collaborative Decision Making (A-CDM) which will be highly contributing to the airport operations efficiency and to the European ATM network performance. Currently the A-CDM for EPWA is in the finalisation phase. It is planned to implement Target Start up Approval Time – TSAT Generator dedicated to optimise the time of the starting the aircraft engines based on the calculated Target off Block Time (TOBT).

* Refer to Annex Q, if necessary.

c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

Planned change of the airspace structure in TMA Warsaw and an increased number of staff should result in a reduction of delays generated due to ATC Capacity from 2023. Together with the airspace structure changes and ATCO increase, PANSa plans to implement tools supporting ATCOs and allowing for capacity increase, including supporting operations in adverse weather conditions (A-SMGCS, ILS).

For more information please see Annex Q.

* Refer to Annex Q, if necessary.

SECTION 3.4: COST-EFFICIENCY KPA

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #x

- a) RP3 revised cost-efficiency performance targets (IR 2020/1627)
- b) Information on the baseline values for the determined costs and the determined unit costs
- c) Detailed justifications for the adjustments to the baseline values
- d) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate
- e) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS
- f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #x

- a) RP3 revised cost-efficiency performance targets (IR 2020/1627)
- b) Information on the baseline values for the determined costs and the determined unit costs
- c) Detailed justifications for the adjustments to the baseline values
- d) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS
- e) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of

3.4.3 - Pension assumptions

- 3.4.3.1 Total pension costs
- 3.4.3.2 Assumptions for the "State" pension scheme
- 3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme
- 3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

3.4.5 - Restructuring costs

- 3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3
- 3.4.5.2 Restructuring costs planned for RP3

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

- a) Overall description of the measures necessary to achieve the en-route capacity targets for RP3, which induce additional costs
- b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3
- c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 by nature by ANSP
- d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

Annexes of relevance to this section

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

NOTE: The following requirements as per Annex II, 3.3 are addressed in the Annexes A and B:

Point 3.3 (d) on cost-allocation;

Point 3.3 (e) on the return on equity and cost of capital;

Point 3.3 (f) on assumptions for pension costs and interest on debt for other entities, inflation forecast and adjustments beyond IFRS;

Point 3.3 (g) on adjustments to the unit rates carried over from previous reference periods;

Point 3.3 (h) on costs exempt from cost-sharing;

Point 3.3 (k) reporting tables and additional informations.

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #1 - Poland

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

En route charging zone Name of the CZ	Baseline 2014	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2014 B	2024 D vs. 2019 B
	2014 B	2019 B	2020/2021 D	2022 D	2023 D	2024 D		
Total en route costs in nominal terms (in national currency)	660 997 812	889 554 541	1 682 177 715	896 080 125	934 564 330	971 190 123	46,9%	9,2%
Total en route costs in real terms (in national currency at 2017 prices)	664 844 905	867 942 999	1 582 338 819	819 108 493	839 574 381	857 899 066	29,0%	-1,2%
Total en route costs in real terms (in EUR2017) ¹	156 256 514	203 990 053	371 892 371	192 512 625	197 322 662	201 629 458	29,0%	-1,2%
YoY variation			82,3%	-48,2%	2,5%	2,2%		
Total en route Service Units (TSU)	3 920 861	4 959 376	4 386 811	3 496 000	4 186 000	4 802 000	22,5%	-3,2%
YoY variation			-11,5%	-20,3%	19,7%	14,7%		
Real en route unit costs (in national currency at 2017 prices)	169,14	175,01	360,70	234,30	200,57	178,65	5,4%	2,1%
Real en route unit costs (in EUR2017) ¹	39,75	41,13	84,78	55,07	47,14	41,99	5,4%	2,1%
YoY variation			106,1%	-35,0%	-14,4%	-10,9%		

National currency	PLN
¹ Average exchange rate 2017 (1 EUR=)	4,25

b) Information on the baseline values for the determined costs and the determined unit costs

En route charging zone Name of the CZ	Baseline 2014	Baseline 2019	Actuals 2014	Actuals 2019	2014 Baseline adjustments	2019 Baseline adjustments
	2014 B	2019 B	2014 A	2019 A		
Total en route costs in nominal terms (in national currency)	660 997 812	889 554 541	660 997 812	836 485 578	0	53 068 963
Total en route costs in real terms (in national currency at 2017 prices)	664 844 905	867 942 999	664 844 905	814 956 767	0	52 986 232
Total en route costs in real terms (in EUR2017) ¹	156 256 514	203 990 053	156 256 514	191 536 857	0	12 453 196
Total en route Service Units (TSU)	3 920 861	4 959 376	3 930 688	4 971 806	-9 827	-12 430

c) Detailed justifications for the adjustments to the baseline values

c.1) Adjustments to the 2014 baseline value for the determined costs

Number of adjustments	0

c.2) Adjustments to the 2014 service units

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-0,25%	CRCO correction factor May 2019 (on 12 months)	-9 827

Other adjustment to the 2014 service units	No

Total adjustments to the 2014 service units	-9 827

c.3) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	5

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
1	PANSA	ANSP	Cost of capital	50 286 550	50 286 550	11 818 698
Description and justification of the adjustment For details, see Annex F.						

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
2	Other ANSP	MET	Staff	952 597	921 940	216 681
Description and justification of the adjustment For details, see Annex F.						

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
3	Other ANSP	MET	Other operating	1 618 129	1 566 054	368 065
Description and justification of the adjustment For details, see Annex F.						

Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
4	Other ANSP	MET	Depreciation	200 643	200 643	47 157
Description and justification of the adjustment For details, see Annex F.						

Adjustment #5	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
5	Other ANSP	MET	Cost of capital	11 045	11 045	2 596
Description and justification of the adjustment For details, see Annex F.						

Total adjustments to the 2019 baseline value for the determined costs				Costs nominal NC	Costs real NC	Costs EUR2017
				53 068 963	-	-

c.4) Adjustments to the 2019 service units

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-0,25%	CRCO correction factor May 2019 (on 12 months)	-12 430

Other adjustment to the 2019 service units	Click to select

Total adjustments to the 2019 service units	-12 430

d) Description and justification of the consistency between local and Union-wide cost-efficiency targets

For details, see Annex R.

** Refer to Annex R, if necessary.*

e) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate under:

Additional costs of measures necessary to achieve the capacity targets for RP3	No	
Restructuring costs planned for RP3	No	

f) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS

For details, see Annex R.

** Refer to Annex R, if necessary.*

g) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification

With regard to the preparation of the PP all air navigation service providers, whose determined costs were included in the cost base for en-route charges were required to deliver necessary information with appropriate justification, confirming that determined costs are related to the provision of air navigation services as well as they are allocated in transparent way to the charging zones in respect of which they are incurred. The verification process, to the extent that it was carried out by NSA did not reveal any irregularities in terms of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317.

** Refer to Annex U, if necessary.*

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #1 - Poland - EPWA

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Name of the CZ	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	44 126 045	84 474 485	49 553 419	50 860 403	53 374 860	21,0%
Total terminal costs in real terms (in national currency at 2017 prices)	42 896 651	78 559 701	44 719 749	45 007 691	46 418 555	8,2%
Total terminal costs in real terms (in EUR2017) ¹	10 081 872	18 463 652	10 510 349	10 578 023	10 909 615	8,2%
YoY variation		83,1%	-43,1%	0,6%	3,1%	
Total terminal Service Units (TNSU)	107 857	89 808	75 168	96 102	108 711	0,8%
YoY variation		-16,7%	-16,3%	27,8%	13,1%	
Real terminal unit costs (in national currency at 2017 prices)	397,72	874,75	594,93	468,33	426,99	7,4%
Real terminal unit costs (in EUR2017) ¹	93,47	205,59	139,82	110,07	100,35	7,4%
YoY variation		119,9%	-32,0%	-21,3%	-8,8%	

National currency	PLN
¹ Average exchange rate 2017 (1 EUR=)	4,25

b) Information on the baseline values for the determined costs and the determined unit costs

Terminal charging zone Name of the CZ	Baseline 2019	Actuals 2019	2019 Baseline adjustments
	2019 B	2019 A	
Total terminal costs in nominal terms (in national currency)	44 126 045	44 126 045	0
Total terminal costs in real terms (in national currency at 2017 prices)	42 896 651	42 896 651	0
Total terminal costs in real terms (in EUR2017) ¹	10 081 872	10 081 872	0
Total terminal Service Units (TNSU)	107 857	107 857	0

c) Detailed justifications for the adjustments to the baseline values

c.1) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	0

c.2) Adjustments to the 2019 service units

Adjustment to the 2014 service units	Click to select

d) Description and justification of the contribution of the the local targets to the performance of the European ATM network

For details, see Annex R.

** Refer to Annex R, if necessary.*

e) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS

For details, see Annex R.

** Refer to Annex R, if necessary.*

f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification

With regard to the preparation of the PP all air navigation service providers, whose determined costs were included in the cost base for en-route charges were required to deliver necessary information with appropriate justification, confirming that determined costs are related to the provision of air navigation services as well as they are allocated in transparent way to the charging zones in respect of which they are incurred. The verification process, to the extent that it was carried out by NSA did not reveal any irregularities in terms of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317.

** Refer to Annex U, if necessary.*

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #2 - Poland - Others

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Name of the CZ	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	118 001 935	269 991 569	151 059 770	152 053 412	151 684 889	28,5%
Total terminal costs in real terms (in national currency at 2017 prices)	114 901 322	251 953 004	136 686 738	134 971 838	132 304 826	15,1%
Total terminal costs in real terms (in EUR2017) ¹	27 004 915	59 215 763	32 125 076	31 722 028	31 095 208	15,1%
YoY variation		119,3%	-45,7%	-1,3%	-2,0%	
Total terminal Service Units (TNSU)	138 516	123 291	100 766	125 663	138 906	0,3%
YoY variation		-11,0%	-18,3%	24,7%	10,5%	
Real terminal unit costs (in national currency at 2017 prices)	829,51	2 043,57	1 356,48	1 074,08	952,48	14,8%
Real terminal unit costs (in EUR2017) ¹	194,96	480,29	318,81	252,44	223,86	14,8%
YoY variation		146,4%	-33,6%	-20,8%	-11,3%	

National currency	PLN
¹ Average exchange rate 2017 (1 EUR=)	4,25

b) Information on the baseline values for the determined costs and the determined unit costs

Terminal charging zone Name of the CZ	Baseline 2019	Actuals 2019	2019 Baseline adjustments
	2019 B	2019 A	
Total terminal costs in nominal terms (in national currency)	118 001 935	114 834 656	3 167 279
Total terminal costs in real terms (in national currency at 2017 prices)	114 901 322	111 822 410	3 078 913
Total terminal costs in real terms (in EUR2017) ¹	27 004 915	26 281 287	723 628
Total terminal Service Units (TNSU)	138 516	138 516	0

c) Detailed justifications for the adjustments to the baseline values

c.1) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	8

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
1	Other ANSP	ANSP	Staff	1 199 766	1 161 155	272 903
Description and justification of the adjustment						
For details, see Annex F.						

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
1	Other ANSP	MET	Staff	548 588	530 933	124 784
Description and justification of the adjustment						
For details, see Annex F.						

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
3	Other ANSP	ANSP	Other operating	1 045 358	1 011 717	237 781
Description and justification of the adjustment						
For details, see Annex F.						

Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
4	Other ANSP	MET	Other operating	-47 881	-46 340	-10 891
Description and justification of the adjustment						
For details, see Annex F.						

Adjustment #5	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
5	Other ANSP	ANSP	Depreciation	148 004	148 004	34 785
Description and justification of the adjustment						
For details, see Annex F.						

Adjustment #6	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
6	Other ANSP	MET	Depreciation	239 073	239 073	56 189
Description and justification of the adjustment						
For details, see Annex F.						

Adjustment #7	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
7	Other ANSP	ANSP	Cost of capital	32 335	32 335	7 600
Description and justification of the adjustment For details, see Annex F.						

Adjustment #8	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
8	Other ANSP	MET	Cost of capital	2 035	2 035	478
Description and justification of the adjustment For details, see Annex F.						

Total adjustments to the 2019 baseline value for the determined costs	Costs nominal NC	Costs real NC	Costs EUR2017
	3 167 279	3 078 913	723 628

c.2) Adjustments to the 2019 service units

Adjustment to the 2014 service units	No

d) Description and justification of the contribution of the the local targets to the performance of the European ATM network

For details, see Annex R.

** Refer to Annex R, if necessary.*

e) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS

For details, see Annex R.

** Refer to Annex R, if necessary.*

f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification

With regard to the preparation of the PP all air navigation service providers, whose determined costs were included in the cost base for en-route charges were required to deliver necessary information with appropriate justification, confirming that determined costs are related to the provision of air navigation services as well as they are allocated in transparent way to the charging zones in respect of which they are incurred. The verification process, to the extent that it was carried out by NSA did not reveal any irregularities in terms of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317.

** Refer to Annex U, if necessary.*

3.4.3 - Pension assumptions

Polish Air Navigation Services Agency (PANSa)

3.4.3.1 Total pension costs (in nominal terms in '000 national currency)

Pension costs	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pension costs	54 911	76 537	131 447	81 099	82 648	85 712
En-route activity	45 691	61 858	107 549	65 780	67 760	71 052
Terminal activity	8 395	13 596	21 991	14 047	13 758	13 655
Other activities	824	1 083	1 908	1 271	1 130	1 005

3.4.3.2 Assumptions for the "State" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many?	Yes-2

All staff	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	420 964	378 244	799 208	457 116	468 018	495 988
Employer % contribution rate to this scheme	16	16		16	16	16
Total pension costs in respect of this scheme	39 971	50 521	90 492	50 319	51 109	52 320
Number of employees the employer contributes for in this scheme	1 898	2 006		1 975	2 022	2 013

Staff employed in special conditions (ATCO, "flying personnel")	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	225 743	179 994	405 737	213 042	228 448	253 919
Employer % contribution rate to this scheme	2	2		2	2	2
Total pension costs in respect of this scheme	1 287	1 893	3 180	1 634	1 713	1 790
Number of employees the employer contributes for in this scheme	613	618		636	648	660

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3

The State pension scheme is defined in the Act of 13 October 1998 on social security scheme. It is a general occupational scheme applicable to all entities/all employees in Poland. The scheme is a Defined Contribution Scheme. This scheme defines level of obligatory contribution of employers to State pension scheme. This pension contribution amounts to 9.76% plus additional 6.5% for disability scheme - totalling 16.26% (employer's contribution only). Additionally, for staff employed in special conditions (the list of staff categories is defined in Annexes to the Act of 19 December 2008 on bridging pension scheme), under the obligatory State scheme defined in the Act of 19 December 2008 on bridging pension scheme, employer pays 1.5% contribution to bridging pension scheme. In case of PANSa the staff employed in special conditions include personnel operating aircraft used for calibration flights (pilots and mechanics) and ATCOs.

At the moment of drafting the RP3 PP revision no drafts of proposed changes to the above national legislation on pensions are available - therefore the revised RP3 PP does not assume any changes.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

For the State pension scheme the costs assume the annual limit of contributions to State pension insurance applicable for 2021 in the amount of PLN 157.770, which in subsequent years was increased by inflation rate per annum calculated on the basis of the amount for 2021 (the limit is verified on annual basis by the State taking into account the level of monthly average salary in the Polish economy).

The following limits were assumed in the RP3 PP:

2021 - 157.770 PLN,
2022 - 166.930 PLN,
2023 - 171.156 PLN,
2024 - 175.435 PLN.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users

As the pension costs related to the State occupational scheme directly depend on the national legislation applicable to all entities, PANSa and the NSA have no control over the evolution of these costs if any change to the national legislation is implemented within RP3.

PANSa possible cost control mechanisms can only relate to the number of employees not exceeding the numbers foreseen in the RP3 PP and assumptions on remuneration level (sticking to the assumptions underlying the RP3 PP). PANSa is committed to following these assumptions on staff numbers and remuneration level as foreseen in the revised RP3 PP.

3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many?	Select

All staff (access for employees on voluntary basis)	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	195 028	344 606	539 634	416 364	426 093	451 464
Employer % contribution rate to this scheme	7	7		7	7	7
Total pension costs in respect of this scheme	13 652	24 122	37 774	29 146	29 827	31 602
Number of employees the employer contributes for in this scheme	1 573	1 756		1 759	1 752	1 763

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3
The occupational pension scheme is based on the Act of 13 October 1998 on employee pension schemes. In case of introducing such scheme, it is necessary to sign a company contract - an agreement concluded by the employer with a representation of employees. Then it is possible for the employer to pay pension contribution to the scheme up to 7% for each employee registered to the scheme. Contribution in PANSA according to the company contract amounts to 7%. Contributions are collected and managed by AVIVA Insurance Company. In addition, employees have the right to determine the amount they want to contribute - the sum of additional contributions made by a participant to the scheme during a calendar year may not exceed the amount equivalent to four-and-a-half times the average projected monthly salary in the national economy for a given year. In 2020, the contribution was suspended for 6 months due to the need to maintain liquidity and reduce staff costs. This is considered as one-off measure following the crisis outbreak. No future changes are predicted.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs
Calculations are made in the same way as in the case of contributions to the State pension scheme, except that there is no limit of contributions.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users
The pension costs related to this scheme are dependent on the number of employees and their salaries. Therefore, similar as in case of the State scheme described above, PANSA possible cost control mechanisms can relate to the number of employees not exceeding the numbers foreseen in the RP3 PP and assumptions on remuneration level (sticking to the assumptions underlying the RP3 PP). PANSA is committed to following these assumptions on staff numbers and remuneration level as foreseen in the revised RP3 PP. In case of unforeseen increase in the level of remuneration or number of staff, which could lead to significant increase in the costs of this pension scheme, PANSA has a possibility to limit the level of contribution or to suspend the scheme for a limited period (as exceptionally done in 2020).

3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme (in nominal terms in '000 national currency)

Does the ANSP assume liability for meeting future obligations for the occupational "Defined benefits" scheme?	No
Is the occupational "Defined benefits" pension scheme funded?	Select

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies			-			
Employer % contribution rate to this scheme						
Total pension costs in respect of this scheme			-			
Number of employees the employer contributes for in this scheme						

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

Where, in the Reporting Tables, some occupational "defined benefits" costs (e.g. interest expense related to pensions) are reported in other cost item(s) than staff costs, the cost item(s) should be indicated here below along with corresponding explanations.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

Polish Air Navigation Services Agency (PANSa)

Select number of loans	2

Interest rate assumptions for loans financing the provision of air navigation services (Amounts in nominal terms in '000 national currency)

Loan #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Operating credit facility provided by Bank Gospodarstwa Krajowego with agreed value of the arrangement amounting to 250 million PLN. Effective annual interest rate calculated taking into account: loan interest at floating rates - which is the total of the WIBOR 3M reference rate and bank's fixed margin of 0.95%, commission on the loan disbursement at 0.17% of full amount available, loan administration fee (on full amount made available) at 0.1% payable on a quarterly basis. Full amount available during the whole term of credit to be utilised and repaid according to PANSa needs. Final repayment until 31 Dec 2024.					
Remaining balance	64 501	149 432		129 432	5 432	-
Interest rate %	3,29%	3,29%		3,29%	3,29%	3,29%
Interest amount	90	2 340	2 431	5 470	3 850	1 419

Loan #2	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Investment credit to be provided by Bank Gospodarstwa Krajowego in planned amount amounting to 550 million PLN. Effective annual interest rate calculated taking into account: loan interest at floating rates - which is the total of the WIBOR 3M reference rate and bank's fixed margin of 1.6%, commission on every loan installment disbursement at 0.39% of the amount of installment concerned, commission on the unused expected maximum value of the arrangement at 1.0%, commission for issuing a State Treasury guarantee at 1.2% of full amount available payable immediately after arrangement conclusion. Expected maximum value of the Arrangement to be available in annual tranches within 2021-2023. The arrangement should be repaid until 31.12.2033.					
Remaining balance	0	190 000		351 000	494 000	439 000
Interest rate %	3,57%	3,57%		3,57%	3,57%	3,57%
Interest amount	0	1 707	1 707	9 144	17 206	17 465

Other loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description						
Remaining balance						
Average weighted interest rate %	-	-	-	-	-	-
Interest amount			-			

Total loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total remaining balance	64 501	339 432		480 432	499 432	439 000
Average weighted interest rate %	0,14%	1,19%		3,04%	4,22%	4,30%
Interest amount	90	4 047	4 138	14 614	21 056	18 884

3.4.5 - Restructuring costs

3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3

Restructuring costs from previous reference periods approved by the European Commission?	No

3.4.5.2 Restructuring costs planned for RP3

Restructuring costs foreseen for RP3?	No

Additional comments

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

Additional costs of measures necessary to achieve the capacity targets for RP3?	Select
If yes, number of en route charging zones concerned	1

Polish Air Navigation Services Agency (PANSa)

a) Overall description of the measures necessary to achieve the en-route capacity targets for RP3, which induce additional costs

Information on measures planned to be implemented to support achievement of capacity targets is provided in chapter 3.3.1 of the revised draft RP3 PP. These include, among others,

- reorganisation of ACC Warszawa sector configuration - three layer vertical division with improved resectorisation,
- reorganisation of TMAs for major Polish airports, including new sectors,
- continuation of training process for new ATCOs (required increase in ATCO numbers as a result of planned airspace changes),
- continued investments in infrastructure (CNS) and technology allowing for optimisation of airspace structures and optimisation of coverage in the Polish airspace as well as supporting resilience, scalability and flexibility of service provision,
- evolving ACC sector configurations to cope with updated traffic forecasts.

The above mentioned measures will generate additional costs in the areas of staff (ATCOs and ATCO students) as well as investments costs (depreciation and cost of capital on new CAPEX dedicated to capacity KPA - as indicated in Annex E, ca. 84% of CAPEX planned for RP3 is related to capacity KPA).

b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3

Number of capacity measures, which induce additional costs	2

ATCO increase	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	3 609	4 042	7 651	6 642	9 643	12 892

Description and justification of the additional determined costs of the measure

To be able to implement airspace resectorisation, including the three-layer vertical division, some increase in ATCO number is needed. This relates both to ACC ATCOs as well as APP ATCOs. Due to dynamic traffic increase over 2018-2019, PANSa faced insufficient number of ATCOs at the end of RP2 - this gap needs to be filled in over the RP3 perspective to support reaching the capacity targets over 2023-2024 as well as beyond. It needs to be stressed that reference values for Poland underlying the revised Union-wide capacity targets for RP3 are more ambitious than the initial ones from 2019 - this is reflected also in revised local capacity targets proposed in the revised Polish RP3 PP. This revised, very ambitious target of 0,12 min/flight cannot be met without the planned airspace resectorisation and required increase in ATCO numbers.

Increase in ATCO numbers results in increase in staff costs. For the purpose of calculating the additional costs related to this measure only costs related to employment of new ATCOs (salaries with related additional remuneration elements as well as social security payments) and their employment during the training period (during both, ab-initio training and on-the-job training) were taken into account - where as new ATCO only net increase above actual level at 31.12.2019 (end of RP2) was considered (replacements of ATCO leaving PRU1 were not considered in the calculations). The amounts presented in the table do not include other costs related to the ATCO training process like accommodation, costs related to recruitment of ATCO students, cost of trainers, cost of training materials or infrastructure used for training purposes or indirect costs - therefore the costs presented in the table need to be considered as very conservative.

Execution on investments related to capacity	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	3 289	19 558	22 847	32 899	49 091	65 007

Description and justification of the additional determined costs of the measure

Maintaining and further increasing ER capacity of FIR Warszawa requires investments in infrastructure and systems necessary to perform ANS by PANSa. Ca. 84% of PANSa RP3 CAPEX is related to capacity KPA. These investments include, among others, upgrades/changes to ATM system (PEGASUS-21 and subsequently iTEC), infrastructure needed to accommodate the new ATM system (iTEC), construction of new OPS rooms aimed at providing contingency and/or enabling capacity increase, development of radiocommunication stations required for implementation of three-layer vertical division of airspace or replacement/development of SUR infrastructure. They cover both, replacement investments (without which maintaining the capacity provided up-to-date would not be possible) as well as development investments (aimed at further improving capacity, both for the RP3 period and beyond) or projects considered as both replacement and development project (e.g. replacement of an asset or system but with additional functionalities added). Detailed information on investments over RP3 is provided in chapter 2.1 of the draft revised RP3 PP.

Execution of those investments results in increase in related costs - depreciation and cost of capital on fixed assets. For the purpose of calculating the values presented in the table above, only costs related to CAPEX to be spent over RP3 (from Jan 2020) allocated to ER services were considered - costs related to parts of the projects that started earlier (before end of RP2) were not considered. Again, similar as in the case of staff costs above, the amounts need to be considered as very conservative as they do not include non-capitalised cost elements related to CAPEX execution or putting the assets into operation like costs of business trips, additional training etc.

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total additional costs of measures ('000 national currency)	6 898	23 600	30 498	39 541	58 734	77 899

c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 by nature by ANSP

Additional costs of measures necessary to achieve the capacity targets for RP3 (nominal terms in '000 national currency)

Click to select	2020D	2021D	2020/2021D	2022D	2023D	2024D
Staff	3 609	4 042	7 651	6 642	9 643	12 892
of which, pension costs	510	619	1 129	1 047	1 516	1 916
Other operating costs			-			
Depreciation	0	10 464	10 464	17 363	24 345	30 802
Cost of capital	3 289	9 093	12 382	15 537	24 747	34 205
Exceptional items			-			
Total additional costs of measures	6 898	23 600	30 498	39 541	58 734	77 899

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total additional costs of measures ('000 national currency)	13 796	47 199	60 996	79 083	117 468	155 799

Additional comments

d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

SECTION 3.5: ADDITIONAL KPIS / TARGETS

3.5 Additional KPIS / Targets

Annexes of relevance to this section

ANNEX J. OPTIONAL KPIS AND TARGETS

3.5 - Additional KPIs / Targets

Number of additional KPIs	Click to select number of additional KPIs

SECTION 3.6: DESCRIPTION OF KPAS INTERDEPENDENCIES AND TRADE-OFFS INCLUDING THE ASSUMPTIONS USED TO ASSESS THOSE TRADE-OFFS

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

3.6.2 - Interdependencies and trade-offs between capacity and environment

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

3.6.4 - Other interdependencies and trade-offs

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

a) Do the measures to reach the targets in the different KPAs require changes in the ANSP functional system that have safety implications? If yes, which mitigation measures are put in place?

Some of the measures foreseen to be implemented to support reaching the targets in the areas of capacity and environment, including FRA development plans and multilayer vertical split of airspace, will require changes in PANSA functional system. For such changes, prior to their implementation, safety assessment is performed and submitted to the NSA. Safety is considered a priority in implementation of any such changes. Safety assessment is performed under the Safety Management System in place at PANSA for all changes in the functional system and changes that have impact on that system. In such safety assessment all potential implications of the change for the safety area, as well as risks are identified and analysed. If the assessment indicates that the change might have any safety implications, then respective mitigation measures are planned to avoid any negative impact of the change on the safety area. Such measures may include for example restrictions introduced when implementing/developing FRA, reduced capacities of elementary sectors for new sectors after airspace reorganisation, dedicated trainings/briefings to staff etc.

b) What are the main assumptions used to assess the interdependencies between safety and other KPAs?

The main assumption for the interdependencies is that the level of safety required under the EU legislation shall not be compromised and impacted by the other performance areas.

c) What metrics, other than those indicators described in the Regulation, are you monitoring during RP3 to ensure targets in the KPAs of capacity, environment, and cost-efficiency are not degrading safety?

PL NSA analyses safety related occurrences within State Safety Programme/Plan and Safety Oversight Report. The inspection plan is developed as a risk based oversight programme.

d) Do targets allow trade-offs in operational decision making to managing resource shortfalls in order to preserve safety performance? Do targets restrict the release of staff for safety activities, such as training?

The trade-offs in operational decision making are sometimes unavoidable. The ambitious capacity targets may restrict the release of staff for safety training during the high season. However, these activities are not deleted but postponed and moved to low season.

e) Has the State reviewed the ANSP financial and personnel resources that are needed to support safe ATC service provision through safety promotion, safety improvement, safety assurance and safety risk management after changes introduced to achieve targets in other KPAs? Please, explain.

PL CAA inspectors review and supervise the ANSP personnel resources in accordance with regulatory requirements of the Commission IR (EU) 2017/373, ATM/ANS.OR.B.005 and ATS.OR.200.

3.6.2 - Interdependencies and trade-offs between capacity and environment

Several projects (airspace optimisation, route network straightening, DCT and FRA implementation) carried out by PANSA in the past few years allowed to improve HFE KPIs calculated for Polish (and Baltic FAB) airspace. Already Poland has one of the lowest KEA values in the SES area. Further improvement of HFE KPIs may cause reduction in capacity and/or throughput of EPWW FIR airspace. In complex airspaces with high demand, capacity is inversely proportional to flight routing efficiency. This is also confirmed by preliminary results of SESAR 2020 PJ06 project which is validating FRA concept in high and very high complexity environments. According to the mentioned results, when FRA is being implemented in complex airspaces with high demand it is necessary to introduce some "structural limitations" (which decrease flight efficiency) in order to maintain capacity, which can be affected by increased complexity (ATCO workload) and increased number of ACC sectors, which are penetrated by flights carried out on shortened routings. This situation will lead to increased regulation implemented on the day of operation. The outcome of these structural limitations is very often less penalising than the cost of ATM regulations.

Last significant implemented PANSA project (POLFRA) aimed to optimise flight efficiency was implementation of FRA in FIR EPWW on 28th of February 2019. Based on the above mentioned knowledge and performed analysis, in order not to decrease capacity of ACC Warszawa, POLFRA was implemented together with minimal set of necessary RAD restrictions. All these restrictions were implemented after precise analysis in order to minimise negative impact on users, while at the same time minimizing the risk of occurrence of ATM regulation implemented on the day of operation. Please also see the initial Poland RP3 PP dated 11.2019 (point 3.6.2) where results of PANSA analysis regarding high level estimation of potential negative results of withdrawing some of "structural limitations" of POLFRA were presented.

Another example of trade-offs between capacity and environmental targets could be the effect of previously planned but currently suspended enhanced NM Summer Measures. While at network level these measures are believed to bring positive effects for the level of delays, from the HFE perspective the led to negative effects linked to longer routes. This relationship was recognized also by EASA Management Board Task Force on Airspace Congestion.

Considering all mentioned above, PANSA is constantly trying to improve the HFE KPI values and improve capacity available for AUs. Recently three airspace projects are being developed in order to improve mentioned domains: cross-border FRA implementation projects (focused on HFE) and implementation of additional (third) sector layer in en-route airspace (focused on capacity).

Two cross-border FRA implementation projects are being developed now by PANSAs:

- Baltic FRA – the common cross-border FRA are including cross-border FRA operations between Poland and Slovakia (Baltic FRA and SEE FRA) with planned implementation dates set to FEB 2022.

- Cross border FRA operations between Poland and Sweden (Baltic FAB and DK-SE FAB), planned for FEB 2023.

Both projects are focused on allowing AUs to plan freely via common border between Poland and Lithuania/Slovakia/Sweden, which will result in shorter, more optimised routings. Although some improvement of HFE could be expected, it also must be underlined that some structural limitations must be also applied in order not to decrease the available capacity. Already in 2018 PANSAs noticed that capacity levels in south-east part of the Polish airspace is not enough to meet forecasted demand. Thus in 2019 the horizontal split of 2 ACC sectors was implemented. Although available capacity was increased and the delays were reduced that solution was foreseen as an intermediate step due to some operational constraints which increased complexity in that area. To further improve airspace configuration, minimise additional complexity and further increase available complexity forecasted for RP3 period (including the whole EPWW FIR area) the implementation of third layer of ACC sectors was initiated. The project was divided into 4 steps. The original plan was to start implementation of the first step in 2021 but due to the COVID-19 pandemic it was postponed to 2022. This project, although not directly focused on HFE improvement, also can indirectly contribute to the HFE by further minimisation of probability of delays. Thus AUs will not have to be forced to plan longer routings in order to avoid congested and regulated areas during peak summer periods. Additionally, in March 2020 PANSAs has suspended a significant number of RAD restrictions related the Polish FRA area (POLFRA) due to the low level of traffic caused by COVID-19 pandemic and lack of capacity problems. As for June 2021 these restrictions are still being suspended at least until November 2021. Depending on traffic recovery their suspension might be prolonged. Undertaken actions could benefit in HFE optimisation, however although shorter connections were available, actual decrease of HFE KPIs has not been observed, because of AUs choices which in most cases take into account the cheapest routings, which are not necessarily the shortest ones, or because of some political factors.

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

There is a direct and widely recognised trade-off between these two areas. However, this relationship is not linear – the crisis period of 2020–2021 has shown that there is a minimum cost of ensuring service continuity and maintaining required capacity. Capacity provision comes at cost. To be able to increase and even to maintain current capacity, ANSPs need financial resources allowing them to ensure availability of ATCOs and infrastructure/systems – these are the two most visible resources categories related to capacity provision. This also applies to situation, when ANSP encounters periodic traffic drop but in longer perspective traffic recovery and further traffic increase is expected – at such times, even with lower traffic, infrastructure/systems must be maintained operational and due consideration needs to be given to ensuring OPS staff availability when traffic recovers. This is the case over 2020–2021. ANSP has to be prepared to resume full operational capabilities once traffic returns. Having in mind that building operational capacity is a long lasting process (time required for ATCO training and for investments execution), operational capabilities cannot be decreased to a point where it would be impossible to return to the level of service required by the Airspace Users after the crisis. Without required financial resources ANSPs will not be able to ensure availability of ATCOs or technical staff maintaining infrastructure/systems. Similarly, lack of investments in new tools supporting ATCOs, new ATM system and CNS infrastructure would negatively impact provision of additional capacity. This concerns not only ER, but also investments at airports like ILS or A-SMGCS, which increase airport capacity in adverse weather conditions. Relationship between cost efficiency and capacity can also be measured by so called economic cost being total of financial costs invoiced to the airspace users and cost of delays. Reductions in ANSP financial costs can lead to significant increase in cost of delays, as a consequence negatively impacting the economic cost - with increasing cost for airspace users.

3.6.4 - Other interdependencies and trade-offs

Experience of Poland of RP2 indicates that there is also an interdependency between costefficiency and environment areas. In case of bordering charging zones with significant differences in unit rates, in times of relatively low fuel costs, aircraft operators might be willing to fly through 'cheaper' charging zones, even when this means longer routes. During RP2 these differences in the level of UR among the States were seen. The airspace users planned their most efficient route (not necessarily the shortest) and then performed flight on the shortest available routes. This practice has an impact also on ANSP overall performance in both cost-efficiency and environment areas.

Should additional space be needed for any of the items, please use Annex S.

SECTION 4: CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

4.1 - Cross-border initiatives and synergies

4.1.1 - Planned or implemented cross-border initiatives at the level of ANSPs

4.1.2 - Investment synergies achieved at FAB level or through other cross-border initiatives

4.2 - Deployment of SESAR Common Projects

4.3 - Change management

Annexes of relevance to this section

ANNEX N. CROSS-BORDER INITIATIVES

4.1 - Cross-border initiatives and synergies

4.1.1 - Planned or implemented cross-border initiatives at the level of ANSPs

Number of cross-border initiatives	4

Initiative #1	
Name	Local Traffic Complexity Management
Description	Objective: The Local traffic complexity management project is an instrument for automated and dynamic traffic forecasting and sectorisation planning that would provide support to local ATFCM and ATS units in the execution of tasks in order to enable efficient planning of capacity and staffing at PANSO/Oro Navigacija. The project would enable to run fast-time simulations that in turn would develop optimised sectorisation scenarios in terms of capacity parameters and ATCOs resources needs. The project will enable coordination between ANSPs and different stakeholders, in particular NM, AUs and MIL, airport operators/slot coordinator through collaborative decision-making processes. Status: Project is in implementation stage. PANSO/Poland and Oro Navigacija/Lithuania submitted project application in 2018 Q1, with was approved in November 2018. Project Grant Agreement was signed in December 2018. PANSO is planning to finish the implementation of local Traffic Complexity Tool in Q3 2021. Oro Navigacija/Lithuania started the formal withdraw process from the project financed under Grant Agreement in 2021. ATM MP links and EU legislation links: In accordance with the CP1 IR (EU 2021/116) and the Deployment Programme, ATM Functionality # 4 (Network Collaborative Management), including the SDP Project Family 4.4.2 (Traffic Complexity tools), is required to be deployed in the European Air Traffic Management Network (EATMN). ATM MP L3 2020 edition: ATC12.1 AF4 - Network Collaborative Management; SESAR Deployment Programme 2018: Family 4.4.2 - Traffic Complexity tools.
Expected performance benefits	Safety: Medium impact The project will enable more precise traffic forecasting leading to a significant reduction of overload situations and having positive impact on improved safety. The project will reduce operational human errors. Environment: Medium impact Reduced flight times and delays due to improved trajectory and network complexity assessment. Capacity: High impact The project will enable more precise traffic forecasting and traffic predictability, which will have positive impact on capacity increase and delay reduction in both en-route and terminal operations. Improved predictability is a consequence of better capacity utilisation. This improvement is mainly related to improved trajectory and network complexity assessment. Cost-efficiency: Low impact Increased ATCO productivity due to better allocation of resources to traffic thanks to traffic complexity assessment and EFD messages. Operational efficiency: Medium impact Reduced flight times and delays due to improved trajectory and network complexity assessment.

Initiative #2	
Name	ITEC/Convergence of ATM systems in the Baltic FAB ACCs and Cross-Borders Service provision with Joint Contingency Service Provision
Description	Objective: Objective of this project is to achieve ATM system convergence, which will be an enabler for several solutions aiming at achieving the optimal use of technical and human resources resulting in lower provision costs and improved operational performance in the Baltic FAB. It will be then possible, for two ANSP operating the same ATM system, to provide contingency ATM services for themselves. Status: Project is during the implementation phase. ATM MP links and EU legislation links / other links: L3: ATC02.8, ATC12.1, ATC17, ITY-AGDL, ITY-AGVCS2, ITY-FMTP EC Regulations: 373/2017; 552/2004 (amended by 1139/2018); ESSIP/LSSIP: All ESSIP/LSSIP ATC & ITY-xxx objectives related to ATM and COM systems; FOC< 2019 and IOC>2017 ATM Master Plan: All ATM MP OI steps with FOC< 2019 and IOC>2017 related to VLCN Network Strategy Plan: SO4.

Expected performance benefits	<u>Safety:</u> High impact Improved safety and controllers confidence while using complete set of Safety Nets, Conflict detection and monitoring aids available for 2015+ manufactured systems be offered by manufacturers (from 2018+). <u>Environment:</u> Low impact Low impact 1) System will support cross-border FRA contributing to ENV KPIs for horizontal fuel savings and corresponding reduction of CO2 emission; 2) System will be upgradable to future XMAN and thus capable to contribute future ENV KPIs most probably related to vertical fuel savings and corresponding CO2 emission and noise reduction. <u>Capacity:</u> High impact 1) Designed to support dynamic sectorization it will allow to deliver capacity on demand thus optimizing controllers workload while avoiding either overdelivery or underdelivery of the tactical capacity; 2) Air-Ground and Ground-Ground data exchange for seamless ATC coordination, dialog and transfer of communication means will allow to accommodate significant traffic growth/fluctuations without increasing the number of controlling sectors, protecting them from tactical overloads which may cause potential delays; 3) Interoperable with the airport systems to support A-CDM. <u>Cost-efficiency:</u> High impact. It will reduce equipment maintenance costs (other operating costs) and minimise the required installation of new upgrades and functions in existing ATC system. <u>Operational efficiency:</u> Medium impact Reduction in flight time and reduction in fuel burn.

Initiative #3	
Name	Enhancement of inter-FAB cooperation and cooperation with non-EU countries (FAB project)
Description	The main objective of cooperation is to drive progress towards greater flight efficiency, cost <u>efficiency and operational consistency</u> in line with Single European Sky performance goals. <u>Status:</u> Implementation phase is closed. Baltic FAB ANSPs will continue to seek for further possibilities of common actions in international environment in accordance with Baltic FAB Development Strategy. Project is a continuous activity. <u>ATM MP links and EU legislation links:</u> L3: AOM21.2, ATC02.8, ATC07.1, ATC12.1, ATC15.1, ATC15.2, ATC17 EC Regulations: SES Legislation ATM Master plan: "Regulatory roadmap". <u>Particular activities:</u> • Joint execution of the project based on ANSPs resources (financial, technical, HR), MoT, MoD, NSAs in kind contribution. ANSP activity was focused on cooperation within interFAB Cooperation platform and GATE ONE as well as on opportunities provided by joint participation in SESAR Deployment Manager (Common implementation of AGDL, participation in definition of DLS functionality B, iTEC), B4 Consortium (Pansa, Oro Navigacija, LPS and ANS CZ) and Centralised Services (PANSA, Oro Navigacija, Uksatse) projects.c • In 2017, PANSA and Oro Navigacija, signed a memorandum of cooperation with the Ukrainian air traffic agency UKSATSE. Under the memorandum, the parties will strive for intensive cooperation on aviation infrastructure development and airspace management, particularly in the area of the preparation and development of operating systems for air traffic control and the deployment of Free Route Airspace. • In 2018 a Memorandum of Cooperation between Baltic FAB ANSPs and Belaeronavigatsia, Belarusian Air Navigation Service Provider, Belaeronavigatsia was signed. The aim of the Memorandum of Cooperation between Baltic FAB and Belaeronavigatsia was to give a framework for potential future works on operational level. • By a bilateral agreement on cooperation, Oro Navigacija and PANSA formalized their cooperation in search and rescue (SAR) area signing the appropriate agreement in 2018. The two ANSPs are also planning to cooperate in joint trainings / exercises and exchange of best practice. • Also, meetings were held with Belarusian ANSP, Ukrainian ANSP, and Kaliningrad ANSP with the aim to discuss the optimisation of CNS. Numerous common activities prove that ANSPs in Baltic FAB consider its common presence as valuable tool to achieve benefits. Two abovementioned Memorandums of Cooperation signed between Baltic FAB ANSPs and non—EU ANSPs from Ukraine and Belarus partially cover cross-border activities: 1. MoC with Ukraine covers co-operation concerning the following areas: • Cross border Free Route Airspace; • Implementation and utilisation of GBAS/SBAS; • Deployment and extension of AMHS network; • Coordinated approach to DLS implementation; • Safety and Quality; • Implementation of common requirements applicable to ANSPs at EU level; • GATE ONE; • Baltic FAB ATM System. 2. MoC with Belarus covers cooperation concerning the following areas: • cross border Free Route Airspace; • implementation and utilisation of PBN; • deployment and extension of AMHS network; • coordinated approach to DLS implementation; • surveillance Data Exchange; • safety and quality; • flight plan progress messages exchange.
Expected performance benefits	Low to medium in SAF, ENV and CAPACITY KPI. Not applicable to Cost-Efficiency.

Initiative #4	
Name	Free Route Airspace (FRA) and cross-border FRA
Description	Commission Implementing Regulation (EU) No 716/2014 of 27 June 2014 on the establishment of the Pilot Common Project supporting the implementation of the European Air Traffic Management Master Plan, obliged air navigation service providers to introduce an airspace based on direct routing from January 1, 2018 and Full-FRA from January 1, 2022. According to the abovementioned regulation, these solutions must be provided and come into service at and above FL310 in the ICAO EUR region (currently, in accordance with the CP1 Regulation EU 116/2021, at and above FL305). On the 28th of February, 2019, the Free Route Airspace (FRA) was officially implemented in the Polish airspace. The testing and validation phase was completed, which allowed PANSA to launch FRA in Warszawa FIR according to the schedule. Free Route Airspace in Poland is known as POLFRA. POLFRA is applied 24/7, above FL095 excluding TMAs. PANSA's future plans are to expand and improve the capability of POLFRA, working together with neighbouring ANSPs on the crossborder implementations (see chapter on Environment KPI). Current PANSA activities on FRA are aligned with currently applicable Regulation EU (116/2021) on Common Project One (CP1) which repealed the Regulation No 716/2014 – Family AF3, Sub-functionality on Free Route Airspace (3.1.2).
Expected performance benefits	POLFRA is in operation since end of February 2019 and positive impact is visible when looking at the shortest constrained route indicator, which improved from March 2019. In general, extension of FRA on cross-border basis with Lithuania and other States/FABs is expected to contribute to the objectives of the performance scheme in the Environment KPA, however, due to the fact that HFE is impacted by a number of external factors beyond control of ANSP (including military activities, weather, political issues) no significant reduction in KEA should be expected. Next steps of POLFRA development (see also the chapter on Environment KPI): • To extend POLFRA into cross-border FAB Baltic Free Route Airspace – project is under development with target implementation in 2022; • Extension of POLFRA/FAB Baltic FRA to cross-border FRA with already existing (or planned) FRA of neighboring FABs (e.g. DK-SE FAB, FABEC, FAB CE) and countries (e.g. Ukraine, Belarus). PANSA has started cross-border FRA project with Sweden (LFV) with target implementation date 2023. <u>Additional comments:</u> • FRA is included into the list of initiatives since the FRA is being extended to crossborder FRA project between PANSA and Oro Navigacija. • PANSA also actively participates in initiatives undertaken by the Network Manager aimed at supporting Network performance. Following support under the enhanced NM Summer 2019 Measures over 2019, these include active participation in the Operational Excellence Programme, where PANSA acts as a Champion ANSP for WST 05 – Achievement of higher sector throughput as well as in Airspace Restructuring Programme.

Additional comments

4.1.2 - Investment synergies achieved at FAB level or through other cross-border initiatives

Details of synergies in terms of common infrastructure and common procurement
• New joint ATM system developed under the iTEC alliance, • Cooperation in project related to implementation of Local Traffic Complexity Tool, • Data sharing related to CNS infrastructure. This could include: - o DVOR/DME Suwałki (replacement of existing DVOR/DME 'SUW' after resource period; this navaid may be potentially used for instrument procedures or RNAV coverage also on the territory of Lithuania); - o DME Rudka (new DME which will be set instead of current DVOR/DME 'RUD'; planned location of new DME site is 52°55'36.1 N 023°05'16.3E (WGS-84); This navaid may be potentially used for RNAV coverage also on the territory of Lithuania); - o Radar Gdańsk (new radar site close to Gdańsk (finally replacing current one); data from this radar may be potentially shared with SE ORO NAVIGACIJA).

4.2 - Deployment of SESAR Common Projects

4.2.1 - Common Project One (CP1)

CP1 ATM Functionality (CP1-AF) / Sub functionality (CP1-s-AF)	Recent and expected progress
CP1-AF1 - Extended AMAN and Integrated AMAN/DMAN in High-Density TMAs	
CP1-s-AF1.1 AMAN extended to en-route airspace	Poland outside the geographical scope of the Regulation 2021/116 on CP1.
CP1-s-AF1.2 AMAN/DMAN Integration	Poland outside the geographical scope of the Regulation 2021/116 on CP1.
CP1-AF2 - Airport Integration and Throughput	
CP1-s-AF2.1 DMAN synchronised with predeparture sequencing	Poland outside the geographical scope of the Regulation 2021/116 on CP1.
CP1-s-AF2.2.1 Initial airport operations plan (IAOP)	Poland outside the geographical scope of the Regulation 2021/116 on CP1.
CP1-s-AF2.2.2 Airport operations plan (AOP)	Warsaw airport added to the geographical scope of the Regulation 2021/116. There is not yet data available. Monitoring activities to be launched later this year.
CP1-s-AF2.3 Airport safety nets	Poland outside the geographical scope of the Regulation 2021/116 on CP1.
CP1-AF3 - Flexible Airspace Management and Free Route Airspace	
CP1-s-AF3.1 Airspace management and advanced flexible use of airspace	Family 3.1.1: ASM Tool to support AFUA - 100% Full deployment achieved; Performance gains: the primary scope/focus of the Family is KPA Capacity and KPA Safety: • it increases airspace capacity thanks to better airspace organisation and planning, • it leads to better situational awareness of airspace users, • it enhances Civil-Military ATM performance, • it provides real-time exchange of airspace management data, • it facilitates collaborative (civil-military) decision-making and improves safety. Family 3.1.2: ASM Management of real-time airspace data - Implementation in progress (75% achieved); the deployment target date: December 2021; Performance gains: the primary scope/focus of the Family is KPA Capacity: • it provides information about status of airspace reservation in order to optimise the use of airspace and increase capacity. Family 3.1.3: Full rolling ASM/ATFCM process and ASM information sharing - Implementation in progress (35% achieved); the deployment target date: December 2022; Performance gains: the primary scope/focus of the Family is KPA Capacity: • it will contribute to Network performance improvements and will support a better utilisation of Free Route Airspace and fixed route structure through enhanced ASM processes and tools, • it will contribute to enhance performance-driven ASM-ATFCM processes and will introduce more dynamic and flexible ASM/ATFCM/ATS processes. Family 3.1.4: Management of Dynamic Airspace Configurations - Implementation in progress (90% achieved); the deployment target date: December 2021; Performance gains: the primary scope/focus of the Family is KPA Capacity: it will enable dynamic sectorisation and therefore flexible Airspace Management within Polish airspace.
CP1-s-AF3.2 Free route airspace	Family 3.2.1: Upgrade of ATM systems to support DCTs and FRA - Implementation in progress (95% achieved); the deployment target date: December 2022; Performance gains: this Family embraces all four KPAs as defined in the Performance Scheme: PANSA projects that fall under this Project Families aim at deploying advanced operational concepts such as but not limited to extended information exchange with other systems / partners in a timely, coordinated and synchronized effort to raise capacity, improve safety and cutting costs and thus enabling a significant performance increase at PANSA; PANSA projects facilitate also Free Route Airspace utilization and Extended Arrival Management; while the projects support FRA utilization, they enable improved flight efficiencies in fuel and in time for the airspace users. Family 3.2.3: Implement Direct Routings (DCTs) - 100% Full deployment achieved; Performance gains: the primary scope/focus of the Family is KPA Environment; it enables improved flight efficiencies in fuel and in time for the airspace users thus, also reducing the environmental footprint of commercial aviation. Family 3.2.4: Implement Free Route Airspace (FRA) - 100 % Full deployment achieved; Performance gains: the primary scope/focus of the Family is KPA Environment; it enables improved flight efficiencies in fuel and in time for the airspace users thus, also reducing the environmental footprint of commercial aviation.
CP1-AF4 - Network Collaborative Management	

CP1-s-AF4.1 Enhanced short-term ATFCM measures	Family 4.1.1: STAM Phase 1 – 100% Full deployment achieved; Performance gains: the primary scope/focus of the Family is KPA Capacity: • it minimizes ATFCM delay by reducing the need for ATFCM regulations and its impact on operations, • it improves the balance between demand and available capacity through cooperation between ATFCM and ATS processes, through targeted measures on (an) individual flight(s), • it supports the network coordination between stakeholders and provides the network view for the elaboration, decision and execution of STAM measures, • it provides the collaborative environment to stakeholders during the elaboration, decision and execution of STAM measures; • it helps to plan optimum capacity and flight efficiency. Family 4.1.2: STAM Phase 2 - Implementation in progress (5% achieved); the deployment of the Family linked with the Family on Traffic Complexity Tool (TCT); STAM Phase 2 to be implemented via Local Tool (TCT) in B2B connection with the Network Manager; the deployment target date: December 2021; Performance gains: since this Family aims at further developing the STAM Phase 1 initiative, the primary scope/focus of the Family is KPA Capacity: it enables an optimised use of the available capacity by using realtime information about the network situation to identify and avoid 'hotspots' and reduce traffic complexity; Reduced flight time and holdings, owing to improved network predictability. The both Families (4.1.1 and 4.1.2) contribute also to cost savings and reduced fuel burn due to airspace users being able to fly their preferred trajectories, according to their priorities and operational objectives.
CP1-s-AF4.2 Collaborative NOP	Family 4.2.2: Interactive Rolling NOP - Implementation planned (0% achieved); ATFM procedures and staff training to be done when NM platform (N-Connect) is available; the deployment target date: December 2021; Performance gains: the primary scope/focus of the Family is KPA Capacity and KPA Safety; the Family will enable to improve ATCO workload predictability and prevent ATCOs overloads. the Family, once NM platform is available, will contribute to improving Network situational awareness and increasing operational CDM efficiency for all network stakeholders; it will help reduce flight time and flight holding due to improved network predictability. Family 4.2.3: Interface ATM systems to NM systems - 100% Full deployment achieved; Performance gains: this Family is of a horizontal nature and in fact embraces all four KPAs as defined in the Performance Scheme; it is focused on the collaboration improvement between NM, ANSPs, airports and airspace users in flight plan filing and processing. Family 4.2.4: AOP/NOP information sharing - Poland/no Polish stakeholder required to deploy this family in line with PCP.
CP1-s-AF4.3 Automated support for traffic complexity assessment	Family 4.3.1: Traffic Complexity Tools - Implementation in progress (20% achieved); the deployment target date: December 2021; Performance gains: the primary scope/focus of the Family is KPA Capacity: PANSA's projects falling under this Family are expected to bring the largest performance benefits in terms of capacity increase and reduction of delays both in en-route and terminal traffic; as concerns indirect impacts, the project will contribute to the following KPAs: • Safety: the project will enable more precise traffic forecasting leading to a significant reduction of overload situations and having positive impact on improved safety. • Predictability: The project will enable more precise traffic forecasting and traffic predictability that will have positive impact on capacity increase and delay reduction in both en-route and terminal operations. Improved predictability is a consequence of better capacity utilisation. This improvement is mainly related to improved trajectory and network complexity assessment. • Flight efficiency: Reduced flight times and delays due to improved trajectory and network complexity assessment. • Cost efficiency: Increased ATCO productivity due to better allocation of resources to traffic thanks to traffic complexity assessment and EFD (Electronic Flight Display) messages.
CP1-s-AF4.4 AOP/NOP integration	Warsaw airport added to the geographical scope of the Regulation 2021/116. There is not yet data available. Monitoring activities to be launched later this year
CP1-AF5 - SWIM	
CP1-s-AF5.1 Common infrastructure components	Family 5.1.1: PENS1: Pan-European Network Service version 1 - 100% Full deployment achieved; Performance gains: the primary scope/focus of the Family is KPA Cost-efficiency: a joint EUROCONTROL / ANSP led initiative to provide a common IP based network service across the European region covering voice and data communication and providing efficient support to existing services and new requirements that are emerging from future Air Traffic Management concepts, in particular in the context of SESAR (SWIM backbone). Family 5.1.2: NewPENS: New Pan-European Network Services – 100% Full deployment achieved; Performance gains: since the Family aims at replacing the PENS1, the primary scope/focus of the Family is also KPA Cost-efficiency through the multistakeholder nature of the initiative.

CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	Family 5.2.1: Stakeholder Internet Protocol Compliance - Implementation in progress (60% achieved); the implementation project (co-funded from EU funds) underway; the deployment target date: 2021; Performance gains: PANSA's project that falls under the Family is about splitting of operational and non-operational services that are based on network environment and thus contributes to improving network services for operational users by upgrading reliability and stability level (service continuity) and, ultimately, to KPA Safety. Family 5.2.2: Stakeholder SWIM Infrastructure Components - Implementation in progress (5% achieved); the implementation project (co-funded from EU funds) underway; the deployment target date: December 2024; Performance gains: PANSA's project that falls under the Family consists in improving reliability level for AMHS and upgrading AMHS functionality for Warsaw AMHS COM Center, thus contributing to service continuity and KPA Safety. Family 5.2.3: Stakeholders' SWIM PKI and cybersecurity - Implementation planned; PANSA is going to make use of solutions/best practices that will be developed in the framework of the multistakeholder project on SWIM Common PKI and policies & procedures for establishing of Trust Framework; the deployment target date: December 2024; Performance gains/description: the scope of activities under the Project families concerns cybersecurity aspects.
CP1-s-AF5.3 Aeronautical information exchange	Family 5.3.1: Upgrade/Implement Aeronautical Information - Implementation in progress (20% achieved); the deployment target date: December 2024; Performance gains/description: PANSA's activities within the Family will support the enhancement of security, data integrity and capacity, as well as promotion of ATM automation while making sure that the data quality is compatible with System Wide Information Management (SWIM) requirements; it will improve consistency, reliability and integrity of aeronautical data and information as well as the availability of quality-assured electronic terrain and obstacle data from authoritative sources.
CP1-s-AF5.4 Meteorological information exchange	Family 5.4.1: Upgrade/Implement Meteorological Information - Implementation planned (0% achieved); the implementation of the Family dependent on MET Service Provider activities in order to be able to consume services as provided by METSP; the deployment target date: December 2024.
CP1-s-AF5.5 Cooperative network information exchange	Family 5.5.1: Upgrade/Implement Cooperative Network Information Exchange System/Service - Implementation in progress (10% achieved); the deployment target date: December 2024; Project gains/description: Activities under this Family will be focused on initiating SWIM compliance and at developing/deploying new B2B services to exchange network / flight plan information between NM and operational stakeholders; the Family will contribute to KPA Capacity and KPA Safety.
CP1-s-AF5.6 Flight information exchange (yellow profile)	Family 5.6.1: Upgrade/Implement Flight Information Exchange System / Service supported by Yellow Profile - Implementation planned (0% achieved); the deployment target date: December 2024; Performance gains/description: this Family aims at upgrading or implementing Flight Information Exchange systems and services supported by the Yellow Profile in accordance with SWIM principles; the implementation of this Family requires an analysis of upgrades and new implementations of services to be performed, as well as the development of a concept on how to tackle the transition for this Family; this analysis shall include the development of a roadmap of the transition and the identification of the relevant artefacts (roadmap, services definition, Safety and Security framework, compliance framework); the transition concept is still awaited. Family 5.6.2: Upgrade/Implement Flight Information Exchange System / Service supported by Blue Profile - Implementation planned (0% achieved); please note that this area has been removed from the CP1.
CP1-AF6 - Initial Trajectory Information Sharing	
CP1-s-AF6.1 Initial air-ground trajectory information sharing	Family 6.1.1: ATN B1-based services in ATSP domain (CPDLC) - 100% Full deployment achieved; Performance gains: the primary scope/focus of the Family is KPA Capacity and KPA Safety: through the data-link communication, ATCOs' workload is substantially diminished which contributes to capacity and safety increase. Family 6.1.2: ATN B2-based services in ATSP domain - Implementation not planned yet (0% achieved); Low readiness Family; depending on ATN B2 services maturity, PANSA will later decide if it is feasible to upgrade current ATM system with ATN B2 services or if to postpone it until the future ATM system. Family 6.1.3: A/G and G/G Multi Frequency DL Network in defined European Service Areas - 100% Full deployment; Performance gains: the primary scope/focus of the Family is KPA Capacity and KPA Cost-efficiency: • it supports SDM in its activities according to the DLS Recovery Plan and defining a European DLS Common Governance. • it identifies steps towards the envisaged target solution in order to achieve the required performance needed to achieve full AF6 implementation. • it identifies the "Service Areas" and develops a design of the system architecture that will enable Data-link services provision in the most efficient way.
CP1-s-AF6.2 Network Manager trajectory information enhancement	A new theme in the CP1; The Network Manager required to deploy.
CP1-s-AF6.3 Initial trajectory information sharing ground distribution	A new theme in the CP1; There is not yet data available; monitoring activities to be launched later this year.

4.3 - Change management

Change management practices and transition plans for the entry into service of major airspace changes or for ATM system improvements, aimed at minimising any negative impact on the network performance

PANSA has a dedicated change management programme. Identification, initiation, assessment of the need for change, development of the change and the implementation of the change takes place in accordance with internal regulations in force at PANSA. There is a catalogue of changes requiring notification and/or approval of the President of the Civil Aviation Authority. The major changes may be proceeded as projects with additional internal PANSA procedures basing on modified management procedures specially created for PANSA. Every change takes a formal evaluation and risk assessment. Safety assessment is carried out, training support is provided to prepare the workforce to new types of tools and working methods.

The process is continuously measured and monitored.

Managers of all the units and leaders of the changes take part in recurring meetings where the progress is monitored. Impact is assessed, reviewed and mitigated during the process.

Negative impact is minimised by close cooperation with specialists/practitioners and stakeholders during the change process and transition plans involve implementations in a limited environment that can include monitoring the operations in implementation phase and step by step introduction in lower traffic or higher workforce. For example during the introduction of POLFRA there were open days for stakeholders and the validations of flight plans involved all the major aircraft operators and CFSPS directly. To exclude the possible effect at the beginning of introduction the operational staff was increased and less workintensive system configurations were launched.

SECTION 5: TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

5.1 - Traffic risk sharing parameters

5.1.1 Traffic risk sharing - En route charging zones

5.1.2 Traffic risk sharing - Terminal charging zones

5.2 - Capacity incentive schemes

5.2.1 - Capacity incentive scheme - Enroute

5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute

5.2.1.2 Rationale and justification - Enroute

5.2.2 - Capacity incentive scheme - Terminal

5.2.2.1 Parameters for the calculation of financial advantages or disadvantages - Terminal

5.2.2.2 Rationale and justification - Terminal

5.3 - Optional incentives

Annexes of relevance to this section

ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING

ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES

ANNEX K. OPTIONAL INCENTIVE SCHEMES

5.1 - Traffic risk sharing

5.1.1 Traffic risk sharing - En route charging zones

Poland			Traffic risk-sharing parameters adapted?		no	
			Service units lower than plan		Service units higher than plan	
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

5.1.2 Traffic risk sharing - Terminal charging zones

Poland - EPWA			Traffic risk-sharing parameters adapted?		no	
			Service units lower than plan		Service units higher than plan	
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

Poland - Others			Traffic risk-sharing parameters adapted?		no	
			Service units lower than plan		Service units higher than plan	
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

5.2 - Capacity incentive schemes

5.2.1 - Capacity incentive scheme - Enroute

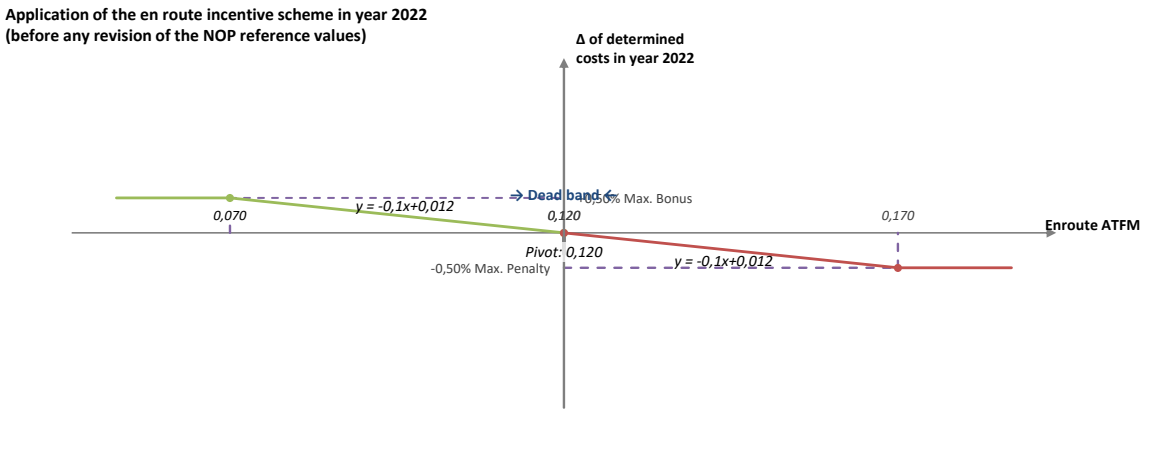
5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute

Enroute	Expressed in	Value
Dead band Δ	Select	$\pm 20\%$
Max bonus ($\leq 2\%$)	% of DC	0,50%
Max penalty ($\geq$ Max bonus)	% of DC	0,50%
The pivot values for RP3 are	modulated	

Polish Air Navigation Services Agency (PANS)

	2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)			0,12	0,12	0,12
Alert threshold (Δ Ref. value in fraction of min)			$\pm 0,050$	$\pm 0,050$	$\pm 0,050$
Performance Plan targets (mins of ATFM delay per flight)			0,12	0,12	0,12
Pivot values for RP3 (mins of ATFM delay per flight)*			0,12		
Financial advantages / disadvantages	Dead band range		[0,096-0,144]	[0-0]	[0-0]
	Bonus sliding range		[0,07-0,096]	n/a	n/a
	Penalty sliding range		[0,144-0,17]	[0-0,05]	[0-0,05]

* When modulation applies, these figures are only indicative as they will be updated annually on the basis of the November n-1 NOP and the methodology described in 5.2.1.2.a2 below. The pivot values for year n have to be notified to the EC by 1 January n.



5.2.1.2 Rationale and justification - Enroute

Indicate which of the principles below will be applied for the modulation of the pivot values for the whole RP3:	
a) In order to enable significant and unforeseen changes in traffic to be taken into account:	
a.1) The pivot value for year n IS the reference value from the November release of year n-1 of the NOP.	Yes
a.2) The pivot value for year n is informed by the November release of the year n-1 of the NOP and calculated according to the following principles and formulas:**	No
b) The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. If yes, provide below a justification for this decision and an explanation of how the pivot values are calculated.	

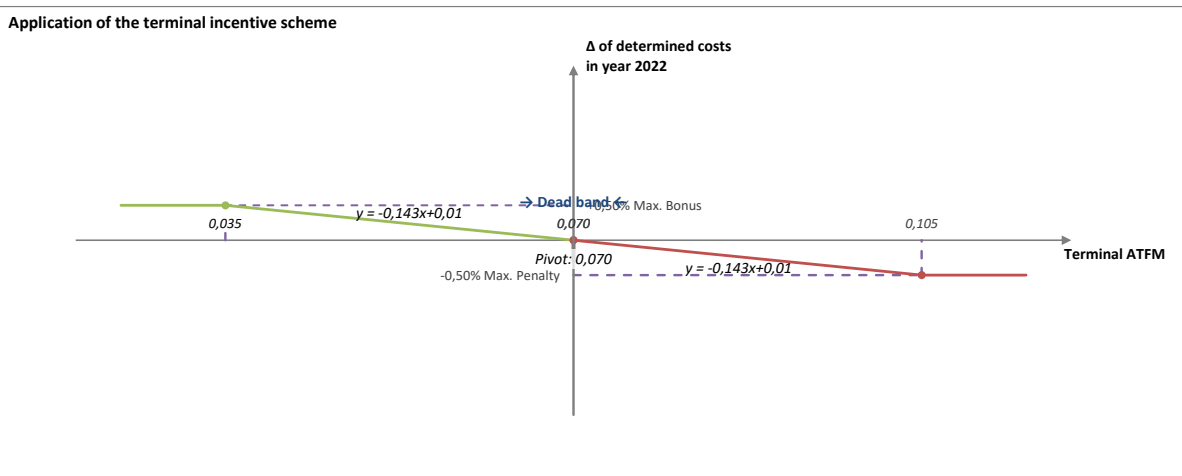
** Refer to Annex I, if necessary.

5.2.2 - Capacity incentive scheme - Terminal

5.2.2.1 Parameters for the calculation of financial advantages or disadvantages - Terminal

Terminal	Expressed in	Value
Dead band Δ	Select	±20%
Bonus/penalty range (% of pivot value)	%	±50%
Max bonus	% of DC	0,50%
Max penalty	% of DC	0,50%
The pivot values for RP3 are	Select	

	2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)			0,21	0,24	0,23
Bonus/penalty range Δ (in fraction of min)			±0,035	±0,000	±0,000
Pivot values for RP3 (mins of ATFM delay per flight)			0,07		
Financial advantages / disadvantages	Dead band range		[0,056-0,084]	[0-0]	[0-0]
	Bonus sliding range		[0,035-0,056]	n/a	n/a
	Penalty sliding range		[0,084-0,105]	[0-0]	[0-0]



5.2.2.2 Rationale and justification - Terminal

Explain how the bonus and penalties are going to be apportioned between the different terminal charging zones and ANSPs providing services in each of them**

The target in terminal capacity area was set on national level. The financial advantage or disadvantage from those incentive schemes shall be calculated on as a 0,5 % of the terminal determined costs of year n of PANSAs and recovered from (reimbursed to) airspace users through an increase (reduction) of unit rate respectively in year n+2.

** Refer to Annex I, if necessary.

5.3 - Optional incentives

Total maximum bonus for all optional incentives (≤2%):	0,0%

Total maximum penalty for optional incentives (≤4%):	0,0%

Number of optional incentives	Click to select

SECTION 6: IMPLEMENTATION OF THE PERFORMANCE PLAN

[6.1 Monitoring of the implementation plan](#)

[6.2 Non-compliance with targets during the reference period](#)

6 - IMPLEMENTATION OF THE PERFORMANCE PLAN

6.1 Monitoring of the implementation plan

Description of the processes put in place by the NSA to monitor the implementation of the Performance Plan including the yearly monitoring of all KPIs and PIs defined in Annex I of the Regulation and a description of the data sources

Based on Article 37, Regulation (EU) 2019/317) Polish NSA is obliged to carefully monitor the implementation of the revised Polish Performance Plan for RP3.

Polish NSA has prepared the monitoring activities to cover the following areas:

- investment plan (CAPEX) execution,
- execution of planned costs,
- use of public funding, including EU funding,
- execution of employment plan,
- execution of staff training plan,
- ATCO productivity,
- implementation of major projects aimed at increasing capacity and enhancing flight efficiency,
- implementation of corrective measures in the safety area.

The scope of the selected areas was chosen taking into account airspace users' remarks, as well as CAA own assessment of the relevant elements of the performance plan.

The CAA is going to continue the preparation of the CAA's report for the airspace users. Polish CAA proposes to maintain the monitoring exercise during RP3 with the adjustment of the scope and frequency of the information received from ANSPs, taking into account that the scope of the information from smaller institutions may not necessarily be the same as from PANSAs.

Additionally, CAA is obliged to perform the process of continuous oversight of all ANSPs as it is stated in the Regulation 2017/373. These monitoring activities at the national level includes ANSP's business and annual plans and their consistency with the PP.

All the above supervision exercise will give the CAA the knowledge on the ANSPs Performance and will facilitate identification of any threat concerning reaching of alert thresholds (in accordance with Article 18, Reg. (EU) 2019/317) and other obligatory requirements determined within Annex VI, Regulation (EU) 2019/317 and other relevant legislation (especially Regulation (EU) 2017/373).

The monitoring of progress in achieving performance targets set in Regulation (EU) 2019/317 shall be performed by dedicated Polish NSA inspectors. The cooperation with neighbouring NSAs is already established and will be used accordingly if needed.

Polish CAA in cooperation with Network Manager will prepare the annual Monitoring Report for the Republic of Poland and after approval will submit it to the European Commission via PRB until 1st June of every year of RP3 at the latest.

In Polish CAA opinion the monitoring described above will give CAA the necessary information to react in advance when the risk of not reaching the targets will be identified.

6.2 Non-compliance with targets during the reference period

Description of the processes put in place and measures to be applied by the NSA to address the situation where targets are not reached during the reference period

In case a target is not met at national level, the NSA PL shall identify potential issues, apply corrective measures designed to correct the situation and subsequently inform the European Commission in accordance with Art. 37 of the Regulation (EU) 2019/317.

Based on all the inputs, NSA in cooperation with Network Manager will prepare annual Monitoring Report for the Republic of Poland and after its approval will submit it to the European Commission via PRB until 1st June of every year of RP3 at the latest.

The monitoring exercise described above will give CAA the necessary information to react in advance when the risk of not reaching the target will be identified. This prudent approach shall minimise the risk of the situation when targets are not reached (in case when the situation is caused by the circumstances under ANSPs' control).

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)

ANNEX A.x - En route Charging Zone #x

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX B.x - Terminal Charging Zone #x

ANNEX C. CONSULTATION

ANNEX D. LOCAL TRAFFIC FORECASTS

ANNEX E. INVESTMENTS

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES

ANNEX J. OPTIONAL KPIS AND TARGETS

ANNEX K. OPTIONAL INCENTIVE SCHEMES

ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME

ANNEX M. COST ALLOCATION

ANNEX N. CROSS-BORDER INITIATIVES

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX S. INTERDEPENDENCIES

ANNEX T. OTHER MATERIAL

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

ANNEX Z. CORRECTIVE MEASURES*

** Only as per Article 15(6) of the Regulation*

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex A.1 Enroute Charging Zone

Legend for the Check sheet									
PRAWDA	Cells highlighted in green indicate that the items checked are equal and different to 0								
PRAWDA	Cells highlighted in pale yellow indicate that the items entering the check are blank or 0								
FAŁSZ	Cells highlighted in red indicate that the items checked are not equal								
FAŁSZ	Cells highlighted in pale yellow indicate that one of the items entering the check is blank or 0								
#DIV/0	Cells highlighted in orange indicate formulae that resulted in error								
N/A	Cells highlighted in white with grey "N/A" indicate that the check is not applicable for the given combination of year and/or RP								
INFORMATION ON COSTS AND UNIT COSTS - TABLE 1			Rounding (dec. plcs)	Determined					
#	Item	Checks for Route TABLE 1 (consolidated)		2020	2021	2020/2021	2022	2023	2024
#001	4.2	Check that values in Table 1 Consolidated are sums of the same items across all the entities (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total determined/actual costs (in '000 NC)		810 485,039	871 692,676	1 682 177,715	896 080,125	934 564,330	971 190,123
		Sum of Total determined/actual costs for all entities (in '000 NC)		810 485,039	871 692,676	1 682 177,715	896 080,125	934 564,330	971 190,123
#002	1.6	Check the sum of costs by nature (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by nature (in '000 NC)		813 925,719	875 741,436	1 689 667,155	900 928,498	939 436,366	976 063,118
		Sum of items 1.1 to 1.5 (in '000 NC)		813 925,719	875 741,436	1 689 667,155	900 928,498	939 436,366	976 063,118
#003	2.10	Check the sum of costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by service (in '000 NC)		813 925,719	875 741,436	1 689 667,155	900 928,498	939 436,366	976 063,118
		Sum of items 2.1 to 2.9 (in '000 NC)		813 925,719	875 741,436	1 689 667,155	900 928,498	939 436,366	976 063,118
#004	2.10	Check that total costs by nature equals total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by nature (in '000 NC)		813 925,719	875 741,436	1 689 667,155	900 928,498	939 436,366	976 063,118
		Total costs by service (in '000 NC)		813 925,719	875 741,436	1 689 667,155	900 928,498	939 436,366	976 063,118
#063	4.2	Check total costs after deduction of costs for exempted VFR	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total determined/actual costs(in '000 NC)		810 485,039	871 692,676	1 682 177,715	896 080,125	934 564,330	971 190,123
		Total costs by service deducted by Costs for exempted VFR flights (in '000 NC)		810 485,039	871 692,676	1 682 177,715	896 080,125	934 564,330	971 190,123
#100	5.1	Check that inflation rate is not negative	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Inflation rate		3,70%	3,20%		2,52%	2,53%	2,50%
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017)	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Calculated price index		107,15	110,58		113,37	116,24	119,15
		Price Index		107,15	110,58		113,37	116,24	119,15
#017b	5.5	Check calculation of the unit cost for RP3	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs real terms / Total service units		359,61	361,75	360,70	234,30	200,57	178,65
		Unit Cost		359,61	361,75	360,70	234,30	200,57	178,65
#	Item	Checks for Route Table 1 PANSA		2020	2021	2020/2021	2022	2023	2024
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)		45 691,204	61 857,561	107 548,766	65 780,429	67 760,430	71 051,953
#002	1.6	Check the sum of costs by nature (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)		721 069,824	778 344,004	1 499 413,828	802 412,232	838 124,474	872 890,444
		Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)		721 069,824	778 344,004	1 499 413,828	802 412,232	838 124,474	872 890,444
#003	2.10	Check the sum of costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)		721 069,824	778 344,004	1 499 413,828	802 412,232	838 124,474	872 890,444
		Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)		721 069,824	778 344,004	1 499 413,828	802 412,232	838 124,474	872 890,444
#004	2.10	Check that total costs by nature equals total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)		721 069,824	778 344,004	1 499 413,828	802 412,232	838 124,474	872 890,444
		Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)		721 069,824	778 344,004	1 499 413,828	802 412,232	838 124,474	872 890,444
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017)	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Calculated price index		107,15	110,58		113,37	116,24	119,15
		Price Index		107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021)		680 904,621	716 490,636		724 591,244	743 288,008	760 674,676
		Total costs real terms (in '000 NC)		680 904,621	716 490,636		724 591,244	743 288,008	760 674,676
#016	5.4	Check that Service Units are the same for all entities (in '000)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total Service Units (ANSP) - Note: (check sum for combined year 2020-2021)		2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
		Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)		2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
#017b	5.5	Check calculation of the unit cost for RP3	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs real terms / Total service units		317,32	319,72	318,54	207,26	177,57	158,41
		Unit Cost		317,32	319,72	318,54	207,26	177,57	158,41
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Inflation rate (%) (ANSP)		3,70%	3,20%		2,52%	2,53%	2,50%
		Inflation rate (%) (Consolidated)		3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Price Index (ANSP)		107,15	110,58		113,37	116,24	119,15
		Price Index (Consolidated)		107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Cost of capital pre tax rate (%)		5,700%	5,800%		5,800%	5,900%	5,900%
		Cost of capital / total asset base (%)		5,700%	5,800%		5,800%	5,900%	5,900%
#020	3.8	Check proportion of financing through equity is coherent with components	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Proportion of financing through equity calculated from components is (in %):		40,00%	40,00%		40,00%	40,00%	40,00%
		Proportion of financing through equity is (in %):		40,00%	40,00%		40,00%	40,00%	40,00%
#018	3.4	Check total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Sum of assets (in '000 NC)		1 195 978,878	1 210 306,305		1 265 202,538	1 372 481,287	1 471 631,925
		Total asset base (in '000 NC)		1 195 978,878	1 210 306,305		1 265 202,538	1 372 481,287	1 471 631,925
#065	3.4	Check that no cost of capital is calculated if no asset base is reported	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Total asset base (in '000 NC)		1 195 978,878	1 210 306,305		1 265 202,538	1 372 481,287	1 471 631,925
		Cost of capital (in '000 NC)		68 561,086	70 331,320		73 920,961	80 652,091	86 801,958
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021)		98 585,270	99 866,053	198 451,323	104 835,566	108 650,646	113 203,909
		Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)		98 585,270	99 866,053	198 451,323	104 835,566	108 650,646	113 203,909
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
		Cost of capital - item 3.11 (in '000 NC)		59 460,429	60 405,089		63 633,823	69 850,880	75 512,704
		NBV of fixed assets * WACC rate (in '000 NC)		59 460,429	60 405,089		63 633,823	69 850,880	75 512,704
#	Item	Checks for Route Table 1 IMWM		2020	2021	2020/2021	2022	2023	2024
#002	1.6	Check the sum of costs by nature (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)		29 923,487	31 768,300	61 691,788	31 893,201	33 213,246	34 696,144
		Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)		29 923,487	31 768,300	61 691,788	31 893,201	33 213,246	34 696,144
#003	2.10	Check the sum of costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)		29 923,487	31 768,300	61 691,788	31 893,201	33 213,246	34 696,144
		Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)		29 923,487	31 768,300	61 691,788	31 893,201	33 213,246	34 696,144
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)		29 923,487	31 768,300	61 691,788	31 893,201	33 213,246	34 696,144
		Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)		29 923,487	31 768,300	61 691,788	31 893,201	33 213,246	34 696,144
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
		Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)		1 046,719	1 293,737	2 340,456	1 317,223	1 317,764	1 343,547
#0									

Total Service Units (MET) - Note: (check sum for combined year 2020-2021)				2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)				2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
#017b	5.5	Check calculation of the unit cost for RP3	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs real terms / Total service units				13,05	12,87	12,96	8,08	6,87	6,12
Unit Cost				13,05	12,87	12,96	8,08	6,87	6,12
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Inflation rate (%) (MET)			3,70%	3,20%	2,52%		2,53%	2,50%	
Inflation rate (%) (Consolidated)			3,70%	3,20%	2,52%		2,53%	2,50%	
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Price Index (MET)				107,15	110,58		113,37	116,24	119,15
Price Index (Consolidated)				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital pre tax rate (%)				3,100%	3,200%		2,700%	3,100%	3,300%
Cost of capital / total asset base (%)				3,100%	3,200%		2,700%	3,100%	3,300%
#020	3.8	Check proportion of financing through equity is coherent with components	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Proportion of financing through equity calculated from components is (in %):				64,00%	69,00%		50,00%	64,00%	72,00%
Proportion of financing through equity is (in %):				64,00%	69,00%		50,00%	64,00%	72,00%
#018	3.4	Check total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Sum of assets (in '000 NC)				11 618,958	12 118,556		5 683,909	6 804,109	6 081,371
Total asset base (in '000 NC)				11 618,958	12 118,556		5 683,909	6 804,109	6 081,371
#065	3.4	Check that no cost of capital is calculated if no asset base is reported	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Total asset base (in '000 NC)				11 618,958	12 118,556		5 683,909	6 804,109	6 081,371
Cost of capital (in '000 NC)				354,378	386,582		152,897	208,886	199,469
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021)				863,189	860,637	1 723,826	966,072	1 115,613	1 594,706
Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)				863,189	860,637	1 723,826	966,072	1 115,613	1 594,706
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital - item 3.11 (in '000 NC)				119,283	124,957		89,096	90,221	77,180
NBV of fixed assets * WACC rate (in '000 NC)				119,283	124,957		89,096	90,221	77,180
#	Item	Checks for Route Table 1 Radom Meteo		2020	2021	2020/2021	2022	2023	2024
#002	1.6	Check the sum of costs by nature (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				299,033	321,750	620,782	327,233	1 231,420	1 189,243
Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)				299,033	321,750	620,782	327,233	1 231,420	1 189,243
#003	2.10	Check the sum of costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				299,033	321,750	620,782	327,233	1 231,420	1 189,243
Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)				299,033	321,750	620,782	327,233	1 231,420	1 189,243
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				299,033	321,750	620,782	327,233	1 231,420	1 189,243
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				299,033	321,750	620,782	327,233	1 231,420	1 189,243
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)				9,412	12,640	22,051	12,640	82,341	82,341
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017)	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Calculated price index				107,15	110,58		113,37	116,24	119,15
Price Index				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - N				283,520	296,356	579,876	294,996	1 070,904	1 011,761
Total costs real terms (in '000 NC)				283,520	296,356	579,876	294,996	1 070,904	1 011,761
#016	5.4	Check that Service Units are the same for all entities (in '000)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total Service Units (MET) - Note: (check sum for combined year 2020-2021)				2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)				2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
#017b	5.5	Check calculation of the unit cost for RP3	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs real terms / Total service units				0,13	0,13	0,13	0,08	0,26	0,21
Unit Cost				0,13	0,13	0,13	0,08	0,26	0,21
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Inflation rate (%) (MET)				3,70%	3,20%		2,52%	2,53%	2,50%
Inflation rate (%) (Consolidated)				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Price Index (MET)				107,15	110,58		113,37	116,24	119,15
Price Index (Consolidated)				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital pre tax rate (%)				5,100%	5,100%		5,200%	5,200%	5,200%
Cost of capital / total asset base (%)				5,100%	5,100%		5,200%	5,200%	5,200%
#020	3.8	Check proportion of financing through equity is coherent with components	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Proportion of financing through equity calculated from components is (in %):				100,00%	100,00%		100,00%	100,00%	100,00%
Proportion of financing through equity is (in %):				100,00%	100,00%		100,00%	100,00%	100,00%
#018	3.4	Check total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Sum of assets (in '000 NC)				318,976	391,010		629,622	565,815	609,045
Total asset base (in '000 NC)				318,976	391,010		629,622	565,815	609,045
#065	3.4	Check that no cost of capital is calculated if no asset base is reported	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Total asset base (in '000 NC)				318,976	391,010		629,622	565,815	609,045
Cost of capital (in '000 NC)				16,199	19,822		33,020	29,674	31,941
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021)				50,310	36,546	86,856	20,849	52,800	52,800
Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)				50,310	36,546	86,856	20,849	52,800	52,800
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital - item 3.11 (in '000 NC)				4,192	1,983		0,547	8,213	15,041
NBV of fixed assets * WACC rate (in '000 NC)				4,192	1,983		0,547	8,213	15,041
#	Item	Checks for Route Table 1 Warmia i Mazury Meteo		2020	2021	2020/2021	2022	2023	2024
#002	1.6	Check the sum of costs by nature (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 635,603	1 680,261	3 315,864	1 729,540	1 773,032	1 778,092
Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 635,603	1 680,261	3 315,864	1 729,540	1 773,032	1 778,092
#003	2.10	Check the sum of costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 635,603	1 680,261	3 315,864	1 729,540	1 773,032	1 778,092
Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 635,603	1 680,261	3 315,864	1 729,540	1 773,032	1 778,092
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 635,603	1 680,261	3 315,864	1 729,540	1 773,032	1 778,092
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 635,603	1 680,261	3 315,864	1 729,540	1 773,032	1 778,092
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)				79,075	80,146	159,221	83,476	88,648	89,082
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017)	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Calculated price index				107,15	110,58		113,37	116,24	119,15
Price Index				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - N				1 528,672	1 523,761	3 052,433	1 531,231	1 531,547	1 499,214
Total costs real terms (in '000 NC)				1 528,672	1 523,761	3 052,433	1 531,231	1 531,547	1 499,214
#016	5.4	Check that Service Units are the same for all entities (in '000)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total Service Units (MET) - Note: (check sum for combined year 2020-2021)				2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)				2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
#017b	5.5	Check calculation of the unit cost for RP3	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs real terms / Total service units				0,71	0,68	0,70	0,44	0,37	0,31
Unit Cost				0,71	0,68	0,70	0,44	0,37	0,31

#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) <i>Inflation rate (%) (MET)</i> <i>Inflation rate (%) (Consolidated)</i>			PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					3,70%	3,20%		2,52%	2,53%	2,50%
					3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) <i>Price Index (MET)</i> <i>Price Index (Consolidated)</i>			PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					107,15	110,58		113,37	116,24	119,15
					107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate <i>Cost of capital pre tax rate (%)</i> <i>Cost of capital / total asset base (%)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					5,100%	4,800%		4,900%	4,900%	4,900%
					5,100%	4,800%		4,900%	4,900%	4,900%
#020	3.8	Check proportion of financing through equity is coherent with components <i>Proportion of financing through equity calculated from components is (in %):</i> <i>Proportion of financing through equity is (in %):</i>	2		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					100,00%	100,00%		100,00%	100,00%	100,00%
					100,00%	100,00%		100,00%	100,00%	100,00%
#018	3.4	Check total asset base (in '000 NC) <i>Sum of assets (in '000 NC)</i> <i>Total asset base (in '000 NC)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					229,190	236,368		265,995	233,790	208,860
					229,190	236,368		265,995	233,790	208,860
#065	3.4	Check that no cost of capital is calculated if no asset base is reported <i>Total asset base (in '000 NC)</i> <i>Cost of capital (in '000 NC)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					229,190	236,368		265,995	233,790	208,860
					11,641	11,421		12,997	11,424	10,206
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) <i>Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					21,126	33,308	54,435	34,886	33,105	32,384
					21,126	33,308	54,435	34,886	33,105	32,384
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) <i>Cost of capital - item 3.11 (in '000 NC)</i> <i>NBV of fixed assets * WACC rate (in '000 NC)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					10,612	10,517		11,970	10,317	9,100
					10,612	10,517		11,970	10,317	9,100
#	Item	Checks for Route Table 1 Bydgoszcz Meteo			2020	2021	2020/2021	2022	2023	2024
#002	1.6	Check the sum of costs by nature (in '000 NC) <i>Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					1 149,551	1 331,666	2 481,217	1 372,450	1 385,708	1 446,753
					1 149,551	1 331,666	2 481,217	1 372,450	1 385,708	1 446,753
#003	2.10	Check the sum of costs by service (in '000 NC) <i>Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					1 149,551	1 331,666	2 481,217	1 372,450	1 385,708	1 446,753
					1 149,551	1 331,666	2 481,217	1 372,450	1 385,708	1 446,753
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) <i>Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					1 149,551	1 331,666	2 481,217	1 372,450	1 385,708	1 446,753
					1 149,551	1 331,666	2 481,217	1 372,450	1 385,708	1 446,753
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 <i>Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					88,968	104,893	193,861	113,855	115,880	118,843
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) <i>Calculated price index</i> <i>Price Index</i>	2		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					107,15	110,58		113,37	116,24	119,15
					107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 <i>Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - N</i> <i>Total costs real terms (in '000 NC)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					1 088,172	1 223,386	2 311,558	1 233,122	1 217,380	1 241,945
					1 088,172	1 223,386	2 311,558	1 233,122	1 217,380	1 241,945
#016	5.4	Check that Service Units are the same for all entities (in '000) <i>Total Service Units (MET) - Note: (check sum for combined year 2020-2021)</i> <i>Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)</i>			PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
					2 145,811	2 241,000	4 386,811	3 496,000	4 186,000	4 802,000
#017b	5.5	Check calculation of the unit cost for RP3 <i>Total costs real terms / Total service units</i> <i>Unit Cost</i>	2		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					0,51	0,55	0,53	0,35	0,29	0,26
					0,51	0,55	0,53	0,35	0,29	0,26
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) <i>Inflation rate (%) (MET)</i> <i>Inflation rate (%) (Consolidated)</i>			PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					3,70%	3,20%		2,52%	2,53%	2,50%
					3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) <i>Price Index (MET)</i> <i>Price Index (Consolidated)</i>			PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					107,15	110,58		113,37	116,24	119,15
					107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate <i>Cost of capital pre tax rate (%)</i> <i>Cost of capital / total asset base (%)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					5,700%	5,400%		5,200%	5,000%	4,900%
					5,700%	5,400%		5,200%	5,000%	4,900%
#020	3.8	Check proportion of financing through equity is coherent with components <i>Proportion of financing through equity calculated from components is (in %):</i> <i>Proportion of financing through equity is (in %):</i>	2		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					60,00%	48,00%		74,00%	94,00%	100,00%
					60,00%	48,00%		74,00%	94,00%	100,00%
#018	3.4	Check total asset base (in '000 NC) <i>Sum of assets (in '000 NC)</i> <i>Total asset base (in '000 NC)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					1 280,762	690,042		781,261	736,900	627,897
					1 280,762	690,042		781,261	736,900	627,897
#065	3.4	Check that no cost of capital is calculated if no asset base is reported <i>Total asset base (in '000 NC)</i> <i>Cost of capital (in '000 NC)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					1 280,762	690,042		781,261	736,900	627,897
					73,042	37,297		40,399	36,639	30,682
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) <i>Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					156,470	162,769	319,239	150,553	144,207	141,521
					156,470	162,769	319,239	150,553	144,207	141,521
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) <i>Cost of capital - item 3.11 (in '000 NC)</i> <i>NBV of fixed assets * WACC rate (in '000 NC)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					69,825	34,917		27,921	21,297	15,131
					69,825	34,917		27,921	21,297	15,131
#	Item	Checks for Route Table 1 CAA-NSA			2020	2021	2020/2021	2022	2023	2024
#002	1.6	Check the sum of costs by nature (in '000 NC) <i>Total costs by nature (in '000 NC)</i> <i>Sum of items 1.1 to 1.5 (in '000 NC)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
#003	2.10	Check the sum of costs by service (in '000 NC) <i>Total costs by service (in '000 NC)</i> <i>Sum of items 2.1 to 2.9 (in '000 NC)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
#004	2.10	Check that total costs by nature equals total costs by service (in '000 NC) <i>Total costs by nature (in '000 NC)</i> <i>Total costs by service (in '000 NC)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
#068	3.13	Check that Eurocontrol costs (in '000 Euro) are filled in and different from 0 <i>Eurocontrol costs (in '000 Euro)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					11 691,699	12 186,118		12 316,249	12 380,374	12 413,352
#068b	3.15	Check calculation of Eurocontrol costs (in '000 NC) <i>Eurocontrol costs (in '000 NC)</i> <i>Eurocontrol costs (in '000 Euro) * exchange rate - Note: (check sum for combined year 2020-2021)</i>	3		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
					51 910,674	54 228,225		54 807,308	55 092,664	55 239,416
					51 910,674	54 228,225		54 807,308	55 092,664	55 239,416
#054	3.15	Check that Eurocontrol costs are = to T1 NSA (Other States costs) <i>Eurocontrol costs reported in item 3.15 (in '000 NC)</i> <i>Other State costs reported in item 2.9 (in '000 NC)</i>	3		PRAWDA	PRAWDA	FALSZ	PRAWDA	PRAWDA	PRAWDA
					51 910,674	54 228,225	0,000	54 807,308	55 092,664	55 239,416
					51 910,674	54 228,225	106 138,899	54 807,308	55 092,664	55 239,416
#055	3.15	Check that Eurocontrol costs are ≤ to T1 NSA (Other operating costs) <i>Eurocontrol costs reported in item 3.15 (in '000 NC)</i> <i>Other operating costs of NSA reported in item 1.2 (in '000 NC)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					51 910,674	54 228,225	0,000	54 807,308	55 092,664	55 239,416
					54 157,804	56 403,927	110 561,731	57 093,213	57 437,238	57 636,544
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 <i>Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC)</i> <i>Total costs real terms (in '000 NC)</i>	3		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
					59 848,221	62 295,455	122 143,675	63 193,841	63 708,486	64 062,441
#016	5.4	Check that Service Units are the same for all entities (in '000) <i>Total Service Units (NSA)</i> <i>Total Service Units (Consolidated)</i>			PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					2 146	2 241	4 387	3 496	4 186	4 802
					2 146	2 241	4 387	3 496	4 186	4 802
#017b	5.5	Check calculation of the unit cost for RP3 <i>Total costs real terms / Total service units</i>	2		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
					27,89	27,80	27,84	18,08	15,22	13,34

Unit Cost			27,89	27,80	27,84	18,08	15,22	13,34
#019	3.5	Check calculation of cost of capital pre-tax rate	3	N/A	N/A	N/A	N/A	N/A

Table 1 - Total Costs and Unit Costs

Poland
Currency: PLN
All Entities

Actual costs 2012-2019										Determined costs - Performance Plan - RP3				
Cost details	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)														
1.1 Staff	404 876	395 096	412 530	402 489	410 430	495 848	516 609	543 322	489 019	531 218	1 020 237	507 255	526 588	552 006
of which, pension costs	0	0	0	0	0	0	0	0	47 638	64 122	111 760	68 122	70 202	73 543
1.2 Other operating costs	125 491	116 627	199 343	123 235	137 889	148 810	150 762	191 548	156 214	172 777	328 992	213 505	221 913	221 958
1.3 Depreciation	37 765	48 770	50 009	50 127	57 387	68 554	79 989	90 552	99 676	100 959	200 636	106 008	109 996	115 025
1.4 Cost of capital	18 501	19 759	2 057	41 707	48 455	76 666	83 446	15 746	69 016	70 786	139 803	74 160	80 939	87 074
1.5 Exceptional items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.6 Total costs	586 633	580 253	663 940	617 557	654 162	789 877	830 805	841 168	813 926	875 741	1 689 667	900 928	939 436	976 063
Total % n/n-1		-1,1%	14,4%	-7,0%	5,9%	20,7%	5,2%	1,2%	-3,2%	7,6%		2,9%	4,3%	3,9%
2. Detail by service (in nominal terms)														
2.1 Air Traffic Management	374 394	374 118	432 644	398 344	416 891	506 494	536 108	542 810	520 030	579 353	1 099 383	601 533	629 385	657 028
2.2 Communication	15 906	15 919	18 758	19 797	19 673	21 900	25 410	24 002	24 591	33 571	58 162	34 364	36 475	38 095
2.3 Navigation	35 265	32 417	39 191	40 109	40 992	47 906	50 829	49 779	49 023	58 960	107 984	57 120	58 052	57 374
2.4 Surveillance	47 419	41 590	51 435	43 969	52 164	60 238	61 904	50 330	54 273	69 239	123 512	68 032	71 149	75 321
2.5 Search and rescue	154	185	227	667	225	8 308	14 976	15 113	13 156	5 968	19 124	5 653	5 782	5 772
2.6 Aeronautical Information	48 894	49 892	55 485	44 979	45 217	69 185	64 051	68 422	59 997	31 253	91 250	35 710	37 281	39 302
2.7 Meteorological services	17 150	17 680	17 235	20 629	23 279	25 270	25 453	29 497	33 008	35 102	68 110	35 322	37 603	39 110
2.8 Supervision costs	6 968	6 316	6 162	6 238	6 296	6 222	6 884	8 248	7 938	8 067	16 005	8 387	8 616	8 823
2.9 Other State costs	40 483	42 135	42 803	42 825	49 424	44 356	45 190	52 967	51 911	54 228	106 139	54 807	55 093	55 239
2.10 Total costs	586 633	580 253	663 940	617 557	654 162	789 877	830 805	841 168	813 926	875 741	1 689 667	900 928	939 436	976 063
Total % n/n-1		-1,1%	14,4%	-7,0%	5,9%	20,7%	5,2%	1,2%	-3,2%	7,6%		2,9%	4,3%	3,9%
3. Complementary information (in nominal terms)														
Average asset base														
3.1 Net book val. fixed assets	578 562	595 467	618 249	673 782	759 009	887 786	962 221	1 038 113	1 042 654	1 044 309		1 093 239	1 192 409	1 283 371
3.2 Adjustments total assets	0	0	0	0	0	0	0	0	0	0		0	0	0
3.3 Net current assets	-50 921	-31 245	7 153	28 128	58 427	99 008	110 767	97 166	166 773	179 433		179 324	188 413	195 788
3.4 Total asset base	527 642	564 223	625 402	701 911	817 437	986 794	1 072 988	1 135 279	1 209 427	1 223 742		1 272 563	1 380 822	1 479 159
Cost of capital %														
3.5 Cost of capital pre tax rate														
3.6 Return on equity														
3.7 Average interest on debts														
3.8 Share of financing through equity														
Costs of common projects														
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Costs of new and existing investments														
3.10 Depreciation									99 676	100 959	200 636	106 008	109 996	115 025
3.11 Cost of capital									59 664	60 577	120 242	63 763	69 981	75 629
3.12 Cost of leasing									5 990	6 315	12 306	6 650	6 943	6 952
Eurocontrol costs														
3.13 Eurocontrol costs (Euro)														
3.14 Exchange rate (if applicable)														
3.15 Eurocontrol costs (national currency)	40 483	42 135	42 803	42 825	49 424	44 356	45 190	52 967	51 911	54 228	0	54 807	55 093	55 239
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)														
4.1 Costs for exempted VFR flights	123	3 003	2 942	3 401	3 667	3 726	4 725	4 682	3 441	4 049	7 489	4 848	4 872	4 873
4.2 Total determined/actual costs	586 511	577 250	660 998	614 156	650 496	786 152	826 080	836 486	810 485	871 693	1 682 178	896 080	934 564	971 190
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)														
5.1 Inflation %	3,70%	0,80%	0,10%	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%
5.2 Inflation index (1)	98,4	99,2	99,3	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1
5.3 Total costs real terms (2)	594 206	580 876	664 845	620 766	658 318	786 152	818 840	814 957	771 662	810 677	1 582 339	819 108	839 574	857 899
Total % n/n-1		-2,2%	14,5%	-6,6%	6,0%	19,4%	4,2%	-0,5%	-5,3%	5,1%		1,0%	2,5%	2,2%
5.4 Total Service Units	3 854,5	3 983,7	3 930,7	3 880,0	4 174,7	4 290,5	4 666,1	4 971,8	2 145,8	2 241,0	4 386,8	3 496,0	4 186,0	4 802,0
Total % n/n-1		3,4%	-1,3%	-1,3%	7,6%	2,8%	8,8%	6,6%	-56,8%	4,4%		56,0%	19,7%	14,7%
5.5 Unit cost in real terms prices (3)	154,16	145,81	169,14	159,99	157,69	183,23	175,49	163,92	359,61	361,75	360,70	234,30	200,57	178,65
Total % n/n-1		-5,4%	16,0%	-5,4%	-1,4%	16,2%	-4,2%	-6,6%	119,4%	0,6%		-35,2%	-14,4%	-10,9%

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland
Currency: PLN
PANSA

Actual costs 2012-2019																Determined costs - Performance Plan - RP3								Actual costs - Reference Period 3					
Cost details	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024		2020	2021	2020/2021	2022	2023	2024		2020	2021	2020/2021	2022	2023	2024	
1. Detail by nature (in nominal terms)																													
1.1 Staff	395 677	385 660	403 494	392 059	399 935	485 284	505 542	530 338	474 074	514 987	989 061	490 347	508 477	533 329		474 074							474 074						
of which, pension costs									45 691	61 858	107 549	65 780	67 760	71 052		45 691							45 691						
1.2 Other operating costs	70 520	60 048	142 272	64 146	70 056	84 567	85 304	114 797	79 850	93 159	173 009	133 308	140 345	139 556		79 850							79 850						
1.3 Depreciation	37 686	48 712	49 971	50 033	56 832	67 704	79 147	89 719	98 585	99 866	198 451	104 836	108 651	113 204		98 585							98 585						
1.4 Cost of capital	18 422	19 702	2 003	41 626	48 339	76 476	83 285	15 603	68 561	70 331	138 892	73 921	80 652	86 802		68 561							68 561						
1.5 Exceptional items									0	0	0	0	0	0		0							0						
1.6 Total costs	522 304	514 121	597 740	547 865	575 162	714 030	753 279	750 456	721 070	778 344	1 499 414	802 412	838 124	872 890		721 070							721 070						
Total % n/n-1		-1.6%	16.3%	-8.3%	5.0%	24.1%	5.5%	-0.4%	-3.9%	7.9%		3.1%	4.5%	4.1%		-3.9%													
2. Detail by service (in nominal terms)																													
2.1 Air Traffic Management	374 394	374 118	432 644	398 344	416 891	506 494	536 108	542 810	520 030	579 353	1 099 383	601 533	629 385	657 028		520 030							520 030						
of which, communication	15 906	15 919	18 758	19 797	19 673	21 900	25 410	24 002	24 591	33 571	58 162	34 364	36 475	38 095		24 591							24 591						
2.3 Navigation	35 265	32 417	39 191	40 109	40 992	47 906	50 829	49 779	49 023	58 960	107 984	57 120	58 052	57 374		49 023							49 023						
2.4 Surveillance	47 419	41 590	51 435	43 969	52 164	60 238	61 904	50 330	54 273	69 239	123 512	68 032	71 149	75 321		54 273							54 273						
2.5 Search and rescue	154	185	227	667	225	8 308	14 976	15 113	13 156	5 968	19 124	5 653	5 782	5 772		13 156							13 156						
2.6 Aeronautical Information	48 894	49 892	55 485	44 979	45 217	69 185	64 051	68 422	59 997	31 253	91 250	35 710	37 281	39 302		59 997							59 997						
2.7 Meteorological services	272								0	0	0	0	0	0		0							0						
2.8 Supervision costs																													
2.9 Other State costs																													
2.10 Total costs	522 304	514 121	597 740	547 865	575 162	714 030	753 279	750 456	721 070	778 344	1 499 414	802 412	838 124	872 890		721 070							721 070						
Total % n/n-1		-1.6%	16.3%	-8.3%	5.0%	24.1%	5.5%	-0.4%	-3.9%	7.9%		3.1%	4.5%	4.1%		-3.9%													
3. Complementary information (in nominal terms)																													
Average asset base																													
3.1 Net book val. fixed assets	578 427	595 382	618 168	672 558	755 206	881 528	957 045	1 033 739	1 037 227	1 039 489		1 089 132	1 188 674	1 280 235		1 037 227													
3.2 Adjustments total assets							0	0	0	0				0		0													
3.3 Net current assets	-52 087	-32 482	5 777	27 046	57 220	97 678	109 348	96 008	158 752	170 817		176 071	183 808	191 397		158 752													
3.4 Total asset base	526 341	562 900	623 945	699 604	812 427	979 206	1 066 393	1 129 747	1 195 979	1 210 306		1 265 203	1 372 481	1 471 632		1 195 979													
Cost of capital %																													
3.5 Cost of capital pre tax rate	3,50%	3,50%	0,32%	5,95%	5,95%	7,81%	7,81%	1,38%	5,73%	5,81%		5,84%	5,88%	5,90%		5,73%													
3.6 Return on equity	3,50%	3,50%	0,32%	5,95%	5,95%	7,81%	7,81%	1,38%	9,40%	9,40%		9,40%	9,40%	9,40%		9,40%													
3.7 Average interest on debts	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	3,29%	3,42%		3,47%	3,53%	3,56%		3,29%													
3.8 Share of financing through equity	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	40,00%	40,00%		40,00%	40,00%	40,00%		40,00%													
Costs of common projects																													
3.9 Common projects				0	0	0	0	0	0	0		0	0	0		0													
Costs of new and existing investments																													
3.10 Depreciation									98 585	99 866	198 451	104 836	108 651	113 204		98 585													
3.11 Cost of capital									59 460	60 405	119 866	63 634	69 851	75 513		59 460													
3.12 Cost of leasing									5 990	6 315	12 306	6 650	6 943	6 952		5 990													
Eurocontrol costs																													
3.13 Eurocontrol costs (Euro)																													
3.14 Exchange rate (if applicable)																													
3.15 Eurocontrol costs (national currency)																													
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																													
4.1 Costs for exempted VFR flights	122	3 002	2 942	3 401	3 666	3 726	4 725	4 682	3 441	4 049	7 489	4 848	4 872	4 873		3 441													
4.2 Total determined/actual costs	522 182	511 119	594 798	544 464	571 496	710 305	748 554	745 774	717 629	774 295	1 491 925	797 564	833 253	868 018		717 629													
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																													
5.1 Inflation %	3,70%	0,80%	0,10%	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%		3,70%													
5.2 Inflation index (I)	98,4	99,2	99,3	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1		107,1													
5.3 Total costs real terms (2)	529 611	514 606	598 527	550 789	578 957	710 305	741 603	725 163	680 905	716 491	1 397 395	724 591	743 288	760 675		680 905													
Total % n/n-1		-2,8%	16,3%	-8,0%	5,1%	22,7%	4,4%	-2,2%	6,1%	5,2%		1,1%	2,6%	2,3%		-6,1%													
5.4 Total Service Units	3 854,5	3 983,7	3 990,7	3 880,0	4 174,7	4 290,5	4 666,1	4 971,8	2 145,8	2 241,0	4 386,8	3 496,0	4 186,0	4 802,0		2 145,8													
Total % n/n-1		3,4%	-1,3%	-1,3%	7,6%	2,8%	8,8%	6,6%	-56,8%	4,4%		56,0%	19,7%	14,7%		-56,8%													
5.5 Unit cost in real terms prices (3)	137,40	129,18	152,27	141,96	138,68	165,55	158,93	145,86	317,32	319,72	318,54	207,26	177,57	158,41		317,32													
Total % n/n-1		-6,0%	17,9%	-6,8%	-2,3%	19,4%	-4,0%	-8,2%	117,6%	0,8%		-35,2%	-14,3%	-10,8%		117,6%													

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 10

Table 1 - Total Costs and Unit Costs

Poland
Currency: PLN
IMVMS

Actual costs 2012-2019																Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
Cost details	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024		2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																											
1.1 Staff	4 750	5 225	4 910	6 208	6 118	6 145	6 251	7 305	7 860	8 831	16 690	9 213	9 581	9 964		7 860											
of which, pension costs									1 047	1 294	2 340	1 317	1 318	1 344		1 047											
1.2 Other operating costs	11 969	12 339	12 232	14 186	16 249	17 817	17 949	21 126	20 846	21 680	42 537	21 562	22 308	22 938		20 846											
1.3 Depreciation	79	58	38	89	526	821	819	810	863	861	1 724	966	1 116	1 595		863											
1.4 Cost of capital	79	57	54	81	116	190	160	144	354	387	741	153	209	199		354											
1.5 Exceptional items									0	0	0	0	0	0		0											
1.6 Total costs	16 877	17 680	17 235	20 565	23 009	24 973	25 179	29 385	29 923	31 768	61 692	31 893	33 213	34 696		29 923											
Total % n/n-1		4,8%	-2,5%	19,3%	11,9%	8,5%	0,8%	16,7%	1,8%	6,2%		0,4%	4,1%	4,5%		1,8%											
2. Detail by service (in nominal terms)																											
2.1 Air Traffic Management									0	0	0	0	0	0		0											
2.2 Communication									0	0	0	0	0	0		0											
2.3 Navigation									0	0	0	0	0	0		0											
2.4 Surveillance									0	0	0	0	0	0		0											
2.5 Search and rescue									0	0	0	0	0	0		0											
2.6 Aeronautical Information									0	0	0	0	0	0		0											
2.7 Meteorological services	16 877	17 680	17 235	20 565	23 009	24 973	25 179	29 385	29 923	31 768	61 692	31 893	33 213	34 696		29 923											
2.8 Supervision costs																											
2.9 Other State costs																											
2.10 Total costs	16 877	17 680	17 235	20 565	23 009	24 973	25 179	29 385	29 923	31 768	61 692	31 893	33 213	34 696		29 923											
Total % n/n-1		4,8%	-2,5%	19,3%	11,9%	8,5%	0,8%	16,7%	1,8%	6,2%		0,4%	4,1%	4,5%		1,8%											
3. Complementary information (in nominal terms)																											
Average asset base																											
3.1 Net book val. fixed assets	135	85	81	1 181	3 796	6 025	4 927	4 334	3 911	3 917		3 312	2 939	2 353		3 911											
3.2 Adjustments total assets	0	0	0	0	0	0	0	0	0	0		0	0	0		0											
3.3 Net current assets	1 166	1 237	1 376	1 072	1 138	1 260	1 212	1 158	7 708	8 201		2 372	3 865	3 738		7 708											
3.4 Total asset base	1 301	1 323	1 457	2 253	4 934	7 285	6 139	5 492	11 619	12 119		5 684	6 804	6 081		11 619											
Cost of capital %																											
3.5 Cost of capital pre tax rate	6,10%	4,33%	3,74%	3,58%	2,35%	2,61%	2,61%	2,62%	3,05%	3,19%		2,69%	3,07%	3,28%		3,05%											
3.6 Return on equity	6,10%	4,33%	3,74%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%		4,00%	4,00%	4,00%		4,00%											
3.7 Average interest on debts	0,00%	0,00%	0,00%	2,37%	2,35%	2,37%	2,37%	2,35%	1,34%	1,40%		1,40%	1,40%	1,40%		1,34%											
3.8 Share of financing through equity	100,00%	100,00%	100,00%	74,00%	0,01%	14,72%	14,72%	16,36%	64,29%	68,85%		49,62%	64,23%	72,31%		64,29%											
Costs of common projects																											
3.9 Common projects									0	0	0	0	0	0		0											
Costs of new and existing investments																											
3.10 Depreciation									863	861	1 724	966	1 116	1 595		863											
3.11 Cost of capital									119	125	244	89	90	77		119											
3.12 Cost of leasing									0	0	0	0	0	0		0											
Eurocontrol costs																											
3.13 Eurocontrol costs (Euro)																											
3.14 Exchange rate (if applicable)																											
3.15 Eurocontrol costs (national currency)																											
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																											
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0											
4.2 Total determined/actual costs	16 877	17 680	17 235	20 565	23 009	24 973	25 179	29 385	29 923	31 768	61 692	31 893	33 213	34 696		29 923											
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																											
5.1 Inflation %	3,70%	0,80%	0,10%	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%		3,70%											
5.2 Inflation index (I)	98,4	99,2	99,3	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1		107,1											
5.3 Total costs real terms (2)	17 143	17 818	17 353	20 850	23 367	24 973	24 892	28 470	28 008	28 848		28 264	28 758	29 409		28 008											
Total % n/n-1		3,9%	-2,6%	20,2%	12,1%	6,9%	-0,3%	14,4%	-1,6%	3,0%		-2,0%	1,7%	2,3%		-1,6%											
5.4 Total Service Units	3 854,5	3 983,7	3 990,7	3 880,0	4 174,7	4 290,5	4 666,1	4 971,8	2 145,8	2 241,0		4 386,8	3 496,0	4 186,0		4 802,0											
Total % n/n-1		3,4%	-1,3%	-1,3%	7,6%	2,8%	8,8%	6,6%	-56,8%	4,4%		56,0%	19,7%	14,7%		-56,8%											
5.5 Unit cost in real terms prices (3)	4,45	4,47	4,41	5,37	5,60	5,82	5,33	5,73	13,05	12,87		12,96	8,08	6,87		13,05											
Total % n/n-1		0,6%	-1,3%	21,7%	4,2%	4,0%	-8,3%	7,3%	127,9%	-1,4%		-37,2%	-15,0%	-10,9%		127,9%											

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Poland
Currency: PLN
Radom Meteo

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(3) *Determined unit costs (performance plan) and actual unit costs in real terms*

Table 1 - Total Costs and Unit Costs

Poland
Currency: PLN
Warmia i Mazury Meteo

Actual costs 2012-2019										Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
Cost details	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024		2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																					
1.1 Staff									445	451	897	470	499	502		445					
1.1.1 of which, pension costs									79	80	159	83	89	89		79					
1.2 Other operating costs									1 156	1 184	2 342	1 212	1 229	1 234		1 156					
1.3 Depreciation									21	33	54	35	33	32		21					
1.4 Cost of capital									12	11	23	13	11	10		12					
1.5 Exceptional items									0	0	0	0	0	0		0					
1.6 Total costs									1 636	1 680	3 316	1 730	1 773	1 778		1 636					
Total % n/n-1									#DZIEL/01	2,7%		2,9%	2,5%	0,3%		#DZIEL/01					
2. Detail by service (in nominal terms)																					
2.1 Air Traffic Management									0	0	0	0	0	0		0					
2.2 Communication									0	0	0	0	0	0		0					
2.3 Navigation									0	0	0	0	0	0		0					
2.4 Surveillance									0	0	0	0	0	0		0					
2.5 Search and rescue									0	0	0	0	0	0		0					
2.6 Aeronautical Information									0	0	0	0	0	0		0					
2.7 Meteorological services									1 636	1 680	3 316	1 730	1 773	1 778		1 636					
2.8 Supervision costs																					
2.9 Other State costs																					
2.10 Total costs									1 636	1 680	3 316	1 730	1 773	1 778		1 636					
Total % n/n-1									#DZIEL/01	2,7%		2,9%	2,5%	0,3%		#DZIEL/01					
3. Complementary information (in nominal terms)																					
Average asset base																					
3.1 Net book val. fixed assets									209	218		245	211	186		209					
3.2 Adjustments total assets									0	0		0	0	0		0					
3.3 Net current assets									20	19		21	23	23		20					
3.4 Total asset base									229	236		266	234	209		229					
Cost of capital %																					
3.5 Cost of capital pre tax rate									5,08%	4,83%		4,89%	4,89%	4,89%		5,08%					
3.6 Return on equity									5,08%	4,83%		4,89%	4,89%	4,89%		5,08%					
3.7 Average interest on debts									0,00%	0,00%		0,00%	0,00%	0,00%		0,00%					
3.8 Share of financing through equity									100,00%	100,00%		100,00%	100,00%	100,00%		100,00%					
Costs of common projects																					
3.9 Common projects									0	0	0	0	0	0		0					
Costs of new and existing investments																					
3.10 Depreciation									21	33	54	35	33	32		21					
3.11 Cost of capital									11	11	21	12	10	9		11					
3.12 Cost of leasing									0	0	0	0	0	0		0					
Eurocontrol costs																					
3.13 Eurocontrol costs (Euro)																					
3.14 Exchange rate (if applicable)																					
3.15 Eurocontrol costs (national currency)																					
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																					
4.1 Costs for exempted VFR flights									0	0	0	0	0	0		0					
4.2 Total determined/actual costs									1 636	1 680	3 316	1 730	1 773	1 778		1 636					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																					
5.1 Inflation %	3,70%	0,80%	0,10%	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%		3,70%					
5.2 Inflation index (1)	98,4	99,2	99,3	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1		107,1					
5.3 Total costs real terms (2)									1 529	1 524	3 052	1 531	1 532	1 499		1 529					
Total % n/n-1										-0,3%		0,5%	0,0%	-2,1%		#DZIEL/01					
5.4 Total Service Units	3 854,5	3 983,7	3 990,7	3 880,0	4 174,7	4 290,5	4 666,1	4 971,8	2 145,8	2 241,0	4 386,8	3 496,0	4 186,0	4 802,0		2 145,8					
Total % n/n-1	3,4%		-1,3%	-1,3%	7,6%	2,8%	8,8%	6,6%	-56,8%	4,4%		56,0%	19,7%	14,7%		-56,8%					
5.5 Unit cost in real terms prices (3)									0,71	0,68	0,70	0,44	0,37	0,31		0,71					
Total % n/n-1										-4,6%		-35,6%	-16,5%	-14,7%		#DZIEL/01					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland
Currency: PLN
Bydgoszcz: Meteo

Actual costs 2012-2019										Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
Cost details	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024		2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																					
1.1 Staff									797	900	1 697	967	985	1 011		797					
of which, pension costs									89	105	194	114	116	119		89					
1.2 Other operating costs									123	232	354	215	220	264		123					
1.3 Depreciation									156	163	319	151	144	142		156					
1.4 Cost of capital									73	37	110	40	37	31		73					
1.5 Exceptional items									0	0	0	0	0	0		0					
1.6 Total costs									1 150	1 332	2 481	1 372	1 386	1 447		1 150					
Total % n/n-1									#DZIEL/01	15,8%		3,1%	1,0%	4,4%		#DZIEL/01					
2. Detail by service (in nominal terms)																					
2.1 Air Traffic Management																					
2.2 Communication																					
2.3 Navigation																					
2.4 Surveillance																					
2.5 Search and rescue																					
2.6 Aeronautical Information																					
2.7 Meteorological services									1 150	1 332	2 481	1 372	1 386	1 447		1 150					
2.8 Supervision costs																					
2.9 Other State costs																					
2.10 Total costs									1 150	1 332	2 481	1 372	1 386	1 447		1 150					
Total % n/n-1									#DZIEL/01	15,8%		3,1%	1,0%	4,4%		#DZIEL/01					
3. Complementary information (in nominal terms)																					
Average asset base																					
3.1 Net book val. fixed assets									1 224	646		540	428	310		1 224					
3.2 Adjustments total assets									0	0		0	0	0		0					
3.3 Net current assets									56	44		241	309	318		56					
3.4 Total asset base									1 281	690		781	737	628		1 281					
Cost of capital %																					
3.5 Cost of capital pre tax rate									5,70%	5,41%		5,17%	4,97%	4,89%		5,70%					
3.6 Return on equity									6,84%	7,44%		5,73%	5,05%	4,89%		6,84%					
3.7 Average interest on debts									4,02%	3,51%		3,56%	3,83%	0,00%		4,02%					
3.8 Share of financing through equity									59,80%	48,16%		74,16%	93,74%	100,00%		59,80%					
Costs of common projects																					
3.9 Common projects											0										
Costs of new and existing investments																					
3.10 Depreciation									156	163	319	151	144	142		156					
3.11 Cost of capital									70	35	105	28	21	15		70					
3.12 Cost of leasing									0	0	0	0	0	0		0					
Eurocontrol costs																					
3.13 Eurocontrol costs (Euro)																					
3.14 Exchange rate (if applicable)																					
3.15 Eurocontrol costs (national currency)																					
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																					
4.1 Costs for exempted VFR flights									0	0	0	0	0	0		0					
4.2 Total determined/actual costs	0	0	0	0	0	0	0	0	1 150	1 332	2 481	1 372	1 386	1 447		1 150					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																					
5.1 Inflation %	3,70%	0,80%	0,10%	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%		3,70%					
5.2 Inflation index (1)	98,4	99,2	99,3	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1		107,1					
5.3 Total costs real terms (2)									1 088	1 223	2 312	1 233	1 217	1 242		1 088					
Total % n/n-1										12,4%		0,8%	-1,3%	2,0%		#DZIEL/01					
5.4 Total Service Units	3 854,5	3 983,7	3 930,7	3 880,0	4 174,7	4 290,5	4 666,1	4 971,8	2 145,8	2 241,0	4 386,8	3 496,0	4 186,0	4 802,0		2 145,8					
Total % n/n-1	3,4%		-1,3%	-1,3%	7,6%	2,8%	8,8%	6,6%	-56,8%	4,4%	-56,0%	19,7%	14,7%	14,7%		-56,8%					
5.5 Unit cost in real terms prices (3)									0,51	0,55	0,53	0,35	0,29	0,26		0,51					
Total % n/n-1									7,7%			-35,4%	-17,5%	-11,1%		#DZIEL/01					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Currency: PLN CAA-NSA		Currency: PLN CAA-NSA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		Actual costs 2012-2019										Determined costs - Performance Plan - RP3										Actual costs - Reference Period 3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Cost details		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
1. Detail by nature (in nominal terms)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) *Determined costs (performance plan) and actual costs in real terms*

(3) *Determined unit costs (performance plan) and actual unit costs in real terms*

Table 2 - Unit rate calculation

Poland
Currency: PLN
All Entities

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs					
1.1	Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	1 682 177,7	896 080,1	934 564,3	971 190,1
Inflation adjustment calculation					
2.1	Determined costs subject to inflation adjustment	1 219 595,6	652 718,1	679 920,8	705 028,1
2.2	Forecast inflation index - Table 1		113,37	116,24	119,15
2.3	Actual inflation index - Table 1				
2.4	Actual / forecast total inflation index (in %)				
2.5	Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)					
3.1	New and existing investments (Art. 28(4))				
3.3	Competent authorities and qualified entities costs (Art. 28(5))				
3.4	Eurocontrol costs (Art. 28(5))				
3.5	Pension costs (Art. 28(6))				
3.6	Interest on loans (Art. 28(6))				
3.7	Changes in law (Art. 28(6))				
3.8	Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment					
4.1	Determined costs subject to traffic risk sharing	1 491 924,6	797 564,0	833 252,5	868 017,6
4.2	% deviation % referred to in Article 27(2) and 27(5)				
4.3	% additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4	% loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5	% deviation referred to in Article 27(4)				
4.6	Forecast total service units (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
4.7	Actual total service units				
4.8	Actual / forecast total service units (in %)				
4.9	Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments					
5.1	For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2	Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3	Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives					
6.1	Financial incentives relating to capacity (Art. 11(3))				
6.2	Financial incentives relating to environment (Art. 11(4))				
6.3	Additional financial incentives relating to capacity (Art. 11(4))				
6.4	Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges					
7.1	Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate					
8.1	Temporary unit rate applied in year n	Footnote 2			
8.2	Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	803 342,1			
Cross-financing between charging zones					
9.1	Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues					
10.1	Union assistance programmes (Art. 25(3)(a))	-24 781,5	0,0	0,0	0,0
10.2	National public funding (Art. 25(3)(a))	-125,8	0,0	0,0	0,0
10.3	Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4	Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5	Total other revenues relating to year n (Art. 25(3))	-24 907,3	0,0	0,0	0,0
Application of a lower unit rate		Footnote 3			
11.1	Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	0,0	0,0	0,0	0,0
12	Total adjustments relating to year n	778 434,8	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)		2020/2021	2022	2023	2024
13.1	Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	1 682 177,71	896 080,12	934 564,33	971 190,12
13.2	Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	3 369,81	-	-	-
13.3	Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	- 54 179,01	-	-	-
13.4	Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	33 233,22	-	- 15 000,74	-
13.5	Financial incentives : amounts carried over to year n (Art. 25(2)(e))	217,54	-	-	-
13.6	Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7	Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 11 794,45	- 11 820,92	- 18 635,12	-
13.8	Other revenues (Art. 25(2)(i))	- 23 603,03	- 24 907,28	-	-
13.9	Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10	Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	160 668,42	160 668,42
13.11	Grand total for the calculation of year n unit rate	1 629 421,8	859 351,9	1 061 596,9	1 131 858,5
13.12	Forecast total service units for year n (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
13.13	Unit rate for year n as per Art. 25(2) (in national currency)	371,44	245,81	253,61	235,71
13.14	Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00	0,00	0,00
14	Applicable unit rate for year n	371.44	245.81	253.61	235.71

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

4) Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2020

Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2021

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland
Currency: PLN
PANSa

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	1 491 924,6	797 564,0	833 252,5	868 017,6
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	1 154 580,9	618 807,4	643 949,8	668 011,7
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing	1 491 924,6	797 564,0	833 252,5	868 017,6
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	699 470,8			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	-24 781,5			
10.2 National public funding (Art. 25(3)(a))	-125,8			
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5 Total other revenues relating to year n (Art. 25(3))	-24 907,3	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	674 563,5	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	1 491 924,61	797 563,97	833 252,55	868 017,56
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	3 042,30	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	- 54 179,01	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	26 706,98	-	- 15 000,74	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	217,54	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	371,51	- 9 289,43	- 18 002,11	-
13.8 Other revenues (Art. 25(2)(i))	- 23 458,53	- 24 907,28	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	139 894,15	139 894,15
13.11 Grand total for the calculation of year n unit rate	1 444 625,4	763 367,3	940 143,9	1 007 911,7
13.12 Forecast total service units for year n (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	329,31	218,35	224,59	209,89
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	329,31	218,35	224,59	209,89

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland
Currency: PLN
IMWM

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	61 691,6	31 893,1	33 213,1	34 696,0
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	59 226,8	30 774,1	31 888,6	32 901,9
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	32 444,8			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))				
10.2 National public funding (Art. 25(3)(a))				
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	32 444,8	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	61 691,56	31 893,09	33 213,13	34 696,03
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	106,54	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 3 928,07	- 813,33	- 1 392,37	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	6 488,95	6 488,95
13.11 Grand total for the calculation of year n unit rate	57 870,0	31 079,8	38 309,7	41 185,0
13.12 Forecast total service units for year n (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	13,19	8,89	9,15	8,58
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	13,19	8,89	9,15	8,58

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland
Currency: PLN
Radom Meteo

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	620,8	327,2	1 231,4	1 189,2
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	497,9	273,4	1 148,9	1 104,5
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	100,4			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))				
10.2 National public funding (Art. 25(3)(a))				
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	100,4	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	620,78	327,23	1 231,42	1 189,24
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	1,08	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 39,96	- 8,27	- 97,23	-
13.8 Other revenues (Art. 25(2)(i))	- 144,50	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	20,08	20,08
13.11 Grand total for the calculation of year n unit rate	437,4	319,0	1 154,3	1 209,3
13.12 Forecast total service units for year n (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	0,10	0,09	0,28	0,25
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	0,10	0,09	0,28	0,25

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland
Currency: PLN
Warmia i Mazury Meteo

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	3 315,9	1 729,5	1 773,0	1 778,1
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	3 238,4	1 681,7	1 728,5	1 735,5
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	1 883,6			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))				
10.2 National public funding (Art. 25(3)(a))				
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate				
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	Footnote 3			
12 Total adjustments relating to year n	1 883,6	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)				
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	3 315,86	1 729,54	1 773,03	1 778,09
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	-	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	-	-	-	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	376,71	376,71
13.11 Grand total for the calculation of year n unit rate	3 315,9	1 729,5	2 149,7	2 154,8
13.12 Forecast total service units for year n (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	0,76	0,49	0,51	0,45
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	0,76	0,49	0,51	0,45

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland
Currency: PLN
Bydgoszcz Meteo

Reference period 3

Table 2 A - Adjustments relating to year n		2020/2021	2022	2023	2024
A. Cost-sharing					
Determined costs					
1.1	Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	2 481,2	1 372,5	1 385,7	1 446,8
Inflation adjustment calculation					
2.1	Determined costs subject to inflation adjustment	2 051,6	1 181,5	1 204,9	1 274,6
2.2	Forecast inflation index - Table 1		113,4	116,2	119,1
2.3	Actual inflation index - Table 1				
2.4	Actual / forecast total inflation index (in %)				
2.5	Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)					
3.1	New and existing investments (Art. 28(4))				
3.3	Competent authorities and qualified entities costs (Art. 28(5))				
3.4	Eurocontrol costs (Art. 28(5))				
3.5	Pension costs (Art. 28(6))				
3.6	Interest on loans (Art. 28(6))				
3.7	Changes in law (Art. 28(6))				
3.8	Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				
B. Traffic risk sharing					
Traffic risk sharing adjustment					
4.1	Determined costs subject to traffic risk sharing				
4.2	% deviation % referred to in Article 27(2) and 27(5)				
4.3	% additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4	% loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5	% deviation referred to in Article 27(4)				
4.6	Forecast total service units (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
4.7	Actual total service units				
4.8	Actual / forecast total service units (in %)				
4.9	Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments					
5.1	For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2	Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3	Traffic adjustments relating to year n (Art. 27(8) and 27(9))				
C. Financial incentive schemes on capacity and environment					
Adjustments relating to financial incentives					
6.1	Financial incentives relating to capacity (Art. 11(3))				
6.2	Financial incentives relating to environment (Art. 11(4))				
6.3	Additional financial incentives relating to capacity (Art. 11(4))				
6.4	Financial incentives relating to year n (Art. 11(3) and 11(4))				
D. Other adjustments					
Modulation of charges					
7.1	Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate					
8.1	Temporary unit rate applied in year n	Footnote 2			
8.2	Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	1 251,6			
Cross-financing between charging zones					
9.1	Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues					
10.1	Union assistance programmes (Art. 25(3)(a))				
10.2	National public funding (Art. 25(3)(a))				
10.3	Commercial activities (Art. 25(3)(b))				
10.4	Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5	Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate		Footnote 3			
11.1	Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12	Total adjustments relating to year n	1 251,6	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)		2020/2021	2022	2023	2024
13.1	Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	2 481,22	1 372,45	1 385,71	1 446,75
13.2	Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	-	-	-	-
13.3	Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4	Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5	Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6	Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7	Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	-	-	-	-
13.8	Other revenues (Art. 25(2)(i))	-	-	-	-
13.9	Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10	Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	250,33	250,33
13.11	Grand total for the calculation of year n unit rate	2 481,2	1 372,5	1 636,0	1 697,1
13.12	Forecast total service units for year n (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
13.13	Unit rate for year n as per Art. 25(2) (in national currency)	0,57	0,39	0,39	0,35
13.14	Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14	Applicable unit rate for year n	0,57	0,39	0,39	0,35

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland
Currency: PLN
CAA-NSA

Reference period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	122 143,7	63 193,8	63 708,5	64 062,4
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment				
2.2 Forecast inflation index - Table 1				
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	68 191,0			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))				
10.2 National public funding (Art. 25(3)(a))				
10.3 Commercial activities (Art. 25(3)(b))				
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))				
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	68 191,0	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	122 143,68	63 193,84	63 708,49	64 062,44
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	219,89	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	6 526,23	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 8 197,93	- 1 709,88	856,59	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	13 638,20	13 638,20
13.11 Grand total for the calculation of year n unit rate	120 691,9	61 484,0	78 203,3	77 700,6
13.12 Forecast total service units for year n (performance plan)	4 386,8	3 496,0	4 186,0	4 802,0
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	27,51	17,59	18,68	16,18
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	27,51	17,59	18,68	16,18

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland Currency: PLN All Entities							
Complementary information on adjustments	Amounts	2020	2021	2022	2023	2 024	After RP
Inflation adjustment 2018	2 733	2 733	0	0	0	0	0
Inflation adjustment 2019	637	0	637	0	0	0	0
Total inflation adjustment up to 2019	3 370	2 733	637	0	0	0	0
Inflation adjustment 2020-2021	0	0	0	0	0	0	0
Inflation adjustment 2022	0	0	0	0	0	0	0
Inflation adjustment 2023	0	0	0	0	0	0	0
Inflation adjustment 2024	0	0	0	0	0	0	0
Total inflation Adjustment (Art. 26)*	3 370	2 733	637	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	-19 115	-19 115	0	0	0	0	0
Traffic risk sharing 2019	-35 064	0	-35 064	0	0	0	0
Total traffic risk sharing adjustments up to 2019	-54 179	-19 115	-35 064	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Traffic risk sharing 2022	0	0	0	0	0	0	0
Traffic risk sharing 2023	0	0	0	0	0	0	0
Traffic risk sharing 2024	0	0	0	0	0	0	0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	-54 179	-19 115	-35 064	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in investment costs 2022	0	0	0	0	0	0	0
Difference in investment costs 2023	0	0	0	0	0	0	0
Difference in investment costs 2024	0	0	0	0	0	0	0
Total adjustment relating to investment costs (Art. 28(4))	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2022	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2023	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2024	0	0	0	0	0	0	0
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2022	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2023	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2024	0	0	0	0	0	0	0
Total adjustment relating to Eurocontrol costs (Art. 28(5))	0	0	0	0	0	0	0
Difference in pension costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in pension costs 2022	0	0	0	0	0	0	0
Difference in pension costs 2023	0	0	0	0	0	0	0
Difference in pension costs 2024	0	0	0	0	0	0	0
Total adjustment relating to pension costs (Art. 28(6))	0	0	0	0	0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in interest on loans 2022	0	0	0	0	0	0	0
Difference in interest on loans 2023	0	0	0	0	0	0	0
Difference in interest on loans 2024	0	0	0	0	0	0	0
Total adjustment relating to interest on loans (Art. 28(6))	0	0	0	0	0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Costs relating to change in law 2022	0	0	0	0	0	0	0
Costs relating to change in law 2023	0	0	0	0	0	0	0
Costs relating to change in law 2024	0	0	0	0	0	0	0
Total adjustment relating to change in law (Art. 28(6))	0	0	0	0	0	0	0
Cost exempt from cost sharing up to 2017	16 149	0	6 340	0	9 810	0	0
Cost exempt from cost sharing 2018	-2 083	0	979	0	-3 062	0	0
Cost exempt from cost sharing 2019	4 166	0	25 914	0	-21 748	0	0
Total adjustment relating to cost exempt from previous RPs	18 232	0	33 233	0	-15 001	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	0	0	0	0	0	0	0
Financial incentives year 2019	218	0	218	0	0	0	0
Total financial incentives up to 2019	218	0	218	0	0	0	0
Financial incentives year 2022	0	0	0	0	0	0	0
Financial incentives year 2023	0	0	0	0	0	0	0
Financial incentives year 2024	0	0	0	0	0	0	0
Total financial incentives (Art. 11(3) and 11(4))*	218	0	218	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	0
Modulation of charges year 2018	0	0	0	0	0	0	0
Modulation of charges year 2019	0	0	0	0	0	0	0
Total modulation of charges up to 2019	0	0	0	0	0	0	0
Modulation of charges 2020-2021	0	0	0	0	0	0	0
Modulation of charges 2022	0	0	0	0	0	0	0
Modulation of charges 2023	0	0	0	0	0	0	0

Modulation of charges 2024	0	0	0	0	0	0	0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-3 582	-3 582	0	0	0	0	0
Traffic adjustment 2019	-8 212	0	-8 212	0	0	0	0
Total traffic adjustments up to 2019	-11 794	-3 582	-8 212	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-11 821	0	0	-11 821	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-18 635	0	0	0	-18 635	0	0
Traffic adjustment on adjustments from previous RPs 2022	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2023	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2024	0	0	0	0	0	0	0
Total traffic adjustment on adjustments from previous reference periods	-30 456	0	0	-11 821	-18 635	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Traffic adjustment 2022	0	0	0	0	0	0	0
Traffic adjustment 2023	0	0	0	0	0	0	0
Traffic adjustment 2024	0	0	0	0	0	0	0
Total traffic adjustment (Art. 27(8) and 27(9))*	-42 250	-3 582	-8 212	-11 821	-18 635	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	-381	-381	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	-22 958	0	-22 958	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	-23 340	-381	-22 958	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	-24 781	0	0	-24 781	0	0	0
Revenues received from Union assistance programmes in 2022	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2023	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2024	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	-48 121	-381	-22 958	-24 781	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	7	7	0	0	0	0	0
Revenues received from national public funding in 2019	-126	0	-126	0	0	0	0
Total revenues received from national public funding up to 2019	-119	7	-126	0	0	0	0
Revenues received from national public funding in 2020-2021	-126	0	0	-126	0	0	0
Revenues received from national public funding in 2022	0	0	0	0	0	0	0
Revenues received from national public funding in 2023	0	0	0	0	0	0	0
Revenues received from national public funding in 2024	0	0	0	0	0	0	0
Total revenues received from national public funding (Art. 25(3)(a))*	-245	7	-126	-126	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	-144	0	-144	0	0	0	0
Total revenues from commercial activities up to 2019	-144	0	-144	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0	0	0
Revenues from commercial activities in 2022	0	0	0	0	0	0	0
Revenues from commercial activities in 2023	0	0	0	0	0	0	0
Revenues from commercial activities in 2024	0	0	0	0	0	0	0
Total revenues from commercial activities (Art. 25(3)(b))*	-144	0	-144	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2022	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2023	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2024	0	0	0	0	0	0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	803 342	0	0	0	160 668	160 668	482 005
Revenue difference - revision of UR 2022	0	0	0	0	0	0	0
Revenue difference - revision of UR 2023	0	0	0	0	0	0	0
Revenue difference - revision of UR 2024	0	0	0	0	0	0	0
Total revenue differences from temporary application of UR (Art. 29(5))	803 342	0	0	0	160 668	160 668	482 005
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024	0	0	0	0	0	0	0
Total cross-financing to (-) / from (+) other charging zone(s)	0	0	0	0	0	0	0
Total adjustments	680 222	-20 338	-32 418	-36 728	127 033	160 668	482 005

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Table 3 - Complementary information on adjustments

Poland
Currency: PLN
PANSAs

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	2 472	2 472					
Inflation adjustment 2019	570		570				
Total inflation adjustment up to 2019	3 042	2 472	570				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*)	3 042	2 472	570	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	-19 115	-19 115	0	0	0	0	0
Traffic risk sharing 2019	-35 064		-35 064	0	0	0	0
Total traffic risk sharing adjustments up to 2019	-54 179	-19 115	-35 064	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
Traffic risk sharing 2022	0					0	
Traffic risk sharing 2023	0						0
Traffic risk sharing 2024	0						0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*)	-54 179	-19 115	-35 064	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	11 706	0	1 897	0	9 810	0	0
Cost exempt from cost sharing 2018	0	0	3 062	0	-3 062	0	0
Cost exempt from cost sharing 2019	0		21 748	0	-21 748	0	0
Total adjustment relating to cost exempt from previous RPs	11 706	0	26 707	0	-15 001	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	0	0					
Financial incentives year 2019	218		218				
Total financial incentives up to 2019	218	0	218	0	0	0	0
Financial incentives year 2022	0					0	
Financial incentives year 2023	0						0
Financial incentives year 2024	0						0
Total financial incentives (Art. 11(3) and 11(4))*)	218	0	218	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	1 034	1 034	0	0	0	0	0
Traffic adjustment 2019	-663		-663	0	0	0	0
Total traffic adjustments up to 2019	372	1 034	-663	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-9 289			-9 289	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-18 002				-18 002	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-27 292	0	0	-9 289	-18 002	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-26 920	1 034	-663	-9 289	-18 002	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	-381	-381	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	-22 958	0	-22 958	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	-23 340	-381	-22 958	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	-24 781	0	0	-24 781	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	-48 121	-381	-22 958	-24 781	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	7	7	0	0	0	0	0
Revenues received from national public funding in 2019	-126	0	-126	0	0	0	0
Total revenues received from national public funding up to 2019	-119	7	-126	0	0	0	0
Revenues received from national public funding in 2020-2021	-126	0	0	-126	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	-245	7	-126	-126	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017							
Revenues from contracts with airport operators in 2018							
Revenues from contracts with airport operators in 2019							
Total revenues from contracts with airport operators up to 2019							
Revenues from contracts with airport operators in 2020-2021							
Revenues from contracts with airport operators in 2022							
Revenues from contracts with airport operators in 2023							
Revenues from contracts with airport operators in 2024							
Total revenues from contracts with airport operators (Art. 25(3)(c))*							
Revenue difference - revision of UR 2020-2021	699 471				139 894	139 894	419 682
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	699 471	0	0	0	139 894	139 894	419 682
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	584 972	-15 983	-31 316	-34 197	106 891	139 894	419 682
Amounts in '000 (national currency)	Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022						
* Including carry-overs relating to the previous reference period(s)							

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Table 3 - Complementary information on adjustments

Poland
Currency: PLN
IMWM

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	85	85					
Inflation adjustment 2019	21		21				
Total inflation adjustment up to 2019	107	85	21				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	107	85	21	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-1 485	-1 485	0	0	0	0	0
Traffic adjustment 2019	-2 444		-2 444	0	0	0	0
Total traffic adjustments up to 2019	-3 928	-1 485	-2 444	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-813			-813	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-1 392				-1 392	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-2 206	0	0	-813	-1 392	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-6 134	-1 485	-2 444	-813	-1 392	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017							
Revenues from contracts with airport operators in 2018							
Revenues from contracts with airport operators in 2019							
Total revenues from contracts with airport operators up to 2019							
Revenues from contracts with airport operators in 2020-2021							
Revenues from contracts with airport operators in 2022							
Revenues from contracts with airport operators in 2023							
Revenues from contracts with airport operators in 2024							
Total revenues from contracts with airport operators (Art. 25(3)(c))*							
Revenue difference - revision of UR 2020-2021	32 445				6 489	6 489	19 467
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	32 445	0	0	0	6 489	6 489	19 467
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	26 418	-1 399	-2 422	-813	5 097	6 489	19 467

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Table 3 - Complementary information on adjustments

Poland
Currency: PLN
Radom Meteo

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	1	1					
Inflation adjustment 2019	0,22		0				
Total inflation adjustment up to 2019	1	1	0				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	1	1	0	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-15	-15	0	0	0	0	0
Traffic adjustment 2019	-25		-25	0	0	0	0
Total traffic adjustments up to 2019	-40	-15	-25	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-8			-8	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-97				-97	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-106	0	0	-8	-97	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-145	-15	-25	-8	-97	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	-144	0	-144	0	0	0	0
Total revenues from commercial activities up to 2019	-144	0	-144	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	-144	0	-144	0	0	0	0
Revenues from contracts with airport operators up to 2017							
Revenues from contracts with airport operators in 2018							
Revenues from contracts with airport operators in 2019							
Total revenues from contracts with airport operators up to 2019							
Revenues from contracts with airport operators in 2020-2021							
Revenues from contracts with airport operators in 2022							
Revenues from contracts with airport operators in 2023							
Revenues from contracts with airport operators in 2024							
Total revenues from contracts with airport operators (Art. 25(3)(c))*							
Revenue difference - revision of UR 2020-2021	100				20	20	60
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	100	0	0	0	20	20	60
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	-188	-14	-169	-8	-77	20	60

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Table 3 - Complementary information on adjustments

Poland
Currency: PLN
Warmia i Mazury Meteo

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	0	0					
Inflation adjustment 2019	0		0				
Total inflation adjustment up to 2019	0	0	0				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	0	0	0	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	0	0	0	0	0	0	0
Traffic adjustment 2019	0		0	0	0	0	0
Total traffic adjustments up to 2019	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	0			0	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	0				0	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	0	0	0	0	0	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	0	0	0	0	0	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017							
Revenues from contracts with airport operators in 2018							
Revenues from contracts with airport operators in 2019							
Total revenues from contracts with airport operators up to 2019							
Revenues from contracts with airport operators in 2020-2021							
Revenues from contracts with airport operators in 2022							
Revenues from contracts with airport operators in 2023							
Revenues from contracts with airport operators in 2024							
Total revenues from contracts with airport operators (Art. 25(3)(c))*							
Revenue difference - revision of UR 2020-2021	1 884				377	377	1 130
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	1 884	0	0	0	377	377	1 130
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	1 884	0	0	0	377	377	1 130

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Table 3 - Complementary information on adjustments

Poland
Currency: PLN
Bydgoszcz Meteo

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	0	0					
Inflation adjustment 2019	0		0				
Total inflation adjustment up to 2019	0	0	0				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	0	0	0	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	0	0	0	0	0	0	0
Traffic adjustment 2019	0		0	0	0	0	0
Total traffic adjustments up to 2019	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	0			0	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	0				0	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	0	0	0	0	0	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	0	0	0	0	0	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017							
Revenues from contracts with airport operators in 2018							
Revenues from contracts with airport operators in 2019							
Total revenues from contracts with airport operators up to 2019							
Revenues from contracts with airport operators in 2020-2021							
Revenues from contracts with airport operators in 2022							
Revenues from contracts with airport operators in 2023							
Revenues from contracts with airport operators in 2024							
Total revenues from contracts with airport operators (Art. 25(3)(c))*							
Revenue difference - revision of UR 2020-2021	1 252				250	250	751
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	1 252	0	0	0	250	250	751
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	1 252	0	0	0	250	250	751

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Table 3 - Complementary information on adjustments

Poland
Currency: PLN
CAA-NSA

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	175	175					
Inflation adjustment 2019	45		45				
Total inflation adjustment up to 2019	220	175	45				
Inflation adjustment 2020-2021							
Inflation adjustment 2022							
Inflation adjustment 2023							
Inflation adjustment 2024							
Total inflation Adjustment (Art. 26)*	220	175	45	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)							
Difference in investment costs 2022							
Difference in investment costs 2023							
Difference in investment costs 2024							
Total adjustment relating to investment costs (Art. 28(4))							
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0				0		
Difference in competent authorities and QEs costs 2022	0					0	
Difference in competent authorities and QEs costs 2023	0						0
Difference in competent authorities and QEs costs 2024	0						0
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))	0				0	0	0
Difference in Eurocontrol costs 2020-2021 (exceptional measures)	0				0		
Difference in Eurocontrol costs 2022	0					0	
Difference in Eurocontrol costs 2023	0						0
Difference in Eurocontrol costs 2024	0						0
Total adjustment relating to Eurocontrol costs (Art. 28(5))	0				0	0	0
Difference in pension costs 2020-2021 (exceptional measures)							
Difference in pension costs 2022							
Difference in pension costs 2023							
Difference in pension costs 2024							
Total adjustment relating to pension costs (Art. 28(6))							
Difference in interest on loans 2020-2021 (exceptional measures)							
Difference in interest on loans 2022							
Difference in interest on loans 2023							
Difference in interest on loans 2024							
Total adjustment relating to interest on loans (Art. 28(6))							
Costs relating to change in law 2020-2021 (exceptional measures)							
Costs relating to change in law 2022							
Costs relating to change in law 2023							
Costs relating to change in law 2024							
Total adjustment relating to change in law (Art. 28(6))							
Cost exempt from cost sharing up to 2017	4 443		4 443				0
Cost exempt from cost sharing 2018	-2 083		-2 083				0
Cost exempt from cost sharing 2019	4 166		4 166				0
Total adjustment relating to cost exempt from previous RPs	6 526	0	6 526	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	

Modulation of charges 2023	0						0
Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-3 117	-3 117	0	0	0	0	0
Traffic adjustment 2019	-5 081		-5 081	0	0	0	0
Total traffic adjustments up to 2019	-8 198	-3 117	-5 081	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-1 710			-1 710	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	857				857	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-853	0	0	-1 710	857	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-9 051	-3 117	-5 081	-1 710	857	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017							
Revenues from contracts with airport operators in 2018							
Revenues from contracts with airport operators in 2019							
Total revenues from contracts with airport operators up to 2019							
Revenues from contracts with airport operators in 2020-2021							
Revenues from contracts with airport operators in 2022							
Revenues from contracts with airport operators in 2023							
Revenues from contracts with airport operators in 2024							
Total revenues from contracts with airport operators (Art. 25(3)(c))*							
Revenue difference - revision of UR 2020-2021	68 191				13 638	13 638	40 915
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	68 191	0	0	0	13 638	13 638	40 915
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	65 886	-2 942	1 490	-1 710	14 495	13 638	40 915

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Table 4 - Complementary information on common projects and on revenues from Union assistance programmes allocated to the charging zone

Poland

Amounts received

Project reference (as per Grant Agreement)	Project title	Value of funded project in '000 Euro		Amounts granted (as per GA) in '000 Euro		Common project y/n	Actual amounts received (charging zone) in '000 Euro										
		Total	For the charging zone	Total	For the charging zone		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
POIS.06.03.00-00-009/11-00	Operational Programme Infrastructure and Environment	141 449	124 320	70 958	62 365	N	32 101	13 678	13 468	3 118	0	0	0				
MOVE/E2-2014-717/SESAR FPA	Cost of PANSA's employees working for SESAR Deployment Alliance	326	280	326	280	N	0	72	4	25	59	62	57				
RPLB.01.01.00-08-001/14-00	ILS Zielona Góra development	1 068	637	732	437	N	0	0	437	0	0	0	0				
PAZp/15-614/AG	Cost of PANSA's employees working for SESAR Deployment Alliance	13	11	13	11	N	0	0	20	24	-34	0	0				
GA 731781	Increased Runway and Airport Throughput – PJ02 ERTH	745	637	521	446	N	0	0	81	45	39	118	36				
GA 733121	Total Airport Management – PJ04 TAM	101	86	71	60	N	0	0	13	4	8	16	0				
GA 731796	Advanced Airspace Management – PJ08 AAM	327	281	255	219	N	0	0	30	31	42	65	42				
GA 734143	Controller Tools and Team Organisation for the Provision of Separation in Air Traffic Management – PJ10 PROSA	405	346	283	242	N	0	0	16	14	24	121	0				
GA 734161	4D Trajectory Management – PJ18 4DTM	41	35	29	25	N	0	0	2	0	6	8	0				
GA INEA/CEF/TRAN/M2014/1037259	Call 2014 ITEC	6 600	5 635	3 300	2 817	Y	0	0	0	1 054	0	1 122	0				
GA INEA/CEF/TRAN/M2015/1131871	Call 2015 - ECG I LAN	3 570	3 009	3 040	2 563	Y	0	0	0	615	0	569	0				
GA INEA/CEF/TRAN/M2016/1349619	Call 2016	13 339	11 512	5 760	4 971	Y	0	0	0	1 667	0	0	1 532				
GA 734139	Airport Safety Nets PJ03b SAFE	523	451	366	316	N	0	0	0	19	18	107	90				
GA 734129	Trajectory based Free Routing - PJ06 ToBeFREE	897	769	628	539	N	0	0	0	103	50	223	85				
POIS.06.03.00-00-009/11-00	Operational Programme Infrastructure and Environment II	44 391	38 298	37 732	32 553	N	0	0	0	0	10 385	10 630	4 239				
GA INEA/CEF/TRAN/M2017/1349619	Call 2017	456	389	228	195	Y						195	0				
GA 874477	WAVE 2 - PJ02	148	127	104	89	N						89	0				
GA 874472	WAVE 2 - PJ04	56	48	39	33	N						33	0				
GA 874470	WAVE 2 - PJ05	118	103	83	72	N						0	72				
GA 874465	WAVE 2 - PJ07	125	107	87	75	N						75	0				
GA 874463	WAVE 2 - PJ09	36	30	25	21	N						21	0				
GA 874464	WAVE 2 - PJ10	108	92	75	65	N						65	0				
GA 874474	WAVE 2 - PJ13	61	53	42	37	N						0	37				
GA 872320	WAVE 2 - PJ18	128	109	90	77	N						77	0				
GA 874473	WAVE 2 - PJ19	29	25	20	17	N						17	0				
GA 874475	WAVE 2 - PJ20	29	25	20	17	N						17	0				
GA 874476	WAVE 2 - VLD2	8	7	5	5	N						0	5				
Total in '000 Euro		215 095	187 422	124 834	108 545	0	32 101	13 750	14 071	6 719	10 599	13 630	6 196	0	0	0	0
Total in '000 national currency		891 329	776 406	518 454	450 655	0	130 842	56 045	57 517	28 533	44 561	57 716	26 376				

Amounts reimbursed to airspace users through other revenues

Project reference (as per Grant Agreement)	Project title	Amounts retained in respect of administrative costs for the	Total to be reimbursed for the charging zone in '000 Euro	Amounts reimbursed to users (charging zone) in '000 national currency												
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	After RP	
POIS.06.03.00-00-009/11-00	Operational Programme Infrastructure and Environment			46 758	0	5 608	14 008	21 211	1 237	-2 411	14 962	24 791				
MOVE/E2-2014-717/SESAR FPA	Cost of PANSA's employees working for SESAR Deployment Alliance			0	0	0	0	0	416	242	254					
RPLB.01.01.00-08-001/14-00	ILS Zielona Góra development			0	0	132	79	126	-1	0	126	126				
PAZp/15-614/AG	Cost of PANSA's employees working for SESAR Deployment Alliance			0	0	0	0	0	42	0	0					
GA 731781	Increased Runway and Airport Throughput – PJ02 ERTH			0	0	0	0	0	268	470	524					
GA 733121	Total Airport Management – PJ04 TAM			0	0	0	0	0	46	64	58					
GA 731796	Advanced Airspace Management – PJ08 AAM			0	0	0	0	0	256	200	288					
GA 734143	Controller Tools and Team Organisation for the Provision of Separation in Air Traffic Management – PJ10 PROSA			0	0	0	0	0	98	144	533					
GA 734161	4D Trajectory Management – PJ18 4DTM			0	0	0	0	0	9	29	36					
GA INEA/CEF/TRAN/M2014/1037259	Call 2014 ITEC			0	0	0	0	0	673	270	415					
GA INEA/CEF/TRAN/M2015/1131871	Call 2015 - ECG i LAN			0	0	0	0	0	62	83	355					
GA INEA/CEF/TRAN/M2016/1349619	Call 2016			0	0	0	0	0	1 377	861	856					
GA 734139	Airport Safety Nets PJ03b SAFE			0	0	0	0	0	81	80	469					
GA 734129	Trajectory based Free Routing - PJ06 ToBeFREE			0	0	0	0	0	226	446	982					
POIS.06.03.00-00-009/11-00	Operational Programme Infrastructure and Environment II			0	0	0	0	0	0	1 088	3 356					
GA INEA/CEF/TRAN/M2017/1349619	Call 2017										342					
GA 874477	WAVE 2 - PJ02										2					
GA 874472	WAVE 2 - PJ04										0					
GA 874470	WAVE 2 - PJ05										0					
GA 874465	WAVE 2 - PJ07										2					
GA 874463	WAVE 2 - PJ09										1					
GA 874464	WAVE 2 - PJ10										0					
GA 874474	WAVE 2 - PJ13										0					
GA 872320	WAVE 2 - PJ18										0					
GA 874473	WAVE 2 - PJ19										0					
GA 874475	WAVE 2 - PJ20										0					
GA 874476	WAVE 2 - VLD2										0					
Traffic adjustment	Traffic adjustment			0	0	0	0	0	498	-1 193	-477					
Total in '000 Euro				11 267	0	1 383	3 394	5 141	1 274	90	5 562	6 004	0	0	0	0
Total in '000 national currency				46 758	0	5 740	14 087	21 337	5 286	374	23 084	24 916				

RP3 Cost-efficiency targets

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

En route charging zone Poland	Baseline 2014	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D	2024 D
	2014 B	2019 B	2020/2021 D	2022 D	2023 D	2024 D	vs. 2014 B	vs. 2019 B
Total en route costs in nominal terms (in national currency)	660 997 812	889 554 541	1 682 177 715	896 080 125	934 564 330	971 190 123	46,9%	9,2%
Total en route costs in real terms (in national currency at 2017 prices)	664 844 905	867 942 999	1 582 338 819	819 108 493	839 574 381	857 899 066	29,0%	-1,2%
Total en route costs in real terms (in EUR2017) ¹	156 256 514	203 990 053	371 892 371	192 512 625	197 322 662	201 629 458	29,0%	-1,2%
YoY variation			82,3%	-48,2%	2,5%	2,2%		
Total en route Service Units (TSU)	3 920 861	4 959 376	4 386 811	3 496 000	4 186 000	4 802 000	22,5%	-3,2%
YoY variation			-11,5%	-20,3%	19,7%	14,7%		
Real en route unit costs (in national currency at 2017 prices)	169,57	175,01	360,70	234,30	200,57	178,65	5,4%	2,1%
Real en route unit costs (in EUR2017) ¹	39,85	41,13	84,78	55,07	47,14	41,99	5,4%	2,1%
YoY variation			106,1%	-35,0%	-14,4%	-10,9%		

National currency	PLN
¹ Average exchange rate 2017 (1 EUR=)	4,25

b) Information on the baseline values for the determined costs and the determined unit costs

En route charging zone Poland	Baseline 2014	Baseline 2019	Actuals 2014	Actuals 2019	2014 Baseline adjustments	2019 Baseline adjustments
	2014 B	2019 B	2014 A	2019 A		
Total en route costs in nominal terms (in national currency)	660 997 812	889 554 541	660 997 812	836 485 578	0	53 068 963
Total en route costs in real terms (in national currency at 2017 prices)	664 844 905	867 942 999	664 844 905	814 956 767	0	52 986 232
Total en route costs in real terms (in EUR2017) ¹	156 256 514	203 990 053	156 256 514	191 536 857	0	12 453 196
Total en route Service Units (TSU)	3 920 861	4 959 376	3 930 688	4 971 806	-9 827	-12 430

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex A.2 En-route Charging Zone
Additional Information

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

ADDITIONAL INFORMATION TO REPORTING TABLES 1 – TOTAL COSTS AND UNIT COSTS

1. Determined costs and unit costs

a) Description of the methodology used for allocating costs of facilities or services between different air navigation services, based on the list of facilities and services listed in ICAO Regional Air Navigation Plan, European Region (Doc 7754) as last amended, and a description of the methodology used for allocating those costs between different charging zones;

For the Polish Performance Plan for RP3 (PL RP3 PP) the cost base for en-route charges in Poland consists of cost incurred by the following six organizations:

- **Polish Air Navigation Services Agency (PANSa)** – provider of air traffic services, CNS services and AIS, as well as SAR coordination,
- **Institute of Meteorology and Water Management – National Research Institute (IMWM)** – MET services provider,
- **Radom Meteo sp. z o.o. (Radom Meteo)** – MET services provider for EPRA approach and tower services,
- **Warmia i Mazury sp. z o.o. (Warmia i Mazury)** – MET services provider for EPSY approach and tower services,
- **Port Lotniczy Bydgoszcz S.A. (PL Bydgoszcz)** – MET services provider for EPBY approach and tower services,
- **Civil Aviation Authority of the Republic of Poland (CAA)** – national supervisory authority.

The en-route cost base includes also EUROCONTROL costs – although the contribution is paid by PANSa, for presentation purpose in the reporting tables the EUROCONTROL costs are included under the CAA costs.

There is one en-route charging zone in Poland (FIR Warszawa).

		RP1	RP2	RP3
ER	ATSP	PANSa (ATS, CNS, AIS, SAR coordination)	PANSa (ATS, CNS, AIS, SAR coordination)	PANSa (ATS, CNS, AIS, SAR coordination)
	MET	IMWM (MET)	IMWM (MET) Radom Meteo (MET – EPRA) Warmia i Mazury (MET – EPSY) ¹	IMWM (MET) Radom Meteo (MET – EPRA) Warmia i Mazury (MET – EPSY) PL Bydgoszcz (MET – EPBY)
	NSA	CAA (CAA+MS) + EUROCONTROL costs	CAA (CAA+MS) + EUROCONTROL costs	CAA (CAA+MS) + EUROCONTROL costs

¹ Although Warmia i Mazury was providing MET services in RP2, the whole costs were allocated to the terminal cost base, what was decided during the revision of RP2 concerning the inclusion of EPSY airport into BFAB PP RP2.

En-route Charging Zone Poland Reference Period 3 (2020-2024)

I. PANSA

For the purpose of calculating the cost base for the en-route charges, PANSA has taken into consideration costs of facilities listed in the ICAO Regional Navigation Plan (Doc. 7754) reflecting all equipment used for the provision of air navigation services.

For methodology used for allocating costs between charging zones (en-route and terminal, and within terminal between two charging zones (based on allocation of costs to each individual airport)) – see point c) below.

II. IMWM

See point c), d) and e) below.

III. Radom Meteo

Not applicable to Radom Meteo as this ANSP only provides MET services. For details, see point c).

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz.

VI. CAA (including EUROCONTROL)

The allocation of CAA's costs between ER and TNC is based on the number of personnel (FTEs) executing the tasks of national supervisory authority and part of member state responsibilities which are in the competence of CAA as stated in the Polish Aviation Law Act. The methodology, developed during Poland's technical integration with EUROCONTROL CRCO, remains unchanged since 2008. For more information, see point c).

b) Description of the methodology and assumptions used to establish the costs of air navigation services provided to VFR flights, when exemptions are granted for VFR flights in accordance with Article 31(3), 31(4) and 31(5);

I. PANSA

Cost of air navigation services provided for VFR flights is calculated through a marginal cost methodology. Being covered by the State budget, costs of VFR flights are deducted from the en-route determined costs. The methodology applied for RP3 has not changed compared to previous reference period.

II. IMWM

IMWM calculates costs of VFR flights which are exempted from navigation charges using the marginal cost methodology. This methodology is based on the number of visits users make to two most frequently visited IMWM websites which are: www.imgw.pl and www.pogodynka.pl which further direct the user to the tab concerning aviation information (awiacja.imgw.pl). This cost is calculated as follows:

- The analysis of the Internet connection load through the www.imgw.pl website shows that it occupies 11% of the rented capacity.
- 11% of the annual cost of Internet bandwidth equal to the cost of maintaining the website www.imgw.pl and www.pogodynka.pl.
- The average number of entrances to the awiacja.imgw.pl tab is 1,76% of all the visits to the IMWM websites, what after following calculation: 1,76% multiplied by annual cost of maintaining the websites gives an annual cost of maintaining awiacja.imgw.pl tab.
- We assume that 50% of flights from these entries are subjects to exemptions from navigation charges (50% of the annual cost of maintaining the awiacja.imgw.pl tab equal to annual marginal cost of flights exempted from navigation charges).

All products dedicated to VFRs are loaded with marginal costs at the same rate.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz.

VI. CAA (including EUROCONTROL)

Not applicable.

c) Criteria used to allocate costs between terminal and en route services, in accordance with Article 22(5);

I. PANSA

Criteria for allocation of PANSA's costs between ER and TNC remain unchanged as compared with the RP2 and initial draft RP3 performance plan dated Nov 2019. In the initial draft PL RP3 PP, as compared to RP2, some modifications were introduced to allocation keys of two major investments (Tower Warsaw and new Campus) following consultation of draft PL RP3 PP and comments provided by airspace users. During works on revised PL RP3 PP PANSA has also updated the variable part of the allocation keys (timesheet, cost center structure, movements, SU, FTE, etc).

PANSA, for cost allocation purposes, uses the Services Cost Calculation and Profitability Analysis System built on the basis of Activity Based Costing methodology. The Cost Calculation system is based on a multi-step allocation principle.

Some costs, by their origin may be allocated directly to the ER or TNC services (e.g. ACC ATCOs). Other costs, which are not directly linked with the provision of specific services (e.g. human resources or financial staff) are allocated using the allocation keys catalogue which is included in the model. Those keys were constructed in a very precise manner in order to reflect, in the best possible way, the distribution of costs borne in operational activity (e.g. number of operations, number of service units, staff complement, power utilization etc.).

For ATS:

- The costs of services provided in the controlled area (CTA) and TMA are allocated to ER.
- Costs related to services provided in CTR (controlled zone) are allocated to TNC.

With regards to ATC units:

- Costs of APP and ACC units are allocated to ER in total.
- For TWR units distinction has to be made between airports where a separate APP unit has been established and airports where in fact the TWR unit provides procedural approach services:
 - In Poland, following operational requirements, 4 approach control units have been created for the major airports:
 - Gdańsk im. Lecha Wałęsy (EPGD),
 - Poznań-Ławica (EPPO) and Wrocław-Strachowice (EPWR) together,
 - Kraków-Balice (EPKK) and Katowice-Pyrzowice (EPKT) together,
 - Chopina w Warszawie (EPWA) and Warszawa/Modlin (EPMO) together.

For those airports, where a separate APP unit operates, cost of TWR service is allocated to ER only in the part, which covers services provided outside CTR boundaries and is limited to services provided to approaching (landing) operations.

- At remaining airports, TWR unit provides also APP services. When both APP and TWR services are provided by TWR unit, the cost of the unit is divided between ER and TNC in accordance with the airspace volume ratio (CTR and TMA). For that purpose the following formula is used: $V(CTR) / V(CTR + TMA)$. This formula should be understood as volume of airport controlled area to the total volume of the airport controlled zone and the airport controlled area.

Costs of FIS services, as well as SAR coordination, are in total allocated to ER.

For CNS:

En-route Charging Zone Poland Reference Period 3 (2020-2024)

- NAV: The basis for costs allocation of Nav aids is the degree of their use by individual air traffic control units (APP vs. TWR) and reflects use of those Nav aids in different airspace structures (TMA vs. CTR). Allocation of VOR/DVORs, DMEs and ILSs takes into account range of these Nav aids, and as a consequence, their possible use in TMA and CTR. Usage of the airport Nav aids for certain flights in different types of airspace is strictly connected with the dimension of the given airspace. Therefore, their cost is split between TWR and APP, and consequently between TNC and ER.
- SUR: Costs of en-route and approach radars are in total allocated to ER service. Costs of airport movements radars, ASMGCS system and airport MLAT are allocated in total to TNC services (in line with their location).
- COM: The cost allocation is based on the number of radio-stations and voice communication consoles used by each service.

The cost of ATM operational system Pegasus 21 is allocated between ER and TNC on the basis of revenues from navigation services provided. New ATM system (iTEC) is fully allocated to ER as it will be dedicated to ACC and APP units.

II. IMWM

In order to properly allocate the costs of MET services between ER and TNC, the “product methodology” was applied, in accordance with Commission Regulation (EU) No. 1191/2010 and WMO publication No. 904, taking into account the need for cost transparency and the fact that individual users are charged only for the costs services of their use.

The allocation of costs between the ER-TNC of individual aviation products is based on the assessment of the percentage of one-time work per day. The starting point of this procedure is the assessment of the involvement of individual organizational units directly providing aviation products, such as: Central Aeronautical Forecasting Office - Meteorological Watch Office in Warsaw and Meteorological Forecasting Office in Cracow; and Aeronautical Meteorological Stations (LSM) and units indirectly involved in MET services providing (i.e. Meteorological Services for Civil Aviation Centre, Quality and Safety Management (SMS), Administration with Law Office and Finance Office, Central Laboratory of Measurement Equipment or IT Services). This commitment is measured by the amount of time needed to produce a given type of product.

The detailed description of the cost allocation used to determine the costs of products is as follows:

- 1) A catalog of basic classes of meteorological products was defined. This catalogue is based on the guidelines contained in ICAO Annex 3, WMO Publication No. 904 and on the provisions of the contract for meteorological services for civil aviation, concluded between IMWM and PANSA. The catalogue preparation has been agreed with the customer and includes the following classes of products:
 - Local regular and special messages (MET REPORT) / open text with the use of abbreviations / - participation in the development of this product is taken by all Aeronautical Meteorological Stations: LSM Gdańsk, LSM Katowice-Pyrzowice, LSM Kraków-Balice, LSM Łódź, LSM Poznań-Ławica, LSM Rzeszów-Jasionka, LSM Szczecin-Goleniów, LSM Warszawa, LSM Warszawa-Modlin, LSM Lublin, LSM Wrocław-Strachowice, LSM Zielona Góra-Babimost. This is information provided to air traffic services in accordance with the criteria contained in the relevant operational cooperation agreements and requires constant monitoring of weather conditions;
 - TREND forecast, developed and added to METAR messages for the EPWA airport in the METAR TREND program. It is a landing forecast, developed for 2 hours and added to each METAR message for the EPWA airport by weather forecasters from Meteorological Watch Office. Requires tracking weather conditions at the airport and weather analysis for fast appending to METAR. This is a forecast of meteorological conditions developed in accordance with the criteria agreed with the user;
 - TREND forecast for ATIS. This is a forecast prepared for 2 hours to the ATIS message. The forecast is prepared by the forecasters in Meteorological Watch Office. This is a forecast of meteorological conditions and it is developed in accordance with the criteria agreed with the user. It is developed every half hour and in the case of a new message, when the weather conditions at the airport have changed according to the criteria contained in the agreement with the user. Regular messages in the form of METAR code - these are observations and measurements recorded in a consistent code,

En-route Charging Zone Poland

Reference Period 3 (2020-2024)

transmitted every half an hour. All Aeronautical Meteorological Stations mentioned above take part in the preparation of this product;

- TAF FC and FT forecasts / along with changes to them / - TAF FC forecasts are prepared every 3 hours, valid for 9 hours, TAF FT for EPWA, EPKK, EPWR airports every 3 hours, valid for 24 hours, and for others airports every 6 hours with validity for 24 hours. They are developed in TAF code consistent with aeronautical-meteorological codes. The TAF forecasts being developed are supervised on a continuous basis and in accordance with the applicable criteria. It is possible to develop changes to them, then the TAF AMD forecast is issued. Two forecasting offices are involved in the development of the product from the beginning of 2019;
 - Central Aeronautical Forecasting Office - Meteorological Watch Office - develops: TAF FT for EPWA, EPGD, EPLL, EPSC, EPMO and TAF FC for EPLB;
 - Meteorological Forecasting Office in Cracow - develops TAF FT for EPKK, EPRZ, EPKT, EPPO, EPWR and TAF FC for EPZG;
- Information SIGMET (WS, WV) and AIRMET WA / open text using the abbreviations applicable / for FIR Warszawa - EPWW is information about meteorological conditions observed and forecasted, written with an open text with applicable abbreviations. This forecast is a warning. This product is developed by Meteorological Watch Office, in accordance with the applicable criteria requiring continuous monitoring and analysis of weather conditions at FIR Warszawa;
- Airport warnings according to established criteria /open text / - are developed for 12 airports. Criteria for warnings are agreed with users. Forecasting offices have been taking part in the development of this product since 2019. Airport warnings cover 12 airports in the following division of responsibilities;
 - Central Aeronautical Forecasting Office - Meteorological Watch Office - airports: EPGD, EPSC, EPWA, EPLL, EPMO, EPLB;
 - Meteorological Forecasting Office in Cracow - airports: EPKK, EPRZ, EPKT, EPWR, EPZG, EPPO;
- Preparation and update of en-route forecasts: METAR, TAF, SIGMET, AIRMET and maps (above and below FL 100/150): SIGNIFICANT, wind and temperature forecasts at various levels (i.e. aerial maps at various levels) - preparation of flight documentation and service flight crews. The documentation includes TAF, METAR, SIGMET and AIRMET message sets, mainly from Europe, aerial maps above and below FL100 / 150 and SIGWX - a map of significant weather phenomena, including SWC for the area of Poland from the ground surface up to FL100 / 150. This product is available in the Meteorological Watch Office, 24 hours a day;
- Regional minimum QNH pressure with a one-hour step - it is a product developed for PANSAs order for 14 regions and transmitted in the form of a message. The message after processing is automatically delivered to PANSAs;
- Pressure for the determination of the transient level / 995 hPa / - when the pressure of QNH in the METAR message set exceeds 995 hPa, forecasters are required to inform the air traffic services about this fact. Implementation of this service consists in tracking the national sets of METARs issued every half an hour and providing information;
- GAMET - area forecast - forecast developed in accordance with the requirements of ICAO Annex 3 for 5 FIS sectors, 4 times a day, valid for 6 hours. The forecasting departments that cover the following sectors take part in the development of this product: Meteorological Watch Office - sectors A1, A3, A4; Meteorological Forecasting Office in Cracow – sectors A5, A2;
- Data for VOLMET broadcast - it is a set of 9 METAR messages, including 3 national (for EPWA, EPGD and EPPO), transmitted, every 1 hour to PANSAs. This task is carried out by Meteorological Watch Office;
- Information on the release of radioactive and toxic materials into the atmosphere and volcanic ash - the transfer of this information is part of responsibilities of Meteorological Watch Office;
- Information from weather radars in a currently available form (radar images) - providing images from 8 meteorological radars;
- Information from atmospheric lightning detection system (in the form of text and image) - providing data from the PERUN system;

En-route Charging Zone Poland Reference Period 3 (2020-2024)

- SAT images - providing satellite images. PANSA is an external customer, therefore it is necessary for IMWM to purchase an appropriate license for the use of satellite images;
 - Reports from aircrafts - development and transmission of messages based on information from aircraft transferred by PANSA to IMWM. This product is developed by Meteorological Watch Office;
 - Climatological data / information - developed for airports from METAR measurement data in accordance with the tables in ICAO Annex 3. All Aeronautical Meteorological Stations participate in preparation of the product;
 - Providing information on the possibility of dangerous weather phenomena (below FL100 / 150), in particular turbulence, icing and strong wind zones. This information is made available in graphic form;
 - Providing information on wind speed and direction, turbulence (including CAT), icing at FIR Warszawa on flight levels available for controlled traffic. This information is available in graphic form;
 - Providing a new graphic form of wind and temperature forecasts (below FL 100/150) for FIR Warszawa and wind forecasts for individual TMAs;
 - Information on current and possible meteorological conditions in the area of search for the Aeronautical Rescue Coordination Centre. Information on current and possible meteorological conditions on the flight route of ARCC search aircraft. Information on previous meteorological conditions in the area of search for ARCC. Information on meteorological conditions that prevailed during the last known position of the missing aircraft and along the planned flight route for the ARCC. These forecasts and information are prepared by Meteorological Watch Office, ordered by the Head of the ARCC Center (PANSA);
 - MeteoFlight - a system for calculating and visualizing meteorological threats for air traffic services.
- 2) Daily work charts for Meteorological Watch Office, Meteorological Forecasting Office in Cracow and Aeronautical Meteorological Stations were prepared. They present the average time needed to produce particular classes of meteorological products, during a day by individual organizational units.
 - 3) The cost of manufacturing the product was calculated based on the labour intensity. This consists of: number of full-time jobs; labour consumption for a products; annual amount of remuneration for full-time job.
 - 4) The share of other cost groups (service, AWOS, materials, external services, business trips, telecommunications, SADIS, training, lease, infrastructure, depreciation, capital cost) has been divided taking into account labour intensity in a given organisational unit in a given year.

Products		Percentage breakdown		
		ER	TNC	Total
1	Local regular and special messages (MET REPORT) (MET REPORT, SPECIAL)	-	100%	100%
2	Trend forecast for messages specified in item 1 (for EPWA)	50%	50%	100%
3	Regular messages in the form of METAR code	75%	25%	100%
4	Trend forecast for messages specified in item 3 (for EPWA)	50%	50%	100%
5	TAF FC and FT forecasts along with changes to them	75%	25%	100%
6	SIGMET (WS, WV) and AIRMET WA information	100%	-	100%
7	Airport warnings according to established criteria	-	100%	100%
8	Preparation and update of ensembles: METAR, TAF, SIGMET, AIRMET and maps (above and below FL 100/150): SIGNIFICANT, wind and temperature forecasts at various levels	75%	25%	100%
9	Regional minimum QNH pressure with an one-hour step	50%	50%	100%
10	Pressure for the determination of the transient level	50%	50%	100%
11	GAMET - area forecast	100%	-	100%
12	SIGNIFICANT for Poland	100%	-	100%
13	Data for VOLMET broadcast	100%	-	100%

En-route Charging Zone Poland Reference Period 3 (2020-2024)

14	Information on the release of radioactive and toxic materials into the atmosphere and volcanic ash	100%	-	100%
15	Information for the needs of search and rescue services	100%	-	100%
16	Currently available information from the weather radars (radar images)	50%	50%	100%
17	Information from the lightning detection system (text and image form)	50%	50%	100%
18	SAT images - providing satellite images	75%	25%	100%
19	Reports from aircrafts	100%		100%
20	Climatological data / information	-	100%	100%
21	Providing information on the possibility of dangerous weather events (below FL100 / 150), in particular turbulence, icing and strong wind zones.	75%	25%	100%
22	Providing graphic information on wind speed and direction, turbulences (including CAT), icing at FIR Warszawa on flight levels available for controlled traffic.	75%	25%	100%
23	Providing a new graphic form of wind and bottom temperature forecasts (below FL 100/150) for FIR Warszawa and wind forecasts for individual TMAs.	75%	25%	100%
24	VENTO - meteorological tool supporting the work of PANSA controllers	50%	50%	100%
25	MeteoFlight - meteorological tool supporting the work of PANSA controllers	50%	50%	100%

III. Radom Meteo

Radom Meteo has been designated on 14th May 2019 by the Minister responsible for transport for the provision of MET services in CTR/TMA at Radom-Sadków airport (EPRA) for the period from 1st January 2020 to 31st December 2024. Radom Meteo has been also provided with the renewal of ANSP certificate on 18th March 2020 r. by the President of Civil Aviation Authority of Poland.

Since 2019, the EPRA airport remains under reconstruction – despite that fact, Radom Meteo is constantly providing MET services in order to fulfil its obligations stemming from the designation, ANSP certificate and in order to maintain the Radom Meteo's potential to deliver the high-quality MET services once the EPRA will be opened once again, what is currently expected at the turn of 2022/2023.

Methodology used for allocating costs between en-route and terminal ANS

Radom Meteo's only efforts are dedicated to prepare MET products and services, which final clients are to a large extent Airspace Users.

The methodology for determining the cost of various aviation products is based on an expert internal assessment of the percentage division of the working time devoted to preparation of the MET products. The indicators of this commitment are the amounts of time required to prepare a particular product.

The next step of cost-allocation is based on guidelines included in the 'Guide to Aeronautical Meteorological Services Cost Recovery' by WMO - No 904 second edition from 2007 which are in line with ICAO Doc 9161, and was performed in order to divide the costs incurred between en-route and terminal ANS.

The table below presents the results of the product division prepared by Radom Meteo for the meteorological service according to the methodology presented above. The final allocation proportions are equal to 40.00% ER / 59.40% TNC / 0.60% Other, what was presented in the table below.

Product/service	Labour intensity	Allocated to ANS	Allocated to other activities	WMO 904 attachment II		Cost		
				ER	TNC	ER	TNC	Other
Providing local meteorological reports for ATC/ATIS	0,32	100%	0,00%	0%	100%	0,00	0,32	0,00
Providing METAR reports	0,22	100%	0,00%	75%	25%	0,17	0,06	0,00
Providing and supervising over forecasts TAF FC (TAF AMD)	0,23	100%	0,00%	75%	25%	0,17	0,06	0,00
Providing meteorological warnings	0,10	95%	5,00%	0%	100%	0,00	0,10	0,01
Wind shear warnings	0,02	100%	0,00%	0%	100%	0,00	0,02	0,00
Providing meteorological flight documentation	0,03	100%	0,00%	75%	25%	0,02	0,01	0,00

En-route Charging Zone Poland Reference Period 3 (2020-2024)

Forwarding reports from the air to MBN	0,04	100%	0,00%	100%	0%	0,04	0,00	0,00
Conduction on briefings and meteorological consultations	0,02	95%	5,00%	0%	100%	0,00	0,02	0,00
Providing climatological information	0,02	100%	0,00%	0%	100%	0,00	0,02	0,00
Total	1,00	-	-	-	-	40,00%	59,40%	0,60%

Due to the EPRA airport closure, some of the (mainly terminal) activities (such as providing local meteorological reports for ATC/ATIS, wind shear warnings or forwarding reports from the air to MBN) are not realized, while the final clients of some other are not Airspace Users. Therefore, it was essential to provide additional cost allocation methodology for the period of EPRA closure, based on the same proportion of labour intensity, with regard only to products provided. In that time, the final allocation of Radom Meteo's costs is equal to 54.44% ER / 18.15% TNC / 27.42% Other, what was presented in the table below and is planned to be applied in 2020-2022.

Product/service	Labour intensity	Allocated to ANS	Allocated to other activities	WMO 904 attachment II		Cost		
				ER	TNC	ER	TNC	Other
Providing local meteorological reports for ATC/ATIS	0,00	0%	0%	0%	100%	0,00	0,00	0,00
Providing METAR reports	0,22	100%	0%	75%	25%	0,17	0,06	0,00
Providing and supervising over forecasts TAF FC (TAF AMD)	0,23	100%	0%	75%	25%	0,17	0,06	0,00
Providing meteorological warnings	0,10	0%	100%	0%	100%	0,00	0,00	0,10
Wind shear warnings	0,00	0%	0%	0%	100%	0,00	0,00	0,00
Providing meteorological flight documentation	0,03	0%	100%	75%	25%	0,00	0,00	0,03
Forwarding reports from the air to MBN	0,00	0%	0%	100%	0%	0,00	0,00	0,00
Conduction on briefings and meteorological consultations	0,02	0%	100%	0%	100%	0,00	0,00	0,02
Providing climatological information	0,02	0%	100%	0%	100%	0,00	0,00	0,02
Total	0,62	-	-	-	-	54,44%	18,15%	27,42%

IV. Warmia i Mazury

Warmia i Mazury scope of provided services generates the necessity of a costs' breakdown between en-route and terminal charging zones only for MET service. Warmia i Mazury methodology is in line with doc. WMO 904 (Annex II) – 'Guide to Meteorological Services Cost Recovery', coherent with ICAO Doc 9161. The division of labour intensity between each product and service delivered is based on internal estimations. The table below presents product allocation to the en-route and TNC.

Warmia i Mazury does not exclude the 'Other' segment as it is utterly marginal. Any additional exercise done by MET staff is paid in bonuses which are excluded from the cost-bases.

Product/service	Labour intensity	WMO 904 attachment II		Cost	
		ER	TNC	ER	TNC
Wind shear warnings	1,25%	0%	100%	0,00%	1,25%
Providing local meteorological reports for ATC/ATIS	18,50%	-	100%	0,00%	18,50%
Providing METAR reports	30,00%	75%	25%	22,50%	7,50%
Providing and supervising over forecasts TAF FC (TAF AMD)	35,00%	75%	25%	26,25%	8,75%
Providing meteorological warnings	5,00%	-	100%	0,00%	5,00%
Providing meteorological flight documentation	2,00%	75%	25%	1,50%	0,50%
Forwarding reports from the air to MBN	7,25%	100%		7,25%	0,00%
Conduction on briefings and meteorological consultations	0,50%	0%	100%	0,00%	0,50%
Providing climatological information	0,50%	0%	100%	0,00%	0,50%
Total	100,00%	-	-	57,50%	42,50%

En-route Charging Zone Poland Reference Period 3 (2020-2024)

Warmia i Mazury accounting policy bases on synthetic accounts in accordance with the applicable accounting regulations and analytical accounts based on the organizational structure of Warmia i Mazury. Separate analytical records are kept for MET services, which include the following costs:

- Direct costs – which are allocated in 100% based on the financial and accounting documents (e.g. invoices, payroll),
- Indirect costs – which division is calculated based on the proportion of the costs of Warmia i Mazury by using appropriate and specific keys, such as inter alia: space occupied, number of staff, assigned fixed assets, labour intensity, or utilities consumption.

Due to COVID-19 pandemic which had a large impact on the structure of Warmia i Mazury activity as a whole entity, since 1st January 2021 Warmia i Mazury is in testing phase of the new accounting policy concerning especially the improvement of management accounting, which will be fully implemented by 1st January 2022. Therefore, the planning exercise for years 2022-2024 and future reporting methodology will include these changes in order to provide full consistency between methodologies of calculating the determined and actual costs to provide comparable data. One of the aims of these decision was to provide more accurate allocation of assets and identification of cost centres.

V. PL Bydgoszcz

In general, PL Bydgoszcz is dividing all the costs incurred by company on ANS-directly related, ANS-directly unrelated and indirect costs that are furtherly allocated using the average company's departments involvement in providing ANS.

In case of MET costs, PL Bydgoszcz has identified various MET products and services provided and has estimated the labour intensity proportions for their provision, basing on employees' experiences. Then, the products and services are allocated to ANS (for Airspace Users) and to other activities (for other recipients – which are marginal).

The allocation between en-route and TNC is fully based on International Civil Aviation Organization's Doc 9161 and World Meteorological Organization's Doc 904, which are coherent with each other. The final allocation was presented in the table below, in proportions: 41.00% ER / 58.89% TNC / 0.11% Other.

Product/service	Labour intensity	Allocated to ANS	Allocated to other activities	WMO 904 annex II		Cost		
				ER	TNC	ER	TNC	Other
Wind shear warnings	5,00%	100,00%	0,00%	0%	100%	0,00%	5,00%	0,00%
Providing local meteorological reports for ATC/ATIS	35,00%	100,00%	0,00%	0%	100%	0,00%	35,00%	0,00%
Providing METAR reports	25,00%	100,00%	0,00%	75%	25%	18,75%	6,25%	0,00%
Providing and supervising over forecasts TAF FC (TAF AMD)	25,00%	100,00%	0,00%	75%	25%	18,75%	6,25%	0,00%
Providing meteorological warnings	5,00%	97,92%	2,08%	0%	100%	0,00%	4,90%	0,10%
Providing meteorological flight documentation	2,00%	100,00%	0,00%	75%	25%	1,50%	0,50%	0,00%
Forwarding reports from the air to MBN	2,00%	100,00%	0,00%	100%	0%	2,00%	0,00%	0,00%
Conduction on briefings and meteorological consultations	0,50%	97,92%	2,08%	0%	100%	0,00%	0,49%	0,01%
Providing climatological information	0,50%	100,00%	0,00%	0%	100%	0,00%	0,50%	0,00%
Total	100,00%	-	-	-	-	41,00%	58,89%	0,11%

I. CAA (including EUROCONTROL)

The allocation between en-route and terminal ANS based on the involvement of each of the CAA's organizational units into activities linked within the en-route and terminal supervision, measured in FTEs.

En-route Charging Zone Poland

Reference Period 3 (2020-2024)

d) Breakdown of the meteorological costs between direct costs and the costs of supporting meteorological facilities and services that also serve meteorological requirements in general ('MET core costs'). MET core costs include general analysis and forecasting, surface and upper-air observation networks, meteorological communication systems, data processing centres and supporting core research, training and administration;

I. PANSA

Not applicable.

II. IMWM

Methodology of separating the costs of meteorological services for civil aviation in IMWM

Determination of the share of costs of meteorological services for civil aviation provided by IMWM in total MET costs is based on separation of direct costs of such services and on separation of MET core costs.

Methodology of direct costs of meteorological services determination.

The separation of direct costs of meteorological services for aviation from the total MET costs consists in defining the costs of services, facilities and systems used only to provide meteorological services for civil aviation. IMWM defines these costs in accordance with ICAO Doc. 9161 'Manual on air navigation services economics' and WMO Publication No 904 'Guide to aeronautical meteorological services cost recovery. Principles and guidance', Annex 1, as the costs of: Meteorological Watch Office, Meteorological Forecasting Office in Cracow - only the part of the costs related to services for aviation, Aeronautical Meteorological Stations, telecommunication system which serve aviation, automated weather observing systems, and costs of administrative support (including training) directly serving the aviation. Such defined direct costs include:

- 1) gross payments including: personal and impersonal wages, company's award fund contribution, social insurance contribution, company's social benefit fund contribution, and others; this cost is proportional to the number of staff working in meteorological services for civil aviation.

These group of costs are qualified as staff costs.

The other groups of the direct costs of meteorological service for civil aviation are:

- 2) indirect costs proportional to remuneration fund and remuneration-related expenditures;
- 3) materials and equipment: office tools, printers ink, equipment purchase including purchase of equipment at airports, electricity, heating, computers;
- 4) third party services: specialized software service (LEADS, AMHS, METAR2010, DEDAL, PROMET), renovation, check-ups, maintenance (computers, copiers, plotters, etc.), data communication network service (servers, routers) used by Meteorological Offices, and Aeronautical Meteorological Stations;
- 5) telecommunication: costs of maintaining communication between headquarters and Meteorological Watch Office, between Meteorological Offices and PANSA (AFTN network) and Aeronautical Meteorological Stations; SADIS communication system; fees for fixed-line telephones and mobile phones;
- 6) business trips inside and outside the country;
- 7) trainings and conferences: periodical meteorological training in respect of international European standards; enhancing qualifications trainings, inner audit costs connected with Quality and Safety Management Systems; other trainings connected with the service provision;
- 8) lease of premises and meteorological ground on the premises of airports - leasing according to signed agreements;
- 9) usage of automated weather observation systems (AWOS) for the needs of meteorological services for civil aviation, including: trainings for the service workers, relevant business trips, the costs directly connected with AWOS maintenance and the cost of measuring equipment modernization.

The above costs, points 2 to 9 constitute other operating costs of meteorological services for aviation.

Methodology of determining the share of meteorological services for aviation costs in core MET costs.

According to ICAO Doc. 9161 'Manual on air navigation services economics' and WMO no 904 'Guide on aeronautical meteorological services cost recovery. Principles and guidance', MET core systems are

En-route Charging Zone Poland Reference Period 3 (2020-2024)

defined as systems, facilities and services not only used for meteorological services for civil aviation but also for the public. These are as follows:

- General forecasting system;
- Numerical weather forecast system;
- Telecommunication infrastructure;
- Hydrological-meteorological stations network;
- Aerology observations system;
- Meteorological radars and discharging detection systems;
- Satellite data receiving system;
- Historical database;
- Systems supervision.

Core MET costs are costs of maintenance of the above listed systems in this part which was included within total MET costs and on the basis of the methodology presented above.

The share of costs of most MET core systems in aviation costs was calculated in accordance with procedures defined in ICAO Doc. 9161 'Manual on air navigation services economics' and WMO no 904 'Guide on aeronautical meteorological services cost recovery. Principles and guidance', point 3.10 (d), namely: in proportion of all employees working for aeronautical meteorology to employees working for National Hydrological-Meteorological Service. The number of employees working for aeronautical meteorology was determined on the basis of dividing National Hydrological-Meteorological Service into HYDRO Service and MET Service. This methodology was applied in order to determine the share of costs of the following core systems:

- Generally forecasting system;
- Numerical weather forecast system;
- Hydrological-meteorological stations network;
- Aerology observation system;
- Satellite data receiving system;
- Historical database;
- Systems supervision.

The share of costs of telecommunication systems in aviation costs was determined analogously to the methodology which determines the share of MET costs (total MET costs) in National Hydrological-Meteorological Service. The methodology is defined in ICAO Doc. 9161 and WMO no 904 point 3.10 (c), namely it is based on the analysis of the size of computer network flow in IMWM.

III. Radom Meteo

For details on cost allocation see point c).

IV. Warmia i Mazury

For details on cost allocation see point c).

V. PL Bydgoszcz

For details on cost allocation see point c).

VI. CAA (including EUROCONTROL)

Not applicable.

e) Description of the methodology used for allocating total meteorological costs and MET core costs referred to in point (d) to civil aviation and between charging zones;

I. PANSA

Not applicable.

II. IMWM

Methodology for division of costs of MET services to civil aviation into costs of particular products

En-route Charging Zone Poland

Reference Period 3 (2020-2024)

The methodology for determining the cost of various aviation products is based on an assessment of the percentage contribution of the working time of one post per day in the manufacture of products for meteorological service to civil aviation. The basis of the methodology is the assessment of involvement of different organizational units, directly producing aeronautical products such as the Meteorological Watch Office (MBN), Meteorological Forecasting Office in Cracow (BPM) and the Aeronautical Meteorological Stations (LSM) and indirectly involved in the protection of civil aviation. The measure of this commitment is the amount of time required to manufacture a particular product. The share of work of the units indirectly involved is assigned to each product, and contribution of the Central Measuring Equipment Laboratory, was assigned only to products that are based on measuring instruments.

A detailed description of the methodology used to determine the costs of products is as follows:

- 1) A catalogue of basic classes of meteorological products has been defined. It was prepared by IMWM in order to provide meteorological services to civil aviation in 2020-2024. This catalogue is based on ICAO Annex 3, WMO Publication No. 904.
- 2) Daily work tables were constructed for the Meteorological Watch Office and Meteorological Forecasting Office in Cracow, and for Aeronautical Meteorological Stations. These tables describe the average time it takes to produce various aeronautical meteorological products in specific classes in the consecutive hours of the day, in different organizational units.
- 3) On the base of obtaining percentage of product workload, partial product cost has been calculated which is a product of the following elements:
 - Number of posts;
 - Labour consumption of the products;
 - Annual amount of salaries per post.

The term workload is understood as the amount of work needed or used for the implementation and monitoring of a single product that is expressed as a percentage of working time to the entire time.

- 4) Cost share of other groups (service, AWOS, materials, external services, delegations, telecommunications, SADIS, trainings, rentals, infrastructure, depreciation, cost of capital) has been established - on the basis of dedicated work at each cost group to manufacture the product. This share has been added to the cost of each product. In this way, an annual cost of developing each of the products ordered by PANSA has been achieved. The sum of the individual products gives us an annual cost of MET services to civil aviation.

III. Radom Meteo

For details on cost allocation see point c).

IV. Warmia i Mazury

For details on cost allocation see point c).

V. PL Bydgoszcz

For details on cost allocation see point c).

VI. CAA (including EUROCONTROL)

Not applicable.

f) For each entity, description of the composition of each item of the determined costs by nature and by service (points 1 and 2 of Table 1), including a description of the main factors explaining the planned variations over the reference period;

The costs allocated to each item of the determined costs by nature and by service for each of the entities are allocated in line with the Regulation 2019/317. Below more detailed information is presented for each of the entities. Please note that macroeconomic situation in Poland has changed what has an impact on the level of planned costs by entities (for more information please see PP RP3 point 1.1.4.).

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

I. PANSA

Determined costs by nature and by service

Entity: PANSA	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Staff costs cover gross remuneration, overtime payments and other ancillary benefits including jubilee awards and bonuses, PANSA contributions to social security scheme, including pension contributions, as well as provisions related to staff costs. Staff costs do not include the costs of training, which are disclosed under other operating costs. The main drivers for 2020-2021 cost evolution are: implementation of cost containment measures in the area of base salaries due to the lack of the main source of income (ANS charges) – applicable to 2021; reduction of all other remuneration components (overtime, bonuses, awards, allowances etc.) related to the extraordinary financial circumstances, reduced workload and use of furloughs/downtime – applicable to 2020-2021, use of COVID-related state care allowance for small kids by some employees during lockdown and related school closure – applicable to 2020-2021, temporary suspension/reduction of some contribution to social insurance scheme – applicable to 2020. The main assumptions for 2022-2024 planned cost evolution include: partly restoration of basic salaries following the 2021 cuts indicated above , restoration of other remuneration components where needed/justified, - increase in employment (especially in the CNS and IT areas, implementation of projects as well as ATCOs) due to i.a. infrastructure and systems development as well as planned operational developments.
of which, pension costs	These include PANSA contributions to national pension scheme (applicable to all entities in Poland) as well as additional PANSA occupational pension scheme applicable to PANSA employees (Defined Contribution Scheme). Pension contributions were assumed at the current level. In percentage: 1) for the state scheme: 9.76% - pension contribution rate; 6.5% - disability pension contribution rate and 1.5% - bridging pension contribution rate for employees employed in special conditions, 2) for PANSA occupational scheme: 7%. For the state scheme the costs assume the annual limit of basis for the contributions to state pension insurance applicable for 2021 in the amount of 157 770 PLN, which in subsequent years was increased by forecasted inflation (the limit is verified on annual basis by the state taking into account the level of monthly average salary in the Polish economy). 2020 pension costs are impacted by the temporary suspension of contribution to PANSA occupational scheme.
1.2 Other operating costs	The other operating costs were estimated according to the best knowledge regarding signed agreements with subcontractors, short term needs related to ensuring services continuity as well as savings and optimization of costs necessitated by COVID-19 situation. The level of costs also takes into account cost of training. The main drivers for 2020-2021 cost evolution are: - restrictions connected with COVID-19 pandemic, which have temporary impact on the level of such costs as travel, trainings, energy and utilities (remote work), events etc., - measures aimed at maintaining liquidity, consisting in temporary reduction of some expenditures or postponement of these – where possible, including also CAPEX optimization (impacting costs related to new investments – incl. preparatory works, implementation and maintenance of infrastructure and systems, as well as costs related to repair services and other – incl. security, cleaning and maintenance services – needed to maintain PANSA's Property Plant and Equipment at the level ensuring undistorted operations). The main assumptions for 2022-2024 planned cost evolution include: - execution of projects aimed at ensuring services continuity and improving provision of ATM/ANS in FIR Warszawa and cross-border cooperation, considering also the need to improve resilience and digitalization of services. These include both investment tasks as foreseen in the verified CAPEX plan (where planned investments have impact on costs related to preparatory works, implementation and maintenance of infrastructure and systems) and projects planned to be executed as OPEX,

En-route Charging Zone Poland Reference Period 3 (2020-2024)

	restoration to normal operations where it is no longer possible to reduce or postpone activities and related costs, and where due account must be taken of increase in prices of energy, minimum wage (impacting costs of external services) and tax liabilities (also resulting from execution of investment tasks mentioned above). Following talks between NSA and the European Commission on the treatment of costs related to non-contractual use of land, costs related to accounting provisions on these claims are not included in the revised RP3 determined costs. In accordance with the outcome of the discussions with the EC, these will be reported as cost-exempt once the final amounts to be paid by PANSA are established and subject to payment and will be recovered accordingly.
1.3 Depreciation	The depreciation cost covers both, continued depreciation of assets existing before RP3 as well as depreciation on new assets, which were/will be put into operation over 2020-2024. It includes depreciation of fixed assets and intangible assets. Historic cost accounting is applied. The level of depreciation cost is impacted by investments executed before the COVID pandemic (up to 1Q 2020), limited investments carried out during 2020-2021, which are necessary to ensure service continuity, are required by regulatory framework or are subject to agreements signed with contractors and investments planned for the following years of RP3. Following the outbreak of the pandemic, in 2020 PANSA has undertaken a complete review of CAPEX plan for the whole RP3 and beyond. The aim was on the one hand to look for possible savings in the level of expenditures, especially for the period 2020-2021, including possible postponement of projects (financial dimension of the review), and on the other to again validate the projects from the perspective of current operational needs and expected benefits, also in the light of expected changes to traffic levels (operational perspective of the review). As a result of that review, some investments were cancelled/suspended, and many were postponed. Further review was undertaken in 2021 and led to some additional refinements in RP3 CAPEX plan, taking also into account actual execution of CAPEX over 2020 and early 2021. The reviewed investment plan includes both, replacement and development needs. New investments shall enable modernization and development of the Air Traffic Management infrastructure and systems (including implementation of new ATM system – iTEC and infrastructure needed for that), aimed and improving resilience of the ATM/ANS, to support cross-border cooperation and support digitalization of services.
1.4 Cost of capital	The evolution of the level of cost of capital over RP3 is related to increasing value of asset base, especially fixed assets, what is the consequence of implementation of the revised RP3 investment plan. For further details on the cost of capital calculation – see point i) below.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	The evolution of ATM costs is related to personnel costs (see section 1.1), both operational, supporting and back office staff. In addition, PANSA has updated the valuation of activities resulting from structural changes to improve the functioning of PANSA areas.
2.2 Communication	Evolution of the costs is impacted by development of communication ground stations dedicated to ACC required for airspace development, including three layer vertical split. These entail increase in the related other operating costs – including energy, rental of land, security etc. Moreover, these costs are subject to slight fluctuations reflecting changes in employee costs.
2.3 Navigation	Plan assumes replacements of a number of ER Nav aids and development of Nav aids network in line with RNP navigation. Similarly as for COM above, changes in navigation costs are caused by changes in staff costs.
2.4 Surveillance	The increase in costs is due to investments in radars/MLAT. These investments entail increase in related other operating costs.
2.5 Search and rescue	The evolution of SAR costs is related to operational and supporting staff personnel costs (see section 1.1). In addition, in 2021 PANSA implemented structural changes to improve internal processes and functioning of all areas, what resulted in updated valuation of some activities and had an impact on division of some costs by service.
2.6 Aeronautical Information	Due to the development of airports in Poland as well as changes in the airspace in the vicinity of airports, publications and procedures created for airports have an increasing share in these activities. This causes changes (decrease) in the amount of costs for en-route navigation.
2.7 Meteorological services	Not applicable.

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
Not applicable.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: PANSA
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
Information on pension costs assumptions is provided above in point f) and in the revised RP3 performance plan (item 3.4.3).

II. IMWM

Determined costs by nature and by service

Entity: IMWM	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	The increase in personnel costs is related to the increase in wages in IMWM and the increase in the average wage in the country. In March 2020 we introduced IMWN Collective Labor Agreement that regulates wages in IMWM.
of which, pension costs	The methodology of calculating pension and pension contributions paid by the employer for employees at IMWM is based on suitable articles of the Act on the social insurance system of 13th October 1998. The sum total of the pension and pension contribution paid by the employer is 9.76% plus 6.5% equal to 16.26% of the contribution basis.
1.2 Other operating costs	The increase in operating costs is dictated by the increase in the amount related to the lease of AWOS systems not owned by IMWM (EPWA, EPPO, EPLB, EPZG, EPMO). Assumptions that were adopted for the RP2 period did not provide for real costs incurred by the Institute in this respect. In addition, the assumptions related to the service of systems owned by IMWM were verified, which also resulted in increased operating costs. Operating expenses were also increased due to the need to adapt the IMWM infrastructure to the standards imposed by Eurocontrol and EASA in the field of data exchange, including adaptation to SWIM information exchange standards. Another element is the introduction of new products and tools supporting the work of forecasters and tools supporting the work of PANSA ATC / Vento, MeteoFlight . Also a number of IT activities for the meteorological services were also carried out: consolidation of the IT environment (mainly in relation to servers), construction of a backup node for transmission and processing environments and data storage, replacement and supplementation of network equipment, development of monitoring tools and tools for measuring parameters of applications, servers and ICT network, maintenance of the incident management system, expansion of configuration management systems, development and maintenance of the business continuity management system, replacement (reconstruction) of computers functioning as workstations, development and migration from the tools used so far as well as operational implementation of the acquisition and distribution system with operational and historical databases, analysis of the use and analysis of the functionality of the software used by meteorological services- process from aeronautical meteorological stations level to the level of forecasting offices, purchase of infrastructure elements dedicated to the needs of projects and tasks carried out as part of the meteorological services, modernization of AWOS and ICEALERT systems in order to increase reliability and reduce the number of single points of failure, changes in the connections of the AWOS system with the infrastructure of airports and the Polish Air Navigation Services Agency (PANSA) in order to increase reliability.
1.3 Depreciation	Subsequent years of operation of the AWOS systems purchased in 2016 and other fixed assets purchased.
1.4 Cost of capital	Subsequent years of operation of the AWOS systems purchased in 2016 and other fixed assets purchased.
1.5 Exceptional items	n/a
2. Detail by service (in nominal terms)	

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

2.1 Air Traffic Management	n/a
2.2 Communication	n/a
2.3 Navigation	n/a
2.4 Surveillance	n/a
2.5 Search and rescue	n/a
2.6 Aeronautical Information	n/a
2.7 Meteorological services	Please see explanation above (1.1-1.5)
2.8 Supervision costs	n/a
2.9 Other State costs	n/a
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
n/a	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: IMWM
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
See point 1.1 of the chart.

III. Radom Meteo

Determined costs by nature and by service

Entity: Radom Meteo	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Radom Meteo in 2019 and 2020 has minimized the staff costs by largely reducing the working time of employees, to the levels necessary to fulfil the obligations of ANSP certificate, designation and employees' requirements to maintain their authorities to perform MET services. From 2023, the staff costs are expected to significantly rise, also comparing to RP2, as the MET services are planned to be delivered 24 hours a day as EPRA is planned to become an important airport devoted to handling the Warsaw's traffic.
of which, pension costs	Pension costs are planned to rise in the later years of RP3 as a consequence of the increase in employment and changes in legal form of cooperation with employees to the form of contracts that include social security expenses.
1.2 Other operating costs	Radom Meteo has reached agreements for the years 2020-2022 with lots of contractors which have resulted in minimalization of the costs incurred for the time of EPRA closure. From 2023, due to the plans of EPRA modernization and its significant growth in terms of level of handled traffic, lots of MET investments are planned to be performed, which will eventually result in higher level of costs due to its maintenance and utilities. Also, the values of contracts with the external counterparties are planned to rise to the levels from before the EPRA closure as the temporary agreements, mentioned above, will reach their end.
1.3 Depreciation	Depreciation of the old equipment, which is constantly in use, will end in 2022. At the beginning of 2023, new important investments, such as AWOS modernization equipment and climatological software are planned to be purchased, which will generate the significant depreciation costs for further years. The investments are necessary to bring the EPRA airport category to a higher level.
1.4 Cost of capital	The COVID-19 pandemic and changes in navigation charges distribution system at national level have made the level of cost of capital incurred not neglectable anymore. The determined WACC values are based on the recommendation of PRB (for details see point j))
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Not applicable.
2.2 Communication	Not applicable.

**En-route Charging Zone Poland
Reference Period 3 (2020-2024)**

2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	All costs are related to this activity. Please see explanation above (1.1-1.5).
2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
Radom Meteo follows the rules of Polish Accounting Act. Full compliance with the IFR Standards in not possible at this stage, nevertheless Radom Meteo is aware its obligation to achieve such compliance to the maximum possible extent.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: Radom Meteo
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
As stated in point 1.1. of the table above. No changes are expected.

IV. Warmia i Mazury

Determined costs by nature and by service

Entity: <Warmia i Mazury>	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	The MET costs YoY evolution is marginal and depend mainly on forecasted inflation rates. The costs have risen comparing to RP2 due to AWOS upgrade to category II in last years of RP2 which resulted in higher maintenance, data and personnel costs. The pension costs are proportionate to staff costs.
of which, pension costs	
1.2 Other operating costs	
1.3 Depreciation	
1.4 Cost of capital	
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Not applicable.
2.2 Communication	Not applicable.
2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	The MET costs YoY evolution is marginal and depend mainly on forecasted inflation rates.
2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
Warmia i Mazury follows the rules of Polish Accounting Act. It is not possible to provide full compliance with the IFRS, though the compliance with IFRS is currently at the maximum possible extent.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: <Warmia i Mazury>
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
Warmia i Mazury does not foresee any changes in law which may have an impact on pension costs in RP3.

**En-route Charging Zone Poland
Reference Period 3 (2020-2024)**

V. PL Bydgoszcz

Determined costs by nature and by service

Entity: PL Bydgoszcz	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Costs in 2020 are lower than in years 2021-2024 due to the airport's closure for several weeks due to COVID-19 pandemic and ability to lower staff costs, stemming from the so called 'Shield' programme. The wages in next years are rising as a compensation for current and forecasted in near future high inflation rates and due to the increase of experience of employees in order to prevent the key personnel from leaving the company.
of which, pension costs	The pension costs consist of social security expenses and are strictly connected with staff costs growth.
1.2 Other operating costs	Majority of other operating costs is planned for maintenance of the AWOS system, insurance, consulting services, training, business trips, utilities, external services such as IT support and maintenance. What is more, some of PL Bydgoszcz's personnel has been contracted as external counterparties what also has a significant impact on the final cost values.
1.3 Depreciation	Depreciation of assets is maintaining the similar level over RP3. The main cost-driver is depreciation of AWOS system and MET software.
1.4 Cost of capital	Costs of capital is falling YoY as the net book value of assets is declining due to its depreciation.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Not applicable.
2.2 Communication	Not applicable.
2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	All costs are related to this activity. For details see points 1.1-1.5 above.
2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
PL Bydgoszcz accounting policy is basing on the rules of Polish Accounting Act. It is not possible to provide full compliance with the IFR Standards, though PL Bydgoszcz is struggling to achieve coherence with IFRS at the maximum possible extent.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: PL Bydgoszcz	
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3	
No changes in law having an impact on pension costs in RP3 are expected. For details, see point 1.1. in table above.	

VI. CAA (including EUROCONTROL)

Determined costs by nature and by service

Entity: CAA (including EUROCONTROL)	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Among others – costs of: remuneration, pension contributions, bonuses.
of which, pension costs	Pension contributions covering the 9.76% and 6.5% parts of wages (national pension scheme).
1.2 Other operating costs	Among others – costs of: materials, energy, utilities, business travels, furniture, renovation, trainings, rent + EUROCONTROL costs.

En-route Charging Zone Poland Reference Period 3 (2020-2024)

1.3 Depreciation	Not applicable.
1.4 Cost of capital	Not applicable.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Not applicable.
2.2 Communication	Not applicable.
2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	Not applicable.
2.8 Supervision costs	The growth of CAA costs in RP3 comparing to RP2 results from the planned rise of wages stemming from the government budget and the increase of obligations and task performed by the CAA in the field of air navigation service.
2.9 Other State costs	Includes EUROCONTROL costs, which are out of control for PL.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
The CAA, as a national budgetary unit financed from state budget, is obliged to follow accounting regulations applicable to national administration bodies. As a consequence, the CAA does not apply IAS but follows national regulations regarding budgetary units which are based on cash accounting rules.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: CAA (including EUROCONTROL)
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
The assumptions were based on the currently functioning national pension scheme. It is not expected to face any major changes over RP3.

g) For each entity, a description and justification of the method adopted for the calculation of depreciation costs (point 1.3 of Table 1): historical costs or current costs referred to in the fourth subparagraph of Article 22(4), and, where current cost accounting is used, provision of comparable historical cost data;

I. PANSA

In compliance with the Accounting Policy, historical cost accounting method is applied for the calculation of the depreciation costs. Depreciation is provided using the straight-line method over the estimated economic useful lives of the assets. The depreciation periods applied by PANSA remain unchanged as compared to previous reference periods. The economic useful life is periodically reviewed to ensure that depreciation periods are consistent with the expected pattern of economic benefits from items property, plant and equipment.

With regard to investments co-financed by the public funds, including EU Cohesion Fund and the Connecting Europe Facility fund, the full amount of depreciation costs is included in the determined costs. At the same time the subsidies are taken into account as other revenue – the calculation of other revenues fully follows provisions of article 25.3 of Regulation 2019/317 – see also point f) in the Additional Information to Table 2 below.

II. IMWM

Depreciation of appliances is always calculated from the next month after the takeover is completed. This calculation is done in accordance with expected operating life – in line with the operating life for the specific type of fixed assets as described in the 'Principles for establishing the cost-base for en-route charges and the calculation of the unit rates' - using the straight-line method and refers to historic cost of fixed assets depreciated and intangible and legal assets.

To calculate cost of capital the following pattern is used in the IMWM:

Cost of capital = (Average net value of fixed assets and possible adjustments of all assets determined by national regulatory body, currently operationally exploited or built, used by an institution serving air navigation + average net value of current assets, excluding interests, necessary for air navigation service) x weighted average of debt interest rate and of return on equity.

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

IMWM follows EUROCONTROL Principles according to which only these assets can be calculated within the equity which operating period is expected to begin before the end of the year for which the cost calculation is made.

IMWM					
Equivalent in historic cost accounting					
	2020	2021	2022	2023	2024
Investment costs (in nominal terms in '000 national currency)					
1.3 Depreciation	863	861	966	1 116	1 595
1.4 Cost of capital	354	387	153	209	199
Average asset base					
3.1 Net book val. fixed assets	3 911	3 917	3 312	2 939	2 353
3.2 Adjustments total assets	0	0	0	0	0
3.3 Net current assets	7 708	8 201	2 372	3 865	3 728
3.4 Total asset base	11 619	12 119	5 684	6 804	6 081
Cost of capital %					
3.5 Cost of capital pre tax rate	3,05%	3,19%	2,69%	3,07%	3,28%
3.6 Return on equity	4,00%	4,00%	4,00%	4,00%	4,00%
3.7 Average interest on debts	1,34%	1,40%	1,40%	1,40%	1,40%
3.8 Share of financing through equity	64,29%	68,85%	49,62%	64,23%	72,31%

III. Radom Meteo

Radom Meteo uses the historical costs methodology for the calculation of depreciation costs. No assets revaluation has been included or is planned to be performed in the scope of RP3.

IV. Warmia I Mazury

Warmia i Mazury uses the historical costs methodology, therefore there is no need for additional information concerning comparable data on depreciation costs.

V. PL Bydgoszcz

PL Bydgoszcz uses the historical costs methodology for the calculation of depreciation costs. No assets revaluation has been included or is planned to be performed in the scope of RP3.

VI. CAA (including EUROCONTROL)

Not applicable.

h) For each entity, description and underlying assumptions of each item of complementary information (point 3 of Table 1), including a description of the main factors explaining the variations over the reference period;

I. PANSA

PANSA	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	Cost of capital is calculated taking into account average value of the intangible assets and the tangibles assets as well as WACC rate (see item i) below).
3.12 Cost of leasing	For the purpose of establishing cost bases for RP3 PANSA follows EC recommendations and presents lease payments under other operating costs. It should be emphasized that depreciation charge for the leased assets, interest expenses on a lease liability (as a consequence of IFRS 16 implementation) as well as right-of-use of leased assets are not included in determined costs (neither as depreciation nor as cost of capital).

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

II. IMWM

IMWM	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) and g) above
3.11 Cost of capital	Covered in item f), g) and i) above
3.12 Cost of leasing	n/a

III. Radom Meteo

<Radom Meteo>	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above.
3.11 Cost of capital	Radom Meteo has not included in cost bases in RP2 the incurred cost of capital as its level were neglectable. Details of its evolution in RP3 are covered in item f) above.
3.12 Cost of leasing	The cost of leasing is not planned in RP3 and were not incurred in RP2.

IV. Warmia i Mazury

<Warmia i Mazury>	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	Cost of capital related to new and existing investments is a product of the forecasted values of NBV fixed assets and WACC.
3.12 Cost of leasing	Not applicable.

V. PL Bydgoszcz

<PL Bydgoszcz>	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above.
3.11 Cost of capital	The values of cost of capital stemming from new and existing investments are the product of the forecasted WACC and net book value of fixed assets.
3.12 Cost of leasing	Not applicable to PL Bydgoszcz.

VI. CAA (including EUROCONTROL)

CAA (including EUROCONTROL)	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Not applicable.
3.11 Cost of capital	Not applicable.
3.12 Cost of leasing	Not applicable.

Eurocontrol costs	
3.13 Eurocontrol costs (Euro)	The attributable part to PL of EUROCONTROL costs has been implemented into Poland's cost base together with costs of CAA. The amounts are consistent with the document EUROCONTROL 2022-2026 forecast revised cost-base sent on 21 st May 2021.
3.14 Exchange rate (if applicable)	The exchange rates for RP3 are consistent with the Polish Government recommendations for macroeconomic assumptions (document updated in April 2020) and is equal to 4.45 PLN/EUR for 2021-2024

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

i) For each entity, description of the assumptions used to compute the cost of capital (point 1.4 of Table 1), including the composition of the asset base, the return on equity, the average interest on debts and the shares of financing of the asset base through debt and equity;

I. PANSA

PANSA	
Average asset base	
3.1 NBV fixed assets	The average net book value of fixed assets for en-route services provision is calculated taking into account the intangible assets and the tangible assets (in operation and under construction). It should be emphasized that leased assets are excluded from average asset base calculation. The average considers level of fixed assets at the beginning and at the end of each year.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	The value of net current assets is calculated taking into account approach recommended by CRCO when auditing PANSA's cost base in 2010 and applied since then, which is also consistent with EUROCONTROL Principles. It assumes that only assets that are necessary to provide ANS are taken into account. Planned current assets required to provide air navigation services are calculated taking into consideration latest available (for the year preceding the calculation) credit period associated to the payment of invoices (credit from customers and credit suppliers and staff). Methodology applied guarantees exclusion of interest bearing items.
Cost of capital %	
3.6 Return on equity	In order to properly reflect financial risk incurred when providing air navigation services PANSA applies CAPM methodology for establishing return on equity. Assumptions taken into account to determine RoE rate for RP3 under the current submission: Capital structure – hypothetical efficient capital structure assuming 60% debt financing over whole RP3. Corporate tax rate – 19%, Risk free rate % (nominal) - the latest available yield of 10 years Polish government bonds rate reported by Eurostat is used (June 2021 publication for May 2021). Equity risk premium % (after tax) – 6.54% - an average of equity risk premium estimated for Poland by Damodaran (6.48% as per Jul 2020 submission) and Fernandez IESE Business School study (6.60% as per Mar 2020 submission). ERP estimated in such way applies for the whole RP3. Asset beta is 0.4. The asset beta is assumed taking into consideration estimates made by SDG for efficient cost of capital for RP2 (a range of 0.3 to 0.5). It is consistent with assumptions used for RP2 and initial RP3 PP dated Nov 2019 and reflects financial risk of running ANSP business. Equity beta for every single year of RP3 amounts to 0.89 and is a product of estimated asset beta, corporate tax rate and assumed hypothetical efficient capital structure described above.
3.7 Average interest on debts	Average interest on debts is calculated taking into account effective annual interest rates calculated based on the agreed operating credit facility and investment credit, both received from Bank Gospodarstwa Krajowego (BGK); average interest on debts calculation was performed taking into account costs already incurred till Jun 2021 and these forecasted to the end of repayment periods. It should be noted that PANSA as a public legal entity is obliged to use financial products offered by this state-owned bank (BGK) only.
3.8 Share of financing through equity	As recommended by SDG and expected by EC (exchanges during discussions on the initial RP3 PP dated Nov 2019) hypothetical efficient capital structure 60% through debt and 40% through equity was assumed for the whole RP3

En-route Charging Zone Poland Reference Period 3 (2020-2024)

WACC calculation	2020	2021	2022	2023	2024
Capital structure (% equity)	40%	40%	40%	40%	40%
Capital structure (% debt)	60%	60%	60%	60%	60%
Corporate tax rate %	19%	19%	19%	19%	19%
Risk free rate % (nominal)	1,82%	1,82%	1,82%	1,82%	1,82%
Market rate (after tax)	8,36%	8,36%	8,36%	8,36%	8,36%
Market (equity) risk premium % (after tax)	6,54%	6,54%	6,54%	6,54%	6,54%
Asset beta	0,4	0,4	0,4	0,4	0,4
Debt beta	0	0	0	0	0
Equity beta	0,89	0,89	0,89	0,89	0,89
Return on Equity % (after tax)	7,61%	7,61%	7,61%	7,61%	7,61%
Return on Equity % (pre tax)	9,40%	9,40%	9,40%	9,40%	9,40%
Debt risk premium %	1,47%	1,60%	1,65%	1,71%	1,74%
Interest on debt % (pre tax)	3,29%	3,42%	3,47%	3,53%	3,56%
Interest on debt % (after tax)	2,66%	2,77%	2,81%	2,86%	2,89%
WACC % vanilla	5,02%	5,10%	5,13%	5,16%	5,18%
WACC % after tax	4,64%	4,71%	4,73%	4,76%	4,78%
WACC % (pre tax)	5,73%	5,81%	5,84%	5,88%	5,90%

II. IMWM

IMWM	
Average asset base	
3.1 NBV fixed assets	Average accounting net value of fixed assets was calculated on the basis of actually involved fixed assets, which serve meteorological services for civil aviation and on the basis of all planned purchases of fixed assets for above mentioned purposes.
3.2 Adjustments total assets	Not applicable.
	Average net value of working assets – <u>net working assets</u> - working assets excluding short-term liabilities; – <u>average net value of working assets</u> was calculated in the following way: (net working assets at the beginning of the year + net working assets at the end of the year): 2; – Working assets are all amounts due on account of the agreement for meteorological services for ANS calculated at the end of financial year. Taking into account the fact that there is a monthly settlement cycle, at the end of the year stays only a December instalment, namely 1/12 part of the amount written in the agreement. Short-term liabilities - accepted at an average index level resulting from the division of short term liabilities by working assets.
3.3 Net current assets	
Cost of capital %	
3.6 Return on equity	Interest on equity for the years 2020-2024 - adopted at the level of 4% acc. interest rate presented in the performance plan for the reference period.
3.7 Average interest on debts	Interest on the loan to finance the purchase of AWOS systems in 2020 -1,34% and in the years 2021-2024 - 1,40%.
3.8 Share of financing through equity	Calculated as the ratio of equity to total capital employed.

III. Radom Meteo

<Radom Meteo>	
Average asset base	
3.1 NBV fixed assets	NBV of fixed assets was calculated as a average value of fixed assets between subsequent years, with respect of its depreciation.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	Net current assets were calculated as a difference between forecasted levels of current assets and liabilities.
Cost of capital %	
3.6 Return on equity	RoE was calculated basing on CAPM and PRB recommendations, including the risk-free rate based on the Poland's government bonds yields (Eurostat data),

**En-route Charging Zone Poland
Reference Period 3 (2020-2024)**

	capped beta factor at level 0.4 and county risk premium based on average of available A. Damodaran, Fernandez-IESE and Dimson-Marsh-Staunton values.
3.7 Average interest on debts	Not applicable as Radom Meteo does not foresee any financial liabilities in RP3.
3.8 Share of financing through equity	Equal to 100% as Radom Meteo does not foresee any financial liabilities in RP3.

IV. Warmia i Mazury

<Warmia i Mazury>	
Average asset base	
3.1 NBV fixed assets	The NBV of fixed assets was calculated basing on the sum of values of fixed assets less depreciation.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	Warmia i Mazury has taken into account the difference between the receivables and liabilities and their turnover ratios.
Cost of capital %	
3.6 Return on equity	Warmia i Mazury has taken into account the PRB recommendations. The RoE was calculate by using Capital Asset Pricing Model. Risk-free rate was based on the Poland's domestic long-term bonds' yield, while beta factor was capped and equal to 0.4, in line with PRB suggestions. There was no need for Hamada's equation application as forecasted debt is equal to 0. Risk premium values were based on the average of A. Damodaran and Fernandez-IESE calculations.
3.7 Average interest on debts	Not applicable as Warmia i Mazury has no external financing concerning MET services.
3.8 Share of financing through equity	The value is constant through RP3 and equal to 100%, see point 3.7 above.

V. PL Bydgoszcz

PL Bydgoszcz	
Average asset base	
3.1 NBV fixed assets	The net book value of fixed assets was calculated basing on monthly averages of fixed assets reduced by appropriate levels of depreciation.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	PL Bydgoszcz has calculated net current assets by diminishing the product of receivables and receivables turnover ratios by the product of non-financial liabilities and liabilities turnover ratios.
Cost of capital %	
3.6 Return on equity	PL Bydgoszcz's calculated RoE by following the PRB recommendations. The CAPM model was used to determine the proper values. The domestic long-term bonds' yield was used as a risk-free rate, together with capped beta equal to 0.4, which was further levered using Hamada's equation. As for risk premium, PL Bydgoszcz has used the average of calculations performed only by A. Damodaran and Fernandez-IESE as Dimson-Marsh-Staunton values were not publicly available.
3.7 Average interest on debts	PL Bydgoszcz has used the average interest on debts basing on relation of actual and planned interests and external capital used for funding the MET services.
3.8 Share of financing through equity	The share of financing through equity was based on the real proportions of debt and equity used to finance the provision of ANS.

VI. CAA (including EUROCONTROL)

Not applicable

j) Description of the determined costs of common projects (point 3.9 of Table 1).

I. PANSA

Description of determined costs of common projects will be provided in the revised draft RP3 performance plan for Poland to be submitted by 1 October 2021.

En-route Charging Zone Poland

Reference Period 3 (2020-2024)

The costs of common projects will include:

- cost of depreciation of existing and new planned assets,
- operating costs (travel costs, training, wages etc.) as presented in grant agreement,
- cost of capital.

Cost of capital is not eligible under grant agreements. However, it is part of determined costs under Regulation 2019/317.

II. IMWM

Not applicable.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz.

VI. CAA (including EUROCONTROL)

Not applicable.

En-route Charging Zone Poland Reference Period 3 (2020-2024)

2. Actual costs and unit costs

a) For each entity and for each cost item, a description of the reported actual costs and the difference between those costs and the determined costs, for each year of the reference period;

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance. The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

I. PANSA

In the cost-efficiency area, the revised draft PL RP3 PP establishes also 2020 determined costs. Revised 2020 determined costs are equal to 2020 actual costs incurred by PANSA.

It should be noted that actual costs for the year 2020 included in the draft revised PL RP3 PP have been recalculated as compared to costs presented for the purpose of June 2021 submission. It led to slight increase in 2020 actual costs mainly due to exclusion of costs related to non-contractual use of land and revision of assumptions applied to cost of capital calculation (to ensure that cost of capital assumptions remain coherent over the whole RP3).

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

RP3 Monitoring – Year 2020 vs. 2019	
PANSA	
1.1 Staff costs	The actual staff costs for 2020 are lower by 10.6% than 2019 costs mainly due to implementation of one-off cost containment measures taken in order to respond to traffic decrease and liquidity issues. Such decrease in staff costs is a result of temporary suspension of hiring new employees (including courses for ATCO), temporary suspension of contributions to the occupational pension scheme and group insurance, limited number of working hours on weekends and night hours, reduction of bonuses and rewards and overtimes as well as use of furloughs/downtime. All these drivers led to reduction of basic as well as non-obligatory remuneration components comparing to pre-pandemic period. Reduced 2020 costs are also linked to use of COVID-related state care allowance for small kids by some employees during lockdown and related school closure.
1.2 Other operating costs	The actual 2020 other operating cost are lower by 30.4% than in 2019 due to work reorganization (remote work), temporary business travelling restrictions as well as temporary training suspension and lower cost of accommodation (cancellation of new recruitments for ATCO courses, use of furloughs/downtime for current students) as well as cancellation of conferences, events etc. Extraordinary measures undertaken following COVID-19 crisis, including revision of investment plan, had impact on temporary change in the level of energy and materials consumption, level of taxes and charges as well as temporary reduction in use of external services and limitations in the provision of some air navigation services. Optimisation (including cancellation/postponement) of repair schedules where possible, using own staff for some repairs instead of external contractors led to temporary reductions in repair services costs. It should be noted that some unexpected costs related to purchase of additional materials and external services needed to minimise possible spreading of COVID among employees have been incurred in 2020.
1.3 Depreciation	A 9.9% increase in the level of depreciation costs in 2020 is mainly impacted by investments executed before the COVID pandemic especially in previous years and in 1Q 2020 and put into operation. Starting from the outbreak of the pandemic PANSA has

En-route Charging Zone Poland Reference Period 3 (2020-2024)

	undertaken a complete review of CAPEX plan looking for possible savings in the level of expenditures, especially for the rest of 2020. It should be noted that 2020 actual depreciation presented in the charges' reporting tables does not include effects of implementation of IFRS16 – costs related to leasing are still disclosed under other operating costs.
1.4 Cost of capital	A material increase in cost of capital comparing to 2019 is a result of different WACC rates applied in RP3 (including 2020) and 2019. It should be emphasized that the WACC for 2019 adopted in the revised RP2 PP was established artificially at the level not reflecting financial risk of running an ANSP business – the rate of 1.38% was much below the risk-free rate for Poland in 2019 (the justified level of WACC over RP2, as used in 2017-2018, was equal to 7.81%). The artificial lowering of the rate for 2019 was done solely in order to achieve negative ER DUC trend over RP2. Therefore the 2019 WACC rate and related cost of capital level cannot be considered as a reference point for any comparisons/analyses. 2020 actual WACC rate has been calculated taking into account updated CAPM assumptions reflecting financial risk of PANSA (as described above in point i). The increase in net current assets base is mainly the result of longer than in 2019 average credit period associated to the payment of en-route invoices.
1.5 Exceptional items	Not applicable.

II. IMWM

RP3 Monitoring – Year 2020 vs. 2019			
ANSP: IMWM	2019A	2020A	Difference 2020-2019
1.1 Staff costs	7 305	7 860	555
1.2 Other operating costs	21 126	20 846	-280
1.3 Depreciation	810	863	53
1.4 Cost of capital	144	354	210
1.5 Exceptional items	0	0	0

Analysis of the actual costs for 2020 compared to the actual costs of 2019. The increase in costs in 2020 compared to 2019 was influenced, among others, by:

- an increase in the inflation rate from 2.10% in 2019 to 3.70% in 2020, this translated into an increase in the costs of materials and services despite the introduced COVID-1 savings
- in March 2020, an agreement was signed to amend the IMWM Collective Labor Agreement, as a result of which wages at the IMWM-PIB were regulated and equalized
- continuation of the implementation of new products for PANSA in 2020 - development of a manual for the VENTO application
- in December 2019, investment purchases were made - sensors for AWOS systems and a truck were purchased for the AWOS system service team, which resulted in an increase in depreciation costs in 2020.
- the increase in the cost of capital resulted from the increase in receivables at the end of 2020. This was the result of an annex to the contract concluded with the Polish Air Navigation Services Agency, under which, due to the aviation situation related to COVID-19, the partial payment for 2020 was postponed in the amount of PLN 35.4 million until April 2021.

III. Radom Meteo

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: Radom Meteo	
1.1 Staff costs	Years 2019 and 2020 were dedicated to restructuring process due to EPRA airport closure. Because of that and because of the changes in cost allocation (for details see point 1. c)) and EPRA airport closure adjustments stemming from 2019 (for details see part 2 point k) and historical sets of RP2 reporting tables and additional information), it is impossible to reliably compare the 2019 and 2020 actuals.
1.2 Other operating costs	
1.3 Depreciation	
1.4 Cost of capital	In 2019, the cost of capital, due its neglectable values, was not presented in cost bases (for details see point 1. f))
1.5 Exceptional items	Not applicable.

**En-route Charging Zone Poland
Reference Period 3 (2020-2024)**

IV. Warmia i Mazury

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: Warmia i Mazury	
1.1 Staff costs	Not applicable to Warmia i Mazury. Although Warmia i Mazury was providing MET services in RP2, the whole costs were allocated to the terminal cost base, what was decided during the revision of RP2 concerning the inclusion of EPSY airport into BFAB PP RP2. For details on cost-evolution, please see TNC-OTHER Additional Information to Reporting Tables.

V. PL Bydgoszcz

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: PL Bydgoszcz	
1.1 Staff costs	Not applicable to PL Bydgoszcz as this ANSP has started providing services in SES in 2020.
1.2 Other operating costs	
1.3 Depreciation	
1.4 Cost of capital	
1.5 Exceptional items	

VI. CAA (including EUROCONTROL)

RP3 Monitoring – Year 2020 vs. 2019	
STATE/NSA: CAA PL	
1.1 Staff costs	The actual staff costs for 2020 are slightly higher than 2019 costs; it was mainly the result of the growth of CAA costs in RP3 comparing to RP2 results from the planned rise of wages stemming from the government budget and the increase of obligations and task performed by the CAA in the field of air navigation service. As far as other operating costs are concerned the actual 2020 are lower by 14.0% than in 2019 mainly due to reorganisation of work (remote work), temporary business travelling restrictions as well as temporary training suspension.
1.2 Other operating costs	
1.3 Depreciation	Not applicable
1.4 Cost of capital	Not applicable
1.5 Exceptional items	Not applicable

b) Description of the reported actual service units and a description of any differences between those units and the figures provided by the entity that is billing and collecting charges as well as any differences between those units and the forecast set in the performance plan, for each year of the reference period;

In 2020, air traffic and generated service units for ER were lower than planned in the initial PL RP3 PP dated Nov 2019 by 58% and lower by 57% than actual SU in 2019. This was the result of the SARS Cov2 pandemic, which caused significant restrictions on both business and leisure travel. Until the beginning of March 2020, traffic was increasing as compared to 2019A, but the pandemic led to extraordinary traffic drop since March 2020, which persisted over all the following months of 2020.

ER SU	2019	2020	Difference	Difference (%)
Draft PL RP3 PP Nov 2019 forecast		5 123 850		
Actual	4 971 806	2 145 811	-2 825 995	-56.8%
Difference		-2 978 039		
Difference (%)		-58.1%		

**En-route Charging Zone Poland
Reference Period 3 (2020-2024)**

c) Breakdown of the actual costs of common projects per individual project;

I. PANSA

Breakdown of the actual costs of common projects will be provided in the revised draft RP3 performance plan for Poland to be submitted by 1 October 2021.

II. IMWM

Not applicable.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz.

VI. CAA (including EUROCONTROL)

Not applicable.

d) Justification of the difference between the determined and the actual costs of new and existing investments of the air navigation service providers, as well as the difference between the planned and the actual date of entry into operation of the fixed assets financed by those investments for each year of the reference period;

In respect of calendar year 2020, this information was provided in the annual monitoring report (see section 4 of the Monitoring Report 2020 Poland RP3 (2020-2024)).

e) Description of the investment projects added, cancelled or replaced during the reference period with respect to the major investment projects identified in the performance plan, and approved by the national supervisory authority in accordance with Article 28(4).

In respect of calendar year 2020, this information was provided in the annual monitoring report (see section 4 of the Monitoring Report 2020 Poland RP3 (2020-2024)).

En-route Charging Zone Poland
Reference Period 3 (2020-2024)

ADDITIONAL INFORMATION TO REPORTING TABLES 2 – UNIT RATE CALCULATION

a) Description and rationale for establishment of the different charging zones, in particular with regard to terminal charging zones and potential cross-subsidies between charging zones;

There is only one en-route charging zone in Poland (FIR Warszawa).

b) Description of the policy on exemptions and description of the financing means to cover the related costs;

According to national law (Article 130 (6) of Aviation Act of 3 July 2002) the following flights are exempted from air navigation charges (both en-route and terminal) in Poland:

- performed under Visual Flight Rules (VFR);
- mixed – where a part of the flight is performed under Visual Flight Rules (VFR) and the remaining part is performed under Instrument Flight Rules (IFR) – for the part of the flight performed in the Polish airspace exclusively under VFR rules;
- performed by aircraft of which the maximum take-off weight is less than 2 tons;
- performed exclusively for the transport, on an official mission, of the reigning monarch and his/her immediate family, head of state, head of government and government ministers; in all cases the flight purpose must be confirmed by the appropriate flight status indicator or remark on the flight plan;
- search and rescue, authorized by a competent SAR coordination body;
- military performed by Polish military aircraft or military aircraft of a country where flights performed by Polish military aircraft are exempted from the air navigation charges;
- performed for military purposes and exempted from charges, under international agreements ratified by Poland in statutory way;
- military performed by military aircraft under multinational NATO programmes, to which Poland is a contracting party, other than those mentioned above;
- flights performed by ANSP for the purpose of checking or testing equipment.

Costs of providing air navigation services to exempted flights are covered by the State budget – they are financed by the means of budgetary subsidy granted by the minister responsible for transport on the application of designated service provider.

I. PANSA

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

	2020
Costs for exempted VFR flights	3 441
Costs for exempted IFR flights	7 837
Total costs for exempted flights	11 278

Costs items presented in '000 PLN

Costs planned in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2021.

	2021
Costs for exempted VFR flights	4 049

En-route Charging Zone Poland Reference Period 3 (2020-2024)

Costs for exempted IFR flights	3 838 ²
Total costs for exempted flights	7 886

Costs items presented in '000 PLN

II. IMWM

Not applicable to Radom Meteo.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz

VI. CAA (including EUROCONTROL)

Not applicable.

c) Description of adjustments resulting from the traffic risk sharing mechanism in accordance with Article 27;

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(1) and (2))).

d) Description of the differences between determined costs and actual costs of year n as a result of the changes in costs referred to in Article 28(3) including description of the changes referred to in that Article;

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3))).

e) Description of adjustments resulting from unforeseen changes in costs in accordance with Article 28(3) to (6);

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3))).

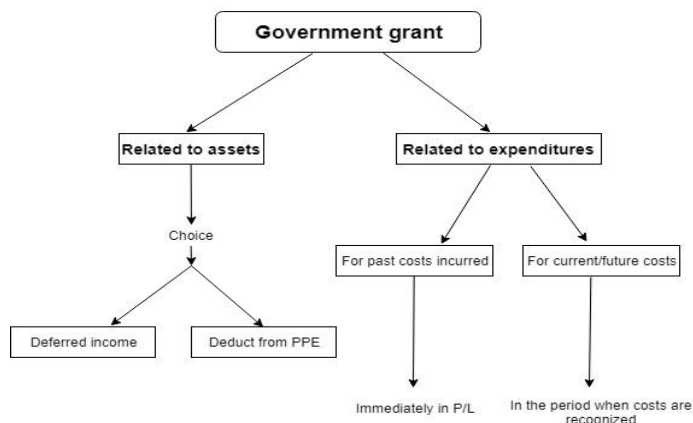
f) Description of the other revenues, if any, broken down between the different categories indicated in Article 25(3);

I. PANSA

As regards public funds obtained from public authorities including financial support from Union assistance programmes PANSA fully follows provisions of article 25.3 of Regulation 2019/317 and passes on to airspace users **revenues recognised** under IAS 20 framework. It assumes that **public funds obtained are recognised in profit or loss on a systematic basis over the period in which PANSA recognises as expenses the related costs for which public funds are intended to compensate.**

² The number of exempted SU is based on historical share of exempted flights in total number of flights. However, considering 2020 annual actual figures, 2021 actual figures for the past months as well as the fact that COVID pandemic has a different impact on exempted flights (including State, MIL, etc.), actual cost of serving exempted flights in 2021 might be higher than presented here.

En-route Charging Zone Poland Reference Period 3 (2020-2024)



Under this submission PANSa:

- assumes that revenue obtained by PANSa from commercial activities are not deducted from determined costs,
- does not assume revenue from contracts/agreements concluded with airport operators.

II. IMWM

IMWM does not plan for the RP3 any additional income covering the costs of meteorological services for civil aviation, except for expected agreement between PANSa and IMWM, covering these costs. Also, IMWM does not provide the meteorological services for the military aviation and does not plan obtaining any income for such services in years 2020-2024. IMWM exchanges with the military services the results of aviation observations and forecasts, on the no-cost base. In this way the IMWM obtains (in no-cost way) the results of military aviation observations and forecasts, which are used by Institute to perform its services for the civil aviation.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz.

VII. CAA (including EUROCONTROL)

Not applicable.

g) Description of the application of the financial incentive schemes referred to in Article 11(3) and 11(4) in year n and the resulting financial advantages and disadvantages; description and explanation of the modulation of air navigation charges applied in year n under Article 32 where applicable, and resulting adjustments;

Financial incentive schemes

The description and justification of the parameters of the incentive scheme defined in accordance with Article 11(3) and 11 (4) are provided in the body of the performance plan under item 5.2.

Modulation of charges

It is not planned to implement any modulation of charges in RP3.

The actual application and relating financial advantages and disadvantages for 2020 is not applicable (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 3 (3)).

En-route Charging Zone Poland Reference Period 3 (2020-2024)

h) Description of adjustments relating to the temporary application of a unit rate under Article 29(5);

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(4))).

It is assumed that the difference in revenues referred to in Article 29(5) of Regulation 2019/317 will be recovered over 5 years period.

i) Description of the cross-financing between en route charging zones, or between terminal charging zones, in accordance with point (e) of Article 15(2) of Regulation 550/2004;

The eligible costs were allocated between en-route and terminal charging zones by using appropriate allocation keys. The topic of the cost allocation was elaborated in the Part I of Additional information.

j) Information on the application of a lower unit rate under Article 29(6) than the unit rate calculated in accordance with Article 25(2) and the means to finance the difference in revenue;

Not applicable for this submission.

k) Information and breakdown of the adjustments relating to previous reference periods impacting the unit rate calculation;

I. PANSA

The process of the discussion between NSA and EC on the treatment of non-contractual use of land (Branicki case) as unforeseeable new cost items not covered in the performance plan but required by law has been ongoing since 2nd half of 2020. Lately, the subject was raised in bilateral discussions with EC held in course of May and June 2021. Consequently, the approach to be followed seems to be defined. The solution discussed would be applied through a one-off correction of the unit rate of calendar year 2023 leading to effective settlement with AUs of eligible (justified) amount of non-contractual use of land. This approach is reflected in the revised draft RP3 performance plan for Poland as -15 001 kPLN adjustment related to RP2 impacting 2023 unit rate.

It has been agreed with the EC that over RP3 future payments related to future rulings on compensation for non-contractual use of land will continue to be recognized as cost exempt once the final amounts to be paid by PANSA are established and subject to payment.

II. IMWM

III. Radom Meteo

The application of the inflation carry-overs from 2018 and 2019 resulted in 1.1 kPLN adjustment on 2020/2021 applicable unit rate.

The application of the traffic adjustment carry-overs from 2018 and 2019 resulted in -40.0 kPLN adjustment on 2020/2021 applicable unit rate.

The application of the other revenues carry-over stemming from the closure of EPRA airport in 2019 resulted in -144.5 kPLN adjustment on 2020/2021 applicable unit rate.

There are no other carry-overs from previous reference periods that have an impact on the unit rates neither in RP3 nor in later RPs.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury. Although Warmia i Mazury was providing MET services in RP2, the whole costs were allocated to the terminal cost base, what was decided during the revision of RP2

En-route Charging Zone Poland

Reference Period 3 (2020-2024)

concerning the inclusion of EPSY airport into BFAB PP RP2. Therefore, all adjustments relating to previous reference periods impacting the unit rate calculation are included in TNC.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz, as this ANSP is providing services in SES since 2020 and has no carry-overs stemming from RP2.

**En-route Charging Zone Poland
Reference Period 3 (2020-2024)**

**ADDITIONAL INFORMATION TO REPORTING TABLE 3 – COMPLEMENTARY INFORMATION
ON COMMON PROJECTS AND ON UNION ASSISTANCE PROGRAMME**

I) Information on the costs of common projects and other funded projects broken down per individual project, as well as of public funds obtained from public authorities for these projects.

Detailed information on the costs of common projects and other funded projects, as well as of public funds obtained from public authorities for these projects will be provided by 1 November 2021.

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex B.1.1 TNC EPWA Reporting Tables

Legend for the Check sheet									
PRAWDA	Cells highlighted in green indicate that the items checked are equal and different to 0								
PRAWDA	Cells highlighted in pale yellow indicate that the items entering the check are blank or 0								
FALSZ	Cells highlighted in red indicate that the items checked are not equal								
FALSZ	Cells highlighted in pale yellow indicate that one of the items entering the check is blank or 0								
#DIV/0	Cells highlighted in orange indicate formulae that resulted in error								
N/A	Cells highlighted in white with grey "N/A" indicate that the check is not applicable for the given combination of year and/or RP								
INFORMATION ON COSTS AND UNIT COSTS - TABLE 1			Rounding (dec. p/ces)	Determined					
				2020	2021	2020/2021	2022	2023	2024
#	Item	Checks for Route TABLE 1 (consolidated)							
#001	4.2	Check that values in Table 1 Consolidated are sums of the same items across all the entities (in '000 NC) Total determined/actual costs (in '000 NC) Sum of Total determined/actual costs for all entities (in '000 NC)	3	PRAWDA 34 444,064 34 444,064	PRAWDA 50 030,421 50 030,421	PRAWDA 84 474,485 84 474,485	PRAWDA 49 553,419 49 553,419	PRAWDA 50 860,403 50 860,403	PRAWDA 53 374,860 53 374,860
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) Sum of items 1.1 to 1.5 (in '000 NC)	3	PRAWDA 34 444,064 34 444,064	PRAWDA 50 030,421 50 030,421	PRAWDA 84 474,485 84 474,485	PRAWDA 49 553,419 49 553,419	PRAWDA 50 860,403 50 860,403	PRAWDA 53 374,860 53 374,860
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) Sum of items 2.1 to 2.9 (in '000 NC)	3	PRAWDA 34 444,064 34 444,064	PRAWDA 50 030,421 50 030,421	PRAWDA 84 474,485 84 474,485	PRAWDA 49 553,419 49 553,419	PRAWDA 50 860,403 50 860,403	PRAWDA 53 374,860 53 374,860
#004	2.10	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) Total costs by service (in '000 NC)	3	PRAWDA 34 444,064 34 444,064	PRAWDA 50 030,421 50 030,421	PRAWDA 84 474,485 84 474,485	PRAWDA 49 553,419 49 553,419	PRAWDA 50 860,403 50 860,403	PRAWDA 53 374,860 53 374,860
#100	5.1	Check that inflation rate is not negative Inflation rate	3	PRAWDA 3,70%	PRAWDA 3,20%		PRAWDA 2,52%	PRAWDA 2,53%	PRAWDA 2,50%
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA 107,15 107,15	PRAWDA 110,58 110,58		PRAWDA 113,37 113,37	PRAWDA 116,24 116,24	PRAWDA 119,15 119,15
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA 746,28 746,28	PRAWDA 996,18 996,18	PRAWDA 874,75 874,75	PRAWDA 594,93 594,93	PRAWDA 468,33 468,33	PRAWDA 426,99 426,99
#063	4.2	Check total costs after deduction of costs for exempted VFR Total determined/actual costs(in '000 NC) Total costs by service deducted by Costs for exempted VFR flights (in '000 NC)	3	PRAWDA 34 444,064 34 444,064	PRAWDA 50 030,421 50 030,421	PRAWDA 84 474,485 84 474,485	PRAWDA 49 553,419 49 553,419	PRAWDA 50 860,403 50 860,403	PRAWDA 53 374,860 53 374,860
#067	4.2	Check the sum of costs by airports (in '000 NC) Total determined/actual costs in T1 Consolidated (in '000 NC) Sum of items 4.2 for all airports (in '000 NC)	3	PRAWDA 34 444,064 34 444,064	PRAWDA 50 030,421 50 030,421	PRAWDA 84 474,485 84 474,485	PRAWDA 49 553,419 49 553,419	PRAWDA 50 860,403 50 860,403	PRAWDA 53 374,860 53 374,860
#067_1.1	1.1	Check the sum of Staff costs by airports (in '000 NC) Staff costs in T1 Consolidated (in '000 NC) Sum of items 1.1 for all airports (in '000 NC)	3	PRAWDA 25 503,533 25 503,533	PRAWDA 35 007,075 35 007,075	PRAWDA 60 510,609 60 510,609	PRAWDA 32 587,583 32 587,583	PRAWDA 33 391,229 33 391,229	PRAWDA 34 675,562 34 675,562
#067_1.2	1.2	Check the sum of Other operating costs by airports (in '000 NC) Other operating costs in T1 Consolidated (in '000 NC) Sum of items 1.2 for all airports (in '000 NC)	3	PRAWDA 3 655,977 3 655,977	PRAWDA 8 213,977 8 213,977	PRAWDA 11 869,954 11 869,954	PRAWDA 9 475,547 9 475,547	PRAWDA 9 606,176 9 606,176	PRAWDA 9 751,326 9 751,326
#067_1.3	1.3	Check the sum of Depreciation by airports (in '000 NC) Depreciation in T1 Consolidated (in '000 NC) Sum of items 1.3 for all airports (in '000 NC)	3	PRAWDA 3 227,643 3 227,643	PRAWDA 4 171,057 4 171,057	PRAWDA 7 398,700 7 398,700	PRAWDA 4 540,734 4 540,734	PRAWDA 4 637,845 4 637,845	PRAWDA 5 173,621 5 173,621
#067_1.4	1.4	Check the sum of Cost of capital by airports (in '000 NC) Cost of capital in T1 Consolidated (in '000 NC) Sum of items 1.4 for all airports (in '000 NC)	3	PRAWDA 2 056,910 2 056,910	PRAWDA 2 638,312 2 638,312	PRAWDA 4 695,222 4 695,222	PRAWDA 2 949,556 2 949,556	PRAWDA 3 225,154 3 225,154	PRAWDA 3 774,351 3 774,351
#067_1.5	1.5	Check the sum of Exceptional Items by airports (in '000 NC) Exceptional items in T1 Consolidated (in '000 NC) Sum of items 1.5 for all airports (in '000 NC)	3	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000
#067_2.1	2.1	Check the sum of Air Traffic Management by airports (in '000 NC) Air Traffic Management in T1 Consolidated (in '000 NC) Sum of items 2.1 for all airports (in '000 NC)	3	PRAWDA 25 924,609 25 924,609	PRAWDA 36 158,267 36 158,267	PRAWDA 62 082,877 62 082,877	PRAWDA 34 389,739 34 389,739	PRAWDA 35 888,624 35 888,624	PRAWDA 37 150,294 37 150,294
#067_2.2	2.2	Check the sum of Communication by airports (in '000 NC) Communication in T1 Consolidated (in '000 NC) Sum of items 2.2 for all airports (in '000 NC)	3	PRAWDA 593,493 593,493	PRAWDA 854,254 854,254	PRAWDA 1 447,747 1 447,747	PRAWDA 842,591 842,591	PRAWDA 859,733 859,733	PRAWDA 881,898 881,898
#067_2.3	2.3	Check the sum of Navigation by airports (in '000 NC) Navigation in T1 Consolidated (in '000 NC) Sum of items 2.3 for all airports (in '000 NC)	3	PRAWDA 1 273,560 1 273,560	PRAWDA 1 688,647 1 688,647	PRAWDA 2 962,208 2 962,208	PRAWDA 1 590,703 1 590,703	PRAWDA 1 625,582 1 625,582	PRAWDA 1 615,013 1 615,013
#067_2.4	2.4	Check the sum of Surveillance by airports (in '000 NC) Surveillance in T1 Consolidated (in '000 NC) Sum of items 2.4 for all airports (in '000 NC)	3	PRAWDA 2 632,234 2 632,234	PRAWDA 4 131,122 4 131,122	PRAWDA 6 763,356 6 763,356	PRAWDA 5 150,513 5 150,513	PRAWDA 4 493,649 4 493,649	PRAWDA 5 428,964 5 428,964
#067_2.5	2.5	Check the sum of Search and Rescue by airports (in '000 NC) Search and Rescue in T1 Consolidated (in '000 NC) Sum of items 2.5 for all airports (in '000 NC)	3	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000
#067_2.6	2.6	Check the sum of Aeronautical Information by airports (in '000 NC) Aeronautical Information in T1 Consolidated (in '000 NC) Sum of items 2.6 for all airports (in '000 NC)	3	PRAWDA 1 331,834 1 331,834	PRAWDA 4 421,245 4 421,245	PRAWDA 5 753,079 5 753,079	PRAWDA 4 778,822 4 778,822	PRAWDA 5 141,168 5 141,168	PRAWDA 5 370,820 5 370,820
#067_2.7	2.7	Check the sum of Meteorological services by airports (in '000 NC) Meteorological services in T1 Consolidated (in '000 NC) Sum of items 2.7 for all airports (in '000 NC)	3	PRAWDA 1 682,215 1 682,215	PRAWDA 1 740,715 1 740,715	PRAWDA 3 422,930 3 422,930	PRAWDA 1 727,355 1 727,355	PRAWDA 1 746,894 1 746,894	PRAWDA 1 791,160 1 791,160
#067_2.8	2.8	Check the sum of Supervision costs by airports (in '000 NC) Supervision costs in T1 Consolidated (in '000 NC) Sum of items 2.8 for all airports (in '000 NC)	3	PRAWDA 1 006,119 1 006,119	PRAWDA 1 036,169 1 036,169	PRAWDA 2 042,288 2 042,288	PRAWDA 1 073,696 1 073,696	PRAWDA 1 104,754 1 104,754	PRAWDA 1 136,710 1 136,710
#067_2.9	2.9	Check the sum of Other State costs by airports (in '000 NC) Other State costs in T1 Consolidated (in '000 NC) Sum of items 2.9 for all airports (in '000 NC)	3	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000	PRAWDA 0,000 0,000
#067b	5.3	Check the sum of costs by airports (in '000 NC) Total costs in real terms in T1 Consolidated (in '000 NC) Sum of items 5.3 for all airports (in '000 NC)	3	PRAWDA 32 565,853 32 565,853	PRAWDA 45 993,848 45 993,848	PRAWDA 78 559,701 78 559,701	PRAWDA 44 719,749 44 719,749	PRAWDA 45 007,691 45 007,691	PRAWDA 46 418,555 46 418,555
#	Item	Checks for Route Table 1 ANSP							
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA 31 755,730 31 755,730	PRAWDA 47 253,536 47 253,536	PRAWDA 79 009,267 79 009,267	PRAWDA 46 752,368 46 752,368	PRAWDA 48 008,756 48 008,756	PRAWDA 50 446,989 50 446,989
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA 31 755,730 31 755,730	PRAWDA 47 253,536 47 253,536	PRAWDA 79 009,267 79 009,267	PRAWDA 46 752,368 46 752,368	PRAWDA 48 008,756 48 008,756	PRAWDA 50 446,989 50 446,989
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA 31 755,730 31 755,730	PRAWDA 47 253,536 47 253,536	PRAWDA 79 009,267 79 009,267	PRAWDA 46 752,368 46 752,368	PRAWDA 48 008,756 48 008,756	PRAWDA 50 446,989 50 446,989
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA 1 966,593	PRAWDA 4 122,868	PRAWDA 6 089,460	PRAWDA 4 209,357	PRAWDA 4 289,100	PRAWDA 4 439,420
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA 107,15 107,15	PRAWDA 110,58 110,58		PRAWDA 113,37 113,37	PRAWDA 116,24 116,24	PRAWDA 119,15 119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs real terms (in '000 NC)	3	PRAWDA 29 989,746 29 989,746	PRAWDA 43 383,529 43 383,529	PRAWDA 73 373,274 73 373,274	PRAWDA 42 122,397 42 122,397	PRAWDA 42 400,097 42 400,097	PRAWDA 43 778,507 43 778,507
#016	5.4	Check that Service Units are the same for all entities (in '000) Total Service Units (ANSP) - Note: (check sum for combined year 2020-2021) Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)		PRAWDA 43,637 43,637	PRAWDA 46,170 46,170	PRAWDA 89,808 89,808	PRAWDA 75,168 75,168	PRAWDA 96,102 96,102	PRAWDA 108,711 108,711
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA 687,25 687,25	PRAWDA 939,64 939,64	PRAWDA 817,00 817,00	PRAWDA 560,37 560,37	PRAWDA 441,20 441,20	PRAWDA 402,70 402,70
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) Inflation rate (%) (ANSP) Inflation rate (%) (Consolidated)		PRAWDA 3,70%	PRAWDA 3,20%		PRAWDA 2,52%	PRAWDA 2,53%	PRAWDA 2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) Price Index (ANSP) Price Index (Consolidated)		PRAWDA 107,15 107,15	PRAWDA 110,58 110,58		PRAWDA 113,37 113,37	PRAWDA 116,24 116,24	PRAWDA 119,15 119,15
#019	3.5	Check calculation of cost of capital pre-tax rate Cost of capital pre tax rate (%) Cost of capital / total asset base (%)	3	PRAWDA 5,700%	PRAWDA 5,800%		PRAWDA 5,800%	PRAWDA 5,900%	PRAWDA 5,900%
#020	3.8	Check proportion of financing through equity is coherent with components Proportion of financing through equity calculated from components is (in %): Proportion of financing through equity is (in %):	3	PRAWDA 40,00%	PRAWDA 40,00%		PRAWDA 40,00%	PRAWDA 40,00%	PRAWDA 40,00%
#018	3.4	Check total asset base (in '000 NC) Sum of assets (in '000 NC) Total asset base (in '000 NC)	3	PRAWDA 35 880,716 35 880,716	PRAWDA 45 401,751 45 401,751		PRAWDA 50 483,451 50 483,451	PRAWDA 54 883,425 54 883,425	PRAWDA 63 989,971 63 989,971
#065	3.4	Check that no cost of capital is calculated if no asset base is reported Total asset base (in '000 NC) Cost of capital (in '000 NC)	3	PRAWDA 35 880,716 2 056,910	PRAWDA 45 401,751 2 638,312		PRAWDA 50 483,451 2 949,556	PRAWDA 54 883,425 3 225,154	PRAWDA 63 989,971 3 774,351
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021) Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA 3 227,643 3 227,643	PRAWDA 4 171,057 4 171,057	PRAWDA 7 398,700 7 398,700	PRAWDA 4 540,734 4 540,734	PRAWDA 4 637,845 4 637,845	PRAWDA 5 173,621 5 173,621
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) Cost of capital - item 3.11 (in '000 NC) NBV of fixed assets * WACC rate (in '000 NC)	3	PRAWDA 1 805,256 1 805,256	PRAWDA 2 261,504 2 261,504		PRAWDA 2 573,232 2 573,232	PRAWDA 2 836,420 2 836,420	PRAWDA 3 363,055 3 363,055
#	Item	Checks for Route Table 1 MET							
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA 1 682,215 1 682,215	PRAWDA 1 740,715 1 740,715	PRAWDA 3 422,930 3 422,930	PRAWDA 1 727,355 1 727,355	PRAWDA 1 746,894 1 746,894	PRAWDA 1 791,160 1 791,160
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA 1 682,215 1 682,215	PRAWDA 1 740,715 1 740,715	PRAWDA 3 422,930 3 422,930	PRAWDA 1 727,355 1 727,355	PRAWDA 1 746,894 1 746,894	PRAWDA 1 791,160 1 791,160

#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) <i>Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 682,215	1 740,715	3 422,930	1 727,355	1 746,894	1 791,160
				1 682,215	1 740,715	3 422,930	1 727,355	1 746,894	1 791,160
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 <i>Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) <i>Calculated price index</i> <i>Price Index</i>		56,007	55,138	111,145	56,505	57,062	58,594
			2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 <i>Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Total costs real terms (in '000 NC)</i>		107,15	110,58		113,37	116,24	119,15
			3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 569,989	1 574,150	3 144,139	1 523,657	1 502,840	1 503,339
#016	5.4	Check that Service Units are the same for all entities (in '000) <i>Total Service Units (MET) - Note: (check sum for combined year 2020-2021)</i> <i>Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)</i>		1 569,989	1 574,150	3 144,139	1 523,657	1 502,840	1 503,339
				PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				43,637	46,170	89,808	75,168	96,102	108,711
#017b	5.5	Check calculation of the unit cost for RP3 <i>Total costs real terms / Total service units</i> <i>Unit Cost</i>		43,637	46,170	89,808	75,168	96,102	108,711
			2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				35,98	34,09	35,01	20,27	15,64	13,83
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) <i>Inflation rate (%) (MET)</i> <i>Inflation rate (%) (Consolidated)</i>		35,98	34,09	35,01	20,27	15,64	13,83
				PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) <i>Price Index (MET)</i> <i>Price Index (Consolidated)</i>		3,70%	3,20%		2,52%	2,53%	2,50%
				PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate <i>Cost of capital pre tax rate (%)</i> <i>Cost of capital / total asset base (%)</i>		107,15	110,58		113,37	116,24	119,15
			3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#020	3.8	Check proportion of financing through equity is coherent with components <i>Proportion of financing through equity calculated from components is (in %):</i> <i>Proportion of financing through equity is (in %):</i>		N/A	N/A		N/A	N/A	N/A
			2	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#018	3.4	Check total asset base (in '000 NC) <i>Sum of assets (in '000 NC)</i> <i>Total asset base (in '000 NC)</i>		N/A	N/A		N/A	N/A	N/A
			3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
#065	3.4	Check that no cost of capital is calculated if no asset base is reported <i>Total asset base (in '000 NC)</i> <i>Cost of capital (in '000 NC)</i>		0,000	0,000		0,000	0,000	0,000
			3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) <i>Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i> <i>Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)</i>		0,000	0,000		0,000	0,000	0,000
			3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) <i>Cost of capital - item 3.11 (in '000 NC)</i> <i>NBV of fixed assets * WACC rate (in '000 NC)</i>		N/A	N/A		N/A	N/A	N/A
			3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#	Item	Checks for Route Table 1 NSA							
#002	1.6	Check the sum of costs by nature (in '000 NC) <i>Total costs by nature (in '000 NC)</i> <i>Sum of items 1.1 to 1.5 (in '000 NC)</i>	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
#003	2.10	Check the sum of costs by service (in '000 NC) <i>Total costs by service (in '000 NC)</i> <i>Sum of items 2.1 to 2.9 (in '000 NC)</i>	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
#004	2.10	Check that total costs by nature equals total costs by service (in '000 NC) <i>Total costs by nature (in '000 NC)</i> <i>Total costs by service (in '000 NC)</i>	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 <i>Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC)</i> <i>Total costs real terms (in '000 NC)</i>	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
				1 006,119	1 036,169	2 042,288	1 073,696	1 104,754	1 136,710
#016	5.4	Check that Service Units are the same for all entities (in '000) <i>Total Service Units (NSA)</i> <i>Total Service Units (Consolidated)</i>		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				44	46	90	75	96	109
				44	46	90	75	96	109
#017b	5.5	Check calculation of the unit cost for RP3 <i>Total costs real terms / Total service units</i> <i>Unit Cost</i>	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				23,06	22,44	22,74	14,28	11,50	10,46
				23,06	22,44	22,74	14,28	11,50	10,46
#019	3.5	Check calculation of cost of capital pre-tax rate <i>Cost of capital pre tax rate (%)</i> <i>Cost of capital / total asset base (%)</i>	3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#020	3.8	Check proportion of financing through equity is coherent with components <i>Proportion of financing through equity calculated from components is (in %):</i> <i>Proportion of financing through equity is (in %):</i>	2	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#018	3.4	Check total asset base (in '000 NC) <i>Sum of assets (in '000 NC)</i> <i>Total asset base (in '000 NC)</i>	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
				0,000	0,000		0,000	0,000	0,000
#065	3.4	Check that no cost of capital is calculated if no asset base is reported <i>Total asset base (in '000 NC)</i> <i>Cost of capital (in '000 NC)</i>	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
				0,000	0,000		0,000	0,000	0,000

Scope of the Terminal Charging Zone

Charging zone: Poland - EPWA

Reference Period 2					Reference Period 3				
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

ICAO Airport code	Airport Name
EPWA	CHOPINA W WARSZAWIE
Total number of airports	

Table 1 - Total Costs and Unit Costs

Poland - EPWA
Currency: PLN
All Entities

Actual costs 2015-2019						Determined costs - Performance Plan - RP3					
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)											
1.1 Staff	27 022	28 349	28 623	32 912	33 029	25 504	35 007	60 511	32 588	33 391	34 676
of which, pension costs						2 114	4 277	6 391	4 370	4 453	4 608
1.2 Other operating costs	8 063	7 185	6 076	5 396	6 402	3 656	8 214	11 870	9 476	9 606	9 751
1.3 Depreciation	3 026	3 178	2 422	2 842	3 329	3 228	4 171	7 399	4 541	4 638	5 174
1.4 Cost of capital	2 177	2 771	1 935	1 471	1 367	2 057	2 638	4 695	2 950	3 225	3 774
1.5 Exceptional items	0	0	0	0	0	0	0	0	0	0	0
1.6 Total costs	40 289	41 483	39 055	42 620	44 126	34 444	50 030	84 474	49 553	50 860	53 375
Total % n/n-1		3,0%	-5,9%	9,1%	3,5%	-21,9%	45,3%		-1,0%	2,6%	4,9%
2. Detail by service (in nominal terms)											
2.1 Air Traffic Management	30 605	30 958	29 540	32 279	34 702	25 925	36 158	62 083	34 390	35 889	37 150
2.2 Communication	1 392	1 451	854	908	914	593	854	1 448	843	860	882
2.3 Navigation	2 080	2 054	1 492	1 554	1 348	1 274	1 689	2 962	1 591	1 626	1 615
2.4 Surveillance	2 859	2 864	1 942	3 601	2 717	2 632	4 131	6 763	5 151	4 494	5 429
2.5 Search and rescue	0	0	0	0	0	0	0	0	0	0	0
2.6 Aeronautical Information	268	223	1 708	1 769	1 739	1 332	4 421	5 753	4 779	5 141	5 371
2.7 Meteorological services	2 211	2 948	2 542	1 476	1 476	1 682	1 741	3 423	1 727	1 747	1 791
2.8 Supervision costs	873	985	977	1 033	1 229	1 006	1 036	2 042	1 074	1 105	1 137
2.9 Other State costs	0	0	0	0	0	0	0	0	0	0	0
2.10 Total costs	40 289	41 483	39 055	42 620	44 126	34 444	50 030	84 474	49 553	50 860	53 375
Total % n/n-1		3,0%	-5,9%	9,1%	3,5%	-21,9%	45,3%		-1,0%	2,6%	4,9%
3. Complementary information (in nominal terms)											
Average asset base											
3.1 Net book val. fixed assets	34 119	42 050	30 424	36 125	32 942	31 491	38 917		44 042	48 268	57 017
3.2 Adjustments total assets	0	0	0	0	0	0	0		0	0	0
3.3 Net current assets	2 477	4 529	5 233	6 202	5 830	4 390	6 484		6 441	6 615	6 973
3.4 Total asset base	36 596	46 579	35 657	42 327	38 772	35 881	45 402		50 483	54 883	63 990
Cost of capital %											
3.5 Cost of capital pre tax rate											
3.6 Return on equity											
3.7 Average interest on debts											
3.8 Share of financing through equity											
Costs of common projects											
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0
Costs of new and existing investments											
3.10 Depreciation						3 228	4 171	7 399	4 541	4 638	5 174
3.11 Cost of capital						1 805	2 262	4 067	2 573	2 836	3 363
3.12 Cost of leasing						229	384	613	403	416	423
Eurocontrol costs											
3.13 Eurocontrol costs (Euro)											
3.14 Exchange rate (if applicable)											
3.15 Eurocontrol costs (national currency)											
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)											
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0
4.2 Total determined/actual costs	40 289	41 483	39 055	42 620	44 126	34 444	50 030	84 474	49 553	50 860	53 375
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)											
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1
5.3 Total costs real terms (2)	40 767	42 036	39 055	42 178	42 897	32 566	45 994	78 560	44 720	45 008	46 419
Total % n/n-1		3,1%	-7,1%	8,0%	1,7%	-24,1%	41,2%		-2,8%	0,6%	3,1%
5.4 Total Service Units	70,7	78,8	90,7	101,9	107,9	43,6	46,2	89,8	75,2	96,1	108,7
Total % n/n-1		11,4%	15,2%	12,3%	5,9%	-59,5%	5,8%		62,8%	27,8%	13,1%
5.5 Unit cost in real terms prices (3)	576,47	533,53	430,46	413,96	397,72	746,28	996,18	874,75	594,93	468,33	426,99
Total % n/n-1		-7,4%	-19,3%	-3,8%	-3,9%	87,6%	33,5%		-40,3%	-21,3%	-8,8%

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - EPWA
Currency: PLN
PANSA

Actual costs 2015-2019												Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3				
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024				
1. Detail by nature (in nominal terms)																					
1.1 Staff	26 157	27 439	27 684	31 920	31 897	24 375	33 801	58 176	31 339	32 101	33 342	24 375									
of which, pension costs					0	1 967	4 123	6 089	4 209	4 289	4 439	1 967									
1.2 Other operating costs	5 845	4 162	3 495	3 878	4 828	2 096	6 643	8 739	7 923	8 045	8 157	2 096									
1.3 Depreciation	3 026	3 178	2 422	2 842	3 329	3 228	4 171	7 399	4 541	4 638	5 174	3 228									
1.4 Cost of capital	2 177	2 771	1 935	1 471	1 367	2 057	2 638	4 695	2 950	3 225	3 774	2 057									
1.5 Exceptional items						0	0	0	0	0	0	0									
1.6 Total costs	37 205	37 550	35 536	40 111	41 421	31 756	47 254	79 009	46 752	48 009	50 447	31 756									
Total % n/n-1		0,9%	-5,4%	12,9%	3,3%	-23,3%	48,8%		-1,1%	2,7%	5,1%	-23,3%									
2. Detail by service (in nominal terms)																					
2.1 Air Traffic Management	30 605	30 958	29 540	32 279	34 702	25 925	36 158	62 083	34 390	35 889	37 150	25 925									
2.2 Communication	1 392	1 451	854	908	914	593	854	1 448	843	860	882	593									
2.3 Navigation	2 080	2 054	1 492	1 554	1 348	1 274	1 689	2 962	1 591	1 626	1 615	1 274									
2.4 Surveillance	2 859	2 864	1 942	3 601	2 717	2 632	4 131	6 763	5 151	4 494	5 429	2 632									
2.5 Search and rescue					0	0	0	0	0	0	0	0									
2.6 Aeronautical information	268	223	1 708	1 769	1 739	1 332	4 421	5 753	4 779	5 141	5 371	1 332									
2.7 Meteorological services						0	0	0	0	0	0	0									
2.8 Supervision costs																					
2.9 Other State costs																					
2.10 Total costs	37 205	37 550	35 536	40 111	41 421	31 756	47 254	79 009	46 752	48 009	50 447	31 756									
Total % n/n-1		0,9%	-5,4%	12,9%	3,3%	-23,3%	48,8%		-1,1%	2,7%	5,1%	-23,3%									
3. Complementary information (in nominal terms)																					
Average asset base																					
3.1 Net book val. fixed assets	34 119	42 050	30 424	36 125	32 942	31 491	38 917		44 042	48 268	57 017	31 491									
3.2 Adjustments total assets					0	0	0		0	0	0	0									
3.3 Net current assets	2 477	4 529	5 233	6 202	5 830	4 390	6 484		6 441	6 615	6 973	4 390									
3.4 Total asset base	36 596	46 579	35 657	42 327	38 772	35 881	45 402		50 483	54 883	63 990	35 881									
Cost of capital %																					
3.5 Cost of capital pre tax rate	5,95%	5,95%	5,43%	3,47%	3,52%	5,73%	5,81%		5,84%	5,88%	5,90%	5,73%									
3.6 Return on equity	5,95%	5,95%	5,43%	3,47%	3,52%	9,40%	9,40%		9,40%	9,40%	9,40%	9,40%									
3.7 Average interest on debts	0,00%	0,00%	0,00%	0,00%	0,00%	3,29%	3,42%		3,47%	3,53%	3,56%	3,29%									
3.8 Share of financing through equity	100,00%	100,00%	100,00%	100,00%	100,00%	40,00%	40,00%		40,00%	40,00%	40,00%	40,00%									
Costs of common projects																					
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0	0									
Costs of new and existing investments																					
3.10 Depreciation						3 228	4 171	7 399	4 541	4 638	5 174	3 228									
3.11 Cost of capital						1 805	2 262	4 067	2 573	2 836	3 363	1 805									
3.12 Cost of leasing						229	384	613	403	416	423	229									
Eurocontrol costs																					
3.13 Eurocontrol costs (Euro)																					
3.14 Exchange rate (if applicable)																					
3.15 Eurocontrol costs (national currency)																					
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																					
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0									
4.2 Total determined/actual costs	37 205	37 550	35 536	40 111	41 421	31 756	47 254	79 009	46 752	48 009	50 447	31 756									
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																					
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%									
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1									
5.3 Total costs real terms (2)	37 652	38 055	35 536	39 686	40 239	29 990	43 384	73 733	42 122	42 400	43 779	29 990									
Total % n/n-1		1,1%	-6,6%	11,7%	1,4%	-25,5%	44,7%		-2,9%	0,7%	3,3%	-25,5%									
5.4 Total Service Units	70,7	78,8	90,7	101,9	107,9	43,6	46,2	89,8	75,2	96,1	108,7	43,6									
Total % n/n-1		11,4%	15,2%	12,3%	5,9%	-59,5%	5,8%		62,8%	27,8%	13,1%	-59,5%									
5.5 Unit cost in real terms prices (3)	532,42	483,00	391,67	389,51	373,08	687,25	939,64	817,00	560,37	441,20	402,70	687,25									
Total % n/n-1		-9,3%	-18,9%	-0,6%	-4,2%	84,2%	36,7%		-40,4%	-21,3%	-8,7%	84,2%									

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - EPWA
Currency: PLN
MET IMWM

Actual costs 2015-2019						Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																	
1.1 Staff	278	243	270	291	293	407	449	856	467	486	505	407					
of which, pension costs						56	55	111	57	57	59	56					
1.2 Other operating costs	1 933	2 706	2 272	1 185	1 182	1 275	1 291	2 567	1 260	1 261	1 286	1 275					
1.3 Depreciation						0	0	0	0	0	0	0					
1.4 Cost of capital						0	0	0	0	0	0	0					
1.5 Exceptional Items						0	0	0	0	0	0	0					
1.6 Total costs	2 211	2 948	2 542	1 476	1 476	1 682	1 741	3 423	1 727	1 747	1 791	1 682					
Total % n/n-1		33,3%	-13,8%	-41,9%	0,0%	14,0%	3,5%		-0,8%	1,1%	2,5%	14,0%					
2. Detail by service (in nominal terms)																	
2.1 Air Traffic Management																	
2.2 Communication																	
2.3 Navigation																	
2.4 Surveillance																	
2.5 Search and rescue																	
2.6 Aeronautical Information																	
2.7 Meteorological services	2 211	2 948	2 542	1 476	1 476	1 682	1 741	3 423	1 727	1 747	1 791	1 682					
2.8 Supervision costs																	
2.9 Other State costs																	
2.10 Total costs	2 211	2 948	2 542	1 476	1 476	1 682	1 741	3 423	1 727	1 747	1 791	1 682					
Total % n/n-1		33,3%	-13,8%	-41,9%	0,0%	14,0%	3,5%		-0,8%	1,1%	2,5%	14,0%					
3. Complementary information (in nominal terms)																	
Average asset base																	
3.1 Net book val. fixed assets						0	0		0	0	0	0					
3.2 Adjustments total assets						0	0		0	0	0	0					
3.3 Net current assets						0	0		0	0	0	0					
3.4 Total asset base	0	0	0	0	0	0	0		0	0	0	0					
Cost of capital %																	
3.5 Cost of capital pre tax rate						#DZIEL/01	#DZIEL/01		#DZIEL/01	#DZIEL/01	#DZIEL/01	#DZIEL/01					
3.6 Return on equity						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.7 Average interest on debts						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.8 Share of financing through equity						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
Costs of common projects																	
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0	0					
Costs of new and existing investments																	
3.10 Depreciation						0	0	0	0	0	0	0					
3.11 Cost of capital						0	0	0	0	0	0	0					
3.12 Cost of leasing						0	0	0	0	0	0	0					
Eurocontrol costs																	
3.13 Eurocontrol costs (Euro)																	
3.14 Exchange rate (if applicable)																	
3.15 Eurocontrol costs (national currency)																	
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																	
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0					
4.2 Total determined/actual costs	2 211	2 948	2 542	1 476	1 476	1 682	1 741	3 423	1 727	1 747	1 791	1 682					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																	
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%					
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1					
5.3 Total costs real terms (2)	2 242	2 996	2 542	1 459	1 428	1 570	1 574	3 144	1 524	1 503	1 503	1 570					
Total % n/n-1		33,6%	-15,1%	-42,6%	-2,1%	9,9%	0,3%		-3,2%	-1,4%	0,0%	9,9%					
5.4 Total Service Units	70,7	78,8	90,7	101,9	107,9	43,6	46,2	89,8	75,2	96,1	108,7	43,6					
Total % n/n-1		11,4%	15,2%	12,3%	5,9%	-59,5%	5,8%		62,8%	27,8%	13,1%	-59,5%					
5.5 Unit cost in real terms prices (3)	31,71	38,02	28,02	14,32	13,24	35,98	34,09	35,01	20,27	15,64	13,83	35,98					
Total % n/n-1		19,9%	-26,3%	-48,9%	-7,5%	171,7%	-5,2%		-40,5%	-22,9%	-11,6%	171,7%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - EPWA
Currency: PLN
NSA

Actual costs 2015-2019												Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3				
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024				
1. Detail by nature (in nominal terms)																					
1.1 Staff	587	667	669	701	838	721	757	1 478	781	804	828	721									
of which, pension costs						92	99	191	104	107	110	92									
1.2 Other operating costs	286	318	308	332	391	285	279	564	293	301	309	285									
1.3 Depreciation						0	0	0	0	0	0	0									
1.4 Cost of capital						0	0	0	0	0	0	0									
1.5 Exceptional items						0	0	0	0	0	0	0									
1.6 Total costs	873	985	977	1 033	1 229	1 006	1 036	2 042	1 074	1 105	1 137	1 006									
Total % n/n-1		12,9%	-0,8%	5,7%	19,0%	-18,1%	3,0%		3,6%	2,9%	2,9%	-18,1%									
2. Detail by service (in nominal terms)																					
2.1 Air Traffic Management																					
2.2 Communication																					
2.3 Navigation																					
2.4 Surveillance																					
2.5 Search and rescue						0	0	0	0	0	0										
2.6 Aeronautical information																					
2.7 Meteorological services																					
2.8 Supervision costs	873	985	977	1 033	1 229	1 006	1 036	2 042	1 074	1 105	1 137	1 006									
2.9 Other State costs						0	0	0	0	0	0	0									
2.10 Total costs	873	985	977	1 033	1 229	1 006	1 036	2 042	1 074	1 105	1 137	1 006									
Total % n/n-1		12,9%	-0,8%	5,7%	19,0%	-18,1%	3,0%		3,6%	2,9%	2,9%	-18,1%									
3. Complementary information (in nominal terms)																					
Average asset base																					
3.1 Net book val. fixed assets						0	0		0	0	0	0									
3.2 Adjustments total assets						0	0		0	0	0	0									
3.3 Net current assets						0	0		0	0	0	0									
3.4 Total asset base	0	0	0	0	0	0	0		0	0	0	0									
Cost of capital %																					
3.5 Cost of capital pre tax rate						#DZIEL/01	#DZIEL/01		#DZIEL/01	#DZIEL/01	#DZIEL/01	#DZIEL/01									
3.6 Return on equity						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%									
3.7 Average interest on debts						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%									
3.8 Share of financing through equity						0,00%	0,00%		0,00%	0,00%	0,00%	0,00%									
Costs of common projects																					
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0	0									
Costs of new and existing investments																					
3.10 Depreciation																					
3.11 Cost of capital																					
3.12 Cost of leasing																					
Eurocontrol costs																					
3.13 Eurocontrol costs (Euro)																					
3.14 Exchange rate (if applicable)																					
3.15 Eurocontrol costs (national currency)																					
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																					
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0	0									
4.2 Total determined/actual costs	873	985	977	1 033	1 229	1 006	1 036	2 042	1 074	1 105	1 137	1 006									
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																					
5.1 Inflation %																					
5.2 Inflation index (1)																					
5.3 Total costs real terms (2)	873	985	977	1 033	1 229	1 006	1 036	2 042	1 074	1 105	1 137	1 006									
Total % n/n-1		12,9%	-0,8%	5,7%	19,0%	-18,1%	3,0%		3,6%	2,9%	2,9%	-18,1%									
5.4 Total Service Units	70,7	78,8	90,7	101,9	107,9	43,6	46,2	89,8	75,2	96,1	108,7	43,6									
Total % n/n-1		11,4%	15,2%	12,3%	5,9%	-59,5%	5,8%		62,8%	27,8%	13,1%	-59,5%									
5.5 Unit cost in real terms prices (3)	12,34	12,50	10,77	10,14	11,40	23,06	22,44	22,74	14,28	11,50	10,46	23,06									
Total % n/n-1		1,3%	-13,8%	-5,9%	12,4%	102,3%	-2,7%		-36,4%	-19,5%	-9,0%	102,3%									

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - EPWA
Currency: PLN
CHOPINA W WARSZAWIE

Actual costs 2015-2019						Determined costs - Performance Plan - RP3					
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)											
1.1 Staff	27 022	28 349	28 623	32 912	33 029	25 504	35 007	60 511	32 588	33 391	34 676
of which, pension costs						2 114	4 277	6 391	4 370	4 453	4 608
1.2 Other operating costs	8 063	7 185	6 076	5 396	6 402	3 656	8 214	11 870	9 476	9 606	9 751
1.3 Depreciation	3 026	3 178	2 422	2 842	3 329	3 228	4 171	7 399	4 541	4 638	5 174
1.4 Cost of capital	2 177	2 771	1 935	1 471	1 367	2 057	2 638	4 695	2 950	3 225	3 774
1.5 Exceptional items	0	0	0	0	0	0	0	0	0	0	0
1.6 Total costs	40 289	41 483	39 055	42 620	44 126	34 444	50 030	84 474	49 553	50 860	53 375
Total % n/n-1		3,0%	-5,9%	9,1%	3,5%	-21,9%	45,3%		-1,0%	2,6%	4,9%
2. Detail by service (in nominal terms)											
2.1 Air Traffic Management	30 605	30 958	29 540	32 279	34 702	25 925	36 158	62 083	34 390	35 889	37 150
2.2 Communication	1 392	1 451	854	908	914	593	854	1 448	843	860	882
2.3 Navigation	2 080	2 054	1 492	1 554	1 348	1 274	1 689	2 962	1 591	1 626	1 615
2.4 Surveillance	2 859	2 864	1 942	3 601	2 717	2 632	4 131	6 763	5 151	4 494	5 429
2.5 Search and rescue	0	0	0	0	0	0	0	0	0	0	0
2.6 Aeronautical Information	268	223	1 708	1 769	1 739	1 332	4 421	5 753	4 779	5 141	5 371
2.7 Meteorological services	2 211	2 948	2 542	1 476	1 476	1 682	1 741	3 423	1 727	1 747	1 791
2.8 Supervision costs	873	985	977	1 033	1 229	1 006	1 036	2 042	1 074	1 105	1 137
2.9 Other State costs	0	0	0	0	0	0	0	0	0	0	0
2.10 Total costs	40 289	41 483	39 055	42 620	44 126	34 444	50 030	84 474	49 553	50 860	53 375
Total % n/n-1		3,0%	-5,9%	9,1%	3,5%	-21,9%	45,3%		-1,0%	2,6%	4,9%
3. Complementary information (in nominal terms)											
Average asset base											
3.1 Net book val. fixed assets	34 119	42 050	30 424	36 125	32 942	31 491	38 917		44 042	48 268	57 017
3.2 Adjustments total assets	0	0	0	0	0	0	0		0	0	0
3.3 Net current assets	2 477	4 529	5 233	6 202	5 830	4 390	6 484		6 441	6 615	6 973
3.4 Total asset base	36 596	46 579	35 657	42 327	38 772	35 881	45 402		50 483	54 883	63 990
Cost of capital %											
3.5 Cost of capital pre tax rate	5,95%	5,95%	5,43%	3,47%	3,52%	5,73%	5,81%		5,84%	5,88%	5,90%
3.6 Return on equity											
3.7 Average interest on debts											
3.8 Share of financing through equity											
Costs of common projects											
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0
Costs of new and existing investments											
3.10 Depreciation						3 228	4 171	7 399	4 541	4 638	5 174
3.11 Cost of capital						1 805	2 262	4 067	2 573	2 836	3 363
3.12 Cost of leasing						229	384	613	403	416	423
Eurocontrol costs											
3.13 Eurocontrol costs (Euro)											
3.14 Exchange rate (if applicable)											
3.15 Eurocontrol costs (national currency)											
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)											
4.1 Costs for exempted VFR flights	0	0	0	0	0	0	0	0	0	0	0
4.2 Total determined/actual costs	40 289	41 483	39 055	42 620	44 126	34 444	50 030	84 474	49 553	50 860	53 375
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)											
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1
5.3 Total costs real terms (2)	40 767	42 036	39 055	42 178	42 897	32 566	45 994	78 560	44 720	45 008	46 419
Total % n/n-1		3,1%	-7,1%	8,0%	1,7%	-24,1%	41,2%		-2,8%	0,6%	3,1%
5.4 Total Service Units	70,7	78,8	90,7	101,9	107,9	43,6	46,2	89,8	75,2	96,1	108,7
Total % n/n-1		11,4%	15,2%	12,3%	5,9%	-59,5%	5,8%		62,8%	27,8%	13,1%
5.5 Unit cost in real terms prices (3)	576,47	533,53	430,46	413,96	397,72	746,28	996,18	874,75	594,93	468,33	426,99
Total % n/n-1		-7,4%	-19,3%	-3,8%	-3,9%	87,6%	33,5%		-40,3%	-21,3%	-8,8%

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 2 - Unit rate calculation

Poland - EPWA
Currency: PLN
All Entities

Reference Period 3

Table 2 A - Adjustments relating to year n		2020/2021	2022	2023	2024
A. Cost-sharing					
Determined costs					
1.1	Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	84 474,5	49 553,4	50 860,4	53 374,9
Inflation adjustment calculation					
2.1	Determined costs subject to inflation adjustment	70 338,3	40 989,4	41 892,7	43 290,2
2.2	Forecast inflation index - Table 1		113,37	116,24	119,15
2.3	Actual inflation index - Table 1				
2.4	Actual / forecast total inflation index (in %)				
2.5	Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)					
3.1	New and existing investments (Art. 28(4))				
3.3	Competent authorities and qualified entities costs (Art. 28(5))				
3.4	Eurocontrol costs (Art. 28(5))				
3.5	Pension costs (Art. 28(6))				
3.6	Interest on loans (Art. 28(6))				
3.7	Changes in law (Art. 28(6))				
3.8	Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				
B. Traffic risk sharing					
Traffic risk sharing adjustment					
4.1	Determined costs subject to traffic risk sharing	79 009,3	46 752,4	48 008,8	50 447,0
4.2	% deviation % referred to in Article 27(2) and 27(5)				
4.3	% additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4	% loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5	% deviation referred to in Article 27(4)				
4.6	Forecast total service units (performance plan)	89,8	75,2	96,1	108,7
4.7	Actual total service units				
4.8	Actual / forecast total service units (in %)				
4.9	Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments					
5.1	For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2	Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3	Traffic adjustments relating to year n (Art. 27(8) and 27(9))				
C. Financial incentive schemes on capacity and environment					
Adjustments relating to financial incentives					
6.1	Financial incentives relating to capacity (Art. 11(3))				
6.2	Financial incentives relating to environment (Art. 11(4))				
6.3	Additional financial incentives relating to capacity (Art. 11(4))				
6.4	Financial incentives relating to year n (Art. 11(3) and 11(4))				
D. Other adjustments					
Modulation of charges					
7.1	Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate					
8.1	Temporary unit rate applied in year n	Footnote 2			
8.2	Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	43 980,5			
Cross-financing between charging zones					
9.1	Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues					
10.1	Union assistance programmes (Art. 25(3)(a))	-671,8	0,0	0,0	0,0
10.2	National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3	Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4	Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5	Total other revenues relating to year n (Art. 25(3))	-671,8	0,0	0,0	0,0
Application of a lower unit rate		Footnote 3			
11.1	Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	0,0	0,0	0,0	0,0
12	Total adjustments relating to year n	43 308,7	0,0	0,0	0,0
Table 2 B - Calculation of the unit rate for year n (1)		2020/2021	2022	2023	2024
13.1	Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	84 474,48	49 553,42	50 860,40	53 374,86
13.2	Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 7 917,18	-	-	-
13.3	Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4	Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	1 611,60	-	- 905,20	-
13.5	Financial incentives : amounts carried over to year n (Art. 25(2)(e))	- 87,73	-	-	-
13.6	Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7	Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 21 502,46	- 9 449,75	- 8 743,44	-
13.8	Other revenues (Art. 25(2)(i))	- 983,07	- 671,77	-	-
13.9	Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10	Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	8 796,10	8 796,10
13.11	Grand total for the calculation of year n unit rate	55 595,6	39 431,9	50 007,9	62 171,0
13.12	Forecast total service units for year n (performance plan)	89,8	75,2	96,1	108,7
13.13	Unit rate for year n as per Art. 25(2) (in national currency)	619,05	524,58	520,36	571,89
13.14	Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00	0,00	0,00
14	Applicable unit rate for year n	619,05	524,58	520,36	571,89

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

4) Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2020

Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2021

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

320,10

343,08

-

-

120,14

122,40

Table 2 - Unit rate calculation

Poland - EPWA
Currency: PLN
PANSA

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	79 009,3	46 752,4	48 008,8	50 447,0
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	66 915,3	39 262,1	40 145,8	41 499,0
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing	79 009,3	46 752,4	48 008,8	50 447,0
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	89,8	75,2	96,1	108,7
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	41 000,0			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	-671,8	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	-671,8	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	40 328,2	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	79 009,27	46 752,37	48 008,76	50 446,99
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 7 395,68	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	1 611,60	-	- 905,20	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	- 87,73	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 20 167,09	- 8 884,65	- 8 139,68	-
13.8 Other revenues (Art. 25(2)(i))	- 983,07	- 671,77	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	8 199,99	8 199,99
13.11 Grand total for the calculation of year n unit rate	51 987,3	37 195,9	47 163,9	58 647,0
13.12 Forecast total service units for year n (performance plan)	89,8	75,2	96,1	108,7
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	578,87	494,84	490,77	539,47
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	578,87	494,84	490,77	539,47

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - EPWA
Currency: PLN
MET IMWM

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	3 422,9	1 727,4	1 746,9	1 791,2
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	3 422,9	1 727,4	1 746,9	1 791,2
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	89,8	75,2	96,1	108,7
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	2 115,0			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	2 115,0	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	3 422,93	1 727,35	1 746,89	1 791,16
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 271,94	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 660,97	- 265,60	- 321,24	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	422,99	422,99
13.11 Grand total for the calculation of year n unit rate	2 490,0	1 461,8	1 848,6	2 214,2
13.12 Forecast total service units for year n (performance plan)	89,8	75,2	96,1	108,7
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	27,73	19,45	19,24	20,37
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	27,73	19,45	19,24	20,37

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

11,06

10,38

-

-

Table 2 - Unit rate calculation

Poland - EPWA
Currency: PLN
NSA

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	2 042,3	1 073,7	1 104,8	1 136,7
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment				
2.2 Forecast inflation index - Table 1				
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	89,8	75,2	96,1	108,7
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	865,6			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	865,6	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	2 042,29	1 073,70	1 104,75	1 136,71
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 249,56	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 674,40	- 299,50	- 282,52	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	173,12	173,12
13.11 Grand total for the calculation of year n unit rate	1 118,3	774,2	995,4	1 309,8
13.12 Forecast total service units for year n (performance plan)	89,8	75,2	96,1	108,7
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	12,45	10,30	10,36	12,05
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	12,45	10,30	10,36	12,05

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - EPWA
Currency: PLN
All Entities

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2 024	After RP
Inflation adjustment 2018	-3 898	-3 898	0	0	0	0	0
Inflation adjustment 2019	-4 019	0	-4 019	0	0	0	0
Total inflation adjustment up to 2019	-7 917	-3 898	-4 019	0	0	0	0
Inflation adjustment 2020-2021	0	0	0	0	0	0	0
Inflation adjustment 2022	0	0	0	0	0	0	0
Inflation adjustment 2023	0	0	0	0	0	0	0
Inflation adjustment 2024	0	0	0	0	0	0	0
Total inflation Adjustment (Art. 26)*	-7 917	-3 898	-4 019	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	0	0	0	0	0	0	0
Traffic risk sharing 2019	0	0	0	0	0	0	0
Total traffic risk sharing adjustments up to 2019	0	0	0	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Traffic risk sharing 2022	0	0	0	0	0	0	0
Traffic risk sharing 2023	0	0	0	0	0	0	0
Traffic risk sharing 2024	0	0	0	0	0	0	0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	0	0	0	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in investment costs 2022	0	0	0	0	0	0	0
Difference in investment costs 2023	0	0	0	0	0	0	0
Difference in investment costs 2024	0	0	0	0	0	0	0
Total adjustment relating to investment costs (Art. 28(4))	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2022	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2023	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2024	0	0	0	0	0	0	0
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2022	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2023	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2024	0	0	0	0	0	0	0
Total adjustment relating to Eurocontrol costs (Art. 28(5))	0	0	0	0	0	0	0
Difference in pension costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in pension costs 2022	0	0	0	0	0	0	0
Difference in pension costs 2023	0	0	0	0	0	0	0
Difference in pension costs 2024	0	0	0	0	0	0	0
Total adjustment relating to pension costs (Art. 28(6))	0	0	0	0	0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in interest on loans 2022	0	0	0	0	0	0	0
Difference in interest on loans 2023	0	0	0	0	0	0	0
Difference in interest on loans 2024	0	0	0	0	0	0	0
Total adjustment relating to interest on loans (Art. 28(6))	0	0	0	0	0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Costs relating to change in law 2022	0	0	0	0	0	0	0
Costs relating to change in law 2023	0	0	0	0	0	0	0
Costs relating to change in law 2024	0	0	0	0	0	0	0
Total adjustment relating to change in law (Art. 28(6))	0	0	0	0	0	0	0
Cost exempt from cost sharing up to 2017	706	0	215	0	492	0	0
Cost exempt from cost sharing 2018	0	0	177	0	-177	0	0
Cost exempt from cost sharing 2019	0	0	1 219	0	-1 219	0	0
Total adjustment relating to cost exempt from previous RPs	706	0	1 612	0	-905	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	-45	-45	0	0	0	0	0
Financial incentives year 2019	-43	0	-43	0	0	0	0
Total financial incentives up to 2019	-88	-45	-43	0	0	0	0
Financial incentives year 2022	0	0	0	0	0	0	0
Financial incentives year 2023	0	0	0	0	0	0	0
Financial incentives year 2024	0	0	0	0	0	0	0
Total financial incentives (Art. 11(3) and 11(4))*	-88	-45	-43	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	0
Modulation of charges year 2018	0	0	0	0	0	0	0
Modulation of charges year 2019	0	0	0	0	0	0	0
Total modulation of charges up to 2019	0	0	0	0	0	0	0
Modulation of charges 2020-2021	0	0	0	0	0	0	0
Modulation of charges 2022	0	0	0	0	0	0	0
Modulation of charges 2023	0	0	0	0	0	0	0

Modulation of charges 2024	0	0	0	0	0	0	0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-11 218	-11 218	0	0	0	0	0
Traffic adjustment 2019	-10 284	0	-10 284	0	0	0	0
Total traffic adjustments up to 2019	-21 502	-11 218	-10 284	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-9 450	0	0	-9 450	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-8 743	0	0	0	-8 743	0	0
Traffic adjustment on adjustments from previous RPs 2022	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2023	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2024	0	0	0	0	0	0	0
Total traffic adjustment on adjustments from previous reference periods	-18 193	0	0	-9 450	-8 743	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Traffic adjustment 2022	0	0	0	0	0	0	0
Traffic adjustment 2023	0	0	0	0	0	0	0
Traffic adjustment 2024	0	0	0	0	0	0	0
Total traffic adjustment (Art. 27(8) and 27(9))*	-39 696	-11 218	-10 284	-9 450	-8 743	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	321	321	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	-1 304	0	-1 304	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	-983	321	-1 304	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	-672	0	0	-672	0	0	0
Revenues received from Union assistance programmes in 2022	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2023	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2024	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	-1 655	321	-1 304	-672	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0	0	0	0	0	0	0
Revenues received from national public funding in 2023	0	0	0	0	0	0	0
Revenues received from national public funding in 2024	0	0	0	0	0	0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0	0	0
Revenues from commercial activities in 2022	0	0	0	0	0	0	0
Revenues from commercial activities in 2023	0	0	0	0	0	0	0
Revenues from commercial activities in 2024	0	0	0	0	0	0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2022	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2023	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2024	0	0	0	0	0	0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	43 981	0	0	0	8 796	8 796	26 388
Revenue difference - revision of UR 2022	0	0	0	0	0	0	0
Revenue difference - revision of UR 2023	0	0	0	0	0	0	0
Revenue difference - revision of UR 2024	0	0	0	0	0	0	0
Total revenue differences from temporary application of UR (Art. 29(5))	43 981	0	0	0	8 796	8 796	26 388
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024	0	0	0	0	0	0	0
Total cross-financing to (-) / from (+) other charging zone(s)	0	0	0	0	0	0	0
Total adjustments	-4 668	-14 840	-14 039	-10 122	-853	8 796	26 388

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - EPWA
Currency: PLN
PANSA

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-3 645	-3 645					
Inflation adjustment 2019	-3 751		-3 751				
Total inflation adjustment up to 2019	-7 396	-3 645	-3 751				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	-7 396	-3 645	-3 751	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	0	0	0	0	0	0	0
Traffic risk sharing 2019	0		0	0	0	0	0
Total traffic risk sharing adjustments up to 2019	0	0	0	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
Traffic risk sharing 2022	0					0	
Traffic risk sharing 2023	0						0
Traffic risk sharing 2024	0						0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	0	0	0	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	706		215	0	492	0	0
Cost exempt from cost sharing 2018	0		177	0	-177	0	0
Cost exempt from cost sharing 2019	0		1 219	0	-1 219	0	0
Total adjustment relating to cost exempt from previous RPs	706	0	1 612	0	-905	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	-45	-45					
Financial incentives year 2019	-43		-43				
Total financial incentives up to 2019	-88	-45	-43	0	0	0	0
Financial incentives year 2022	0					0	
Financial incentives year 2023	0						0
Financial incentives year 2024	0						0
Total financial incentives (Art. 11(3) and 11(4))*	-88	-45	-43	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-10 584	-10 584	0	0	0	0	0
Traffic adjustment 2019	-9 583		-9 583	0	0	0	0
Total traffic adjustments up to 2019	-20 167	-10 584	-9 583	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-8 885			-8 885	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-8 140				-8 140	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-17 024	0	0	-8 885	-8 140	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-37 191	-10 584	-9 583	-8 885	-8 140	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	321	321	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	-1 304	0	-1 304	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	-983	321	-1 304	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	-672	0	0	-672	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	-1 655	321	-1 304	-672	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	0
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	0
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	41 000				-8 200	8 200	24 600
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	41 000	0	0	0	8 200	8 200	24 600
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	-4 623	-13 953	-13 069	-9 556	-845	8 200	24 600

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - EPWA
Currency: PLN
MET IMWM

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-132	-132					
Inflation adjustment 2019	-140		-140				
Total inflation adjustment up to 2019	-272	-132	-140				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	-272	-132	-140	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-285	-285	0	0	0	0	0
Traffic adjustment 2019	-376		-376	0	0	0	0
Total traffic adjustments up to 2019	-661	-285	-376	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-266			-266	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-321				-321	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-587	0	0	-266	-321	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-1 248	-285	-376	-266	-321	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	2 115				423	423	1 269
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	2 115	0	0	0	423	423	1 269
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	595	-417	-516	-266	102	423	1 269

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - EPWA
Currency: PLN
NSA

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-122	-122					
Inflation adjustment 2019	-128		-128				
Total inflation adjustment up to 2019	-250	-122	-128				
Inflation adjustment 2020-2021							
Inflation adjustment 2022							
Inflation adjustment 2023							
Inflation adjustment 2024							
Total inflation Adjustment (Art. 26)*	-250	-122	-128	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)							
Difference in investment costs 2022							
Difference in investment costs 2023							
Difference in investment costs 2024							
Total adjustment relating to investment costs (Art. 28(4))							
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0				0		
Difference in competent authorities and QEs costs 2022	0					0	
Difference in competent authorities and QEs costs 2023	0						0
Difference in competent authorities and QEs costs 2024	0						0
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))	0				0	0	0
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)							
Difference in pension costs 2022							
Difference in pension costs 2023							
Difference in pension costs 2024							
Total adjustment relating to pension costs (Art. 28(6))							
Difference in interest on loans 2020-2021 (exceptional measures)							
Difference in interest on loans 2022							
Difference in interest on loans 2023							
Difference in interest on loans 2024							
Total adjustment relating to interest on loans (Art. 28(6))							
Costs relating to change in law 2020-2021 (exceptional measures)							
Costs relating to change in law 2022							
Costs relating to change in law 2023							
Costs relating to change in law 2024							
Total adjustment relating to change in law (Art. 28(6))							
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-349	-349	0	0	0	0	0
Traffic adjustment 2019	-326		-326	0	0	0	0
Total traffic adjustments up to 2019	-674	-349	-326	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-299			-299	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-283				-283	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-582	0	0	-299	-283	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-1 256	-349	-326	-299	-283	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	866				173	173	519
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	866	0	0	0	173	173	519
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	-640	-470	-454	-299	-109	173	519

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Poland - IPWA

[illegible]

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Poland - EPWA	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	44 126 045	84 474 485	49 553 419	50 860 403	53 374 860	21,0%
Total terminal costs in real terms (in national currency at 2017 prices)	42 896 651	78 559 701	44 719 749	45 007 691	46 418 555	8,2%
Total terminal costs in real terms (in EUR2017) ¹	10 081 872	18 463 652	10 510 349	10 578 023	10 909 615	8,2%
YoY variation		83,1%	-43,1%	0,6%	3,1%	
Total terminal Service Units (TNSU)	107 857	89 808	75 168	96 102	108 711	0,8%
YoY variation		-16,7%	-16,3%	27,8%	13,1%	
Real terminal unit costs (in national currency at 2017 prices)	397,72	874,75	594,93	468,33	426,99	7,4%
Real terminal unit costs (in EUR2017) ¹	93,47	205,59	139,82	110,07	100,35	7,4%
YoY variation		119,9%	-32,0%	-21,3%	-8,8%	

National currency	PLN
¹ Average exchange rate 2017 (1 EUR=)	4,25

b) Information on the baseline values for the determined costs and the determined unit costs

Terminal charging zone Poland - EPWA	Baseline 2019	Actuals 2019	2019 Baseline adjustments
	2019 B	2019 A	
Total terminal costs in nominal terms (in national currency)	44 126 045	44 126 045	0
Total terminal costs in real terms (in national currency at 2017 prices)	42 896 651	42 896 651	0
Total terminal costs in real terms (in EUR2017) ¹	10 081 872	10 081 872	0
Total terminal Service Units (TNSU)	107 857	107 857	0

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex B.1.2 TNC OTHER Reporting Tables

			Legend for the Check sheet								
PRAWDA	Cells highlighted in green indicate that the items checked are equal and different to 0										
PRAWDA	Cells highlighted in pale yellow indicate that the items entering the check are blank or 0										
FALSZ	Cells highlighted in red indicate that the items checked are not equal										
FALSZ	Cells highlighted in pale yellow indicate that one of the items entering the check is blank or 0										
#DIV/0	Cells highlighted in orange indicate formulae that resulted in error										
N/A	Cells highlighted in white with grey "N/A" indicate that the check is not applicable for the given combination of year and/or RP										
INFORMATION ON COSTS AND UNIT COSTS - TABLE 1						Rounding (dec. pls)	Determined				
#	Item	Checks for T1 (consolidated)				2020	2021	2020/2021	2022	2023	2024
#001	4.2	Check that values in Table 1 Consolidated are sums of the same items across all the entities (in '000 NC) Total determined/actual costs (in '000 NC) Sum of Total determined/actual costs for all entities (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				111 559,562	158 432,007	269 991,569	151 059,770	152 053,412	151 684,889	151 684,889	151 684,889
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) Sum of items 1.1 to 1.5 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				111 929,606	158 770,317	270 699,923	151 325,308	152 310,868	151 961,886	151 961,886	151 961,886
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) Sum of items 2.1 to 2.9 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				111 929,606	158 770,317	270 699,923	151 325,308	152 310,868	151 961,886	151 961,886	151 961,886
#004	2.10	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) Total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				111 929,606	158 770,317	270 699,923	151 325,308	152 310,868	151 961,886	151 961,886	151 961,886
#100	5.1	Check that inflation rate is not negative Inflation rate	3	PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				3,70%	3,20%			2,52%	2,53%	2,50%	2,50%
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				107,15	110,58			113,37	116,24	119,15	119,15
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1698,29	2396,86	2043,57	1356,48	1074,08	952,48	952,48	952,48
#063	4.2	Check total costs after deduction of costs for exempted VFR Total determined/actual costs(in '000 NC) Total costs by service deducted by Costs for exempted VFR flights (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				111 559,562	158 432,007	269 991,569	151 059,770	152 053,412	151 684,889	151 684,889	151 684,889
#067	4.2	Check the sum of costs by airports (in '000 NC) Total determined/actual costs in T1 Consolidated (in '000 NC) Sum of items 4.2 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				111 559,562	158 432,007	269 991,569	151 059,770	152 053,412	151 684,889	151 684,889	151 684,889
#067_1.1	1.1	Check the sum of Staff costs by airports (in '000 NC) Staff costs in T1 Consolidated (in '000 NC) Sum of items 1.1 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				67 079,130	97 435,926	164 515,056	88 457,094	87 908,379	86 770,294	86 770,294	86 770,294
#067_1.2	1.2	Check the sum of Other operating costs by airports (in '000 NC) Other operating costs in T1 Consolidated (in '000 NC) Sum of items 1.2 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				22 564,527	36 616,473	59 181,000	38 289,114	39 346,481	38 979,335	38 979,335	38 979,335
#067_1.3	1.3	Check the sum of Depreciation by airports (in '000 NC) Depreciation in T1 Consolidated (in '000 NC) Sum of items 1.3 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				13 740,071	15 338,017	29 078,089	15 426,337	15 838,471	17 181,344	17 181,344	17 181,344
#067_1.4	1.4	Check the sum of Cost of capital by airports (in '000 NC) Cost of capital in T1 Consolidated (in '000 NC) Sum of items 1.4 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				8 545,877	9 379,902	17 925,779	9 152,762	9 217,536	9 030,913	9 030,913	9 030,913
#067_1.5	1.5	Check the sum of Exceptional items by airports (in '000 NC) Exceptional items in T1 Consolidated (in '000 NC) Sum of items 1.5 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
#067_2.1	2.1	Check the sum of Air Traffic Management by airports (in '000 NC) Air Traffic Management in T1 Consolidated (in '000 NC) Sum of items 2.1 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				67 095,734	97 074,740	164 170,474	93 378,307	92 605,385	91 905,150	91 905,150	91 905,150
#067_2.2	2.2	Check the sum of Communication by airports (in '000 NC) Communication in T1 Consolidated (in '000 NC) Sum of items 2.2 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				2 567,644	3 564,927	6 132,571	3 376,196	3 252,454	3 261,791	3 261,791	3 261,791
#067_2.3	2.3	Check the sum of Navigation by airports (in '000 NC) Navigation in T1 Consolidated (in '000 NC) Sum of items 2.3 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				8 700,785	11 080,011	19 780,796	9 630,960	9 820,970	9 215,446	9 215,446	9 215,446
#067_2.4	2.4	Check the sum of Surveillance by airports (in '000 NC) Surveillance in T1 Consolidated (in '000 NC) Sum of items 2.4 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				3 651,508	4 166,059	7 817,568	4 196,856	4 105,338	3 836,934	3 836,934	3 836,934
#067_2.5	2.5	Check the sum of Search and Rescue by airports (in '000 NC) Search and Rescue in T1 Consolidated (in '000 NC) Sum of items 2.5 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
#067_2.6	2.6	Check the sum of Aeronautical Information by airports (in '000 NC) Aeronautical Information in T1 Consolidated (in '000 NC) Sum of items 2.6 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				5 658,143	17 339,845	22 997,989	14 844,604	14 229,988	13 864,578	13 864,578	13 864,578
#067_2.7	2.7	Check the sum of Meteorological services by airports (in '000 NC) Meteorological services in T1 Consolidated (in '000 NC) Sum of items 2.7 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				19 947,546	21 107,812	41 055,358	21 300,772	23 566,129	25 010,545	25 010,545	25 010,545
#067_2.8	2.8	Check the sum of Supervision costs by airports (in '000 NC) Supervision costs in T1 Consolidated (in '000 NC) Sum of items 2.8 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443	4 867,443	4 867,443
#067_4.1	4.1	Check the sum of costs for exempted VFR flights by airports (in '000 NC) Costs for exempted VFR flights in T1 Consolidated (in '000 NC) Sum of items 4.1 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				370,044	338,310	708,354	265,538	257,456	276,997	276,997	276,997
#067_2.9	2.9	Check the sum of Other State costs by airports (in '000 NC) Other State costs in T1 Consolidated (in '000 NC) Sum of items 2.9 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
#067b	5.3	Check the sum of costs by airports (in '000 NC) Total costs in real terms in T1 Consolidated (in '000 NC) Sum of items 5.3 for all airports (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				105 891,226	146 061,778	251 953,004	136 686,738	134 971,838	132 304,826	132 304,826	132 304,826
#	Item	Checks for T1 ANSP PANSA									
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				85 661,630	130 754,140	216 415,770	122 566,271	120 850,649	117 535,607	117 535,607	117 535,607
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				85 661,630	130 754,140	216 415,770	122 566,271	120 850,649	117 535,607	117 535,607	117 535,607
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				85 661,630	130 754,140	216 415,770	122 566,271	120 850,649	117 535,607	117 535,607	117 535,607
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				6 428,360	9 472,702	15 901,061	9 837,894	9 468,533	9 216,059	9 216,059	9 216,059
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				107,15	110,58			113,37	116,24	119,15	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs real terms (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				81 294,641	120 409,199	201 703,839	110 758,198	107 130,579	102 211,455	102 211,455	102 211,455
#016	5.4	Check that Service Units are the same for all entities (in '000) Total Service Units (ANSP PANSA) - Note: (check sum for combined year 2020-2021) Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				62,352	60,939	123,291	100,766	125,663	138,906	138,906	138,906
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1303,81	1975,90	1636,00	1099,16	852,53	735,83	735,83	735,83
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) Inflation rate (%) (ANSP PANSA) Inflation rate (%) (Consolidated)		PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				3,70%	3,20%			2,52%	2,53%	2,50%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) Price Index (ANSP PANSA) Price Index (Consolidated)		PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				107,15	110,58			113,37	116,24	119,15	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate Cost of capital pre tax rate (%) Cost of capital / total asset base (%)	3	PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				5,700%	5,800%			5,800%	5,900%	5,900%	5,900%
#020	3.8	Check proportion of financing through equity is coherent with components Proportion of financing through equity calculated from components is (in %): Proportion of financing through equity is (in %):	3	PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				40,00%	40,00%			40,00%	40,00%	40,00%	40,00%
#018	3.4	Check total asset base (in '000 NC) Sum of assets (in '000 NC) Total asset base (in '000 NC)	3	PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				137 433,741	151 158,116			150 615,611	148 711,292	141 407,546	141 407,546
#065	3.4	Check that no cost of capital is calculated if no asset base is reported Total asset base (in '000 NC) Cost of capital (in '000 NC)	3	PRAWDA	PRAWDA			PRAWDA	PRAWDA	PRAWDA	PRAWDA
				137 433,741	151 158,116			150 615,611	148 711,292	141 407,546	141 407,546
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021) Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				7 878,573	8 783,851			8 799,896	8 738,827	8 340,708	8 340,708
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) Cost of capital - item 3.11 (in '000 NC) NBV of fixed assets * WACC rate (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				7 185,872	7 732,436			7 806,926	7 753,637	7 379,025	7 379,025
#	Item	Checks for T1 ANSP Modlin									
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,000	0,000	0,000	0,000	0,000	0,000
				0,000	0,000	0,000	0,000	0,000	0,000
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,000	0,000	0,000	0,000	0,000	0,000
				0,000	0,000	0,000	0,000	0,000	0,000
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	FALSZ	FALSZ	FALSZ	FALSZ	FALSZ	FALSZ
				0,000	0,000	0,000	0,000	0,000	0,000
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs real terms (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,000	0,000	0,000	0,000	0,000	0,000
				0,000	0,000	0,000	0,000	0,000	0,000
#016	5.4	Check that Service Units are the same for all entities (in '000) Total Service Units (ANSP Modlin) - Note: (check sum for combined year 2020-2021) Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				62,352	60,939	123,291	100,766	125,663	138,906
				62,352	60,939	123,291	100,766	125,663	138,906
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				0,00	0,00	0,00	0,00	0,00	0,00
				0,00	0,00	0,00	0,00	0,00	0,00
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) Inflation rate (%) (ANSP Modlin) Inflation rate (%) (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				3,70%	3,20%		2,52%	2,53%	2,50%
				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) Price Index (ANSP Modlin) Price Index (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate Cost of capital pre tax rate (%) Cost of capital / total asset base (%)	3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#020	3.8	Check proportion of financing through equity is coherent with components Proportion of financing through equity calculated from components is (in %): Proportion of financing through equity is (in %):	3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#018	3.4	Check total asset base (in '000 NC) Sum of assets (in '000 NC) Total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
				0,000	0,000		0,000	0,000	0,000
#065	3.4	Check that no cost of capital is calculated if no asset base is reported Total asset base (in '000 NC) Cost of capital (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
				0,000	0,000		0,000	0,000	0,000
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021) Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	N/A	N/A	N/A	N/A	N/A	N/A
				N/A	N/A	N/A	N/A	N/A	N/A
				N/A	N/A	N/A	N/A	N/A	N/A
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) Cost of capital - item 3.11 (in '000 NC) NBV of fixed assets * WACC rate (in '000 NC)	3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#	Item Checks for T1 ANSP Bydgoszcz								
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				453,275	467,864	921,139	687,369	949,694	1 734,650
				453,275	467,864	921,139	687,369	949,694	1 734,650
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				453,275	467,864	921,139	687,369	949,694	1 734,650
				453,275	467,864	921,139	687,369	949,694	1 734,650
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				453,275	467,864	921,139	687,369	949,694	1 734,650
				453,275	467,864	921,139	687,369	949,694	1 734,650
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				25,695	28,109	53,804	29,997	35,567	52,029
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs real terms (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				306,945	375,509	682,454	590,531	834,956	1 551,473
				306,945	375,509	682,454	590,531	834,956	1 551,473
#016	5.4	Check that Service Units are the same for all entities (in '000) Total Service Units (ANSP Bydgoszcz) - Note: (check sum for combined year 2020-2021) Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				62,352	60,939	123,291	100,766	125,663	138,906
				62,352	60,939	123,291	100,766	125,663	138,906
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				4,92	6,16	5,54	5,86	6,64	11,17
				4,92	6,16	5,54	5,86	6,64	11,17
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) Inflation rate (%) (ANSP Bydgoszcz) Inflation rate (%) (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				3,70%	3,20%		2,52%	2,53%	2,50%
				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) Price Index (ANSP Bydgoszcz) Price Index (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate Cost of capital pre tax rate (%) Cost of capital / total asset base (%)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				5,100%	4,800%		4,900%	4,900%	5,200%
				5,100%	4,800%		4,900%	4,900%	5,200%
#020	3.8	Check proportion of financing through equity is coherent with components Proportion of financing through equity calculated from components is (in %): Proportion of financing through equity is (in %):	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				99,00%	99,90%		100,00%	41,00%	35,00%
				99,00%	99,90%		100,00%	41,00%	35,00%
#018	3.4	Check total asset base (in '000 NC) Sum of assets (in '000 NC) Total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				177,418	11,601		145,667	1 469,087	4 317,675
				177,418	11,601		145,667	1 469,087	4 317,675
#065	3.4	Check that no cost of capital is calculated if no asset base is reported Total asset base (in '000 NC) Cost of capital (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				177,418	11,601		145,667	1 469,087	4 317,675
				9,082	0,560		7,118	72,635	226,315
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021) Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				18,042	14,602	32,644	15,879	132,981	487,081
				18,042	14,602	32,644	15,879	132,981	487,081
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) Cost of capital - item 3.11 (in '000 NC) NBV of fixed assets * WACC rate (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				9,838	1,311		1,570	62,969	208,299
				9,838	1,311		1,570	62,969	208,299
#	Item Checks for T1 ANSP Warmia i Mazury								
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 558,911	2 003,579	3 562,490	2 173,284	2 213,791	2 813,641
				1 558,911	2 003,579	3 562,490	2 173,284	2 213,791	2 813,641
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 558,911	2 003,579	3 562,490	2 173,284	2 213,791	2 813,641
				1 558,911	2 003,579	3 562,490	2 173,284	2 213,791	2 813,641
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 558,911	2 003,579	3 562,490	2 173,284	2 213,791	2 813,641
				1 558,911	2 003,579	3 562,490	2 173,284	2 213,791	2 813,641
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				135,112	178,869	313,980	193,295	201,478	216,583
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs real terms (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 348,778	1 631,440	2 980,218	1 747,183	1 730,522	2 254,219
				1 348,778	1 631,440	2 980,218	1 747,183	1 730,522	2 254,219
#016	5.4	Check that Service Units are the same for all entities (in '000) Total Service Units (ANSP Warmia i Mazury) - Note: (check sum for combined year 2020-2021) Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				62,352	60,939	123,291	100,766	125,663	138,906
				62,352	60,939	123,291	100,766	125,663	138,906
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				21,63	26,77	24,17	17,34	13,77	16,23
				21,63	26,77	24,17	17,34	13,77	16,23
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) Inflation rate (%) (ANSP Warmia i Mazury) Inflation rate (%) (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				3,70%	3,20%		2,52%	2,53%	2,50%
				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) Price Index (ANSP Warmia i Mazury) Price Index (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate Cost of capital pre tax rate (%) Cost of capital / total asset base (%)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				5,100%	4,800%		4,900%	4,900%	4,900%
				5,100%	4,800%		4,900%	4,900%	4,900%
#020	3.8	Check proportion of financing through equity is coherent with components Proportion of financing through equity calculated from components is (in %): Proportion of financing through equity is (in %):	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				100,00%	100,00%		100,00%	100,00%	100,00%
				100,00%	100,00%		100,0		

Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)				114,627	121,062	235,689	155,044	117,120	466,054
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital - item 3.11 (in '000 NC)				44,620	41,490		45,956	39,874	97,347
NBV of fixed assets * WACC rate (in '000 NC)				44,620	41,490		45,956	39,874	97,347
#	Item	Checks for T1 MET IMWM							
#002	1.6	Check the sum of costs by nature (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				16 987,796	17 845,903	34 833,699	17 942,032	18 436,618	19 852,245
Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)				16 987,796	17 845,903	34 833,699	17 942,032	18 436,618	19 852,245
#003	2.10	Check the sum of costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				16 987,796	17 845,903	34 833,699	17 942,032	18 436,618	19 852,245
Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)				16 987,796	17 845,903	34 833,699	17 942,032	18 436,618	19 852,245
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				16 987,796	17 845,903	34 833,699	17 942,032	18 436,618	19 852,245
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				16 987,796	17 845,903	34 833,699	17 942,032	18 436,618	19 852,245
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)				610,903	759,841	1 370,744	779,187	768,000	792,878
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017)	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Calculated price index				107,15	110,58		113,37	116,24	119,15
Price Index				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021)				15 955,838	16 287,065	32 242,903	16 013,663	16 088,505	17 040,452
Total costs real terms (in '000 NC)				15 955,838	16 287,065	32 242,903	16 013,663	16 088,505	17 040,452
#016	5.4	Check that Service Units are the same for all entities (in '000)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total Service Units (MET IMWM) - Note: (check sum for combined year 2020-2021)				62,352	60,939	123,291	100,766	125,663	138,906
Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)				62,352	60,939	123,291	100,766	125,663	138,906
#017b	5.5	Check calculation of the unit cost for RP3	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs real terms / Total service units				255,90	267,27	261,52	158,92	128,03	122,68
Unit Cost				255,90	267,27	261,52	158,92	128,03	122,68
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Inflation rate (%) (MET IMWM)				3,70%	3,20%		2,52%	2,53%	2,50%
Inflation rate (%) (Consolidated)				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Price Index (MET IMWM)				107,15	110,58		113,37	116,24	119,15
Price Index (Consolidated)				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital pre tax rate (%)				3,000%	3,200%		2,700%	3,100%	3,300%
Cost of capital / total asset base (%)				3,000%	3,200%		2,700%	3,100%	3,300%
#020	3.8	Check proportion of financing through equity is coherent with components	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Proportion of financing through equity calculated from components is (in %):				64,00%	69,00%		50,00%	64,00%	72,00%
Proportion of financing through equity is (in %):				64,00%	69,00%		50,00%	64,00%	72,00%
#018	3.4	Check total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Sum of assets (in '000 NC)				16 170,707	15 109,138		8 074,002	8 369,681	7 978,953
Total asset base (in '000 NC)				16 170,707	15 109,138		8 074,002	8 369,681	7 978,953
#065	3.4	Check that no cost of capital is calculated if no asset base is reported	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Total asset base (in '000 NC)				16 170,707	15 109,138		8 074,002	8 369,681	7 978,953
Cost of capital (in '000 NC)				493,206	481,982		217,191	256,949	261,710
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 026,078	1 073,022	2 099,101	1 372,306	1 372,306	2 092,306
Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)				1 026,078	1 073,022	2 099,101	1 372,306	1 372,306	2 092,306
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital - item 3.11 (in '000 NC)				166,012	155,794		126,561	110,981	101,263
NBV of fixed assets * WACC rate (in '000 NC)				166,012	155,794		126,561	110,981	101,263
#	Item	Checks for T1 MET Radom							
#002	1.6	Check the sum of costs by nature (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				99,678	107,250	206,927	109,078	1 828,659	1 766,026
Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)				99,678	107,250	206,927	109,078	1 828,659	1 766,026
#003	2.10	Check the sum of costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				99,678	107,250	206,927	109,078	1 828,659	1 766,026
Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)				99,678	107,250	206,927	109,078	1 828,659	1 766,026
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021)				99,678	107,250	206,927	109,078	1 828,659	1 766,026
Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)				99,678	107,250	206,927	109,078	1 828,659	1 766,026
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)				3,137	4,213	7,350	4,213	122,276	122,276
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017)	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Calculated price index				107,15	110,58		113,37	116,24	119,15
Price Index				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021)				94,507	98,785	193,292	98,332	1 590,293	1 502,465
Total costs real terms (in '000 NC)				94,507	98,785	193,292	98,332	1 590,293	1 502,465
#016	5.4	Check that Service Units are the same for all entities (in '000)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total Service Units (MET Radom) - Note: (check sum for combined year 2020-2021)				62,352	60,939	123,291	100,766	125,663	138,906
Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)				62,352	60,939	123,291	100,766	125,663	138,906
#017b	5.5	Check calculation of the unit cost for RP3	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
Total costs real terms / Total service units				1,52	1,62	1,57	0,98	12,66	10,82
Unit Cost				1,52	1,62	1,57	0,98	12,66	10,82
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Inflation rate (%) (MET Radom)				3,70%	3,20%		2,52%	2,53%	2,50%
Inflation rate (%) (Consolidated)				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Price Index (MET Radom)				107,15	110,58		113,37	116,24	119,15
Price Index (Consolidated)				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Cost of capital pre tax rate (%)				5,100%	5,100%		5,200%	5,200%	5,200%
Cost of capital / total asset base (%)				5,100%	5,100%		5,200%	5,200%	5,200%
#020	3.8	Check proportion of financing through equity is coherent with components	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Proportion of financing through equity calculated from components is (in %):				100,00%	100,00%		100,00%	100,00%	100,00%
Proportion of financing through equity is (in %):				100,00%	100,00%		100,00%	100,00%	100,00%
#018	3.4	Check total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Sum of assets (in '000 NC)				106,325	130,337		209,874	840,235	904,432
Total asset base (in '000 NC)				106,325	130,337		209,874	840,235	904,432
#065	3.4	Check that no cost of capital is calculated if no asset base is reported	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
Total asset base (in '000 NC)</									

#018	3.4	Check total asset base (in '000 NC) Sum of assets (in '000 NC) Total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				1 839,611	991,136		1 122,157	1 058,440	901,875
				1 839,611	991,136		1 122,157	1 058,440	901,875
#065	3.4	Check that no cost of capital is calculated if no asset base is reported Total asset base (in '000 NC) Cost of capital (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				1 839,611	991,136		1 122,157	1 058,440	901,875
				104,913	53,571		58,027	52,627	44,069
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021) Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				224,744	233,792	458,536	216,245	207,130	203,272
				224,744	233,792	458,536	216,245	207,130	203,272
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) Cost of capital - item 3.11 (in '000 NC) NBV of fixed assets * WACC rate (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				100,293	50,152		40,104	30,590	21,734
				100,293	50,152		40,104	30,590	21,734
# Item Checks for T1 MET Warmia i Mazury									
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 1.1 to 1.5 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 208,924	1 241,932	2 450,856	1 278,356	1 310,502	1 314,242
				1 208,924	1 241,932	2 450,856	1 278,356	1 310,502	1 314,242
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021) Sum of items 2.1 to 2.9 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 208,924	1 241,932	2 450,856	1 278,356	1 310,502	1 314,242
				1 208,924	1 241,932	2 450,856	1 278,356	1 310,502	1 314,242
#004	2.1	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs by service (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 208,924	1 241,932	2 450,856	1 278,356	1 310,502	1 314,242
				1 208,924	1 241,932	2 450,856	1 278,356	1 310,502	1 314,242
#091	1.1	Check that pension costs (in '000 NC) are filled in and different from 0 Pension costs (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				58,447	59,238	117,685	61,700	65,523	65,843
#009	5.2	Check calculation of Determined/Actual inflation index (base 100 in 2017) Calculated price index Price Index	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) - Note: (check sum for combined year 2020-2021) Total costs real terms (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				1 126,870	1 119,625	2 246,495	1 122,853	1 122,513	1 098,220
				1 126,870	1 119,625	2 246,495	1 122,853	1 122,513	1 098,220
#016	5.4	Check that Service Units are the same for all entities (in '000) Total Service Units (MET Warmia i Mazury) - Note: (check sum for combined year 2020-2021) Total Service Units (Consolidated) - Note: (check sum for combined year 2020-2021)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				62,352	60,939	123,291	100,766	125,663	138,906
				62,352	60,939	123,291	100,766	125,663	138,906
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				18,07	18,37	18,22	11,14	8,93	7,91
				18,07	18,37	18,22	11,14	8,93	7,91
#006	5.1	Check that inflation rate for the entity is the same as at Charging Zone level (in %) Inflation rate (%) (MET Warmia i Mazury) Inflation rate (%) (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				3,70%	3,20%		2,52%	2,53%	2,50%
				3,70%	3,20%		2,52%	2,53%	2,50%
#006b	5.2	Check that inflation index for the entity is the same as at Charging Zone level (in %) Price Index (MET Warmia i Mazury) Price Index (Consolidated)		PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				107,15	110,58		113,37	116,24	119,15
				107,15	110,58		113,37	116,24	119,15
#019	3.5	Check calculation of cost of capital pre-tax rate Cost of capital pre tax rate (%) Cost of capital / total asset base (%)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				5,100%	4,800%		4,900%	4,900%	4,900%
				5,100%	4,800%		4,900%	4,900%	4,900%
#020	3.8	Check proportion of financing through equity is coherent with components Proportion of financing through equity calculated from components is (in %): Proportion of financing through equity is (in %):	2	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				100,00%	100,00%		100,00%	100,00%	100,00%
				100,00%	100,00%		100,00%	100,00%	100,00%
#018	3.4	Check total asset base (in '000 NC) Sum of assets (in '000 NC) Total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				169,401	174,707		196,605	172,801	154,375
				169,401	174,707		196,605	172,801	154,375
#065	3.4	Check that no cost of capital is calculated if no asset base is reported Total asset base (in '000 NC) Cost of capital (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				169,401	174,707		196,605	172,801	154,375
				8,604	8,441		9,607	8,444	7,543
#087	3.10	Check that depreciation in item 3.10 is the same as in item 1.3 (in '000 NC) Depreciation - item 3.10 (in '000 NC) - Note: (check sum for combined year 2020-2021) Depreciation - item 1.3 (in '000 NC) - Note: (check sum for combined year 2020-2021)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				15,615	24,619	40,234	25,785	24,469	23,936
				15,615	24,619	40,234	25,785	24,469	23,936
#088	3.11	Check that cost of capital in item 3.11 is calculated based on NBV of fixed assets (in '000 NC) Cost of capital - item 3.11 (in '000 NC) NBV of fixed assets * WACC rate (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				7,844	7,773		8,848	7,626	6,726
				7,844	7,773		8,848	7,626	6,726
# Item Checks for T1 NSA									
#002	1.6	Check the sum of costs by nature (in '000 NC) Total costs by nature (in '000 NC) Sum of items 1.1 to 1.5 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
#003	2.10	Check the sum of costs by service (in '000 NC) Total costs by service (in '000 NC) Sum of items 2.1 to 2.9 (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
#004	2.10	Check that total costs by nature equals total costs by service (in '000 NC) Total costs by nature (in '000 NC) Total costs by service (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
#014 RP3	5.3	Check total costs into real terms (in '000 NC) RP3 Total determined/actual costs after deduction of costs for exempted VFR flights / price index (in '000 NC) Total costs real terms (in '000 NC)	3	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
				4 308,244	4 436,923	8 745,167	4 597,612	4 730,605	4 867,443
#016	5.4	Check that Service Units are the same for all entities (in '000) Total Service Units (NSA) Total Service Units (Consolidated)		PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				62	61	123	101	126	139
				62	61	123	101	126	139
#017b	5.5	Check calculation of the unit cost for RP3 Total costs real terms / Total service units Unit Cost	2	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA	PRAWDA
				69,10	72,81	70,93	45,63	37,65	35,04
				69,10	72,81	70,93	45,63	37,65	35,04
#019	3.5	Check calculation of cost of capital pre-tax rate Cost of capital pre tax rate (%) Cost of capital / total asset base (%)	3	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#020	3.8	Check proportion of financing through equity is coherent with components Proportion of financing through equity calculated from components is (in %): Proportion of financing through equity is (in %):	2	N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
				N/A	N/A		N/A	N/A	N/A
#018	3.4	Check total asset base (in '000 NC) Sum of assets (in '000 NC) Total asset base (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
				0,000	0,000		0,000	0,000	0,000
#065	3.4	Check that no cost of capital is calculated if no asset base is reported Total asset base (in '000 NC) Cost of capital (in '000 NC)	3	PRAWDA	PRAWDA		PRAWDA	PRAWDA	PRAWDA
				0,000	0,000		0,000	0,000	0,000
				0,000	0,000		0,000	0,000	0,000

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
All Entities

		Actual costs 2015-2019					Determined costs - Performance Plan - RP3					
Cost details		2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)												
1.1 Staff of which, pension costs		54 280	57 360	53 630	63 828	68 230	67 079	97 436	164 515	88 457	87 908	86 770
							7 782	11 079	18 860	11 516	11 287	11 109
1.2 Other operating costs		19 432	19 164	19 477	22 150	28 567	22 565	36 616	59 181	38 289	39 346	38 979
1.3 Depreciation		6 213	7 665	8 345	10 071	12 976	13 740	15 338	29 078	15 426	15 838	17 181
1.4 Cost of capital		5 193	5 978	5 845	4 888	5 182	8 546	9 380	17 926	9 153	9 218	9 031
1.5 Exceptional items		0	0	0	0	0	0	0	0	0	0	0
1.6 Total costs		85 119	90 167	87 297	100 938	114 955	111 930	158 770	270 700	151 325	152 311	151 962
Total	% n/n-1		5,9%	-3,2%	15,6%	13,9%	-2,6%	41,8%		-4,7%	0,7%	-0,2%
2. Detail by service (in nominal terms)												
2.1 Air Traffic Management		58 878	62 392	53 459	63 854	72 640	67 096	97 075	164 170	93 378	92 605	91 905
2.2 Communication		2 157	2 205	2 102	2 283	2 694	2 568	3 565	6 133	3 376	3 252	3 262
2.3 Navigation		8 321	7 486	8 036	7 498	9 323	8 701	11 080	19 781	9 631	9 821	9 215
2.4 Surveillance		2 093	2 094	2 026	4 504	4 211	3 652	4 166	7 818	4 197	4 105	3 837
2.5 Search and rescue		0	0	0	0	0	0	0	0	0	0	0
2.6 Aeronautical Information		901	999	4 362	4 551	4 626	5 658	17 340	22 998	14 845	14 230	13 865
2.7 Meteorological services		10 287	12 529	14 961	15 660	18 385	19 948	21 108	41 055	21 301	23 566	25 011
2.8 Supervision costs		2 482	2 460	2 349	2 588	3 076	4 308	4 437	8 745	4 598	4 731	4 867
2.9 Other State costs		0	0	0	0	0	0	0	0	0	0	0
2.10 Total costs		85 119	90 167	87 297	100 938	114 955	111 930	158 770	270 700	151 325	152 311	151 962
Total	% n/n-1		5,9%	-3,2%	15,6%	13,9%	-2,6%	41,8%		-4,7%	0,7%	-0,2%
3. Complementary information (in nominal terms)												
Average asset base												
3.1 Net book val. fixed assets		81 032	93 408	101 132	128 830	134 222	133 804	139 936		140 258	138 654	135 165
3.2 Adjustments total assets		0	0	0	0	0	0	0		0	0	0
3.3 Net current assets		8 073	11 129	12 074	14 580	15 062	23 000	28 568		21 128	22 867	22 610
3.4 Total asset base		89 105	104 538	113 206	143 410	149 284	156 804	168 504		161 385	161 522	157 776
Cost of capital %												
3.5 Cost of capital pre tax rate												
3.6 Return on equity												
3.7 Average interest on debts												
3.8 Share of financing through equity												
Costs of common projects												
3.9 Common projects		0	0	0	0	0	0	0	0	0	0	0
Costs of new and existing investments												
3.10 Depreciation							13 740	15 338	29 078	15 426	15 838	17 181
3.11 Cost of capital							7 516	7 990	15 505	8 030	8 018	7 837
3.12 Cost of leasing							861	1 238	2 099	1 231	1 213	1 195
Eurocontrol costs												
3.13 Eurocontrol costs (Euro)												
3.14 Exchange rate (if applicable)												
3.15 Eurocontrol costs (national currency)												
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)												
4.1 Costs for exempted VFR flights		610	323	214	203	120	370	338	708	266	257	277
4.2 Total determined/actual costs		84 509	89 844	87 083	100 735	114 835	111 560	158 432	269 992	151 060	152 053	151 685
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)												
5.1 Inflation %		-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%
5.2 Inflation index (1)		98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1
5.3 Total costs real terms (2)		85 495	91 024	87 083	99 749	111 822	105 891	146 062	251 953	136 687	134 972	132 305
Total	% n/n-1		6,5%	-4,3%	14,5%	12,1%	-5,3%	37,9%		-6,4%	-1,3%	-2,0%
5.4 Total Service Units		95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9
Total	% n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%
5.5 Unit cost in real terms prices (3)		895,83	879,87	765,93	752,58	807,29	1 698,29	2 396,86	2 043,57	1 356,48	1 074,08	952,48
Total	% n/n-1		-1,8%	-13,0%	-1,7%	7,3%	110,4%	41,1%		-43,4%	-20,8%	-11,3%

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
ANSP PANSA

		Actual costs 2015-2019					Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3						
Cost details		2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																		
1.1 Staff		48 560	51 459	47 513	57 569	61 267	56 735	86 007	142 742	76 387	74 249	72 543	56 735					
of which, pension costs						0	6 428	9 473	15 901	9 838	9 469	9 216	6 428					
1.2 Other operating costs		12 051	10 474	9 105	11 005	14 856	8 724	22 104	30 828	23 745	23 957	22 822	8 724					
1.3 Depreciation		6 076	6 932	7 319	9 068	11 972	12 324	13 859	26 183	13 634	13 906	13 830	12 324					
1.4 Cost of capital		5 044	5 817	5 588	4 638	4 960	7 879	8 784	16 662	8 800	8 739	8 341	7 879					
1.5 Exceptional items							0	0	0	0	0	0	0					
1.6 Total costs		71 732	74 682	69 525	82 280	93 054	85 662	130 754	216 416	122 566	120 851	117 536	85 662					
Total	% n/n-1		4,1%	-6,9%	18,3%	13,1%	-7,9%	52,6%		-6,3%	-1,4%	-2,7%	-7,9%					
2. Detail by service (in nominal terms)																		
2.1 Air Traffic Management		58 322	61 946	53 045	63 484	72 244	65 609	95 216	160 826	91 173	90 054	88 034	65 609					
2.2 Communication		2 095	2 156	2 056	2 242	2 650	2 042	2 952	4 994	2 720	2 640	2 584	2 042					
2.3 Navigation		8 321	7 486	8 036	7 498	9 323	8 701	11 080	19 781	9 631	9 821	9 215	8 701					
2.4 Surveillance		2 093	2 094	2 026	4 504	4 211	3 652	4 166	7 818	4 197	4 105	3 837	3 652					
2.5 Search and rescue						0	0	0	0	0	0	0	0					
2.6 Aeronautical information		901	999	4 362	4 551	4 626	5 658	17 340	22 998	14 845	14 230	13 865	5 658					
2.7 Meteorological services							0	0	0	0	0	0	0					
2.8 Supervision costs																		
2.9 Other State costs																		
2.10 Total costs		71 732	74 682	69 525	82 280	93 054	85 662	130 754	216 416	122 566	120 851	117 536	85 662					
Total	% n/n-1		4,1%	-6,9%	18,3%	13,1%	-7,9%	52,6%		-6,3%	-1,4%	-2,7%	-7,9%					
3. Complementary information (in nominal terms)																		
Average asset base																		
3.1 Net book val. fixed assets		78 269	88 157	92 675	120 913	127 376	125 350	133 065		133 620	131 946	125 103	125 350					
3.2 Adjustments total assets						0	0	0		0	0	0	0					
3.3 Net current assets		6 507	9 610	10 317	12 579	13 335	12 083	18 093		16 995	16 765	16 304	12 083					
3.4 Total asset base		84 777	97 767	102 992	133 492	140 712	137 434	151 158		150 616	148 711	141 408	137 434					
Cost of capital %																		
3.5 Cost of capital pre tax rate		5,95%	5,95%	5,43%	3,47%	3,52%	5,73%	5,81%		5,84%	5,88%	5,90%	5,73%					
3.6 Return on equity		5,95%	5,95%	5,43%	3,47%	3,52%	9,40%	9,40%		9,40%	9,40%	9,40%	9,40%					
3.7 Average interest on debts		0,00%	0,00%	0,00%	0,00%	0,00%	3,29%	3,42%		3,47%	3,53%	3,56%	3,29%					
3.8 Share of financing through equity		100,00%	100,00%	100,00%	100,00%	100,00%	40,00%	40,00%		40,00%	40,00%	40,00%	40,00%					
Costs of common projects																		
3.9 Common projects		0	0	0	0	0	0	0	0	0	0	0	0					
Costs of new and existing investments																		
3.10 Depreciation							12 324	13 859	26 183	13 634	13 906	13 830	12 324					
3.11 Cost of capital							7 186	7 732	14 918	7 807	7 754	7 379	7 186					
3.12 Cost of leasing							861	1 238	2 099	1 231	1 213	1 195	861					
Eurocontrol costs																		
3.13 Eurocontrol costs (Euro)																		
3.14 Exchange rate (if applicable)																		
3.15 Eurocontrol costs (national currency)																		
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																		
4.1 Costs for exempted VFR flights		0	0	0	0	0	0	0	0	0	0	0	0					
4.2 Total determined/actual costs		71 732	74 682	69 525	82 280	93 054	85 662	130 754	216 416	122 566	120 851	117 536	85 662					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																		
5.1 Inflation %		-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%					
5.2 Inflation index (1)		98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1					
5.3 Total costs real terms (2)		72 579	75 673	69 525	81 467	90 604	81 295	120 409	201 704	110 758	107 131	102 211	81 295					
Total	% n/n-1		4,3%	-8,1%	17,2%	11,2%	-10,3%	48,1%		-8,0%	-3,3%	-4,6%	-10,3%					
5.4 Total Service Units		95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9	62,4					
Total	% n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%					
5.5 Unit cost in real terms prices (3)		760,48	731,48	611,50	614,65	654,11	1 303,81	1 975,90	1 636,00	1 099,16	852,53	735,83	1 303,81					
Total	% n/n-1		-3,8%	-16,4%	0,5%	6,4%	99,3%	51,5%		-44,4%	-22,4%	-13,7%	99,3%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
AFIS Modlin

		Actual costs 2015-2019					Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3						
Cost details		2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																		
1.1 Staff		495	391	358	324	311	0	0	0	0	0	0	0					
of which, pension costs							0	0	0	0	0	0	0					
1.2 Other operating costs		100	103	100	95	156	0	0	0	0	0	0	0					
1.3 Depreciation		27	24	23	11		0	0	0	0	0	0	0					
1.4 Cost of capital		33	8	7	6		0	0	0	0	0	0	0					
1.5 Exceptional items							0	0	0	0	0	0	0					
1.6 Total costs		654	524	488	436	466	0	0	0	0	0	0	0					
Total	% n/n-1		-19.9%	-7.0%	-10.7%	7.1%	-100.0%	#DZIEL/0!		#DZIEL/0!	#DZIEL/0!	#DZIEL/0!	-100.0%					
2. Detail by service (in nominal terms)																		
2.1 Air Traffic Management		556	446	414	370	396	0	0	0	0	0	0	0					
2.2 Communication		62	50	46	41	44	0	0	0	0	0	0	0					
2.3 Navigation							0	0	0	0	0	0	0					
2.4 Surveillance							0	0	0	0	0	0	0					
2.5 Search and rescue							0	0	0	0	0	0	0					
2.6 Aeronautical Information							0	0	0	0	0	0	0					
2.7 Meteorological services		37	29	27	24	26	0	0	0	0	0	0	0					
2.8 Supervision costs																		
2.9 Other State costs																		
2.10 Total costs		654	524	488	436	466	0	0	0	0	0	0	0					
Total	% n/n-1		-19.9%	-7.0%	-10.7%	7.1%	-100.0%	#DZIEL/0!		#DZIEL/0!	#DZIEL/0!	#DZIEL/0!	-100.0%					
3. Complementary information (in nominal terms)																		
Average asset base																		
3.1 Net book val. fixed assets		992	229	205	176	0	0	0		0	0	0	0					
3.2 Adjustments total assets							0	0		0	0	0	0					
3.3 Net current assets							0	0		0	0	0	0					
3.4 Total asset base		992	229	205	176	0	0	0		0	0	0	0					
Cost of capital %																		
3.5 Cost of capital pre tax rate		3,29%	3,32%	3,33%	3,37%													
3.6 Return on equity		3,50%	3,50%	3,50%	3,50%		0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.7 Average interest on debts		3,12%	3,19%	3,20%	3,26%		0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.8 Share of financing through equity		45,45%	42,76%	44,72%	44,70%		0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
Costs of common projects																		
3.9 Common projects		0	0	0	0	0	0	0	0	0	0	0	0					
Costs of new and existing investments																		
3.10 Depreciation							0	0	0	0	0	0	0					
3.11 Cost of capital							0	0	0	0	0	0	0					
3.12 Cost of leasing							0	0	0	0	0	0	0					
Eurocontrol costs																		
3.13 Eurocontrol costs (Euro)																		
3.14 Exchange rate (if applicable)																		
3.15 Eurocontrol costs (national currency)																		
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																		
4.1 Costs for exempted VFR flights		610	323	214	203	120	0	0	0	0	0	0	0					
4.2 Total determined/actual costs		44	202	274	233	346	0	0	0	0	0	0	0					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																		
5.1 Inflation %		-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%					
5.2 Inflation index (1)		98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1					
5.3 Total costs real terms (2)		44	205	274	230	335	0	0		0	0	0	0					
Total	% n/n-1		363,5%	33,9%	-16,0%	45,5%	-100,0%	#DZIEL/0!		#DZIEL/0!	#DZIEL/0!	#DZIEL/0!	-100,0%					
5.4 Total Service Units		95,4	103,5	113,7	132,5	138,5	62,4	60,9		123,3	100,8	125,7	138,9					
Total	% n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%					
5.5 Unit cost in real terms prices (3)		0,46	1,98	2,41	1,74	2,42	0,00	0,00		0,00	0,00	0,00	0,00					
Total	% n/n-1		327,6%	21,8%	-27,9%	39,2%	-100,0%	#DZIEL/0!		#DZIEL/0!	#DZIEL/0!	#DZIEL/0!	-100,0%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
AFIS Bydgoszcz

Actual costs 2015-2019																	Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3				
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024									
1. Detail by nature (in nominal terms)																										
1.1 Staff						252	329	581	451	534	652	252														
of which, pension costs						26	28	54	30	36	52	26														
1.2 Other operating costs						174	124	298	214	211	369	174														
1.3 Depreciation						18	15	33	16	133	487	18														
1.4 Cost of capital						9	1	10	7	73	226	9														
1.5 Exceptional items						0	0	0	0	0	0	0														
1.6 Total costs	0	0	0	0	0	453	468	921	687	950	1 735	453														
Total % n/n-1							3,2%		46,9%	38,2%	82,7%	#DZIEL/0!														
2. Detail by service (in nominal terms)																										
2.1 Air Traffic Management						453	468	921	687	950	1 735	453														
2.2 Communication						0	0	0	0	0	0	0														
2.3 Navigation						0	0	0	0	0	0	0														
2.4 Surveillance						0	0	0	0	0	0	0														
2.5 Search and rescue						0	0	0	0	0	0	0														
2.6 Aeronautical Information						0	0	0	0	0	0	0														
2.7 Meteorological services						0	0	0	0	0	0	0														
2.8 Supervision costs																										
2.9 Other State costs																										
2.10 Total costs	0	0	0	0	0	453	468	921	687	950	1 735	453														
Total % n/n-1							3,2%		46,9%	38,2%	82,7%	#DZIEL/0!														
3. Complementary information (in nominal terms)																										
Average asset base																										
3.1 Net book val. fixed assets						192	27		32	1 274	3 974	192														
3.2 Adjustments total assets						0	0		0	0	0	0														
3.3 Net current assets						-15	-16		114	196	344	-15														
3.4 Total asset base	0	0	0	0	0	177	12		146	1 469	4 318	177														
Cost of capital %																										
3.5 Cost of capital pre tax rate						5,12%	4,83%		4,89%	4,94%	5,24%	5,12%														
3.6 Return on equity						5,10%	4,82%		4,89%	8,38%	9,39%	5,10%														
3.7 Average interest on debts						6,69%	8,06%		0,00%	2,56%	3,01%	6,69%														
3.8 Share of financing through equity						99,04%	99,89%		100,00%	40,99%	35,05%	99,04%														
Costs of common projects																										
3.9 Common projects						0	0	0	0	0	0	0														
Costs of new and existing investments																										
3.10 Depreciation						18	15	33	16	133	487	18														
3.11 Cost of capital						10	1	11	2	63	208	10														
3.12 Cost of leasing						0	0	0	0	0	0	0														
Eurocontrol costs																										
3.13 Eurocontrol costs (Euro)																										
3.14 Exchange rate (if applicable)																										
3.15 Eurocontrol costs (national currency)																										
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																										
4.1 Costs for exempted VFR flights						126	54	181	21	13	23	126														
4.2 Total determined/actual costs	0	0	0	0	0	327	414	741	666	937	1 712	327														
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																										
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%														
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1														
5.3 Total costs real terms (2)	0	0	0	0	0	307	376	682	591	835	1 551	307														
Total % n/n-1							22,3%		57,3%	41,4%	85,8%	#DZIEL/0!														
5.4 Total Service Units	95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9	62,4														
Total % n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%														
5.5 Unit cost in real terms prices (3)	0,00	0,00	0,00	0,00	0,00	4,92	6,16	5,54	5,86	6,64	11,17	4,92														
Total % n/n-1							25,2%		-4,9%	13,4%	68,1%	#DZIEL/0!														

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
AFIS-COM Warmia i Mazury

		Actual costs 2015-2019					Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3						
Cost details		2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																		
1.1 Staff							761	1 007	1 768	1 088	1 134	1 220	761					
of which, pension costs							135	179	314	193	201	217	135					
1.2 Other operating costs							637	830	1 468	880	918	1 025	637					
1.3 Depreciation							115	121	236	155	117	466	115					
1.4 Cost of capital							46	45	91	50	44	103	46					
1.5 Exceptional items							0	0	0	0	0	0	0					
1.6 Total costs		0	0	0	0	0	1 559	2 004	3 562	2 173	2 214	2 814	1 559					
Total	% n/n-1							28,5%		8,5%	1,9%	27,1%	#DZIEL/0!					
2. Detail by service (in nominal terms)																		
2.1 Air Traffic Management							1 033	1 390	2 424	1 518	1 602	2 136	1 033					
2.2 Communication							526	613	1 139	656	612	677	526					
2.3 Navigation							0	0	0	0	0	0	0					
2.4 Surveillance							0	0	0	0	0	0	0					
2.5 Search and rescue							0	0	0	0	0	0	0					
2.6 Aeronautical Information							0	0	0	0	0	0	0					
2.7 Meteorological services							0	0	0	0	0	0	0					
2.8 Supervision costs																		
2.9 Other State costs																		
2.10 Total costs		0	0	0	0	0	1 559	2 004	3 562	2 173	2 214	2 814	1 559					
Total	% n/n-1							28,5%		8,5%	1,9%	27,1%	#DZIEL/0!					
3. Complementary information (in nominal terms)																		
Average asset base																		
3.1 Net book val. fixed assets							878	858		940	816	1 992	878					
3.2 Adjustments total assets							0	0		0	0	0	0					
3.3 Net current assets							29	70		81	84	118	29					
3.4 Total asset base		0	0	0	0	0	907	929		1 022	900	2 111	907					
Cost of capital %																		
3.5 Cost of capital pre tax rate							5,08%	4,83%		4,89%	4,89%	4,89%	5,08%					
3.6 Return on equity							5,08%	4,83%		4,89%	4,89%	4,89%	5,08%					
3.7 Average interest on debts							0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.8 Share of financing through equity							100,00%	100,00%		100,00%	100,00%	100,00%	100,00%					
Costs of common projects																		
3.9 Common projects							0	0	0	0	0	0	0					
Costs of new and existing investments																		
3.10 Depreciation							115	121	236	155	117	466	115					
3.11 Cost of capital							45	41	86	46	40	97	45					
3.12 Cost of leasing							0	0	0	0	0	0	0					
Eurocontrol costs																		
3.13 Eurocontrol costs (Euro)																		
3.14 Exchange rate (if applicable)																		
3.15 Eurocontrol costs (national currency)																		
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																		
4.1 Costs for exempted VFR flights							125	217	342	220	228	237	125					
4.2 Total determined/actual costs		0	0	0	0	0	1 434	1 787	3 220	1 953	1 985	2 577	1 434					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																		
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%			2,52%	2,53%	2,50%	3,70%					
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6			113,4	116,2	119,1	107,1					
5.3 Total costs real terms (2)	0	0	0	0	0	1 349	1 631	2 980		1 747	1 731	2 254	1 349					
Total	% n/n-1						21,0%			7,1%	-1,0%	30,3%	#DZIEL/0!					
5.4 Total Service Units	95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3		100,8	125,7	138,9	62,4					
Total	% n/n-1						-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%					
5.5 Unit cost in real terms prices (3)	0,00	0,00	0,00	0,00	0,00	21,63	26,77	24,17		17,34	13,77	16,23	21,63					
Total	% n/n-1						23,8%			-35,2%	-20,6%	17,8%	#DZIEL/0!					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
MET IMWM

		Actual costs 2015-2019					Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3						
Cost details		2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																		
1.1 Staff		3 517	3 441	3 524	3 585	4 030	4 718	5 173	9 892	5 398	5 614	5 839	4 718					
of which, pension costs							611	760	1 371	779	768	793	611					
1.2 Other operating costs		6 417	7 399	9 038	9 423	11 285	10 750	11 118	21 868	10 954	11 193	11 659	10 750					
1.3 Depreciation		103	661	941	941	940	1 026	1 073	2 099	1 372	1 372	2 092	1 026					
1.4 Cost of capital		117	153	249	237	215	493	482	975	217	257	262	493					
1.5 Exceptional items							0	0	0	0	0	0	0					
1.6 Total costs		10 154	11 654	13 753	14 186	16 469	16 988	17 846	34 834	17 942	18 437	19 852	16 988					
Total	% n/n-1		14,8%	18,0%	3,1%	16,1%	3,1%	5,1%		0,5%	2,8%	7,7%	3,1%					
2. Detail by service (in nominal terms)																		
2.1 Air Traffic Management																		
2.2 Communication																		
2.3 Navigation																		
2.4 Surveillance																		
2.5 Search and rescue																		
2.6 Aeronautical information																		
2.7 Meteorological services		10 154	11 654	13 753	14 186	16 469	16 988	17 846	34 834	17 942	18 437	19 852	16 988					
2.8 Supervision costs																		
2.9 Other State costs																		
2.10 Total costs		10 154	11 654	13 753	14 186	16 469	16 988	17 846	34 834	17 942	18 437	19 852	16 988					
Total	% n/n-1		14,8%	18,0%	3,1%	16,1%	3,1%	5,1%		0,5%	2,8%	7,7%	3,1%					
3. Complementary information (in nominal terms)																		
Average asset base																		
3.1 Net book val. fixed assets		1 707	5 011	7 901	7 291	6 466	5 443	4 884		4 705	3 615	3 087	5 443					
3.2 Adjustments total assets							0	0		0	0	0	0					
3.3 Net current assets		1 548	1 503	1 652	1 794	1 727	10 728	10 225		3 369	4 755	4 892	10 728					
3.4 Total asset base		3 255	6 514	9 553	9 086	8 193	16 171	15 109		8 074	8 370	7 979	16 171					
Cost of capital %																		
3.5 Cost of capital pre tax rate		3,58%	2,35%	2,61%	2,61%	2,62%	3,05%	3,19%		2,69%	3,07%	3,28%	3,05%					
3.6 Return on equity		4,00%	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%		4,00%	4,00%	4,00%	4,00%					
3.7 Average interest on debts		2,37%	2,35%	2,37%	2,37%	2,35%	1,34%	1,40%		1,40%	1,40%	1,40%	1,34%					
3.8 Share of financing through equity		74,23%	-0,01%	14,72%	14,72%	16,36%	64,29%	68,85%		49,62%	64,23%	72,31%	64,29%					
Costs of common projects																		
3.9 Common projects							0	0	0	0	0	0	0					
Costs of new and existing investments																		
3.10 Depreciation							1 026	1 073	2 099	1 372	1 372	2 092	1 026					
3.11 Cost of capital							166	156	322	127	111	101	166					
3.12 Cost of leasing							0	0	0	0	0	0	0					
Eurocontrol costs																		
3.13 Eurocontrol costs (Euro)																		
3.14 Exchange rate (if applicable)																		
3.15 Eurocontrol costs (national currency)																		
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																		
4.1 Costs for exempted VFR flights							0	0	0	0	0	0	0					
4.2 Total determined/actual costs		10 154	11 654	13 753	14 186	16 469	16 988	17 846	34 834	17 942	18 437	19 852	16 988					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																		
5.1 Inflation %		-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%					
5.2 Inflation index (1)		98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1					
5.3 Total costs real terms (2)		10 293	11 827	13 753	14 032	15 977	15 956	16 287	32 243	16 014	16 089	17 040	15 956					
Total	% n/n-1		14,9%	16,3%	2,0%	13,9%	-0,1%	2,1%		-1,7%	0,5%	5,9%	-0,1%					
5.4 Total Service Units		95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9	62,4					
Total	% n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%					
5.5 Unit cost in real terms prices (3)		107,85	114,33	120,96	105,87	115,34	255,90	267,27	261,52	158,92	128,03	122,68	255,90					
Total	% n/n-1		6,0%	5,8%	-12,5%	9,0%	121,9%	4,4%		-40,5%	-19,4%	-4,2%	121,9%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
MET Radom

		Actual costs 2015-2019					Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3						
Cost details		2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																		
1.1 Staff		39	403	284	218	83	51	53	103	53	1 150	1 150	51					
of which, pension costs							3	4	7	4	122	122	3					
1.2 Other operating costs		51	395	177	159	51	27	36	63	39	556	490	27					
1.3 Depreciation		6	48	51	35	34	17	12	29	7	78	78	17					
1.4 Cost of capital							5	7	12	11	44	47	5					
1.5 Exceptional items							0	0	0	0	0	0	0					
1.6 Total costs		96	846	513	411	167	100	107	207	109	1 829	1 766	100					
Total	% n/n-1		780,6%	-39,4%	-19,7%	-59,3%	-40,4%	7,6%		1,7%	1576,5%	-3,4%	-40,4%					
2. Detail by service (in nominal terms)																		
2.1 Air Traffic Management																		
2.2 Communication																		
2.3 Navigation																		
2.4 Surveillance																		
2.5 Search and rescue																		
2.6 Aeronautical information																		
2.7 Meteorological services		96	846	513	411	167	100	107	207	109	1 829	1 766	100					
2.8 Supervision costs																		
2.9 Other State costs																		
2.10 Total costs		96	846	513	411	167	100	107	207	109	1 829	1 766	100					
Total	% n/n-1		780,6%	-39,4%	-19,7%	-59,3%	-40,4%	7,6%		1,7%	1576,5%	-3,4%	-40,4%					
3. Complementary information (in nominal terms)																		
Average asset base																		
3.1 Net book val. fixed assets		65	11	350	249	59	28	13		3	233	426	28					
3.2 Adjustments total assets							0	0		0	0	0	0					
3.3 Net current assets		17	17	105	207	0	79	117		206	608	479	79					
3.4 Total asset base		82	28	456	456	59	106	130		210	840	904	106					
Cost of capital %																		
3.5 Cost of capital pre tax rate		0,00%	0,00%	0,00%	0,00%	0,00%	5,08%	5,07%		5,24%	5,24%	5,24%	5,08%					
3.6 Return on equity							5,08%	5,07%		5,24%	5,24%	5,24%	5,08%					
3.7 Average interest on debts							0,00%	0,00%		0,00%	0,00%	0,00%	0,00%					
3.8 Share of financing through equity							100,00%	100,00%		100,00%	100,00%	100,00%	100,00%					
Costs of common projects																		
3.9 Common projects							0	0	0	0	0	0	0					
Costs of new and existing investments																		
3.10 Depreciation							17	12	29	7	78	78	17					
3.11 Cost of capital							1	1	2	0	12	22	1					
3.12 Cost of leasing							0	0	0	0	0	0	0					
Eurocontrol costs																		
3.13 Eurocontrol costs (Euro)																		
3.14 Exchange rate (if applicable)																		
3.15 Eurocontrol costs (national currency)																		
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																		
4.1 Costs for exempted VFR flights							0	0	0	0	0	0	0					
4.2 Total determined/actual costs		96	846	513	411	167	100	107	207	109	1 829	1 766	100					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																		
5.1 Inflation %		-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%					
5.2 Inflation index (1)		98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1					
5.3 Total costs real terms (2)		97	859	513	407	163	95	99	193	98	1 590	1 502	95					
Total	% n/n-1		782,4%	-40,3%	-20,6%	-59,9%	-42,0%	4,5%		-0,5%	1517,3%	-5,5%	-42,0%					
5.4 Total Service Units		95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9	62,4					
Total	% n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%					
5.5 Unit cost in real terms prices (3)		1,02	8,30	4,51	3,07	1,18	1,52	1,62	1,57	0,98	12,66	10,82	1,52					
Total	% n/n-1		714,0%	-45,7%	-31,9%	-61,7%	28,8%	7,0%		-39,8%	1196,8%	-14,5%	28,8%					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
MET Bydgoszcz

Actual costs 2015-2019					Determined costs - Performance Plan - RP3							Actual costs - Reference Period 3					
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)																	
1.1 Staff						1 145	1 293	2 438	1 388	1 415	1 452	1 145					
of which, pension costs						128	151	278	164	166	171	128					
1.2 Other operating costs						176	333	509	309	316	379	176					
1.3 Depreciation						225	234	459	216	207	203	225					
1.4 Cost of capital						105	54	158	58	53	44	105					
1.5 Exceptional items						0	0	0	0	0	0	0					
1.6 Total costs	0	0	0	0	0	1 651	1 913	3 564	1 971	1 990	2 078	1 651					
Total % n/n-1							15,8%		3,1%	1,0%	4,4%	#DZIEL/0!					
2. Detail by service (in nominal terms)																	
2.1 Air Traffic Management																	
2.2 Communication																	
2.3 Navigation																	
2.4 Surveillance																	
2.5 Search and rescue																	
2.6 Aeronautical Information																	
2.7 Meteorological services						1 651	1 913	3 564	1 971	1 990	2 078	1 651					
2.8 Supervision costs																	
2.9 Other State costs																	
2.10 Total costs	0	0	0	0	0	1 651	1 913	3 564	1 971	1 990	2 078	1 651					
Total % n/n-1							15,8%		3,1%	1,0%	4,4%	#DZIEL/0!					
3. Complementary information (in nominal terms)																	
Average asset base																	
3.1 Net book val. fixed assets						1 759	928		776	615	445	1 759					
3.2 Adjustments total assets						0	0		0	0	0	0					
3.3 Net current assets						81	63		347	443	457	81					
3.4 Total asset base	0	0	0	0	0	1 840	991		1 122	1 058	902	1 840					
Cost of capital %																	
3.5 Cost of capital pre tax rate						5,70%	5,41%		5,17%	4,97%	4,89%	5,70%					
3.6 Return on equity						6,84%	7,44%		5,73%	5,05%	4,89%	6,84%					
3.7 Average interest on debts						4,02%	3,51%		3,56%	3,83%	0,00%	4,02%					
3.8 Share of financing through equity						59,80%	48,16%		74,16%	93,74%	100,00%	59,80%					
Costs of common projects																	
3.9 Common projects						0	0	0	0	0	0	0					
Costs of new and existing investments																	
3.10 Depreciation						225	234	459	216	207	203	225					
3.11 Cost of capital						100	50	150	40	31	22	100					
3.12 Cost of leasing						0	0	0	0	0	0	0					
Eurocontrol costs																	
3.13 Eurocontrol costs (Euro)																	
3.14 Exchange rate (if applicable)																	
3.15 Eurocontrol costs (national currency)																	
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																	
4.1 Costs for exempted VFR flights						115	60	175	15	5	6	115					
4.2 Total determined/actual costs	0	0	0	0	0	1 536	1 853	3 389	1 957	1 985	2 072	1 536					
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																	
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%					
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1					
5.3 Total costs real terms (2)	0	0	0	0	0	1 455	1 703	3 159	1 758	1 744	1 779	1 455					
Total % n/n-1							17,0%		3,2%	-0,8%	2,0%	#DZIEL/0!					
5.4 Total Service Units	95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9	62,4					
Total % n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%					
5.5 Unit cost in real terms prices (3)	0,00	0,00	0,00	0,00	0,00	23,34	27,95	25,62	17,45	13,88	12,81	23,34					
Total % n/n-1							19,7%		-37,6%	-20,5%	-7,7%	#DZIEL/0!					

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
MET Warmia i Mazury

Actual costs 2015-2019												Determined costs - Performance Plan - RP3					Actual costs - Reference Period 3				
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024				
1. Detail by nature (in nominal terms)																					
1.1 Staff			341	377	443	329	334	663	347	369	371	329									
of which, pension costs						58	59	118	62	66	66	58									
1.2 Other operating costs			316	637	1 242	856	875	1 731	896	909	912	856									
1.3 Depreciation			12	18	30	16	25	40	26	24	24	16									
1.4 Cost of capital				7	7	9	8	17	10	8	8	9									
1.5 Exceptional items				0	0	0	0	0	0	0	0	0									
1.6 Total costs	0	0	669	1 038	1 722	1 209	1 242	2 451	1 278	1 311	1 314	1 209									
Total % n/n-1				55,2%	65,9%	-29,8%	2,7%		2,9%	2,5%	0,3%	-29,8%									
2. Detail by service (in nominal terms)																					
2.1 Air Traffic Management																					
2.2 Communication																					
2.3 Navigation																					
2.4 Surveillance																					
2.5 Search and rescue																					
2.6 Aeronautical information																					
2.7 Meteorological services			669	1 038	1 722	1 209	1 242	2 451	1 278	1 311	1 314	1 209									
2.8 Supervision costs																					
2.9 Other State costs																					
2.10 Total costs	0	0	669	1 038	1 722	1 209	1 242	2 451	1 278	1 311	1 314	1 209									
Total % n/n-1				55,2%	65,9%	-29,8%	2,7%		2,9%	2,5%	0,3%	-29,8%									
3. Complementary information (in nominal terms)																					
Average asset base																					
3.1 Net book val. fixed assets				201	320	154	161		181	156	138	154									
3.2 Adjustments total assets						0	0		0	0	0	0									
3.3 Net current assets						15	14		16	17	17	15									
3.4 Total asset base	0	0	0	201	320	169	175		197	173	154	169									
Cost of capital %																					
3.5 Cost of capital pre tax rate				3,27%	2,33%	5,08%	4,83%		4,89%	4,89%	4,89%	5,08%									
3.6 Return on equity				3,27%	2,33%	5,08%	4,83%		4,89%	4,89%	4,89%	5,08%									
3.7 Average interest on debts				0,00%	0,00%	0,00%	0,00%		0,00%	0,00%	0,00%	0,00%									
3.8 Share of financing through equity				100,00%	99,99%	100,00%	100,00%		100,00%	100,00%	100,00%	100,00%									
Costs of common projects																					
3.9 Common projects						0	0	0	0	0	0	0									
Costs of new and existing investments																					
3.10 Depreciation						16	25	40	26	24	24	16									
3.11 Cost of capital						8	8	16	9	8	7	8									
3.12 Cost of leasing						0	0	0	0	0	0	0									
Eurocontrol costs																					
3.13 Eurocontrol costs (Euro)																					
3.14 Exchange rate (if applicable)																					
3.15 Eurocontrol costs (national currency)																					
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																					
4.1 Costs for exempted VFR flights				0	0	3	7	11	10	11	12	3									
4.2 Total determined/actual costs	0	0	669	1 038	1 722	1 206	1 235	2 440	1 268	1 299	1 302	1 206									
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																					
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%	3,70%									
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1	107,1									
5.3 Total costs real terms (2)	0	0	669	1 026	1 668	1 127	1 120	2 246	1 123	1 123	1 098	1 127									
Total % n/n-1				53,4%	62,6%	-32,4%	-0,6%		0,3%	0,0%	-2,2%	-32,4%									
5.4 Total Service Units	95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9	62,4									
Total % n/n-1				16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%									
5.5 Unit cost in real terms prices (3)	0,00	0,00	5,88	7,74	12,04	18,07	18,37	18,22	11,14	8,93	7,91	18,07									
Total % n/n-1				31,6%	55,5%	50,1%	1,7%		-39,4%	-19,8%	-11,5%	50,1%									

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
NSA

Actual costs 2015-2019											Determined costs - Performance Plan - RP3				Actual costs - Reference Period 3					
Cost details		2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024		
1. Detail by nature (in nominal terms)																				
1.1 Staff		1 669	1 667	1 608	1 756	2 097	3 089	3 240	6 329	3 344	3 443	3 545	3 089							
of which, pension costs							392	425	817	446	460	473	392							
1.2 Other operating costs		813	793	741	832	979	1 220	1 197	2 416	1 253	1 287	1 324	1 220							
1.3 Depreciation							0	0	0	0	0	0	0							
1.4 Cost of capital							0	0	0	0	0	0	0							
1.5 Exceptional items							0	0	0	0	0	0	0							
1.6 Total costs		2 482	2 460	2 349	2 588	3 076	4 308	4 437	8 745	4 598	4 731	4 867	4 308							
Total	% n/n-1		-0,9%	-4,5%	10,1%	18,9%	40,1%	3,0%		3,6%	2,9%	2,9%	40,1%							
2. Detail by service (in nominal terms)																				
2.1 Air Traffic Management																				
2.2 Communication																				
2.3 Navigation																				
2.4 Surveillance																				
2.5 Search and rescue							0	0	0	0	0	0								
2.6 Aeronautical Information																				
2.7 Meteorological services																				
2.8 Supervision costs		2 482	2 460	2 349	2 588	3 076	4 308	4 437	8 745	4 598	4 731	4 867	4 308							
2.9 Other State costs							0	0	0	0	0	0	0							
2.10 Total costs		2 482	2 460	2 349	2 588	3 076	4 308	4 437	8 745	4 598	4 731	4 867	4 308							
Total	% n/n-1		-0,9%	-4,5%	10,1%	18,9%	40,1%	3,0%		3,6%	2,9%	2,9%	40,1%							
3. Complementary information (in nominal terms)																				
Average asset base																				
3.1 Net book val. fixed assets							0	0		0	0	0	0							
3.2 Adjustments total assets							0	0		0	0	0	0							
3.3 Net current assets							0	0		0	0	0	0							
3.4 Total asset base		0	0	0	0	0	0	0		0	0	0	0							
Cost of capital %																				
3.5 Cost of capital pre tax rate							#DZIEL/01	#DZIEL/01		#DZIEL/01	#DZIEL/01	#DZIEL/01	#DZIEL/01							
3.6 Return on equity							0,00%	0,00%		0,00%	0,00%	0,00%	0,00%							
3.7 Average interest on debts							0,00%	0,00%		0,00%	0,00%	0,00%	0,00%							
3.8 Share of financing through equity							0,00%	0,00%		0,00%	0,00%	0,00%	0,00%							
Costs of common projects																				
3.9 Common projects							0	0	0	0	0	0	0							
Costs of new and existing investments																				
3.10 Depreciation																				
3.11 Cost of capital																				
3.12 Cost of leasing																				
Eurocontrol costs																				
3.13 Eurocontrol costs (Euro)																				
3.14 Exchange rate (if applicable)																				
3.15 Eurocontrol costs (national currency)																				
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)																				
4.1 Costs for exempted VFR flights							0	0	0	0	0	0	0							
4.2 Total determined/actual costs		2 482	2 460	2 349	2 588	3 076	4 308	4 437	8 745	4 598	4 731	4 867	4 308							
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)																				
5.1 Inflation %																				
5.2 Inflation index (1)																				
5.3 Total costs real terms (2)		2 482	2 460	2 349	2 588	3 076	4 308	4 437	8 745	4 598	4 731	4 867	4 308							
Total	% n/n-1		-0,9%	-4,5%	10,1%	18,9%	40,1%	3,0%		3,6%	2,9%	2,9%	40,1%							
5.4 Total Service Units		95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9	62,4							
Total	% n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%	-55,0%							
5.5 Unit cost in real terms prices (3)		26,01	23,78	20,66	19,52	22,21	69,10	72,81	70,93	45,63	37,65	35,04	69,10							
Total	% n/n-1		-8,6%	-13,1%	-5,5%	13,8%	211,1%	5,4%		-37,3%	-17,5%	-6,9%	211,1%							

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs and Unit Costs

Poland - Others
Currency: PLN
Other airports

Actual costs 2015-2019						Determined costs - Performance Plan - RP3					
Cost details	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024
1. Detail by nature (in nominal terms)											
1.1 Staff	54 280	57 360	53 630	63 828	68 230	67 079	97 436	164 515	88 457	87 908	86 770
of which, pension costs						7 782	11 079	18 860	11 516	11 287	11 109
1.2 Other operating costs	19 432	19 164	19 477	22 150	28 567	22 565	36 616	59 181	38 289	39 346	38 979
1.3 Depreciation	6 213	7 665	8 345	10 071	12 976	13 740	15 338	29 078	15 426	15 838	17 181
1.4 Cost of capital	5 193	5 978	5 845	4 888	5 182	8 546	9 380	17 926	9 153	9 218	9 031
1.5 Exceptional items	0	0	0	0	0	0	0	0	0	0	0
1.6 Total costs	85 119	90 167	87 297	100 938	114 955	111 930	158 770	270 700	151 325	152 311	151 962
Total % n/n-1		5,9%	-3,2%	15,6%	13,9%	-2,6%	41,8%		-4,7%	0,7%	-0,2%
2. Detail by service (in nominal terms)											
2.1 Air Traffic Management	58 878	62 392	53 459	63 854	72 640	67 096	97 075	164 170	93 378	92 605	91 905
2.2 Communication	2 157	2 205	2 102	2 283	2 694	2 568	3 565	6 133	3 376	3 252	3 262
2.3 Navigation	8 321	7 486	8 036	7 498	9 323	8 701	11 080	19 781	9 631	9 821	9 215
2.4 Surveillance	2 093	2 094	2 026	4 504	4 211	3 652	4 166	7 818	4 197	4 105	3 837
2.5 Search and rescue	0	0	0	0	0	0	0	0	0	0	0
2.6 Aeronautical Information	901	999	4 362	4 551	4 626	5 658	17 340	22 998	14 845	14 230	13 865
2.7 Meteorological services	10 287	12 529	14 961	15 660	18 385	19 948	21 108	41 055	21 301	23 566	25 011
2.8 Supervision costs	2 482	2 460	2 349	2 588	3 076	4 308	4 437	8 745	4 598	4 731	4 867
2.9 Other State costs	0	0	0	0	0	0	0	0	0	0	0
2.10 Total costs	85 119	90 167	87 297	100 938	114 955	111 930	158 770	270 700	151 325	152 311	151 962
Total % n/n-1		5,9%	-3,2%	15,6%	13,9%	-2,6%	41,8%		-4,7%	0,7%	-0,2%
3. Complementary information (in nominal terms)											
Average asset base											
3.1 Net book val. fixed assets	81 032	93 408	101 132	128 830	134 222	133 804	139 936		140 258	138 654	135 165
3.2 Adjustments total assets	0	0	0	0	0	0	0		0	0	0
3.3 Net current assets	8 073	11 129	12 074	14 580	15 062	23 000	28 568		21 128	22 867	22 610
3.4 Total asset base	89 105	104 538	113 206	143 410	149 284	156 804	168 504		161 385	161 522	157 776
Cost of capital %											
3.5 Cost of capital pre tax rate	5,83%	5,72%	5,16%	3,41%	3,47%	5,45%	5,57%		5,67%	5,71%	5,72%
3.6 Return on equity											
3.7 Average interest on debts											
3.8 Share of financing through equity											
Costs of common projects											
3.9 Common projects	0	0	0	0	0	0	0	0	0	0	0
Costs of new and existing investments											
3.10 Depreciation						13 740	15 338	29 078	15 426	15 838	17 181
3.11 Cost of capital						7 516	7 990	15 505	8 030	8 018	7 837
3.12 Cost of leasing						861	1 238	2 099	1 231	1 213	1 195
Eurocontrol costs											
3.13 Eurocontrol costs (Euro)											
3.14 Exchange rate (if applicable)											
3.15 Eurocontrol costs (national currency)											
4. Total costs after deduction of costs for services to exempted flights (in nominal terms)											
4.1 Costs for exempted VFR flights	610	323	214	203	120	370	338	708	266	257	277
4.2 Total determined/actual costs	84 509	89 844	87 083	100 735	114 835	111 560	158 432	269 992	151 060	152 053	151 685
5. Cost-efficiency KPI - Determined/Actual Unit Cost (in real terms)											
5.1 Inflation %	-0,70%	-0,20%	1,60%	1,20%	2,10%	3,70%	3,20%		2,52%	2,53%	2,50%
5.2 Inflation index (1)	98,6	98,4	100,0	101,2	103,3	107,1	110,6		113,4	116,2	119,1
5.3 Total costs real terms (2)	85 495	91 024	87 083	99 749	111 822	105 891	146 062	251 953	136 687	134 972	132 305
Total % n/n-1		6,5%	-4,3%	14,5%	12,1%	-5,3%	37,9%		-6,4%	-1,3%	-2,0%
5.4 Total Service Units	95,4	103,5	113,7	132,5	138,5	62,4	60,9	123,3	100,8	125,7	138,9
Total % n/n-1		8,4%	9,9%	16,6%	4,5%	-55,0%	-2,3%		65,4%	24,7%	10,5%
5.5 Unit cost in real terms prices (3)	895,83	879,87	765,93	752,58	807,29	1 698,29	2 396,86	2 043,57	1 356,48	1 074,08	952,48
Total % n/n-1		-1,8%	-13,0%	-1,7%	7,3%	110,4%	41,1%		-43,4%	-20,8%	-11,3%

Costs and asset base items in '000 - Service units in '000

(1) Inflation index - Base 100 in 2017

(2) Determined costs (performance plan) and actual costs in real terms

(3) Determined unit costs (performance plan) and actual unit costs in real terms

Table 1 - Total Costs

Poland - Others
Currency: PLN
Other airports

Actual costs 2015-2019						Determined costs - Performance Plan - RP3						Actual costs - Reference Period 3					
4.2 Total determined/actual costs	2015	2016	2017	2018	2019	2020	2021	2020/2021	2022	2023	2024	2020	2021	2020/2021	2022	2023	2024
BYDGOSZCZ	2 139	2 337	3 192	3 376	4 460	4 141	7 485	11 626	7 055	7 049	7 685	4 141					
GDĄSK IM. LECHA WAŁĘSY	13 163	13 488	13 204	16 451	17 644	16 506	20 753	37 258	20 391	19 988	19 594	16 506					
KRAKÓW-BALICE	17 105	18 346	16 949	17 020	19 299	17 513	24 601	42 115	23 950	23 425	23 124	17 513					
KATOWICE-PYRZOWICE	13 613	14 242	11 488	13 715	16 164	15 708	20 733	36 441	19 489	19 251	19 154	15 708					
LUBLIN	1 627	1 867	2 281	2 509	3 076	3 341	3 372	6 714	4 801	4 661	4 661	3 341					
ŁÓDŹ	2 692	2 423	2 724	2 382	3 317	3 809	7 826	11 635	6 472	6 062	5 879	3 809					
WARSZAWA/MODLIN	5 581	7 478	8 272	8 155	10 717	10 368	18 950	29 318	16 382	15 760	15 450	10 368					
POZNAŃ-LAWICA	10 474	10 854	11 426	13 778	15 092	14 380	20 552	34 932	19 581	19 605	19 401	14 380					
RADOM-SADKÓW	298	663	719	678	312	257	375	632	808	3 509	3 474	257					
RZESZÓW-JASIONKA	2 722	2 404	3 131	4 956	5 061	5 464	7 245	12 709	6 248	6 001	5 867	5 464					
SZCZECIN-GOLENIÓW	2 505	2 562	2 704	2 566	2 675	2 888	3 813	6 702	3 640	3 650	3 646	2 888					
WROCŁAW-STRACHOWICE	10 789	10 804	9 013	12 029	12 597	11 433	16 026	27 459	15 552	16 245	16 206	11 433					
ZIELONA GÓRA-BABIMOST	1 801	1 760	948	1 711	2 394	2 614	2 821	5 435	2 729	2 808	2 925	2 614					
OLSZTYN-MAZURY	0	617	1 030	1 412	2 027	3 137	3 880	7 017	3 962	4 041	4 617	3 137					
4.2 Total determined/actual costs (1)	84 509	89 844	87 083	100 735	114 835	111 560	158 432	269 992	151 060	152 053	151 685	111 560					
Total % n/n-1		6,3%	-3,1%	15,7%	14,0%	-2,9%	42,0%		-4,7%	0,7%	-0,2%	-2,9%					

(1) Total costs after deduction of costs for services to exempted flights (in nominal terms)

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
All Entities

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	269 991,6	151 059,8	152 053,4	151 684,9
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	214 242,5	121 883,1	122 266,8	120 605,2
2.2 Forecast inflation index - Table 1		113,37	116,24	119,15
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing	220 376,6	125 186,0	123 773,2	121 824,4
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	155 598,4			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	-2 809,6	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	-84,6	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	-2 894,2	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))	0,0	0,0	0,0	0,0
12 Total adjustments relating to year n	152 704,1	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	269 991,57	151 059,77	152 053,41	151 684,89
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 18 927,59	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	2 799,88	-	- 1 572,63	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	- 24,51	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 23 712,84	- 12 357,14	- 12 438,18	-
13.8 Other revenues (Art. 25(2)(i))	- 2 361,34	- 2 894,24	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	31 119,67	31 119,67
13.11 Grand total for the calculation of year n unit rate	227 765,2	135 808,4	169 162,3	182 804,6
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	1 847,38	1 347,76	1 346,16	1 316,03
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00	0,00	0,00
14 Applicable unit rate for year n	1 847,38	1 347,76	1 346,16	1 316,03

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

4) Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2020

Forecast service units used for the unit rate as per Art. 25(2) applied temporary in 2021

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

781,89

791,12

-

-

146,86

152,10

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
ANSP PANSN

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	216 415,8	122 566,3	120 850,6	117 535,6
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	173 570,4	100 132,2	98 205,8	95 364,6
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing	216 415,8	122 566,3	120 850,6	117 535,6
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	125 200,9			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	-2 809,6	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	-84,6	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	-2 894,2	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	122 306,7	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	216 415,77	122 566,27	120 850,65	117 535,61
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 15 521,31	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	2 799,88	-	- 1 572,63	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	- 24,51	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 19 514,12	- 10 109,68	- 10 107,63	-
13.8 Other revenues (Art. 25(2)(i))	- 2 172,35	- 2 894,24	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	25 040,18	25 040,18
13.11 Grand total for the calculation of year n unit rate	181 983,3	109 562,3	134 210,6	142 575,8
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	1 476,05	1 087,30	1 068,02	1 026,42
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	1 476,05	1 087,30	1 068,02	1 026,42

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

623,30

625,81

-

-

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
AFIS Modlin

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	-	-	-	-
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	0,0	0,0	0,0	0,0
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing	0,0	0,0	0,0	0,0
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	0,0			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	0,0	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	-	-	-	-
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 9,15	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 11,01	- 5,94	- 5,89	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	- 0,00	- 0,00
13.11 Grand total for the calculation of year n unit rate	-20,2	-5,9	-5,9	0,0
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	-0,16	-0,06	-0,05	0,00
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	-0,16	-0,06	-0,05	0,00

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
AFIS Bydgoszcz

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	740,6	666,4	937,2	1 711,9
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	698,3	643,4	731,5	998,5
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing	740,6	666,4	937,2	1 711,9
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	698,9			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	698,9	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	740,59	666,40	937,16	1 711,93
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	-	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	-	-	-	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	139,78	139,78
13.11 Grand total for the calculation of year n unit rate	740,6	666,4	1 076,9	1 851,7
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	6,01	6,61	8,57	13,33
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	6,01	6,61	8,57	13,33

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
AFIS-COM Warmia i Mazury

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	3 220,2	1 953,4	1 985,4	2 576,8
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	2 893,5	1 748,4	1 824,3	2 007,6
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing	3 220,2	1 953,4	1 985,4	2 576,8
4.2 % deviation % referred to in Article 27(2) and 27(5)	2%	2%	2%	2%
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)	70%	70%	70%	70%
4.5 % deviation referred to in Article 27(4)	10%	10%	10%	10%
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	1 523,1			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	1 523,1	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	3 220,21	1 953,36	1 985,39	2 576,83
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	-	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	-	-	-	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	304,63	304,63
13.11 Grand total for the calculation of year n unit rate	3 220,2	1 953,4	2 290,0	2 881,5
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	26,12	19,39	18,22	20,74
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	26,12	19,39	18,22	20,74

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
MET IMWM

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	34 833,7	17 942,0	18 436,6	19 852,2
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	31 759,4	16 352,5	16 807,4	17 498,2
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	19 183,6			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	19 183,6	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	34 833,70	17 942,03	18 436,62	19 852,25
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 2 654,22	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 3 265,66	- 1 746,50	- 1 729,07	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	3 836,72	3 836,72
13.11 Grand total for the calculation of year n unit rate	28 913,8	16 195,5	20 544,3	23 689,0
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	234,52	160,72	163,49	170,54
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	234,52	160,72	163,49	170,54

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
MET Radom

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	206,9	109,1	1 828,7	1 766,0
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	166,0	91,1	1 706,2	1 640,2
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	-540,0			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	-540,0	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	206,93	109,08	1 828,66	1 766,03
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 72,65	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 79,07	- 42,39	- 160,06	-
13.8 Other revenues (Art. 25(2)(i))	- 188,99	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	- 107,99	- 107,99
13.11 Grand total for the calculation of year n unit rate	-133,8	66,7	1 560,6	1 658,0
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	-1,09	0,66	12,42	11,94
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	-1,09	0,66	12,42	11,94

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
MET Bydgoszcz

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	3 388,9	1 956,8	1 984,9	2 072,4
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	2 771,9	1 682,5	1 725,1	1 825,0
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	2 657,7			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	2 657,7	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	3 388,92	1 956,78	1 984,88	2 072,36
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	-	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	-	-	-	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	531,54	531,54
13.11 Grand total for the calculation of year n unit rate	3 388,9	1 956,8	2 516,4	2 603,9
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	27,49	19,42	20,03	18,75
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	27,49	19,42	20,03	18,75

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
MET Warmia i Mazury

Reference Period 3

Table 2 A - Adjustments relating to year n	2020/2021	2022	2023	2024

A. Cost-sharing

Determined costs				
1.1 Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	2 440,3	1 268,2	1 299,5	1 302,5
Inflation adjustment calculation				
2.1 Determined costs subject to inflation adjustment	2 383,0	1 232,8	1 266,5	1 271,0
2.2 Forecast inflation index - Table 1		113,4	116,2	119,1
2.3 Actual inflation index - Table 1				
2.4 Actual / forecast total inflation index (in %)				
2.5 Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)				
3.1 New and existing investments (Art. 28(4))				
3.3 Competent authorities and qualified entities costs (Art. 28(5))				
3.4 Eurocontrol costs (Art. 28(5))				
3.5 Pension costs (Art. 28(6))				
3.6 Interest on loans (Art. 28(6))				
3.7 Changes in law (Art. 28(6))				
3.8 Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				

B. Traffic risk sharing

Traffic risk sharing adjustment				
4.1 Determined costs subject to traffic risk sharing				
4.2 % deviation % referred to in Article 27(2) and 27(5)				
4.3 % additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4 % loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5 % deviation referred to in Article 27(4)				
4.6 Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7 Actual total service units				
4.8 Actual / forecast total service units (in %)				
4.9 Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments				
5.1 For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2 Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3 Traffic adjustments relating to year n (Art. 27(8) and 27(9))				

C. Financial incentive schemes on capacity and environment

Adjustments relating to financial incentives				
6.1 Financial incentives relating to capacity (Art. 11(3))				
6.2 Financial incentives relating to environment (Art. 11(4))				
6.3 Additional financial incentives relating to capacity (Art. 11(4))				
6.4 Financial incentives relating to year n (Art. 11(3) and 11(4))				

D. Other adjustments

Modulation of charges				
7.1 Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate				
8.1 Temporary unit rate applied in year n	Footnote 2			
8.2 Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	1 409,9			
Cross-financing between charging zones				
9.1 Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues				
10.1 Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2 National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3 Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4 Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5 Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate	Footnote 3			
11.1 Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12 Total adjustments relating to year n	1 409,9	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)	2020/2021	2022	2023	2024
13.1 Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	2 440,29	1 268,24	1 299,46	1 302,45
13.2 Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 143,84	-	-	-
13.3 Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4 Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5 Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6 Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7 Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 188,21	- 101,70	- 93,09	-
13.8 Other revenues (Art. 25(2)(i))	-	-	-	-
13.9 Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10 Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	281,97	281,97
13.11 Grand total for the calculation of year n unit rate	2 108,2	1 166,5	1 488,3	1 584,4
13.12 Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13 Unit rate for year n as per Art. 25(2) (in national currency)	17,10	11,58	11,84	11,41
13.14 Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14 Applicable unit rate for year n	17,10	11,58	11,84	11,41

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

Table 2 - Unit rate calculation

Poland - Others
Currency: PLN
NSA

Reference Period 3

Table 2 A - Adjustments relating to year n		2020/2021	2022	2023	2024
A. Cost-sharing					
Determined costs					
1.1	Determined costs in nominal terms - VFR excl. - Table 1 (Art. 22)	8 745,2	4 597,6	4 730,6	4 867,4
Inflation adjustment calculation					
2.1	Determined costs subject to inflation adjustment				
2.2	Forecast inflation index - Table 1				
2.3	Actual inflation index - Table 1				
2.4	Actual / forecast total inflation index (in %)				
2.5	Inflation adjustment relating to year n (Art. 26)				
Differences between determined and actual costs referred to in Article 28(4) to 28(6)					
3.1	New and existing investments (Art. 28(4))				
3.3	Competent authorities and qualified entities costs (Art. 28(5))				
3.4	Eurocontrol costs (Art. 28(5))				
3.5	Pension costs (Art. 28(6))				
3.6	Interest on loans (Art. 28(6))				
3.7	Changes in law (Art. 28(6))				
3.8	Differences between determined and actual costs relating to year n (Art. 28(4) to 28(6))				
B. Traffic risk sharing					
Traffic risk sharing adjustment					
4.1	Determined costs subject to traffic risk sharing				
4.2	% deviation % referred to in Article 27(2) and 27(5)				
4.3	% additional revenue returned to users referred to in Article 27(3) and 27(5)				
4.4	% loss of revenue borne by airspace users referred to in Article 27(3) and 27(5)				
4.5	% deviation referred to in Article 27(4)				
4.6	Forecast total service units (performance plan)	123,3	100,8	125,7	138,9
4.7	Actual total service units				
4.8	Actual / forecast total service units (in %)				
4.9	Traffic risk sharing adjustment relating to year n (Art. 27(2) to 27(5))				
Traffic adjustments					
5.1	For determined costs not subject to traffic risk-sharing (Art. 27(8))				
5.2	Adjustments to year n unit rate not subject to traffic risk-sharing (Art. 27(9))				
5.3	Traffic adjustments relating to year n (Art. 27(8) and 27(9))				
C. Financial incentive schemes on capacity and environment					
Adjustments relating to financial incentives					
6.1	Financial incentives relating to capacity (Art. 11(3))				
6.2	Financial incentives relating to environment (Art. 11(4))				
6.3	Additional financial incentives relating to capacity (Art. 11(4))				
6.4	Financial incentives relating to year n (Art. 11(3) and 11(4))				
D. Other adjustments					
Modulation of charges					
7.1	Adjustment to ensure revenue neutrality for modulation of charges in year n (Art. 32(1))				
Revision of the unit rate					
8.1	Temporary unit rate applied in year n	Footnote 2			
8.2	Difference in revenue due to the temporary application of unit rate in year n (Art. 29(5))	5 464,3			
Cross-financing between charging zones					
9.1	Cross-financing to (-) / from (+) other charging zone(s) relating to year n				
Other revenues					
10.1	Union assistance programmes (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.2	National public funding (Art. 25(3)(a))	0,0	0,0	0,0	0,0
10.3	Commercial activities (Art. 25(3)(b))	0,0	0,0	0,0	0,0
10.4	Revenues from contracts with airport operators (Art. 25(3)(c))	0,0	0,0	0,0	0,0
10.5	Total other revenues relating to year n (Art. 25(3))	0,0	0,0	0,0	0,0
Application of a lower unit rate		Footnote 3			
11.1	Loss of revenue relating to the application of a lower unit rate in n (Art. 29(6))				
12	Total adjustments relating to year n	5 464,3	0,0	0,0	0,0

Table 2 B - Calculation of the unit rate for year n (1)		2020/2021	2022	2023	2024
13.1	Determined costs in nominal terms - VFR excl. (Art. 25(2)(a))	8 745,17	4 597,61	4 730,60	4 867,44
13.2	Inflation adjustment : amount carried over to year n (Art. 25(2)(b))	- 526,41	-	-	-
13.3	Traffic risk sharing adjustment : amounts carried over to year n (Art. 25(2)(c))	-	-	-	-
13.4	Differences in costs as per Art. 28(4) to (6) : amounts carried over to year n (Art. 25(2)(d))	-	-	-	-
13.5	Financial incentives : amounts carried over to year n (Art. 25(2)(e))	-	-	-	-
13.6	Modulation of charges : amounts carried over to year n (Art. 25(2)(f))	-	-	-	-
13.7	Traffic adjustments : amounts carried over to year n (Art. 25(2)(g) and (h))	- 654,77	- 350,93	- 342,44	-
13.8	Other revenues (Art. 25(2)(i))	-	-	-	-
13.9	Cross-financing between charging zones (Art. 25(2)(j))	-	-	-	-
13.10	Difference in revenue from temporary application of unit rate (Art. 25(2)(k))	-	-	1 092,85	1 092,85
13.11	Grand total for the calculation of year n unit rate	7 564,0	4 246,7	5 481,0	5 960,3
13.12	Forecast total service units for year n (performance plan)	123,3	100,8	125,7	138,9
13.13	Unit rate for year n as per Art. 25(2) (in national currency)	61,35	42,14	43,62	42,91
13.14	Reduction as per Art. 29(6), where applicable (in national currency)	0,00	0,00		
14	Applicable unit rate for year n	61,35	42,14	43,62	42,91

Costs, revenues and other amounts in '000 - Service units in '000

(1) Including adjustments relating to previous reference periods (Art. 25(2)(l))

(2) Unit rate as per Art. 25(2) applied temporary in 2020 (in national currency)

Unit rate as per Art. 25(2) applied temporary in 2021 (in national currency)

3) Reduction as per Art. 29(6) applied in 2020 (in national currency)

Reduction as per Art. 29(6) applied in 2021 (in national currency)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption
that actual TSUs 2021 are equal to
forecast and that the
revised plan is adopted in 2022

22,23

23,08

-

-

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
All Entities

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2 024	After RP
Inflation adjustment 2018	-9 078	-9 078	0	0	0	0	0
Inflation adjustment 2019	-9 850	0	-9 850	0	0	0	0
Total inflation adjustment up to 2019	-18 928	-9 078	-9 850	0	0	0	0
Inflation adjustment 2020-2021	0	0	0	0	0	0	0
Inflation adjustment 2022	0	0	0	0	0	0	0
Inflation adjustment 2023	0	0	0	0	0	0	0
Inflation adjustment 2024	0	0	0	0	0	0	0
Total inflation Adjustment (Art. 26)*	-18 928	-9 078	-9 850	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	0	0	0	0	0	0	0
Traffic risk sharing 2019	0	0	0	0	0	0	0
Total traffic risk sharing adjustments up to 2019	0	0	0	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Traffic risk sharing 2022	0	0	0	0	0	0	0
Traffic risk sharing 2023	0	0	0	0	0	0	0
Traffic risk sharing 2024	0	0	0	0	0	0	0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	0	0	0	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in investment costs 2022	0	0	0	0	0	0	0
Difference in investment costs 2023	0	0	0	0	0	0	0
Difference in investment costs 2024	0	0	0	0	0	0	0
Total adjustment relating to investment costs (Art. 28(4))	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2022	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2023	0	0	0	0	0	0	0
Difference in competent authorities and QEs costs 2024	0	0	0	0	0	0	0
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2022	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2023	0	0	0	0	0	0	0
Difference in Eurocontrol costs 2024	0	0	0	0	0	0	0
Total adjustment relating to Eurocontrol costs (Art. 28(5))	0	0	0	0	0	0	0
Difference in pension costs 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in pension costs 2022	0	0	0	0	0	0	0
Difference in pension costs 2023	0	0	0	0	0	0	0
Difference in pension costs 2024	0	0	0	0	0	0	0
Total adjustment relating to pension costs (Art. 28(6))	0	0	0	0	0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Difference in interest on loans 2022	0	0	0	0	0	0	0
Difference in interest on loans 2023	0	0	0	0	0	0	0
Difference in interest on loans 2024	0	0	0	0	0	0	0
Total adjustment relating to interest on loans (Art. 28(6))	0	0	0	0	0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Costs relating to change in law 2022	0	0	0	0	0	0	0
Costs relating to change in law 2023	0	0	0	0	0	0	0
Costs relating to change in law 2024	0	0	0	0	0	0	0
Total adjustment relating to change in law (Art. 28(6))	0	0	0	0	0	0	0
Cost exempt from cost sharing up to 2017	1 227	0	277	0	951	0	0
Cost exempt from cost sharing 2018	0	0	291	0	-291	0	0
Cost exempt from cost sharing 2019	0	0	2 232	0	-2 232	0	0
Total adjustment relating to cost exempt from previous RPs	1 227	0	2 800	0	-1 573	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	-25	-25	0	0	0	0	0
Financial incentives year 2019	0	0	0	0	0	0	0
Total financial incentives up to 2019	-25	-25	0	0	0	0	0
Financial incentives year 2022	0	0	0	0	0	0	0
Financial incentives year 2023	0	0	0	0	0	0	0
Financial incentives year 2024	0	0	0	0	0	0	0
Total financial incentives (Art. 11(3) and 11(4))*	-25	-25	0	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	0
Modulation of charges year 2018	0	0	0	0	0	0	0
Modulation of charges year 2019	0	0	0	0	0	0	0
Total modulation of charges up to 2019	0	0	0	0	0	0	0
Modulation of charges 2020-2021	0	0	0	0	0	0	0
Modulation of charges 2022	0	0	0	0	0	0	0
Modulation of charges 2023	0	0	0	0	0	0	0

Modulation of charges 2024	0	0	0	0	0	0	0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-12 706	-12 706	0	0	0	0	0
Traffic adjustment 2019	-11 007	0	-11 007	0	0	0	0
Total traffic adjustments up to 2019	-23 713	-12 706	-11 007	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-12 357	0	0	-12 357	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-12 438	0	0	0	-12 438	0	0
Traffic adjustment on adjustments from previous RPs 2022	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2023	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2024	0	0	0	0	0	0	0
Total traffic adjustment on adjustments from previous reference periods	-24 795	0	0	-12 357	-12 438	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0	0	0	0	0	0	0
Traffic adjustment 2022	0	0	0	0	0	0	0
Traffic adjustment 2023	0	0	0	0	0	0	0
Traffic adjustment 2024	0	0	0	0	0	0	0
Total traffic adjustment (Art. 27(8) and 27(9))*	-48 508	-12 706	-11 007	-12 357	-12 438	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	323	323	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	-2 422	0	-2 422	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	-2 099	323	-2 422	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	-2 810	0	0	-2 810	0	0	0
Revenues received from Union assistance programmes in 2022	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2023	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2024	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	-4 909	323	-2 422	-2 810	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	11	11	0	0	0	0	0
Revenues received from national public funding in 2019	-84	0	-84	0	0	0	0
Total revenues received from national public funding up to 2019	-73	11	-84	0	0	0	0
Revenues received from national public funding in 2020-2021	-85	0	0	-85	0	0	0
Revenues received from national public funding in 2022	0	0	0	0	0	0	0
Revenues received from national public funding in 2023	0	0	0	0	0	0	0
Revenues received from national public funding in 2024	0	0	0	0	0	0	0
Total revenues received from national public funding (Art. 25(3)(a))*	-158	11	-84	-85	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	-189	0	-189	0	0	0	0
Total revenues from commercial activities up to 2019	-189	0	-189	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0	0	0
Revenues from commercial activities in 2022	0	0	0	0	0	0	0
Revenues from commercial activities in 2023	0	0	0	0	0	0	0
Revenues from commercial activities in 2024	0	0	0	0	0	0	0
Total revenues from commercial activities (Art. 25(3)(b))*	-189	0	-189	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2022	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2023	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2024	0	0	0	0	0	0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	155 598	0	0	0	31 120	31 120	93 359
Revenue difference - revision of UR 2022	0	0	0	0	0	0	0
Revenue difference - revision of UR 2023	0	0	0	0	0	0	0
Revenue difference - revision of UR 2024	0	0	0	0	0	0	0
Total revenue differences from temporary application of UR (Art. 29(5))	155 598	0	0	0	31 120	31 120	93 359
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024	0	0	0	0	0	0	0
Total cross-financing to (-) / from (+) other charging zone(s)	0	0	0	0	0	0	0
Total adjustments	84 110	-21 474	-20 752	-15 251	17 109	31 120	93 359

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
ANSP PANSA

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-7 424	-7 424					
Inflation adjustment 2019	-8 097		-8 097				
Total inflation adjustment up to 2019	-15 521	-7 424	-8 097				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	-15 521	-7 424	-8 097	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	0	0	0	0	0	0	0
Traffic risk sharing 2019	0		0	0	0	0	0
Total traffic risk sharing adjustments up to 2019	0	0	0	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
Traffic risk sharing 2022	0					0	
Traffic risk sharing 2023	0						0
Traffic risk sharing 2024	0						0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	0	0	0	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	1 227	0	277	0	951	0	0
Cost exempt from cost sharing 2018	0	0	291	0	-291	0	0
Cost exempt from cost sharing 2019	0		2 232	0	-2 232	0	0
Total adjustment relating to cost exempt from previous RPs	1 227	0	2 800	0	-1 573	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	-25	-25					
Financial incentives year 2019	0		0				
Total financial incentives up to 2019	-25	-25	0	0	0	0	0
Financial incentives year 2022	0					0	
Financial incentives year 2023	0						0
Financial incentives year 2024	0						0
Total financial incentives (Art. 11(3) and 11(4))*	-25	-25	0	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-10 454	-10 454	0	0	0	0	0
Traffic adjustment 2019	-9 060		-9 060	0	0	0	0
Total traffic adjustments up to 2019	-19 514	-10 454	-9 060	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-10 110			-10 110	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-10 108				-10 108	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-20 217	0	0	-10 110	-10 108	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-39 731	-10 454	-9 060	-10 110	-10 108	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	323	323	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	-2 422	0	-2 422	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	-2 099	323	-2 422	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	-2 810	0	0	-2 810	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	-4 909	323	-2 422	-2 810	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	11	11	0	0	0	0	0
Revenues received from national public funding in 2019	-84	0	-84	0	0	0	0
Total revenues received from national public funding up to 2019	-73	11	-84	0	0	0	0
Revenues received from national public funding in 2020-2021	-85	0	0	-85	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	-158	11	-84	-85	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	125 201				25 040	25 040	75 121
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	125 201	0	0	0	25 040	25 040	75 121
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	66 084	-17 568	-16 864	-13 004	13 360	25 040	75 121

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
AFIS Modlin

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-4	-4					
Inflation adjustment 2019	-5		-5				
Total inflation adjustment up to 2019	-9	-4	-5				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	-9	-4	-5	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	0	0	0	0	0	0	0
Traffic risk sharing 2019	0		0	0	0	0	0
Total traffic risk sharing adjustments up to 2019	0	0	0	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
Traffic risk sharing 2022	0					0	
Traffic risk sharing 2023	0						0
Traffic risk sharing 2024	0						0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	0	0	0	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	0	0					
Financial incentives year 2019	0		0				
Total financial incentives up to 2019	0	0	0	0	0	0	0
Financial incentives year 2022	0					0	
Financial incentives year 2023	0						0
Financial incentives year 2024	0						0
Total financial incentives (Art. 11(3) and 11(4))*	0	0	0	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-6	-6	0	0	0	0	0
Traffic adjustment 2019	-5		-5	0	0	0	0
Total traffic adjustments up to 2019	-11	-6	-5	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-6			-6	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-6				-6	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-12	0	0	-6	-6	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-23	-6	-5	-6	-6	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	0
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	0
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	0				0	0	0
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	0	0	0	0	0	0	0
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	-32	-10	-10	-6	-6	0	0

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
AFIS Bydgoszcz

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	0	0					
Inflation adjustment 2019	0		0				
Total inflation adjustment up to 2019	0	0	0				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	0	0	0	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	0	0	0	0	0	0	0
Traffic risk sharing 2019	0		0	0	0	0	0
Total traffic risk sharing adjustments up to 2019	0	0	0	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
Traffic risk sharing 2022	0					0	
Traffic risk sharing 2023	0						0
Traffic risk sharing 2024	0						0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	0	0	0	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	0	0					
Financial incentives year 2019	0		0				
Total financial incentives up to 2019	0	0	0	0	0	0	0
Financial incentives year 2022	0					0	
Financial incentives year 2023	0						0
Financial incentives year 2024	0						0
Total financial incentives (Art. 11(3) and 11(4))*	0	0	0	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	0	0	0	0	0	0	0
Traffic adjustment 2019	0		0	0	0	0	0
Total traffic adjustments up to 2019	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	0			0	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	0				0	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	0	0	0	0	0	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	0	0	0	0	0	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	699				140	140	419
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	699	0	0	0	140	140	419
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	699	0	0	0	140	140	419

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
AFIS-COM Warmia i Mazury

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	0	0					
Inflation adjustment 2019	0		0				
Total inflation adjustment up to 2019	0	0	0				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	0	0	0	0	0	0	0
Traffic risk sharing up to 2017	0	0	0	0	0	0	0
Traffic risk sharing 2018	0	0	0	0	0	0	0
Traffic risk sharing 2019	0		0	0	0	0	0
Total traffic risk sharing adjustments up to 2019	0	0	0	0	0	0	0
Traffic risk sharing 2020-2021 (exceptional measures)	0				0	0	
Traffic risk sharing 2022	0					0	
Traffic risk sharing 2023	0						0
Traffic risk sharing 2024	0						0
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*	0	0	0	0	0	0	0
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017	0	0	0	0	0	0	0
Financial incentives year 2018	0	0					
Financial incentives year 2019	0		0				
Total financial incentives up to 2019	0	0	0	0	0	0	0
Financial incentives year 2022	0					0	
Financial incentives year 2023	0						0
Financial incentives year 2024	0						0
Total financial incentives (Art. 11(3) and 11(4))*	0	0	0	0	0	0	0
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	0	0	0	0	0	0	0
Traffic adjustment 2019	0		0	0	0	0	0
Total traffic adjustments up to 2019	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	0			0	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	0				0	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	0	0	0	0	0	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	0	0	0	0	0	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	1 523				305	305	914
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	1 523	0	0	0	305	305	914
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	1 523	0	0	0	305	305	914

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
MET IMWM

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-1 287	-1 287					
Inflation adjustment 2019	-1 367		-1 367				
Total inflation adjustment up to 2019	-2 654	-1 287	-1 367				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	-2 654	-1 287	-1 367	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-1 748	-1 748	0	0	0	0	0
Traffic adjustment 2019	-1 518		-1 518	0	0	0	0
Total traffic adjustments up to 2019	-3 266	-1 748	-1 518	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-1 746			-1 746	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-1 729				-1 729	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-3 476	0	0	-1 746	-1 729	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-6 741	-1 748	-1 518	-1 746	-1 729	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	19 184				3 837	3 837	11 510
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	19 184	0	0	0	3 837	3 837	11 510
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	9 788	-3 035	-2 885	-1 746	2 108	3 837	11 510

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
MET Radom

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-35	-35					
Inflation adjustment 2019	-37		-37				
Total inflation adjustment up to 2019	-73	-35	-37				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	-73	-35	-37	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-38	-38	0	0	0	0	0
Traffic adjustment 2019	-41		-41	0	0	0	0
Total traffic adjustments up to 2019	-79	-38	-41	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-42			-42	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-160				-160	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-202	0	0	-42	-160	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-282	-38	-41	-42	-160	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	-189	0	-189	0	0	0	0
Total revenues from commercial activities up to 2019	-189	0	-189	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	-189	0	-189	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	-540				-108	-108	-324
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	-540	0	0	0	-108	-108	-324
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	-1 083	-74	-267	-42	-268	-108	-324

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
MET Bydgoszcz

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	0	0					
Inflation adjustment 2019	0		0				
Total inflation adjustment up to 2019	0	0	0				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	0	0	0	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	0	0	0	0	0	0	0
Traffic adjustment 2019	0		0	0	0	0	0
Total traffic adjustments up to 2019	0	0	0	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	0			0	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	0				0	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	0	0	0	0	0	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	0	0	0	0	0	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	2 658				532	532	1 595
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	2 658	0	0	0	532	532	1 595
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	2 658	0	0	0	532	532	1 595

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
MET Warmia i Mazury

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-70	-70					
Inflation adjustment 2019	-73		-73				
Total inflation adjustment up to 2019	-144	-70	-73				
Inflation adjustment 2020-2021	0				0		
Inflation adjustment 2022	0					0	
Inflation adjustment 2023	0						0
Inflation adjustment 2024	0						0
Total inflation Adjustment (Art. 26)*	-144	-70	-73	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)	0				0		0
Difference in investment costs 2022	0					0	0
Difference in investment costs 2023	0						0
Difference in investment costs 2024	0						0
Total adjustment relating to investment costs (Art. 28(4))	0				0	0	0
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)							
Difference in competent authorities and QEs costs 2022							
Difference in competent authorities and QEs costs 2023							
Difference in competent authorities and QEs costs 2024							
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))							
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)	0				0		0
Difference in pension costs 2022	0					0	0
Difference in pension costs 2023	0						0
Difference in pension costs 2024	0						0
Total adjustment relating to pension costs (Art. 28(6))	0				0	0	0
Difference in interest on loans 2020-2021 (exceptional measures)	0				0		0
Difference in interest on loans 2022	0					0	0
Difference in interest on loans 2023	0						0
Difference in interest on loans 2024	0						0
Total adjustment relating to interest on loans (Art. 28(6))	0				0	0	0
Costs relating to change in law 2020-2021 (exceptional measures)	0				0		0
Costs relating to change in law 2022	0					0	0
Costs relating to change in law 2023	0						0
Costs relating to change in law 2024	0						0
Total adjustment relating to change in law (Art. 28(6))	0				0	0	0
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-106	-106	0	0	0	0	0
Traffic adjustment 2019	-82		-82	0	0	0	0
Total traffic adjustments up to 2019	-188	-106	-82	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-102			-102	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-93				-93	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-195	0	0	-102	-93	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-383	-106	-82	-102	-93	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	1 410				282	282	846
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	1 410	0	0	0	282	282	846
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	883	-177	-155	-102	189	282	846

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 3 - Complementary information on adjustments

Poland - Others
Currency: PLN
NSA

Complementary information on adjustments	Amounts	2020	2021	2022	2023	2024	After RP
Inflation adjustment 2018	-256	-256					
Inflation adjustment 2019	-271		-271				
Total inflation adjustment up to 2019	-526	-256	-271				
Inflation adjustment 2020-2021							
Inflation adjustment 2022							
Inflation adjustment 2023							
Inflation adjustment 2024							
Total inflation Adjustment (Art. 26)*	-526	-256	-271	0	0	0	0
Traffic risk sharing up to 2017							
Traffic risk sharing 2018							
Traffic risk sharing 2019							
Total traffic risk sharing adjustments up to 2019							
Traffic risk sharing 2020-2021 (exceptional measures)							
Traffic risk sharing 2022							
Traffic risk sharing 2023							
Traffic risk sharing 2024							
Total traffic risk sharing adjustment (Art. 27(2) to 27(5))*							
Difference in investment costs 2020-2021 (exceptional measures)							
Difference in investment costs 2022							
Difference in investment costs 2023							
Difference in investment costs 2024							
Total adjustment relating to investment costs (Art. 28(4))							
Difference in competent authorities and QEs costs 2020-2021 (exc.meas.)	0				0		
Difference in competent authorities and QEs costs 2022	0					0	
Difference in competent authorities and QEs costs 2023	0						0
Difference in competent authorities and QEs costs 2024	0						0
Total adjustment relating to competent authorities and QEs costs (Art. 28(5))	0				0	0	0
Difference in Eurocontrol costs 2020-2021 (exceptional measures)							
Difference in Eurocontrol costs 2022							
Difference in Eurocontrol costs 2023							
Difference in Eurocontrol costs 2024							
Total adjustment relating to Eurocontrol costs (Art. 28(5))							
Difference in pension costs 2020-2021 (exceptional measures)							
Difference in pension costs 2022							
Difference in pension costs 2023							
Difference in pension costs 2024							
Total adjustment relating to pension costs (Art. 28(6))							
Difference in interest on loans 2020-2021 (exceptional measures)							
Difference in interest on loans 2022							
Difference in interest on loans 2023							
Difference in interest on loans 2024							
Total adjustment relating to interest on loans (Art. 28(6))							
Costs relating to change in law 2020-2021 (exceptional measures)							
Costs relating to change in law 2022							
Costs relating to change in law 2023							
Costs relating to change in law 2024							
Total adjustment relating to change in law (Art. 28(6))							
Cost exempt from cost sharing up to 2017	0	0	0	0	0	0	0
Cost exempt from cost sharing 2018	0	0	0	0	0	0	0
Cost exempt from cost sharing 2019	0		0	0	0	0	0
Total adjustment relating to cost exempt from previous RPs	0	0	0	0	0	0	0
Financial incentives year up to 2017							
Financial incentives year 2018							
Financial incentives year 2019							
Total financial incentives up to 2019							
Financial incentives year 2022							
Financial incentives year 2023							
Financial incentives year 2024							
Total financial incentives (Art. 11(3) and 11(4))*							
Modulation of charges up to 2017	0	0	0	0	0	0	
Modulation of charges year 2018	0	0	0	0	0	0	
Modulation of charges year 2019	0		0	0	0	0	
Total modulation of charges up to 2019	0	0	0	0	0	0	
Modulation of charges 2020-2021	0				0		
Modulation of charges 2022	0					0	
Modulation of charges 2023	0						0

Modulation of charges 2024	0						0
Total adjustment relating to modulation of charges (Art. 32(1))*	0	0	0	0	0	0	0
Traffic adjustment up to 2017	0	0	0	0	0	0	0
Traffic adjustment 2018	-354	-354	0	0	0	0	0
Traffic adjustment 2019	-301		-301	0	0	0	0
Total traffic adjustments up to 2019	-655	-354	-301	0	0	0	0
Traffic adjustment on adjustments from previous RPs 2020	-351			-351	0	0	0
Traffic adjustment on adjustments from previous RPs 2021	-342				-342	0	0
Traffic adjustment on adjustments from previous RPs 2022	0					0	0
Traffic adjustment on adjustments from previous RPs 2023	0						0
Traffic adjustment on adjustments from previous RPs 2024	0						0
Total traffic adjustment on adjustments from previous reference periods	-693	0	0	-351	-342	0	0
Traffic adjustment 2020-2021 (exceptional measures)	0				0	0	
Traffic adjustment 2022	0					0	
Traffic adjustment 2023	0						0
Traffic adjustment 2024	0						0
Total traffic adjustment (Art. 27(8) and 27(9))*	-1 348	-354	-301	-351	-342	0	0
Revenues received from Union assistance programmes up to 2017	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2018	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2019	0	0	0	0	0	0	0
Total revenues received from Union assistance programmes up to 2019	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2020-2021	0	0	0	0	0	0	0
Revenues received from Union assistance programmes in 2022	0			0	0	0	0
Revenues received from Union assistance programmes in 2023	0				0	0	0
Revenues received from Union assistance programmes in 2024	0					0	0
Total revenues received from Union assistance programmes (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues received from national public funding up to 2017	0	0	0	0	0	0	0
Revenues received from national public funding in 2018	0	0	0	0	0	0	0
Revenues received from national public funding in 2019	0	0	0	0	0	0	0
Total revenues received from national public funding up to 2019	0	0	0	0	0	0	0
Revenues received from national public funding in 2020-2021	0	0	0	0	0	0	0
Revenues received from national public funding in 2022	0			0	0	0	0
Revenues received from national public funding in 2023	0				0	0	0
Revenues received from national public funding in 2024	0					0	0
Total revenues received from national public funding (Art. 25(3)(a))*	0	0	0	0	0	0	0
Revenues from commercial activities up to 2017	0	0	0	0	0	0	0
Revenues from commercial activities in 2018	0	0	0	0	0	0	0
Revenues from commercial activities in 2019	0	0	0	0	0	0	0
Total revenues from commercial activities up to 2019	0	0	0	0	0	0	0
Revenues from commercial activities in 2020-2021	0	0	0	0	0		
Revenues from commercial activities in 2022	0			0	0	0	
Revenues from commercial activities in 2023	0				0	0	0
Revenues from commercial activities in 2024	0					0	0
Total revenues from commercial activities (Art. 25(3)(b))*	0	0	0	0	0	0	0
Revenues from contracts with airport operators up to 2017	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2018	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2019	0	0	0	0	0	0	0
Total revenues from contracts with airport operators up to 2019	0	0	0	0	0	0	0
Revenues from contracts with airport operators in 2020-2021	0	0	0	0	0		
Revenues from contracts with airport operators in 2022	0			0	0	0	
Revenues from contracts with airport operators in 2023	0				0	0	0
Revenues from contracts with airport operators in 2024	0					0	0
Total revenues from contracts with airport operators (Art. 25(3)(c))*	0	0	0	0	0	0	0
Revenue difference - revision of UR 2020-2021	5 464				1 093	1 093	3 279
Revenue difference - revision of UR 2022	0				0	0	0
Revenue difference - revision of UR 2023	0					0	0
Revenue difference - revision of UR 2024	0						0
Total revenue differences from temporary application of UR (Art. 29(5))	5 464	0	0	0	1 093	1 093	3 279
Cross-financing to (-) / from (+) other charging zone(s) 2020-2021							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2022							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2023							
Cross-financing to (-) / from (+) other charging zone(s) relating to 2024							
Total cross-financing to (-) / from (+) other charging zone(s)							
Total adjustments	3 590	-610	-571	-351	750	1 093	3 279

Amounts in '000 (national currency)

* Including carry-overs relating to the previous reference period(s)

Note: Adjustments relating to RP3 are to be calculated and carried forward only once the RP3 performance plan has been adopted in accordance with Article 16 (a) or (b)

Estimates made on assumption that actual TSUs 2021 are equal to forecast and that the revised plan is adopted in 2022

Table 4 - Complementary information on common projects and on revenues from Union assistance programmes allocated to the charging zone

England - Others

Amounts requested		Value of funded project in '000 Euro		Amounts granted (ex per GA) in '000 Euro		Common project s/n	Actual amounts received (charging zone) in '000 Euro												
Project reference (ex per Grant Agreement)	Project title	Total	For the charging zone	Total	For the charging zone		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
PO1.06.03.00-00-000/11-00	Operational Programme Infrastructure and Environment	341 440	11 154	70 951	5 091	N	2 880	1 227	1 208	280	0	0	0						
MO4/EI2-2014-717/SESAR FPA	Cost of FANGA's employees working for SESAR	200	26	200	26	N	0	0	0	0	0	0	0	0					
RP18.01.01.00-08-002/14-00	Deployment Alliance	1 008	411	732	205	N	0	0	205	0	0	0	0	0					
PA2N15-614/AG	Cost of FANGA's employees working for SESAR	13	1	13	1	N	0	0	2	3	-4	0	0	0					
GA 731781	Deployment Alliance	745	74	521	52	N	0	0	9	5	5	14							
GA 73321	Total Airport Management – P104 TAM	101	10	71	7	N	0	0	1	0	1	2	0						
GA 731796	Advanced Airspace Management – P108 AAM	327	32	229	23	N	0	0	3	4	5	8	5						
GA 734143	Controller Tools and Team Organisation for the Provision of Separation in Air Traffic Management – P102 PROSA	405	40	283	28	N	0	0	2	2	3	14	0						
GA 734161	AD Trajectory Management – P1124 ADTM	41	4	29	3	N	0	0	0	0	1	1	0						
GA INEA/CE3/TRAN/M2014/2017259	Call 2014 ITEC	6 600	654	3 304	327	Y	0	0	0	122	0	130	0						
GA INEA/CE3/TRAN/M2015/1131871	Call 2015 - ECI - LAN	3 570	362	3 040	308	Y	0	0	0	75	0	69	0						
GA INEA/CE3/TRAN/M2016/1349610	Call 2016	13 330	1 287	5 760	556	Y	0	0	0	189	0	0	188	0					
GA 734139	Airport Safety Nets P103b SAFE	176	37	263	26	N	0	0	0	2	2	12	30						
GA 734129	Trajectory based Free Routing – P105 TbfRR	759	75	531	53	N	0	0	0	12	6	26	9						
PO1.06.03.00-00-000/11-00	Operational Programme Infrastructure and Environment II	44 391	4 168	37 732	3 543	N	0	0	0	0	1 089	1 203	474						
GA INEA/CE3/TRAN/M2017/1349610	Call 2017	456	45	228	23	Y	0	0	0	0	0	23	0						
GA E74677	WAVE 2 - P102	146	15	104	10	N	0	0	0	0	0	10	0						
GA E74672	WAVE 2 - P104	56	6	39	4	N	0	0	0	0	0	4	0						
GA E74670	WAVE 2 - P105	0	0	0	0	N	0	0	0	0	0	0	0						
GA E74665	WAVE 2 - P107	125	12	87	9	N	0	0	0	0	0	9	0						
GA E74663	WAVE 2 - P109	36	4	25	2	N	0	0	0	0	0	2	0						
GA E74664	WAVE 2 - P110	108	11	75	7	N	0	0	0	0	0	7	0						
GA E74674	WAVE 2 - P113	0	0	0	0	N	0	0	0	0	0	0	0						
GA E73220	WAVE 2 - P118	126	13	86	8	N	0	0	0	0	0	9	0						
GA E74673	WAVE 2 - P119	29	3	20	2	N	0	0	0	0	0	2	0						
GA E74675	WAVE 2 - P120	20	1	20	1	N	0	0	0	0	0	2	0						
GA E74676	WAVE 2 - V102	0	0	0	0	N	0	0	0	0	0	1	0						
Total in '000 Euro		214 150	14 487	124 412	10 913		2 880	1 226	1 203	684	1 114	1 593	689	0	0	0	0		
Total in '000 national currency		889 022	76 792	514 643	45 483		11 739	5 036	5 292	2 962	4 586	6 166	2 731						

Amounts reimbursed to airspace users through other revenues

Project reference (ex per Grant Agreement)	Project title	Amounts retained in respect of administrative costs for the charging zone in '000 Euro	Total to be reimbursed for the charging zone in '000 Euro	Amounts reimbursed to users (charging zone) in '000 national currency														
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	After 2024			
PO1.06.03.00-00-000/11-00	Operational Programme Infrastructure and Environment			1 566	1 594	1 676	2 039	1 670	-493	-499	1 400	2 010						
MO4/EI2-2014-717/SESAR FPA	Cost of FANGA's employees working for SESAR			0	0	0	0	0	48	28	255							
RP18.01.01.00-08-002/14-00	Deployment Alliance			0	0	24	67	85	1	0	846							
PA2N15-614/AG	Cost of FANGA's employees working for SESAR			0	0	0	0	0	5	0	0							
GA 731781	Deployment Alliance			0	0	0	0	0	0	31	55	610						
GA 73321	Increased Runway and Airport Throughput – P102 ERTH			0	0	0	0	0	0	5	8	67						
GA 731796	Total Airport Management – P104 TAM			0	0	0	0	0	0	30	23	335						
GA 734143	Advanced Airspace Management – P108 AAM			0	0	0	0	0	0	11	17	620						
	Controller Tools and Team Organisation for the Provision of Separation in Air Traffic Management – P102 PROSA																	
GA 734161	AD Trajectory Management – P1124 ADTM			0	0	0	0	0	0	3	3	42						
GA INEA/CE3/TRAN/M2014/2017259	Call 2014 ITEC			0	0	0	0	0	0	78	32	482						
GA INEA/CE3/TRAN/M2015/1131871	Call 2015 - ECI - LAN			0	0	0	0	0	0	7	10	434						
GA INEA/CE3/TRAN/M2016/1349610	Call 2016			0	0	0	0	0	0	159	94	973						
GA 734139	Airport Safety Nets P103b SAFE			0	0	0	0	0	0	9	9	545						
GA 734129	Trajectory based Free Routing – P105 TbfRR			0	0	0	0	0	0	26	52	1143						
PO1.06.03.00-00-000/11-00	Operational Programme Infrastructure and Environment II			0	0	0	0	0	0	114	378	9						
GA INEA/CE3/TRAN/M2017/1349610	Call 2017										357							
GA E74677	WAVE 2 - P102										0							
GA E74672	WAVE 2 - P104										0							
GA E74670	WAVE 2 - P105										0							
GA E74665	WAVE 2 - P107										0							
GA E74663	WAVE 2 - P109										0							
GA E74664	WAVE 2 - P110										0							
GA E74674	WAVE 2 - P113										0							
GA E73220	WAVE 2 - P118										0							
GA E74673	WAVE 2 - P119										0							
GA E74675	WAVE 2 - P120										0							
GA E74676	WAVE 2 - V102										0							
	traffic adjustment			0	0	0	0	0	-134	-261	463							
Total in '000 Euro		0	0	377	384	420	307	471	-88	-61	684	697	0	0	0	0	0	0
Total in '000 national currency		0	0	1 566	1 594	1 920	2 286	1 953	-405	-344	2 507	2 894	0	0	0	0	0	0

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Poland - Others	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	118 001 935	269 991 569	151 059 770	152 053 412	151 684 889	28,5%
Total terminal costs in real terms (in national currency at 2017 prices)	114 901 322	251 953 004	136 686 738	134 971 838	132 304 826	15,1%
Total terminal costs in real terms (in EUR2017) ¹	27 004 915	59 215 763	32 125 076	31 722 028	31 095 208	15,1%
YoY variation		119,3%	-45,7%	-1,3%	-2,0%	
Total terminal Service Units (TNSU)	138 516	123 291	100 766	125 663	138 906	0,3%
YoY variation		-11,0%	-18,3%	24,7%	10,5%	
Real terminal unit costs (in national currency at 2017 prices)	829,51	2 043,57	1 356,48	1 074,08	952,48	14,8%
Real terminal unit costs (in EUR2017) ¹	194,96	480,29	318,81	252,44	223,86	14,8%
YoY variation		146,4%	-33,6%	-20,8%	-11,3%	

National currency	PLN
¹ Average exchange rate 2017 (1 EUR=)	4,25

b) Information on the baseline values for the determined costs and the determined unit costs

Terminal charging zone Poland - Others	Baseline 2019	Actuals 2019	2019 Baseline adjustments
	2019 B	2019 A	
Total terminal costs in nominal terms (in national currency)	118 001 935	114 834 656	3 167 279
Total terminal costs in real terms (in national currency at 2017 prices)	114 901 322	111 822 410	3 078 913
Total terminal costs in real terms (in EUR2017) ¹	27 004 915	26 281 287	723 628
Total terminal Service Units (TNSU)	138 516	138 516	0

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex B.2.1 Terminal Charging Zones WAW
Additional Information

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

ADDITIONAL INFORMATION TO REPORTING TABLES 1 – TOTAL COSTS AND UNIT COSTS

1. Determined costs and unit costs

a) Description of the methodology used for allocating costs of facilities or services between different air navigation services, based on the list of facilities and services listed in ICAO Regional Air Navigation Plan, European Region (Doc 7754) as last amended, and a description of the methodology used for allocating those costs between different charging zones;

For the Polish Performance Plan for RP3 (PL RP3 PP) the cost base for terminal charges in Poland consists of cost incurred by the following six organizations:

- **Polish Air Navigation Services Agency (PANSa)** – provider of air traffic services, provider of CNS services and AIS,
- **Institute of Meteorology and Water Management – National Research Institute (IMWM)** – MET services provider,
- **Radom Meteo sp. z o.o. (Radom Meteo)** – MET services provider for EPRA approach and tower services,
- **Warmia i Mazury sp. z o.o. (Warmia i Mazury)** – MET services provider for EPSY approach and tower services,
- **Port Lotniczy Bydgoszcz S.A. (PL Bydgoszcz)** – MET services provider for EPBY approach and tower services,
- **Civil Aviation Authority of the Republic of Poland (CAA)** – national supervisory authority.

There are two terminal charging zones in Poland (FIR Warszawa) – no changes have been made since 2017. The I TCZ includes EPWA airport (TNC-EPWA), while the II TCZ (TNC-OTHER) includes the following 14 airports: EPGD, EPKK, EPBY, EPKT, EPLL, EPPO, EPRZ, EPSC, EPWR, EPZG, EPMO, EPLB, EPRA, EPSY.

	RP1	RP2			RP3	
		Single TCZ (until 2016)	TNC-EPWA (since 2017)	TNC-OTHER (since 2017)	TNC-EPWA	TNC-OTHER
Terminal	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination* +MET costs for EPSY)	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination*)
	IMWM (MET)	IMWM (MET for all airports excluding EPRA and EPSY)	IMWM (MET)	IMWM (MET for all airports excluding EPRA and EPSY)	IMWM (MET)	IMWM (MET for all airports excluding EPRA, EPSY and EPBY)
	MPL WM (AFIS - EPMO)	MPL WM (AFIS - EPMO)		MPL WM (AFIS - EPMO)		
	Radom Meteo (MET – EPRA and EPSY)	Radom Meteo (MET – EPRA and EPSY)		Radom Meteo (MET – EPRA)		Radom Meteo (MET – EPRA)
				Warmia i Mazury (MET – EPSY) ¹		Warmia i Mazury (AFIS, COM, MET – EPSY)
						PL Bydgoszcz (AFIS, MET – EPSY)
	CAA (CAA+MS)	CAA (NSA+MS)	CAA (CAA+MS)	CAA (CAA+MS)	CAA (CAA+MS)	CAA (CAA+MS)

* SAR coordination is fully allocated to ER cost base (see letter c).

¹ In case of Warmia i Mazury in RP2 the whole cost of MET services provided were allocated to the terminal cost base, what was decided during the revision of RP2 concerning the inclusion of EPSY airport into BFAB PP RP2.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

I. PANSA

For the purpose of calculating the cost base for the terminal charges, PANSA has taken into consideration costs of facilities listed in the ICAO Regional Navigation Plan (Doc. 7754) reflecting all equipment used for the provision of air navigation services.

For methodology used for allocating costs between charging zones (en-route and terminal), and within terminal between two charging zones (based on allocation of costs to each individual airport)) – see point c) below.

II. IMWM

See point c), d) and e) below.

III. CAA

The allocation of CAA's costs between ER and TNC is based on the number of personnel (FTEs) executing the tasks of national supervisory authority and part of member state responsibilities which are in the competence of CAA as stated in the Polish Aviation Law Act. The methodology, developed during Poland's technical integration with EUROCONTROL CRCO, remains unchanged since 2008. For more information, see point c).

b) Description of the methodology and assumptions used to establish the costs of air navigation services provided to VFR flights, when exemptions are granted for VFR flights in accordance with Article 31(3), 31(4) and 31(5);

I. PANSA

Cost of air navigation services provided to VFR flights is calculated through a marginal cost methodology. Being covered by the State budget, costs of VFR flights are deducted from the en-route determined costs (no additional costs established under marginal cost methodology are applicable to terminal services). The methodology applied for RP3 has not changed compared to previous reference period.

II. IMWM

Not applicable.

III. CAA

Not applicable.

c) Criteria used to allocate costs between terminal and en route services, in accordance with Article 22(5);

I. PANSA

Criteria for allocation of PANSA's costs between ER and TNC remain unchanged as compared with the RP2 and initial draft RP3 performance plan dated Nov 2019. In the initial draft PL RP3 PP, as compared to RP2, some modifications were introduced to allocation keys of two major investments (Tower Warsaw and new Campus) following consultation of draft PL RP3 PP and comments provided by airspace users. During works on revised PL RP3 PP PANSA has also updated the variable part of the allocation keys (timesheet, cost center structure, movements, SU, FTE, etc).

PANSA, for cost allocation purposes, uses the Services Cost Calculation and Profitability Analysis System built on the basis of Activity Based Costing methodology. The Cost Calculation system is based on a multi-step allocation principle.

Some costs, by their origin may be allocated directly to the ER or TNC services (e.g. ACC ATCOs). Other costs, which are not directly linked with the provision of specific services (e.g. human resources or financial staff) are allocated using the allocation keys catalogue which is included in the model. Those keys were constructed in a very precise manner in order to reflect in the best possible way on the distribution of costs borne in operational activity (e.g. number of operations, number of service units, staff complement, power utilization etc.).

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

For ATS:

- The costs of services provided in the controlled area (CTA) and TMA are allocated to ER.
- Costs related to services provided in CTR (controlled zone) are allocated to TNC.

With regards to ATC units:

- Costs of APP and ACC units are allocated to ER in total.
- For TWR units distinction has to be made between airports where a separate APP unit has been established and airports where in fact the TWR unit provides procedural approach services:
 - In Poland, following operational requirements, 4 approach control units have been created for the major airports:
 - Gdańsk im. Lecha Wałęsy (EPGD),
 - Poznań-Ławica (EPPO) and Wrocław-Strachowice (EPWR) together,
 - Kraków-Balice (EPKK) and Katowice-Pyrzowice (EPKT) together,
 - Chopina w Warszawie (EPWA) and Warszawa/Modlin (EPMO) together.

For those airports, where a separate APP unit operates, cost of TWR service is allocated to ER only in the part, which covers services provided outside CTR boundaries and is limited to services provided to approaching (landing) operations.

- At remaining airports, TWR unit provides also APP services. When both APP and TWR services are provided by TWR unit, the cost of the unit is divided between ER and TNC in accordance with the airspace volume ratio (CTR and TMA). For that purpose the following formula is used: $V(CTR) / V(CTR + TMA)$. This formula should be understood as volume of airport controlled area to the total volume of the airport controlled zone and the airport controlled area.

Costs of FIS services, as well as SAR coordination, are in total allocated to ER.

For CNS:

- NAV: The basis for costs allocation of Nav aids is the degree of their use by individual air traffic control units (APP vs. TWR) and reflects use of those Nav aids in different airspace structures (TMA vs. CTR). Allocation of VOR/DVORs, DMEs and ILSs takes into account range of these Nav aids, and as a consequence, their possible use in TMA and CTR. Usage of the airport Nav aids for certain flights in different types of airspace is strictly connected with the dimension of the given airspace. Therefore, their cost is split between TWR and APP, and consequently between TNC and ER.
- SUR: Costs of en-route and approach radars are in total allocated to ER service. Costs of airport movements radars, ASMGCS system and airport MLAT are allocated in total to TNC services (in line with their location).
- COM: The cost allocation is based on the number of radio-stations and voice communication consoles used by each service.

The cost of ATM operational system Pegasus 21 is allocated between ER and TNC on the basis of revenues from navigation services provided. New ATM system (iTEC) is fully allocated to en-route as it will be dedicated to ACC and APP units.

Costs of PANSA UTM system are divided between TNC (and within this part among airports)- and non-navigation cost segment based on the ratio of the amount of planned costs and the number of movements at a given airport.

II. IMWM

Tasks related to the provision of meteorological services for the TNC zones are carried out by Aeronautical Meteorological Stations, the central laboratory of the measuring equipment, Meteorological Services for Civil Aviation (AWOS systems) and administrative units. In addition, for RP3 the costs of these tasks have been divided by 40% for en-route charges and 60% for terminal charges. For more details see En-route Charging Zone Poland Reference Period 3 (2020-2024) additional information point c).

III. CAA

The allocation between en-route and terminal ANS based on the involvement of each of the CAA's organizational units' into activities linked within the en-route and terminal supervision, measured in FTEs.

d) Breakdown of the meteorological costs between direct costs and the costs of supporting meteorological facilities and services that also serve meteorological requirements in general ('MET core costs'). MET core costs include general analysis and forecasting, surface and upper-air observation networks, meteorological communication systems, data processing centres and supporting core research, training and administration;

I. PANSA

Not applicable.

II. IMWM

Methodology of separating the costs of meteorological services for aviation in IMWM

Determination of the share of costs of meteorological services for civil aviation provided by IMWM in total MET costs is based on separation of direct costs of such services and on separation of MET core costs.

Methodology of direct costs of meteorological services determination.

The separation of direct costs of meteorological services for aviation from the total MET costs consists in defining the costs of services, facilities and systems used exclusively to provide meteorological services for aviation. IMWM defines these costs in accordance with ICAO Doc. 9161 'Manual on air navigation services economics' and WMO Publication No 904 'Guide to aeronautical meteorological services cost recovery. Principles and guidance', Annex 1, as the costs of: Meteorological Watch Office, Meteorological Forecasting Office in Cracow - only the part of the costs related to services for aviation, Aeronautical Meteorological Stations, telecommunication system which serve aviation, systems of aerodrome meteorological measuring devices, and costs of administrative support (including training) directly serving the aviation. Such defined direct costs include:

- 1) gross payments including: personal and impersonal wages, company's award fund contribution, social insurance contribution, company's social benefit fund contribution, and others; this cost is proportional to the amount of employees rendering meteorological services for civil aviation.

These group of costs are qualified as the staff costs.

The other groups of the direct costs of meteorological service for aviation are:

- 2) indirect costs proportional to remuneration fund and remuneration-related expenditures;
- 3) materials and equipment spare parts: office tools, printers ink, equipment purchase including purchase of equipment at airports, electricity, heat, computers, full equipment of the workplaces;
- 4) third party services: specialized software service (LEADS, AMHS, METAR2010, DEDAL, PROMET), renovation, check-ups, maintenance (computers, copiers, plotters, etc.), data communication network service (servers, routers) used by Meteorological Offices, and Aeronautical Meteorological Stations for meteorological services for civil aviation;
- 5) telecommunication: costs of maintaining communication between headquarters and Meteorological Watch Office, between meteorological offices and PANSA (AFTN network) and Aeronautical Meteorological Stations; SADIS communication system; fees for fixed-line telephones and mobile phones directly connected with meteorological services for civil aviation;
- 6) business trips inside and outside the country directly connected with meteorological services for civil aviation;
- 7) trainings and conferences: periodical meteorological training in respect of international European standards; enhancing qualifications trainings, inner audit costs connected with Quality Management System; other trainings connected with the service provision;
- 8) lease of premises and meteorological ground on the premises of airports - leasing according to signed agreements;
- 9) usage of automatic weather observation systems (AWOS) for the needs of meteorological services for civil aviation, including: trainings for the service workers, relevant business trips, the costs directly connected with AWOS maintenance and the cost of measuring equipment modernization.

The above costs, point 2 to 9 constitute other operating costs of meteorological services for aviation.

Methodology of determining the share of meteorological services for aviation costs in core MET costs.

According to ICAO Doc. 9161 'Manual on air navigation services economics' and WMO no 904 'Guide on aeronautical meteorological services cost recovery. Principles and guidance' MET core systems are defined as systems, facilities and services not only used for meteorological services for aviation but also for the public. These are as follows:

- Generally forecasting system;
- Numerical weather forecast system;
- Telecommunication infrastructure;
- Hydrological-meteorological stations network;
- Aerology observations system;
- Meteorological radars and discharging detection systems;
- Satellite data receiving system;
- Historical database;
- Systems supervision.

Core MET costs are costs of maintenance of the above listed systems in this part which was included within total MET costs and on the basis of the methodology presented above.

The share of costs of most MET core systems in aviation costs was calculated in accordance with procedures defined in ICAO Doc. 9161 'Manual on air navigation services economics' and WMO no 904 'Guide on aeronautical meteorological services cost recovery. Principles and guidance', point 3.10 (d), namely: in proportion of all employees working for aeronautical meteorology to employees working for National Hydrological-Meteorological Service. The number of employees working for aeronautical meteorology was determined on the basis of dividing National Hydrological-Meteorological Service into HYDRO Service and MET Service. This methodology was applied in order to determine the share of costs of the following core systems:

- Generally forecasting system;
- Numerical weather forecast system;
- Hydrological-meteorological stations network;
- Aerology observation system;
- Satellite data receiving system;
- Historical database;
- Systems supervision.

The share of costs of telecommunication systems in aviation costs was determined analogously to the methodology which determines the share of MET costs (total MET costs) in National Hydrological-Meteorological Service. The methodology is defined in ICAO Doc. 9161 and WMO no 904 point 3.10 (c), namely it is based on the analysis of the size of computer network flow in IMWM.

III. CAA

Not applicable.

e) Description of the methodology used for allocating total meteorological costs and MET core costs referred to in point (d) to civil aviation and between charging zones;

I. PANSA

Not applicable.

II. IMWM

Methodology for division of costs of MET services to civil aviation into costs of particular products.

The methodology for determining the cost of various aviation products is based on an assessment of the percentage contribution of the working time of one post per day in the manufacture of products for meteorological service to civil aviation. The basis of the methodology is the assessment of involvement of different organizational units, directly producing aeronautical products such as the Meteorological Watch Office (MBN), Meteorological Forecasting Office in Cracow (BPM) and the Aeronautical

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

Meteorological Stations (LSM) units and indirectly involved in services for civil aviation. The measure of this commitment is the amount of time required to manufacture a particular product. The share of work of the units indirectly involved is assigned to each product, and contribution of the Central Measuring Equipment Laboratory, was assigned only to products that are based on measuring instruments.

A detailed description of the methodology used to determine the costs of products is as follows:

- 1) A catalogue of basic classes of meteorological products has been defined. It was prepared by IMWM in order to provide meteorological services to civil aviation in 2020-2024. This catalogue is based on ICAO Annex 3, WMO Publication No. 904.
- 2) Daily work tables were constructed for the Meteorological Watch Office and Meteorological Forecasting Office in Cracow, and for Aeronautical Meteorological Stations. These tables describe the average time it takes to produce various aeronautical meteorological products in specific classes in the consecutive hours of the day, in different organizational units.
- 3) On the base of obtaining percentage of product workload, partial product cost has been calculated which is a product of the following elements:
 - Number of posts;
 - Labour consumption of the products;
 - Annual amount of salaries per post.

The term workload is understood as the amount of work needed or used for the implementation and monitoring of a single product that is expressed as a percentage of working time to the entire time. Cost share of other groups (service, AWOS, materials, external services, delegations, telecommunications, SADIS, trainings, rentals, infrastructure, depreciation, cost of capital) has been established - on the basis of dedicated work at each cost group to manufacture the product. This share has been added to the partial cost of the product. In this way, an annual cost of developing each of the products ordered by PANSA has been achieved. The sum of the individual products gives us an annual cost of MET services to civil aviation.

III. CAA

Not applicable.

f) For each entity, description of the composition of each item of the determined costs by nature and by service (points 1 and 2 of Table 1), including a description of the main factors explaining the planned variations over the reference period;

I. PANSA

Determined costs by nature and by service

Entity: PANSA	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Staff costs cover gross remuneration, overtime payments and other ancillary benefits including jubilee awards and bonuses, PANSA contributions to social security scheme, including pension contributions, as well as provisions related to staff costs. Staff costs do not include the costs of training, which are disclosed under other operating costs. The main drivers for 2020-2021 cost evolution are: - implementation of cost containment measures in the area of base salaries due to the lack of the main source of income (ANS charges) – applicable to 2021; - reduction of all other remuneration components (overtime, bonuses, awards, allowances etc.) related to the extraordinary financial circumstances, reduced workload and use of furloughs/downtime – applicable to 2020-2021, - use of COVID-related state care allowance for small kids by some employees during lockdown and related school closure – applicable to 2020-2021, - temporary suspension/reduction of some contribution to social insurance scheme – applicable to 2020, - cancellation of special remuneration conditions for TWR EPWA ATCOs. The main assumptions for 2022-2024 planned cost evolution include: - partly restoration of basic salaries following the 2021 cuts indicated above,

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

	- restoration of other remuneration components to pre-pandemic levels where needed/justified, increase in employment (especially in the CNS and IT areas) due to i.a. infrastructure and systems development supporting TWR ATCOs.
of which, pension costs	These include PANSA contributions to national pension scheme (applicable to all entities in Poland) as well as additional PANSA occupational pension scheme applicable to PANSA employees (Defined Contribution Scheme). Pension contributions were assumed at the current level. In percentage: 1) for the state scheme: 9.76% - pension contribution rate; 6.5% - disability pension contribution rate and 1.5% - bridging pension contribution rate for employees employed in special conditions, 2) for PANSA occupational scheme: 7%. For the state scheme the costs assume the annual limit of basis for the contributions to state pension insurance applicable for 2021 in the amount of 157 770 PLN, which in subsequent years was increased by forecasted inflation (the limit is verified on annual basis by the state taking into account the level of monthly average salary in the Polish economy). 2020 pension costs are impacted by the temporary suspension of contribution to PANSA occupational scheme.
1.2 Other operating costs	The other operating costs were estimated according to the best knowledge regarding signed agreements with subcontractors, short term needs related to ensuring services continuity as well as savings and optimization of costs necessitated by COVID-19 situation. The level of costs also takes into account cost of training. The main drivers for 2020-2021 cost evolution are: - restrictions connected with COVID-19 pandemic, which have temporary impact on the level of such costs as travel, trainings, energy and utilities (remote work), events etc., - measures aimed at maintaining liquidity, consisting in temporary reduction of some expenditures or postponement of these – where possible, including also CAPEX optimization (impacting costs related to new investments – incl. preparatory works, implementation and maintenance of infrastructure and systems, as well as costs related to repair services and other – incl. security, cleaning and maintenance services – needed to maintain PANSA's Property Plant and Equipment at the level ensuring undistorted operations). The main assumptions for 2022-2024 planned cost evolution include: - execution of projects aimed at increasing efficiency of TWR ATCOs, considering also the need to improve resilience and digitalization of services. These include both investment tasks as foreseen in the verified CAPEX plan (where planned investments have impact on costs related to preparatory works, implementation and maintenance of infrastructure and systems) and projects planned to be executed as OPEX, - restoration to normal operations where it is no longer possible to reduce or postpone activities and related costs, and where due account must be taken of increase in prices of energy, minimum wage (impacting costs of external services) and tax liabilities (also resulting from execution of investment tasks mentioned above). Following talks between NSA and the European Commission on the treatment of costs related to non-contractual use of land, costs related to accounting provisions on these claims are not included in the revised RP3 determined costs. In accordance with the outcome of the discussions with the EC, these will be reported as cost-exempt once the final amounts to be paid by PANSA are established and subject to payment and will be recovered accordingly.
1.3 Depreciation	The depreciation cost covers both, continued depreciation of assets existing before RP3 as well as depreciation on new assets, which were/will be put into operation over 2020-2024. It includes depreciation of fixed assets and intangible assets. Historic cost accounting is applied. The level of depreciation cost is impacted by investments executed before the COVID pandemic (up to 1Q 2020), limited investments carried out during 2020-2021 which are necessary to ensure service continuity, are required by regulatory framework or are subject to agreements signed with contractors and investments planned for the following years of RP3. Following the outbreak of the pandemic, in 2020 PANSA has undertaken a complete review of CAPEX plan for the whole RP3 and beyond. The aim was on the one hand to look for possible savings in the level of expenditures, especially for the period 2020-2021, including possible postponement of projects (financial dimension of the review),

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

	and on the other to again validate the projects from the perspective of current operational needs and expected benefits, also in the light of expected changes to traffic levels (operational perspective of the review). As a result of that review, some investments were cancelled/suspended, and many were postponed. Further review was undertaken in 2021 and led to some additional refinements in RP3 CAPEX plan, taking also into account actual execution of CAPEX over 2020 and early 2021. The reviewed investment plan includes both, replacement and development needs. New investments related to EPWA include modernization of EPWA TWR (project related to building new TWR for EPWA was suspended following the crisis outbreak) as well as A-SMGCS for EPWA.
1.4 Cost of capital	The evolution of the level of cost of capital over RP3 is related to increasing value of asset base, especially fixed assets, what is the consequence of implementation of the revised RP3 investment plan. For further details on the cost of capital calculation – see point i) below.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Evolution of ATM costs is related to the staff cost (see point 1.1) and infrastructure/systems related to ATM.
2.2 Communication	The level of COM costs reflects evolution of COM infrastructure and remains quite steady over RP3 as compared to RP2 actuals. These includes also evolution of related other operating costs – including energy, rental of land, security etc.
2.3 Navigation	Similarly as for COM above, the level of NAV costs reflects evolution of NAV infrastructure and remains quite steady over RP3 as compared to RP2 actuals. These includes also evolution of related other operating costs – including energy, rental of land, security etc.
2.4 Surveillance	The increase in costs is due to investments MLAT and subsequently A-SMGCS. Similarly as for COM above, these investments entail increase in related other operating costs.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Due to the development of airports in Poland as well as changes in the airspace in the vicinity of airports, publications and procedures created for airports have an increasing share in these activities. This causes changes (increase) in the amount of costs for terminal navigation.
2.7 Meteorological services	Not applicable.
2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
Not applicable.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: PANSA
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
Information on pension costs assumptions is provided above in point f) and in the revised PL RP3 PP (item 3.4.3).

II. IMWM

Determined costs by nature and by service

Entity: IMWM	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	The increase in personnel costs is related to the increase in wages in IMWM and the increase in the average wage in the country. In March 2020 we introduced IMWM Collective Labor Agreement.
of which, pension costs	The methodology of calculating pension and pension contributions paid by the employer for employees at the IMWM is based on suitable articles of the Act on the social insurance system of 13 th October 1998. The sum total of the pension and pension contribution paid by the employer is 9.76% plus 6.5% equal to 16.26% of the contribution basis.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

1.2 Other operating costs	The increase in operating costs is dictated by the increase in the amount related to the lease of AWOS systems not owned by IMWM (EPWA). Assumptions that were adopted for the RP2 period did not provide for real costs incurred by the Institute in this respect. Operating expenses were also increased due to the need to adapt the IMWM infrastructure to the standards imposed by EUROCONTROL and EASA in the field of data exchange, including adaptation to SWIM information exchange standards.
1.3 Depreciation	n/a
1.4 Cost of capital	n/a
1.5 Exceptional items	n/a
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	n/a
2.2 Communication	n/a
2.3 Navigation	n/a
2.4 Surveillance	n/a
2.5 Search and rescue	n/a
2.6 Aeronautical Information	n/a
2.7 Meteorological services	Please see explanation above (1.1-1.5).
2.8 Supervision costs	n/a
n/a	
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
n/a	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: IMWM
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
See point 1.1. of the chart

III. CAA

Determined costs by nature and by service

Entity: CAA (including EUROCONTROL)	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Among others – costs of: remuneration, pension contributions, bonuses.
of which, pension costs	Pension contributions covering the 9.76% and 6.5% parts of wages (national pension scheme).
1.2 Other operating costs	Among others – costs of: materials, energy, utilities, business travels, furniture, renovation, trainings, rents.
1.3 Depreciation	Not applicable.
1.4 Cost of capital	Not applicable.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Not applicable.
2.2 Communication	Not applicable.
2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	Not applicable.
2.8 Supervision costs	The growth of CAA costs in RP3 comparing to RP2 results from the planned rise of wages stemming from the government budget and the increase of obligations and task performed by the CAA in the field of air navigation service.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

The CAA, as a national budgetary unit financed from state budget, is obliged to follow accounting regulations applicable to national administration bodies. As a consequence, the CAA does not apply IAS but follows national regulations regarding budgetary units which are based on cash accounting rules.

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: CAA (including EUROCONTROL)	
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3	
The assumptions were based on the currently functioning national pension scheme. It is not expected to face any major changes over RP3.	

g) For each entity, a description and justification of the method adopted for the calculation of depreciation costs (point 1.3 of Table 1): historical costs or current costs referred to in the fourth subparagraph of Article 22(4), and, where current cost accounting is used, provision of comparable historical cost data;

I. PANSA

In compliance with the Accounting Policy, historical cost accounting method is applied for the calculation of the depreciation costs. Depreciation is provided using the straight-line method over the estimated economic useful lives of the assets. The depreciation periods applied by PANSA remain unchanged as compared to previous reference periods. The economic useful life is periodically reviewed to ensure that depreciation periods are consistent with the expected pattern of economic benefits from items property, plant and equipment.

With regard to investments co-financed by the public funds, including EU Cohesion Fund and the Connecting Europe Facility fund, the full amount of depreciation costs is included in the determined costs. At the same time the subsidies are taken into account as other revenue – the calculation of other revenues fully follows provisions of article 25.3 of Regulation 2019/317 – see also point f) in the Additional Information to Table 2 below.

II. IMWM

Depreciation of appliances is always calculated from the next month after the takeover is completed. This calculation is done in accordance with expected operating life – in line with the operating life for the specific type of fixed assets as described in the 'Principles for establishing the cost-base for en-route charges and the calculation of the unit rates' - using the straight-line method and refers to historic cost of fixed assets depreciated and intangible and legal assets.

To calculate cost of capital the following pattern is used in the IMWM:

Cost of capital = (Average net value of fixed assets and possible adjustments of all assets determined by national regulatory body, currently operationally exploited or built, used by an institution serving air navigation + average net value of current assets, excluding interests, necessary for air navigation service) x weighted average of debt interest rate and of return on equity

IMWM follows EUROCONTROL Principles according to which only these assets can be calculated within the equity which operating period is expected to begin before the end of the year for which the cost calculation is made.

We do not plan any investments for EPWA in RP3 and therefore we will not settle the cost of depreciation and the cost of capital.

IMWM TNC - EPWA					
Equivalent in historic cost accounting					
	2020	2021	2022	2023	2024
Investment costs (in nominal terms in '000 national currency)					
1.3 Depreciation	-	-	-	-	-

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

1.4 Cost of capital	-	-	-	-	-
3.1 Net book val. fixed assets	-	-	-	-	-
3.2 Adjustments total assets	-	-	-	-	-
3.3 Net current assets	-	-	-	-	-
3.4 Total asset base	-	-	-	-	-
3.5 Cost of capital pre tax rate	-	-	-	-	-
3.6 Return on equity	-	-	-	-	-
3.7 Average interest on debts	-	-	-	-	-
3.8 Share of financing through equity	-	-	-	-	-

III. CAA

Not applicable.

h) For each entity, description and underlying assumptions of each item of complementary information (point 3 of Table 1), including a description of the main factors explaining the variations over the reference period;

I. PANSA

PANSA	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	Cost of capital is calculated taking into account average value of the intangible assets and the tangibles assets as well as WACC rate (see item i) below).
3.12 Cost of leasing	For the purpose of establishing cost bases for RP3 PANSA follows EC recommendations and presents <u>lease payments under other operating costs</u> . It should be emphasized that depreciation charge for the leased asset, interest expense on a lease liability (as a consequence of IFRS 16 implementation) as well as right-of-use of leased asset <u>are not included in determined costs</u> (neither as depreciation nor as cost of capital).

II. IMWM

IMWM	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	See point f) and g).
3.11 Cost of capital	See point f), g) and i).
3.12 Cost of leasing	n/a

III. CAA

CAA	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Not applicable.
3.11 Cost of capital	Not applicable.
3.12 Cost of leasing	Not applicable.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

i) For each entity, description of the assumptions used to compute the cost of capital (point 1.4 of Table 1), including the composition of the asset base, the return on equity, the average interest on debts and the shares of financing of the asset base through debt and equity;

I. PANSA

PANSA	
Average asset base	
3.1 NBV fixed assets	The average net book value of fixed assets for en-route services provision is calculated taking into account the intangible assets and the tangible assets (in operation and under construction). It should be emphasized that leased assets are excluded from average asset base calculation. The average considers level of fixed assets at the beginning and at the end of each year.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	The value of net current assets is calculated taking into account approach recommended by CRCO when auditing PANSA's cost base in 2010 and applied since then, which is also consistent with EUROCONTROL Principles. It assumes that only assets that are necessary to provide ANS are taken into account. Planned current assets required to provide air navigation services are calculated taking into consideration latest available (for the year preceding the calculation) credit period associated to the payment of invoices (credit from customers and credit suppliers and staff). Methodology applied guarantees exclusion of interest bearing items.
Cost of capital %	
3.6 Return on equity	In order to properly reflect financial risk incurred when providing air navigation services PANSA applies a CAPM methodology for establishing return on equity. Assumptions taken into account to determine RoE rate for RP3 under the current submission: Capital structure – hypothetical efficient capital structure assuming 60% debt financing over whole RP3. Corporate tax rate – 19%, Risk free rate % (nominal) - the latest available yield of 10 years Polish government bonds rate reported by Eurostat is used (June 2021 publication for May 2021). Equity risk premium % (after tax) – 6.54% - an average of equity risk premium estimated for Poland by Damodaran (6.48% as per Jul 2020 submission) and Fernandez IESE Business School study (6.60% as per Mar 2020 submission). ERP estimated in such way applies for the whole RP3. Asset beta is 0.4. The asset beta is assumed taking into consideration estimates made by SDG for efficient cost of capital for RP2 (a range of 0.3 to 0.5). It is consistent with assumptions used for RP2 and initial PL RP3 PP dated Nov 2019 and reflects financial risk of running ANSP business. Equity beta for every single year of RP3 amounts to 0.89 and is a product of estimated asset beta, corporate tax rate and assumed hypothetical efficient capital structure described above.
3.7 Average interest on debts	Average interest on debts is calculated taking into account effective annual interest rates calculated based on the agreed operating credit facility and investment credit, both received from Bank Gospodarstwa Krajowego (BGK); average interest on debts calculation was performed taking into account costs already incurred till Jun 2021 and these forecasted to the end of repayment periods. It should be noted that PANSA as a public legal entity is obliged to use financial products offered by this state-owned bank (BGK) only.
3.8 Share of financing through equity	As recommended by SDG and expected by EC (exchanges during discussions on the initial PL RP3 PP dated Nov 2019) hypothetical efficient capital structure 60% through debt and 40% through equity was assumed for the whole RP3.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

WACC calculation	2020	2021	2022	2023	2024
Capital structure (% equity)	40%	40%	40%	40%	40%
Capital structure (% debt)	60%	60%	60%	60%	60%
Corporate tax rate %	19%	19%	19%	19%	19%
Risk free rate % (nominal)	1,82%	1,82%	1,82%	1,82%	1,82%
Market rate (after tax)	8,36%	8,36%	8,36%	8,36%	8,36%
Market (equity) risk premium % (after tax)	6,54%	6,54%	6,54%	6,54%	6,54%
Asset beta	0,4	0,4	0,4	0,4	0,4
Debt beta	0	0	0	0	0
Equity beta	0,89	0,89	0,89	0,89	0,89
Return on Equity % (after tax)	7,61%	7,61%	7,61%	7,61%	7,61%
Return on Equity % (pre tax)	9,40%	9,40%	9,40%	9,40%	9,40%
Debt risk premium %	1,47%	1,60%	1,65%	1,71%	1,74%
Interest on debt % (pre tax)	3,29%	3,42%	3,47%	3,53%	3,56%
Interest on debt % (after tax)	2,66%	2,77%	2,81%	2,86%	2,89%
WACC % vanilla	5,02%	5,10%	5,13%	5,16%	5,18%
WACC % after tax	4,64%	4,71%	4,73%	4,76%	4,78%
WACC % (pre tax)	5,73%	5,81%	5,84%	5,88%	5,90%

II. IMWM

IMWM	
Average asset base	
3.1 NBV fixed assets	Not applicable.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	Not applicable.
Cost of capital %	
3.6 Return on equity	Not applicable.
3.7 Average interest on debts	Not applicable.
3.8 Share of financing through equity	Not applicable.

III. CAA

Not applicable.

j) Description of the determined costs of common projects (point 3.9 of Table 1).

I. PANSA

Description of determined costs of common projects will be provided in the revised draft PL RP3 PP to be submitted by 1 October 2021.

The costs of common projects will include:

- cost of depreciation of existing and new planned assets,
- operating costs (travel costs, training, wages etc.) as presented in grant agreement,
- cost of capital.

Cost of capital is not eligible under grant agreements. However, it is part of determined costs under Regulation 2019/317.

II. IMWM

Not applicable.

III. CAA

Not applicable.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

2. Actual costs and unit costs

a) For each entity and for each cost item, a description of the reported actual costs and the difference between those costs and the determined costs, for each year of the reference period;

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance. The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

I. PANSA

In the cost-efficiency area, the revised draft PL RP3 PP establishes also 2020 determined costs. Revised 2020 determined costs are equal to 2020 actual costs incurred by PANSA.

It should be noted that actual costs for the year 2020 included in the draft revised PL RP3 PP have been recalculated as compared to costs presented for the purpose of June 2021 submission. It led to slight increase in 2020 actual costs mainly due to exclusion of costs related to non-contractual use of land and revision of assumptions applied to cost of capital calculation (to ensure that cost of capital assumptions remain coherent over the whole RP3).

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: PANSA	
1.1 Staff costs	The actual staff costs for 2020 are lower by 23.6% than 2019 staff costs mainly due to implementation of one-off cost containment measures taken in order to respond to traffic decrease and liquidity issues. Such decrease in staff costs is a result of temporary suspension of hiring new employees, temporary suspension of contributions to the occupational pension scheme and group insurance, limited number of working hours on weekends and night hours, reduction of bonuses and rewards and overtimes as well as use of furloughs/downtime. All these drivers led to reduction of basic as well as non-obligatory remuneration components comparing to pre-pandemic period. Reduced 2020 costs are also linked to use of COVID-related state care allowance for small kids by some employees during lockdown and related school closure. It should be also noted that 2020 ATCO TWR EPWA basic remuneration scheme did not consider any gratification for RAD licenses.
1.2 Other operating costs	The actual 2020 other operating cost are lower by 56.6% than in 2019 due to work reorganization (remote work), temporary business travelling restrictions, as well as cancellation of conferences, events etc. Extraordinary measures undertaken following COVID-19 crisis, including revision of investment plan, had impact on temporary change in the level of energy and materials consumption, level of taxes and charges as well as temporary reduction in use of external services and limitations in the provision of some air navigation services. Optimisation (including cancellation/postponement) of repair schedules where possible, using own staff for some repairs instead of external contractors led to temporary reductions in repair services costs. It should be noted that some unexpected costs related to purchase of additional materials and external services needed to minimise possible spreading of COVID among employees have been incurred in 2020.
1.3 Depreciation	The 3.0 % decrease in the level of depreciation costs in 2020 reflects investments executed before the COVID pandemic especially in previous years and in 1Q 2020, which in respect of EPWA were quite limited. Starting from the outbreak of the pandemic PANSA has undertaken a complete review of CAPEX plan looking for possible savings in the level of expenditures, especially for the rest of 2020 – this included revised planning for EPWA TWR.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

	It should be noted that 2020 actual depreciation presented in the charges' reporting tables does not include effects of implementation of IFRS16 – costs related to leasing are still disclosed under other operating costs.
1.4 Cost of capital	Increase in cost of capital comparing to 2019 is a result of different WACC rates applied in RP3 (including 2020) and 2019. 2020 actual WACC rate has been calculated taking into account updated CAPM assumptions reflecting financial risk of PANSA (as described above in point i). WACC for 2019 adopted in 2014 in RP2 PP did not reflect actual financial and regulatory risks. The decrease in net current assets base is mainly the result of lower than in 2019 TNC WAW actual cost base.

II. IMWM

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance.

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

RP3 Monitoring – Year 2020 vs. 2019			
ANSP: IMWM	2019A	2020A	Difference 2020-2019
1.1 Staff cost	293	407	114
1.2 Other operating costs	1182	1275	93
1.3 Depreciation	0	0	0
1.4 Cost of capital	0	0	0
1.5 Exceptional items	0	0	0

Analysis of the actual costs for 2020 compared to the actual costs of 2019.

The increase in costs in 2020 compared to 2019 was influenced by, among others:

- an increase in the inflation rate from 2.10% in 2019 to 3.70% in 2020, this translated into an increase in the cost of materials and services despite the introduced COVID-19 savings
- in March 2020, an agreement was signed to amend the IMWM Collective Labor Agreement, as a result of which wages at the IMWM were regulated and equalized
- continuation of implementation of new products for PANSA in 2020 - development of a manual for the VENTO application

III. CAA

RP3 Monitoring – Year 2020 vs. 2019	
STATE/NSA: CAA	
1.1 Staff costs	The actual staff costs and other operating costs for 2020 are lower by 18.1 % than in 2019. The cost allocation between both terminal charging zones (TNC EPWA and TNC OTHER) is based on the actual IFR movements (MVS) broken down by airports. Due to the COVID-19 pandemic the MVS structure in 2020 has changed, compared to 2019 data, and this is reflected in the costs execution. Therefore the actual staff costs and other operating costs referring to TNC OTHER for 2020 will be higher than in 2019. Notwithstanding the above the total actual staff costs for both terminal charging zones for 2020 are higher than in 2019 and it was mainly the result of the growth of CAA costs in RP3 comparing to RP2 results from the planned rise of wages stemming from the government budget and the increase of obligations and task performed by the CAA in the field of air navigation service. As far as other operating costs are concerned the actual 2020 are higher than in 2019.
1.2 Other operating costs	
1.3 Depreciation	Not applicable
1.4 Cost of capital	Not applicable
1.5 Exceptional items	Not applicable

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

b) Description of the reported actual service units and a description of any differences between those units and the figures provided by the entity that is billing and collecting charges as well as any differences between those units and the forecast set in the performance plan, for each year of the reference period;

2020 actual service units vs. 2019 actual service units

In 2020, air traffic and generated service units for EPWA were lower than planned in the initial PL RP3 PP dated Nov 2019 by 64% and lower by 60% than actual SU-L for EPWA in 2019. This was the result of the SARS Cov2 pandemic, which caused significant restrictions on both business and leisure travel. Until the beginning of March 2020, traffic was increasing as compared to 2019A, but the pandemic led to extraordinary traffic drop since March 2020, which persisted over all the following months of 2020.

Terminal SU - EPWA	2019	2020	Difference	Difference (%)
Draft PL RP3 PP Nov 2019 forecast		120 138		
Actual	107 857	43 637	-64 220	-59.5%
Difference		-76 501		
Difference (%)		-63.7%		

Table contains only PANSA service units

c) Breakdown of the actual costs of common projects per individual project;

I. PANSA

Breakdown of the actual costs of common projects will be provided in the revised PL RP3 PP to be submitted by 1 October 2021.

II. IMWM

Not applicable.

III. CAA

Not applicable

d) Justification of the difference between the determined and the actual costs of new and existing investments of the air navigation service providers, as well as the difference between the planned and the actual date of entry into operation of the fixed assets financed by those investments for each year of the reference period;

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

e) Description of the investment projects added, cancelled or replaced during the reference period with respect to the major investment projects identified in the performance plan, and approved by the national supervisory authority in accordance with Article 28(4).

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

ADDITIONAL INFORMATION TO REPORTING TABLES 2 – UNIT RATE CALCULATION

a) Description and rationale for establishment of the different charging zones, in particular with regard to terminal charging zones and potential cross-subsidies between charging zones;

There are two charging zones in Poland.

- I TCZ covering the EPWA airport,
- II TCZ covering the EPGD, EPKK, EPBY, EPKT, EPLL, EPPO, EPRZ, EPSC, EPWR, EPZG, EPMO, EPLB, EPRA, EPSY airports.

The presented scope of airports and configuration of terminal charging zones remains unchanged since 2017. The implementation of the configuration of two charging zones was developed among others to minimize the level of potential cross-subsidising.

b) Description of the policy on exemptions and description of the financing means to cover the related costs;

According to national law (Article 130 (6) of Aviation Act of 3 July 2002) the following flights are exempted from air navigation charges (both en-route and terminal) in Poland:

- performed under Visual Flight Rules (VFR);
- mixed – where a part of the flight is performed under Visual Flight Rules (VFR) and the remaining part is performed under Instrument Flight Rules (IFR) – for the part of the flight performed in the Polish airspace exclusively under VFR rules;
- performed by aircraft of which the maximum take-off weight is less than 2 tons;
- performed exclusively for the transport, on an official mission, of the reigning monarch and his/her immediate family, head of state, head of government and government ministers; in all cases the flight purpose must be confirmed by the appropriate flight status indicator or remark on the flight plan;
- search and rescue, authorized by a competent SAR coordination body;
- military performed by Polish military aircraft or military aircraft of a country where flights performed by Polish military aircraft are exempted from the air navigation charges;
- performed for military purposes and exempted from charges, under international agreements ratified by Poland in statutory way;
- military performed by military aircraft under multinational NATO programmes, to which Poland is a contracting party, other than those mentioned above;
- flights performed by ANSP for the purpose of checking or testing equipment.

Costs of providing air navigation services to exempted flights are covered by the State budget – they are financed by the means of budgetary subsidy granted by the minister responsible for transport on the application of designated service provider.

I. PANSA

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

	2020
Costs for exempted VFR flights	0
Costs for exempted IFR flights	279
Total costs for exempted flights	279

Costs items presented in '000

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

Costs planned in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2021.

	2021
Costs for exempted VFR flights	0
Costs for exempted IFR flights	234
Total costs for exempted flights	234

Costs items presented in '000

c) Description of adjustments resulting from the traffic risk sharing mechanism in accordance with Article 27;

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(1) and (2))).

d) Description of the differences between determined costs and actual costs of year n as a result of the changes in costs referred to in Article 28(3) including description of the changes referred to in that Article;

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3))).

e) Description of adjustments resulting from unforeseen changes in costs in accordance with Article 28(3) to (6);

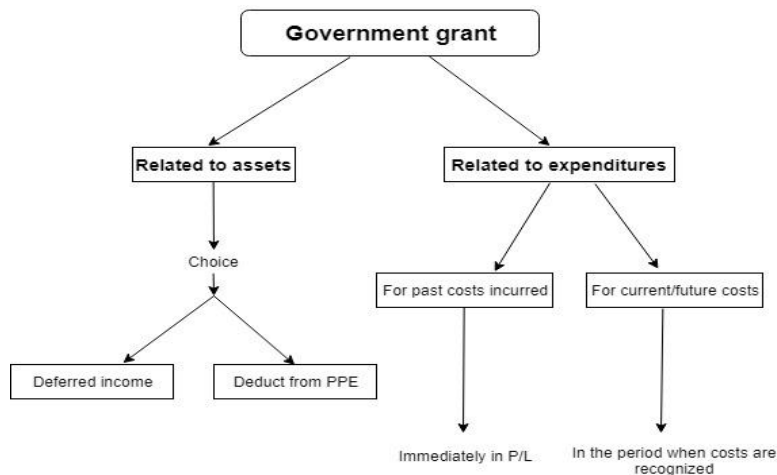
Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3))).

f) Description of the other revenues, if any, broken down between the different categories indicated in Article 25(3);

I. PANSA

As regards public funds obtained from public authorities including financial support from Union assistance programmes PANSA fully follows provisions of article 25.3 of Regulation 2019/317 and passes on to airspace users **revenues recognised** under IAS 20 framework. It assumes that **public funds obtained are recognised in profit or loss on a systematic basis over the period in which PANSA recognises as expenses the related costs for which public funds are intended to compensate.**

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)



Under this submission PANSA:

- assumes that revenue obtained by PANSA from commercial activities are not deducted from determined costs,
- does not assume revenue from contracts/agreements concluded with airport operators.

II. IMWM

IMWM does not plan for the RP3 any additional income covering the costs of meteorological services for civil aviation, except for expected agreement between PANSA and IMWM, covering these costs. Also, IMWM does not provide the meteorological services for the military aviation and does not plan obtaining any income for such services in years 2020-2024. IMWM exchanges with the military services the results of aviation observations and forecasts, on the no-cost base. In this way the IMWM obtains (in no-cost way) the results of military aviation observations and forecasts, which are used by Institute to perform its services for the civil aviation.

g) Description of the application of the financial incentive schemes referred to in Article 11(3) and 11(4) in year n and the resulting financial advantages and disadvantages; description and explanation of the modulation of air navigation charges applied in year n under Article 32 where applicable, and resulting adjustments;

Financial incentive schemes

The description and justification of the parameters of the incentive scheme defined in accordance with Article 11(3) and 11 (4) are provided in the body of the performance plan under item 5.2.

Modulation of charges

It is not planned to implement any modulation of charges in RP3.

The actual application and relating financial advantages and disadvantages for 2020 is not applicable (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 3 (3)).

h) Description of adjustments relating to the temporary application of a unit rate under Article 29(5);

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(4)).

It is assumed that the difference in revenues referred to in Article 29(5) of Regulation 2019/317 will be recovered over 5 years period.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

i) Description of the cross-financing between en route charging zones, or between terminal charging zones, in accordance with point (e) of Article 15(2) of Regulation 550/2004;

The eligible costs were allocated between en-route and terminal charging zones by using appropriate allocation keys. The topic of the cost allocation was elaborated in the Part I of Additional information.

j) Information on the application of a lower unit rate under Article 29(6) than the unit rate calculated in accordance with Article 25(2) and the means to finance the difference in revenue;

Not applicable for this submission.

k) Information and breakdown of the adjustments relating to previous reference periods impacting the unit rate calculation;

The process of the discussion between NSA and EC on the treatment of non-contractual use of land (Branicki case) as unforeseeable new cost items not covered in the performance plan but required by law has been ongoing since 2nd half of 2020. Lately, the subject was raised in bilateral discussions with EC held in course of May and June 2021. Consequently, the approach to be followed seems to be defined. The solution discussed would be applied through a one-off correction of the unit rate of calendar year 2023 leading to effective settlement with AUs of eligible (justified) amount of non-contractual use of land. This approach is reflected in the revised draft RP3 performance plan for Poland as -905 kPLN adjustment related to RP2 impacting 2023 unit rate.

It has been agreed with the EC that over RP3 future payments related to future rulings on compensation for non-contractual use of land will continue to be recognized as cost exempt once the final amounts to be paid by PANSA are established and subject to payment.

Terminal Charging Zone Poland WAW
Reference Period 3 (2020-2024)

**ADDITIONAL INFORMATION TO REPORTING TABLE 3 – COMPLEMENTARY INFORMATION
ON COMMON PROJECTS AND ON UNION ASSISTANCE PROGRAMME**

I) Information on the costs of common projects and other funded projects broken down per individual project, as well as of public funds obtained from public authorities for these projects.

Detailed information on the costs of common projects and other funded projects, as well as of public funds obtained from public authorities for these projects will be provided by 1 October 2021.

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex B.2.2 Terminal Charging Zones OTHER
Additional Information

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

ADDITIONAL INFORMATION TO REPORTING TABLES 1 – TOTAL COSTS AND UNIT COSTS

1. Determined costs and unit costs

a) Description of the methodology used for allocating costs of facilities or services between different air navigation services, based on the list of facilities and services listed in ICAO Regional Air Navigation Plan, European Region (Doc 7754) as last amended, and a description of the methodology used for allocating those costs between different charging zones;

For the Polish Performance Plan for RP3 (PL RP3 PP) the cost base for terminal charges in Poland consists of cost incurred by the following six organizations:

- **Polish Air Navigation Services Agency (PANSa)** – provider of air traffic services, provider of CNS services and AIS,
- **Institute of Meteorology and Water Management – National Research Institute (IMWM)** – MET services provider,
- **Radom Meteo sp. z o.o. (Radom Meteo)** – MET services provider for EPRA approach and tower services,
- **Warmia i Mazury sp. z o.o. (Warmia i Mazury)** – MET services provider for EPSY approach and tower services,
- **Port Lotniczy Bydgoszcz S.A. (PL Bydgoszcz)** – MET services provider for EPBY approach and tower services,
- **Civil Aviation Authority of the Republic of Poland (CAA)** – national supervisory authority.

There are two terminal charging zones in Poland (FIR Warszawa) – no changes have been made since 2017. The I TCZ includes EPWA airport (TNC-EPWA), while the II TCZ (TNC-OTHER) includes the following 14 airports: EPGD, EPKK, EPBY, EPKT, EPLL, EPPO, EPRZ, EPSC, EPWR, EPZG, EPMO, EPLB, EPRA, EPSY.

	RP1	RP2			RP3	
		Single TCZ (until 2016)	TNC-EPWA (since 2017)	TNC-OTHER (since 2017)	TNC-EPWA	TNC-OTHER
Terminal	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination* +MET costs for EPSY)	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination*)	PANSa (ATS, CNS, AIS, SAR coordination*)
	IMWM (MET)	IMWM (MET for all airports excluding EPRA and EPSY)	IMWM (MET)	IMWM (MET for all airports excluding EPRA and EPSY)	IMWM (MET)	IMWM (MET for all airports excluding EPRA, EPSY and EPBY)
		MPL WM (AFIS - EPMO)		MPL WM (AFIS - EPMO)		
		Radom Meteo (MET – EPRA and EPSY)		Radom Meteo (MET – EPRA) Warmia i Mazury (MET – EPSY) ¹		Radom Meteo (MET – EPRA) Warmia i Mazury (AFIS, COM, MET – EPSY) PL Bydgoszcz (AFIS, MET – EPSY)

¹ In case of Warmia i Mazury in RP2 the whole cost of MET services provided were allocated to the terminal cost base, what was decided during the revision of RP2 concerning the inclusion of EPSY airport into BFAB PP RP2.

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

	CAA (CAA+MS)	CAA (NSA+MS)	CAA (CAA+MS)	CAA (CAA+MS)	CAA (CAA+MS)	CAA (CAA+MS)

* SAR coordination is fully allocated to ER cost base (see letter c).

I. PANSA

For the purpose of calculating the cost base for the terminal charges, PANSA has taken into consideration costs of facilities listed in the ICAO Regional Navigation Plan (Doc. 7754) reflecting all equipment used for the provision air navigation of services.

For methodology used for allocating costs between charging zones (en-route and terminal), and within terminal between two charging zones (based on allocation of costs to each individual airport) – see point c) below.

II. IMWM

See point c), d) and e) below.

III. Radom Meteo

Not applicable to Radom Meteo as this ANSP only provides MET services. For details, see point c).

IV. Warmia i Mazury

Warmia i Mazury's MET services are the only ANS allocated between en-route and terminal charging zones. Apart from that, Warmia i Mazury provides AFIS and COM at EPSY airport. For more details on allocation, see point c).

V. PL Bydgoszcz

PL Bydgoszcz provides only MET services, which are allocated between en-route and terminal charging zones and AFIS at EPBY airport. For more details on allocation, see point c).

VI. CAA

The allocation of CAA's costs between ER and TNC is based on the number of personnel (FTEs) executing the tasks of national supervisory authority and part of member state responsibilities which are in the competence of CAA as stated in the Polish Aviation Law Act. The methodology, developed during Poland's technical integration with EUROCONTROL CRCO, remains unchanged since 2008. For more information, see point c).

b) Description of the methodology and assumptions used to establish the costs of air navigation services provided to VFR flights, when exemptions are granted for VFR flights in accordance with Article 31(3), 31(4) and 31(5);

I. PANSA

Cost of air navigation services provided to VFR flights is calculated through a marginal cost methodology. Being covered by the State budget, costs of VFR flights are deducted from the en-route determined costs (no additional costs established under marginal cost methodology are applicable to terminal services). The methodology applied for RP3 has not changed compared to previous reference period.

II. IMWM

Not applicable.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

Warmia i Mazury allocates small part of the terminal AFIS and MET costs to exempted VFR flights, basing on marginal cost methodology, in line with art. 22(6) of Reg. 2019/317/EU.

The allocation keys used for recognition of VFR flights are basing on:

- in case of AFIS – time of communication between AFIS and VFR flight operator,
- in case of MET – time needed for MET staff to prepare announcement and documentation for VFR flights.

V. PL Bydgoszcz

PL Bydgoszcz allocates part of the AFIS and MET terminal costs to VFR flights, basing on marginal cost methodology, with regard to art. 22(6) of Reg. 2019/317/EU.

As for AFIS, the allocation of costs to VFR has been done with regard to the ratio calculated as a relation of the sum of time that AFIS personnel is in direct contact with VFR flight operators to the sum of total time of AFIS personnel operates at EPBY.

In case of MET, the MET-TNC costs are firstly divided between TWR and AFIS services, basing on the relation of TWR/AFIS operating hours and then the amount of costs allocated to AFIS is calculated by the same VFR ratio as in case of AFIS costs, as mentioned in subparagraph above.

VI. CAA

Not applicable.

c) Criteria used to allocate costs between terminal and en route services, in accordance with Article 22(5);

I. PANSA

Criteria for allocation of PANSA's costs between ER and TNC remain unchanged as compared with the RP2, and initial draft PL RP3 performance plan dated Nov 2019. In the initial draft PL RP3 PP, as compared to RP2, some modifications were introduced to allocation keys of two major investments (Tower Warsaw and new Campus) following consultation of draft RP3 PP and comments provided by airspace users. During works on revised PL RP3 PP PANSA has also updated the variable part of the allocation keys (timesheet, cost center structure, movements, SU, FTE, etc).

PANSA, for cost allocation purposes, uses the Services Cost Calculation and Profitability Analysis System built on the basis of Activity Based Costing methodology. The Cost Calculation system is based on a multi-step allocation principle.

Some costs, by their origin may be allocated directly to the ER or TNC services (e.g. ACC ATCOs). Other costs, which are not directly linked with the provision of specific services (e.g. human resources or financial staff) are allocated using the allocation keys catalogue which is included in the model. Those keys were constructed in a very precise manner in order to reflect, in the best possible way, the distribution of costs borne in operational activity (e.g. number of operations, number of service units, staff complement, power utilization etc.).

For ATS:

- The costs of services provided in the controlled area (CTA) and TMA are allocated to ER.
- Costs related to services provided in CTR (controlled zone) are allocated to TNC.

With regards to ATC units:

- Costs of APP and ACC units are allocated to ER in total.
- For TWR units distinction has to be made between airports where a separate APP unit has been established and airports where in fact the TWR unit provides procedural approach services:
 - In Poland, following operational requirements, 4 approach control units have been created for the major airports:
 - Gdańsk im. Lecha Wałęsy (EPGD),
 - Poznań-Ławica (EPPO) and Wrocław-Strachowice (EPWR) together,
 - Kraków-Balice (EPKK) and Katowice-Pyrzowice (EPKT) together,

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

- Chopina w Warszawie (EPWA) and Warszawa/Modlin (EPMO) together.

For those airports, where a separate APP unit operates, cost of TWR service is allocated to ER only in the part, which covers services provided outside CTR boundaries and is limited to services provided to approaching (landing) operations.

- At remaining airports, TWR unit provides also APP services. When both APP and TWR services are provided by TWR unit, the cost of the unit is divided between ER and TNC in accordance with the airspace volume ratio (CTR and TMA). For that purpose the following formula is used: $V(CTR) / V(CTR + TMA)$. This formula should be understood as volume of airport controlled area to the total volume of the airport controlled zone and the airport controlled area.

Costs of FIS services, as well as SAR coordination, are in total allocated to ER.

For CNS:

- NAV: The basis for costs allocation of Nav aids is the degree of their use by individual air traffic control units (APP vs. TWR) and reflects use of those Nav aids in different airspace structures (TMA vs. CTR). Allocation of VOR/DVORs, DMEs and ILSs takes into account range of these Nav aids, and as a consequence, their possible use in TMA and CTR. Usage of the airport Nav aids for certain flights in different types of airspace is strictly connected with the dimension of the given airspace. Therefore, their cost is split between TWR and APP, and consequently between TNC and ER.
- SUR: Costs of en-route and approach radars are in total allocated to ER service. Costs of airport movements radars, ASMGCS system and airport MLAT are allocated in total to TNC services (in line with their location).
- COM: The cost allocation is based on the number of radio-stations and voice communication consoles used by each service.

The cost of ATM operational system Pegasus 21 is allocated between ER and TNC on the basis of revenues from navigation services provided. New ATM system (iTEC) is fully allocated to en-route as it will be dedicated to ACC and APP units.

Costs of PANSA UTM system are divided between TNC (and within this part among airports) and non-navigation cost segment based on the ratio of the amount of planned costs and the number of movements at a given airport.

II. IMWM

Tasks related to the provision of meteorological services for the TNC zones are carried out by Aeronautical Meteorological Stations, the central laboratory of the measuring equipment, Meteorological Services for Civil Aviation (AWOS systems) and administrative units. In addition, for RP3 the costs of these tasks have been divided by 40% for en-route charges and 60% for terminal charges.

For more details see En-route Charging Zone Poland Reference Period 3 (2020-2024) additional information point c).

III. Radom Meteo

Radom Meteo has been designated on 14th May 2019 by the Minister responsible for transport for the provision of MET services in CTR/TMA at Radom-Sadków airport (EPRA) for the period from 1st January 2020 to 31st December 2024. Radom Meteo has been also provided with the renewal of ANSP certificate on 18th March 2020 r. by the President of Civil Aviation Authority of Poland.

Since 2019, the EPRA airport remains under reconstruction – despite that fact, Radom Meteo is constantly providing MET services in order to fulfil its obligations stemming from the designation, ANSP certificate and in order to maintain the Radom Meteo's potential to deliver the high-quality MET services once the EPRA will be opened once again, what is currently expected at the turn of 2022/2023.

Methodology used for allocating costs between en-route and terminal ANS

Radom Meteo's only efforts are dedicated to prepare MET products and services, which final clients are to a large extent Airspace Users.

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

The methodology for determining the cost of various aviation products is based on an expert internal assessment of the percentage division of the working time devoted to preparation of the MET products. The indicators of this commitment are the amounts of time required to prepare a particular product.

The next step of cost-allocation is based on guidelines included in the 'Guide to Aeronautical Meteorological Services Cost Recovery' by WMO - No 904 second edition from 2007 which are in line with ICAO Doc 9161, and was performed in order to divide the costs incurred between en-route and terminal ANS.

The table below presents the results of the product division prepared by Radom Meteo for the meteorological service according to the methodology presented above. The final allocation proportions are equal to 40.00% ER / 59.40% TNC / 0.60% Other, what was presented in the table below.

Product/service	Labour intensity	Allocated to ANS	Allocated to other activities	WMO 904 attachment II		Cost		
				ER	TNC	ER	TNC	Other
Providing local meteorological reports for ATC/ATIS	0,32	100%	0,00%	0%	100%	0,00	0,32	0,00
Providing METAR reports	0,22	100%	0,00%	75%	25%	0,17	0,06	0,00
Providing and supervising over forecasts TAF FC (TAF AMD)	0,23	100%	0,00%	75%	25%	0,17	0,06	0,00
Providing meteorological warnings	0,10	95%	5,00%	0%	100%	0,00	0,10	0,01
Wind shear warnings	0,02	100%	0,00%	0%	100%	0,00	0,02	0,00
Providing meteorological flight documentation	0,03	100%	0,00%	75%	25%	0,02	0,01	0,00
Forwarding reports from the air to MBN	0,04	100%	0,00%	100%	0%	0,04	0,00	0,00
Conduction on briefings and meteorological consultations	0,02	95%	5,00%	0%	100%	0,00	0,02	0,00
Providing climatological information	0,02	100%	0,00%	0%	100%	0,00	0,02	0,00
Total	1,00	-	-	-	-	40,00%	59,40%	0,60%

Due to the EPRA airport closure, some of the (mainly terminal) activities (such as providing local meteorological reports for ATC/ATIS, wind shear warnings or forwarding reports from the air to MBN) are not realized, while the final clients of some other are not Airspace Users. Therefore, it was essential to provide additional cost allocation methodology for the period of EPRA closure, based on the same proportion of labour intensity, with regard only to products provided. In that time, the final allocation of Radom Meteo's costs is equal to 54.44% ER / 18.15% TNC / 27.42% Other, what was presented in the table below and is planned to be applied in 2020-2022.

Product/service	Labour intensity	Allocated to ANS	Allocated to other activities	WMO 904 attachment II		Cost		
				ER	TNC	ER	TNC	Other
Providing local meteorological reports for ATC/ATIS	0,00	0%	0%	0%	100%	0,00	0,00	0,00
Providing METAR reports	0,22	100%	0%	75%	25%	0,17	0,06	0,00
Providing and supervising over forecasts TAF FC (TAF AMD)	0,23	100%	0%	75%	25%	0,17	0,06	0,00
Providing meteorological warnings	0,10	0%	100%	0%	100%	0,00	0,00	0,10
Wind shear warnings	0,00	0%	0%	0%	100%	0,00	0,00	0,00
Providing meteorological flight documentation	0,03	0%	100%	75%	25%	0,00	0,00	0,03
Forwarding reports from the air to MBN	0,00	0%	0%	100%	0%	0,00	0,00	0,00
Conduction on briefings and meteorological consultations	0,02	0%	100%	0%	100%	0,00	0,00	0,02
Providing climatological information	0,02	0%	100%	0%	100%	0,00	0,00	0,02
Total	0,62	-	-	-	-	54,44%	18,15%	27,42%

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

IV. Warmia i Mazury

Warmia i Mazury scope of provided services generates the necessity of a costs' breakdown between en-route and terminal charging zones only for MET service. Warmia i Mazury methodology is in line with doc. WMO 904 (Annex II) – 'Guide to Meteorological Services Cost Recovery', coherent with ICAO Doc 9161. The division of labour intensity between each product and service delivered is based on internal estimations. The table below presents product allocation to the en-route and TNC.

Warmia i Mazury does not exclude the 'Other' segment as it is utterly marginal. Any additional exercise done by MET staff is paid in bonuses which are excluded from the cost-bases.

Product/service	Labour intensity	WMO 904 attachment II		Cost	
		ER	TNC	ER	TNC
Wind shear warnings	1,25%	0%	100%	0,00%	1,25%
Providing local meteorological reports for ATC/ATIS	18,50%	-	100%	0,00%	18,50%
Providing METAR reports	30,00%	75%	25%	22,50%	7,50%
Providing and supervising over forecasts TAF FC (TAF AMD	35,00%	75%	25%	26,25%	8,75%
Providing meteorological warnings	5,00%	-	100%	0,00%	5,00%
Providing meteorological flight documentation	2,00%	75%	25%	1,50%	0,50%
Forwarding reports from the air to MBN	7,25%	100%		7,25%	0,00%
Conduction on briefings and meteorological consultations	0,50%	0%	100%	0,00%	0,50%
Providing climatological information	0,50%	0%	100%	0,00%	0,50%
Total	100,00%	-	-	57,50%	42,50%

Warmia i Mazury accounting policy bases on synthetic accounts in accordance with the applicable accounting regulations and analytical accounts based on the organizational structure of Warmia i Mazury. Separate analytical records are kept for MET, AFIS and COM services, which include the following costs:

- Direct costs – which are allocated in 100% based on the financial and accounting documents (e.g. invoices, payroll),
- Indirect costs – which division is calculated based on the proportion of the costs of Warmia i Mazury by using appropriate and specific keys, such as inter alia: space occupied, number of staff, assigned fixed assets, labour intensity, or utilities consumption.

Due to COVID-19 pandemic which had a large impact on the structure of Warmia i Mazury activity as a whole entity, since 1st January 2021 Warmia i Mazury is in testing phase of the new accounting policy concerning especially the improvement of management accounting, which will be fully implemented by 1st January 2022. Therefore, the planning exercise for years 2022-2024 and future reporting methodology will include these changes in order to provide full consistency between methodologies of calculating the determined and actual costs to provide comparable data. One of the aims of these decision was to provide more accurate allocation of assets and identification of cost centres.

V. PL Bydgoszcz

In general, PL Bydgoszcz is dividing all the costs incurred by company on ANS-directly related, ANS-directly unrelated and indirect costs that are furtherly allocated using the average company's departments ratios of involvement in providing ANS, which values are based on expert estimations.

The AFIS costs are allocated to TNC in 100%.

In case of MET costs, PL Bydgoszcz has identified various MET products and services that are provided, and has estimated the labour intensity proportions for their provision, basing on employees' historical experiences. In parallel, the products and services are allocated to ANS (for Airspace Users) and to other activities (for other recipients – which are marginal).

The allocation between en-route and TNC is fully based on International Civil Aviation Organization's Doc 9161 and World Meteorological Organization's Doc 904, which are coherent with each other. The

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

final allocation was presented in the table below, in proportions: 41.00% ER / 58.89% TNC / 0.11% Other.

Product/service	Labour intensity	Allocated to ANS	Allocated to other activities	WMO 904 annex II		Cost		
				ER	TNC	ER	TNC	Other
Wind shear warnings	5,00%	100,00%	0,00%	0%	100%	0,00%	5,00%	0,00%
Providing local meteorological reports for ATC/ATIS	35,00%	100,00%	0,00%	0%	100%	0,00%	35,00%	0,00%
Providing METAR reports	25,00%	100,00%	0,00%	75%	25%	18,75%	6,25%	0,00%
Providing and supervising over forecasts TAF FC (TAF AMD)	25,00%	100,00%	0,00%	75%	25%	18,75%	6,25%	0,00%
Providing meteorological warnings	5,00%	97,92%	2,08%	0%	100%	0,00%	4,90%	0,10%
Providing meteorological flight documentation	2,00%	100,00%	0,00%	75%	25%	1,50%	0,50%	0,00%
Forwarding reports from the air to MBN	2,00%	100,00%	0,00%	100%	0%	2,00%	0,00%	0,00%
Conduction on briefings and meteorological consultations	0,50%	97,92%	2,08%	0%	100%	0,00%	0,49%	0,01%
Providing climatological information	0,50%	100,00%	0,00%	0%	100%	0,00%	0,50%	0,00%
Total	100,00%	-	-	-	-	41,00%	58,89%	0,11%

VI. CAA

The allocation between en-route and terminal ANS based on the involvement of each of the CAA's organizational units' into activities linked within the en-route and terminal supervision, measured in FTEs.

d) Breakdown of the meteorological costs between direct costs and the costs of supporting meteorological facilities and services that also serve meteorological requirements in general ('MET core costs'). MET core costs include general analysis and forecasting, surface and upper-air observation networks, meteorological communication systems, data processing centres and supporting core research, training and administration;

I. PANSA

Not applicable.

II. IMWM

Methodology of separating the costs of meteorological services for aviation in IMWM

Determination of the share of costs of meteorological services for civil aviation provided by IMWM in total MET costs is based on separation of direct costs of such services and on separation of MET core costs.

Methodology of direct costs of meteorological services determination.

The separation of direct costs of meteorological services for aviation from the total MET costs consists in defining the costs of services, facilities and systems used exclusively to provide meteorological services for aviation. IMWM defines these costs in accordance with ICAO Doc. 9161 'Manual on air navigation services economics' and WMO Publication No 904 'Guide to aeronautical meteorological services cost recovery. Principles and guidance', Annex 1, as the costs of: Meteorological Watch Office, Meteorological Office in Cracow - only the part of the costs related to services for aviation, Aeronautical Meteorological Stations, telecommunication system which serve aviation, systems of aerodrome meteorological measuring devices, and costs of administrative support (including training) directly serving the aviation. Such defined direct costs include:

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

- 1) gross payments including: personal and impersonal wages, company's award fund contribution, social insurance contribution, company's social benefit fund contribution, and others; this cost is proportional to the amount of employees rendering meteorological services for civil aviation.

These group of costs are qualified as the staff costs.

The other groups of the direct costs of meteorological service for aviation are:

- 2) indirect costs proportional to remuneration fund and remuneration-related expenditures;
- 3) materials and equipment spare parts: office tools, printers ink, equipment purchase including purchase of equipment at airports, electricity, heat, computers, full equipment of the workplaces;
- 4) third party services: specialized software service (LEADS, AMHS, METAR2010, DEDAL, PROMET), renovation, check-ups, maintenance (computers, copiers, plotters, etc.), data communication network service (servers, routers) used by Meteorological Offices, and Aeronautical Meteorological Stations for meteorological services for civil aviation;
- 5) telecommunication: costs of maintaining communication between headquarters and Meteorological Watch Office, between Meteorological Office in Cracow and PANSA (AFTN network) and Aeronautical Meteorological Stations; SADIS communication system; fees for fixed-line telephones and mobile phones directly connected with meteorological services for civil aviation;
- 6) business trips inside and outside the country directly connected with meteorological services for civil aviation;
- 7) trainings and conferences: periodical meteorological training in respect of international European standards; enhancing qualifications trainings, inner audit costs connected with Quality Management System; other trainings connected with the service provision;
- 8) lease of premises and meteorological ground on the premises of airports - leasing according to signed agreements;
- 9) usage of automatic weather observation systems (AWOS) for the needs of meteorological services for civil aviation, including: trainings for the service workers, relevant business trips, the costs directly connected with AWOS maintenance and the cost of measuring equipment modernization.

The above costs, point 2 to 9 constitute other operating costs of meteorological services for aviation.

Methodology of determining the share of meteorological services for aviation costs in core MET costs.

According to ICAO Doc. 9161 'Manual on air navigation services economics' and WMO no 904 'Guide on aeronautical meteorological services cost recovery. Principles and guidance' MET core systems are defined as systems, facilities and services not only used for meteorological services for aviation but also for the public. These are as follows:

- Generally forecasting system;
- Numerical weather forecast system;
- Telecommunication infrastructure;
- Hydrological-meteorological stations network;
- Aerology observations system;
- Meteorological radars and discharging detection systems;
- Satellite data receiving system;
- Historical database;
- Systems supervision.

Core MET costs are costs of maintenance of the above listed systems in this part which was included within total MET costs and on the basis of the methodology presented above.

The share of costs of most MET core systems in aviation costs was calculated in accordance with procedures defined in ICAO Doc. 9161 'Manual on air navigation services economics' and WMO no 904 'Guide on aeronautical meteorological services cost recovery. Principles and guidance', point 3.10 (d), namely: in proportion of all employees working for aeronautical meteorology to employees working for National Hydrological-Meteorological Service. The number of employees working for aeronautical meteorology was determined on the basis of dividing National Hydrological-Meteorological Service into HYDRO Service and MET Service. This methodology was applied in order to determine the share of costs of the following core systems:

- Generally forecasting system;

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

- Numerical weather forecast system;
- Hydrological-meteorological stations network;
- Aerology observation system;
- Satellite data receiving system;
- Historical database;
- Systems supervision.

The share of costs of telecommunication systems in aviation costs was determined analogously to the methodology which determines the share of MET costs (total MET costs) in National Hydrological-Meteorological Service. The methodology is defined in ICAO Doc. 9161 and WMO no 904 point 3.10 (c), namely it is based on the analysis of the size of computer network flow in IMWM.

III. Radom Meteo

For details on cost allocation see point c).

IV. Warmia I Mazury

For details on cost allocation see point c).

V. PL Bydgoszcz

For details on cost allocation see point c).

VI. CAA

Not applicable.

e) Description of the methodology used for allocating total meteorological costs and MET core costs referred to in point (d) to civil aviation and between charging zones;

I. PANSA

Not applicable.

II. IMWM

Methodology for division of costs of MET services to civil aviation into costs of particular products.

The methodology for determining the cost of various aviation products is based on an assessment of the percentage contribution of the working time of one post per day in the manufacture of products for meteorological service to civil aviation. The basis of the methodology is the assessment of involvement of different organizational units, directly producing aeronautical products such as the Meteorological Watch Office (MBN), Meteorological Office (BPM) and the Aeronautical Meteorological Stations (LSM) units and indirectly involved in the protection of civil aviation. The measure of this commitment is the amount of time required to manufacture a particular product.

The share of work of the units indirectly involved is assigned to each product, and contribution of the Central Measuring Equipment Laboratory, was assigned only to products that are based on measuring instruments.

A detailed description of the methodology used to determine the costs of products is as follows:

- 1) A catalogue of basic classes of meteorological products has been defined. It was prepared by IMWM in order to provide meteorological services to civil aviation in 2020-2024. This catalogue is based on ICAO Annex 3, WMO Publication No. 904.
- 2) Daily work tables were constructed for the Meteorological Watch Office and individual meteorological offices, and for aeronautical meteorological stations. These tables describe the average time it takes to produce various aeronautical meteorological products in specific classes in the consecutive hours of the day, in different organizational units.
- 3) On the base of obtaining percentage of product workload, partial product cost has been calculated which is a product of the following elements:
 - Number of posts;
 - Labour consumption of the products;
 - Annual amount of salaries per post.

The term workload is understood as the amount of work needed or used for the implementation and monitoring of a single product that is expressed as a percentage of working time to the entire time.

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

Cost share of other groups (service, AWOS, materials, external services, delegations, telecommunications, SADIS, trainings, rentals, infrastructure, depreciation, cost of capital) has been established - on the basis of dedicated work at each cost group to manufacture the product. This share has been added to the partial cost of the product. In this way, an annual cost of developing each of the products ordered by PANSA has been achieved. The sum of the individual products gives us an annual cost of MET services to civil aviation.

III. Radom Meteo

For details on cost allocation see point c).

IV. Warmia I Mazury

For details on cost allocation see point c).

V. PL Bydgoszcz

For details on cost allocation see point c).

VI. CAA

Not applicable.

f) For each entity, description of the composition of each item of the determined costs by nature and by service (points 1 and 2 of Table 1), including a description of the main factors explaining the planned variations over the reference period;

I. PANSA

Determined costs by nature and by service

Entity: PANSA	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Staff costs cover gross remuneration, overtime payments and other ancillary benefits including jubilee awards and bonuses, PANSA contributions to social security scheme, including pension contributions, as well as provisions related to staff costs. Staff costs do not include the costs of training, which are disclosed under other operating costs. The main drivers for 2020-2021 cost evolution are: - implementation of cost containment measures in the area of base salaries due to the lack of the main source of income (ANS charges) – applicable to 2021; - reduction of all other remuneration components (overtime, bonuses, awards, allowances etc.) related to the extraordinary financial circumstances, reduced workload and use of furloughs/downtime – applicable to 2020-2021, - use of COVID-related state care allowance for small kids by some employees during lockdown and related school closure – applicable to 2020-2021, - temporary suspension/reduction of some contribution to social insurance scheme – applicable to 2020. The main assumptions for 2022-2024 planned cost evolution include: - partly restoration of basic salaries following the 2021 cuts indicated above, - restoration of other remuneration components to pre-pandemic levels where needed/justified, increase in employment (especially in the CNS and IT areas) due to i.a. infrastructure and systems development supporting TWR ATCOs.
of which, pension costs	These include PANSA contributions to national pension scheme (applicable to all entities in Poland) as well as additional PANSA occupational pension scheme applicable to PANSA employees (Defined Contribution Scheme). Pension contributions were assumed at the current level. In percentage: 1) for the state scheme: 9.76% - pension contribution rate; 6.5% - disability pension contribution rate and 1.5% - bridging pension contribution rate for employees employed in special conditions, 2) for PANSA occupational scheme: 7%. For the state scheme the costs assume the annual limit of basis for the contributions to state pension insurance applicable for 2021 in the amount of 157 770 PLN, which in subsequent years was increased by forecasted inflation (the limit is verified on annual

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

	basis by the state taking into account the level of monthly average salary in the Polish economy). 2020 pension costs are impacted by the temporary suspension of contribution to PANSAs occupational scheme.
1.2 Other operating costs	The other operating costs were estimated according to the best knowledge regarding signed agreements with subcontractors, short term needs related to ensuring services continuity as well as savings and optimization of costs necessitated by COVID-19 situation. The level of costs also takes into account cost of training. The main drivers for 2020-2021 cost evolution are: – restrictions connected with COVID-19 pandemic, which have temporary impact on the level of such costs as travel, trainings, energy and utilities (limited number of persons on-site, remote work), events etc., – measures aimed at maintaining liquidity, consisting in temporary reduction of some expenditures or postponement of these – where possible, including also CAPEX optimization (impacting costs related to new investments – incl. preparatory works, implementation and maintenance of infrastructure and systems, as well as costs related to repair services and other – incl. security, cleaning and maintenance services – needed to maintain PANSAs Property Plant and Equipment at the level ensuring undistorted operations). The main assumptions for 2022-2024 planned cost evolution include: – execution of projects aimed at increasing efficiency of TWR ATCOs, considering also the need to improve resilience and digitalization of services. These include both investment tasks as foreseen in the verified CAPEX plan (where planned investments have impact on costs related to preparatory works, implementation and maintenance of infrastructure and systems) and projects planned to be executed as OPEX, – restoration to normal operations where it is no longer possible to reduce or postpone activities and related costs, and where due account must be taken of increase in prices of energy, minimum wage (impacting costs of external services) and tax liabilities (also resulting from execution of investment tasks mentioned above). Following talks between NSA and the European Commission on the treatment of costs related to non-contractual use of land, costs related to accounting provisions on these claims are not included in the revised RP3 determined costs. In accordance with the outcome of the discussions with the EC, these will be reported as cost-exempt once the final amounts to be paid by PANSAs are established and subject to payment and will be recovered accordingly.
1.3 Depreciation	The depreciation cost covers both, continued depreciation of assets existing before RP3 as well as depreciation on new assets, which were/will be put into operation over 2020-2024. It includes depreciation of fixed assets and intangible assets. Historic cost accounting is applied. The level of depreciation cost is impacted by investments executed before the COVID pandemic (up to 1Q 2020), limited investments carried out during 2020-2021 which are necessary to ensure service continuity, are required by regulatory framework or are subject to agreements signed with contractors and investments planned for the following years of RP3. Following the outbreak of the pandemic, in 2020 PANSAs has undertaken a complete review of CAPEX plan for the whole RP3 and beyond. The aim was on the one hand to look for possible savings in the level of expenditures, especially for the period 2020-2021, including possible postponement of projects (financial dimension of the review), and on the other to again validate the projects from the perspective of current operational needs and expected benefits, also in the light of expected changes to traffic levels (operational perspective of the review). As a result of that review, some investments were cancelled/suspended, and many were postponed. Further review was undertaken in 2021 and led to some additional refinements in RP3 CAPEX plan, taking also into account actual execution of CAPEX over 2020 and early 2021. The reviewed investment plan includes both, replacement and development needs. New investments shall enable standardization of TWR positions, support digitalization of services and include tools to support efficiency of TWR ATCOs.
1.4 Cost of capital	The cost of capital remains quite steady over RP3. The fixed assets base reflects execution of investment plans. For further details on the cost of capital calculation – see point i) below.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

2.1 Air Traffic Management	Evolution of ATM costs is related to the staff cost (see point 1.1) and planned execution of investments related to ATM.
2.2 Communication	The level of COM costs reflects evolution of COM infrastructure and remains quite steady over RP3 as compared to RP2 actuals. These includes also evolution of related other operating costs – including energy, rental of land, security etc.
2.3 Navigation	Similarly as for COM above, the level of NAV costs reflects evolution of NAV infrastructure and remains quite steady over RP3, also as compared to RP2 actuals. These includes also evolution of related other operating costs – including energy, rental of land, security etc.
2.4 Surveillance	The SUR costs remain steady over RP3, also as compared to 2018-2019 actuals.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Due to the development of airports in Poland as well as changes in the airspace in the vicinity of airports, publications and procedures created for airports have an increasing share in these activities. This causes changes (increase) in the amount of costs for terminal navigation.
2.7 Meteorological services	Not applicable.
2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
Not applicable.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: <PANSA>
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
Information on pension costs assumptions is provided above in point f) and in the revised PL RP3 PP (item 3.4.3).

II. IMWM

Determined costs by nature and by service

Entity: IMWM	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	The increase in personnel costs is related to the increase in wages in IMWM and the increase in the average wage in the country. In March we introduced IMWM Collective Labor Agreements that regulates wages in IMWM.
of which, pension costs	The methodology of calculating pension and pension contributions paid by the employer for employees at the IMWM is based on suitable articles of the Act on the social insurance system of 13 th October 1998. The sum total of the pension and pension contribution paid by the employer is 9.76% plus 6.5% equal to 16.26% of the contribution basis.
1.2 Other operating costs	The increase in operating costs is dictated by the increase in the amount related to the lease of AWOS systems not owned by IMWM (EPWA, EPPO, EPLB, EPZG, EPMO). Assumptions that were adopted for the RP2 period did not provide for real costs incurred by the Institute in this respect. In addition, the assumptions related to the service of systems owned by IMWM were verified, which also resulted in increased operating costs. Operating expenses were also increased due to the need to adapt the IMWM infrastructure to the standards imposed by Eurocontrol and EASA in the field of data exchange, including adaptation to SWIM information exchange standards. Another element is the introduction of new products and tools supporting the work of forecasters and tools supporting the work of PANSA ATC / Vento, MeteoFlight /. Also a number of IT activities for the meteorological services were also carried out: consolidation of the IT environment (mainly in relation to servers), construction of a backup node for transmission and processing environments and data storage, replacement and supplementation of network equipment, development of monitoring tools and tools for measuring parameters of applications, servers and ICT network, maintenance of the incident management system, expansion of configuration management systems, development and maintenance of the business continuity management system, replacement (reconstruction) of computers functioning as workstations, development and migration from the tools used so far as well as operational implementation of the acquisition and distribution system with operational

Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)

	and historical databases, analysis of the use and analysis of the functionality of the software used by meteorological services- process from aeronautical meteorological stations level to the level of forecasting offices, purchase of infrastructure elements dedicated to the needs of projects and tasks carried out as part of the meteorological services, modernization of AWOS and ICEALERT systems in order to increase reliability and reduce the number of single points of failure, changes in the connections of the AWOS system with the infrastructure of airports and the Polish Air Navigation Services Agency (PANSa) in order to increase reliability.
1.3 Depreciation	Subsequent years of operation of the AWOS systems purchased in 2016 and other fixed assets purchased.
1.4 Cost of capital	Subsequent years of operation of the AWOS systems purchased in 2016 and other fixed assets purchased.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	n/a
2.2 Communication	n/a
2.3 Navigation	n/a
2.4 Surveillance	n/a
2.5 Search and rescue	n/a
2.6 Aeronautical Information	n/a
2.7 Meteorological services	Please see explanation above (1.1-1.5).
2.8 Supervision costs	n/a
2.9 Other State costs	n/a
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
n/a	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: IMWM
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
see point 1.1 of the chart

III. Radom Meteo

Determined costs by nature and by service

Entity: Radom Meteo	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Radom Meteo in 2019 and 2020 has minimized the staff costs by largely reducing the working time of employees, to the levels necessary to fulfil the obligations of ANSP certificate, designation and employees' requirements to maintain their authorities to perform MET services. From 2023, the staff costs are expected to significantly rise, also comparing to RP2, as the MET services are planned to be delivered 24 hours a day as EPRA is planned to become an important airport devoted to handling the Warsaw's traffic.
of which, pension costs	Pension costs are planned to rise in the later years of RP3 as a consequence of the increase in employment and changes in legal form of cooperation with employees to the form of contracts that include social security expenses.
1.2 Other operating costs	Radom Meteo has reached agreements for the years 2020-2022 with lots of contractors which have resulted in minimalization of the costs incurred for the time of EPRA closure. From 2023, due to the plans of EPRA modernization and its significant growth in terms of level of handled traffic, lots of MET investments are planned to be performed, which will eventually result in higher level of costs due to its maintenance and utilities. Also, the values of contracts with the external counterparties are planned to rise to the levels from before the EPRA closure as the temporary agreements, mentioned above, will reach their end.
1.3 Depreciation	Depreciation of the old equipment, which is constantly in use, will end in 2022. At the beginning of 2023, new important investments, such as AWOS modernization equipment and climatological software are planned to be purchased, which will

Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)

	generate the significant depreciation costs for further years. The investments are necessary to bring the EPRA airport category to a higher level.
1.4 Cost of capital	The COVID-19 pandemic and changes in navigation charges distribution system at national level have made the level of cost of capital incurred not neglectable anymore. The determined WACC values are based on the recommendation of PRB (for details see point j))
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Not applicable.
2.2 Communication	Not applicable.
2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	All costs are related to this activity. Please see explanation above (1.1-1.5).
2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
Radom Meteo follows the rules of Polish Accounting Act. Full compliance with the IFR Standards is not possible at this stage, nevertheless Radom Meteo is aware its obligation to achieve such compliance to the maximum possible extent.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: Radom Meteo
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
As stated in point 1.1. of the table above. No changes are expected.

IV. Warmia i Mazury

Determined costs by nature and by service

Entity: <Warmia i Mazury>	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Staff costs are lower in 2020 and 2021 due to lower working hours of AFIS than initially planned. The working hours of AFIS are planned to reach the usual level in 2022.
of which, pension costs	The pension costs are proportionate to staff costs.
1.2 Other operating costs	Other operating costs are lower in 2020 and 2021 due to lower working hours of AFIS than initially planned. The working hours of AFIS are planned to reach the usual level in 2022.
1.3 Depreciation	Depreciation costs rise significantly in 2022 due to planned investment in COM vehicles in late 2021 (postponed from 2020) and also grow in 2024 as a result of investment in rAFIS. "Remote AFIS" is changing the provision of Air Traffic Services (ATS) in a way that it is more service tailored, dynamically positioned and available when and where needed, enabled by advanced surveillance solutions making the physical presence of aerodrome flight information service officers (AFISO) In next step it enables centralised aerodrome AFIS services in terms of Remote AFIS Centers to further increase cost efficiency.
1.4 Cost of capital	Cost of capital variation is strictly connected with depreciation costs evolution.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	The costs of AFIS has been reduced in 2020 and 2021 due to COVID-19 pandemic and temporary limitation of working hours of EPSY airport and WiM's air navigation services. In 2024 the costs are rising due to investment in rTWR in which WiM's participation in costs is equal only to 25%. For details see points 1.1-1.5 above.
2.2 Communication	The COM cost drivers are the same as for AFIS (see above). For details see points 1.1-1.5 above.
2.3 Navigation	Not applicable.

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	The MET costs YoY evolution is marginal and varies mainly on forecasted inflation rates. For details see points 1.1-1.5 above.
2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
Warmia i Mazury follows the rules of Polish Accounting Act. It is not possible to provide full compliance with the IFRS, though the compliance with IFRS is currently at the maximum possible extent.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: <Warmia i Mazury>
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
Warmia i Mazury does not foresee any changes in law which may have an impact on pension costs in RP3.

V. PL Bydgoszcz

Determined costs by nature and by service

Entity: <PL Bydgoszcz>	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Costs in 2020 are lower than in years 2021-2024 due to the airport's closure for several weeks due to COVID-19 pandemic and PL Bydgoszcz's ability to lower staff costs, as a consequence from the so called 'Shield' programme. The wages in next years are rising as a compensation for high inflation rates and as a reward for the increase of experience of employees in order to prevent the key personnel from leaving the company. The AFIS costs are rising due to increase in operating hours in subsequent years.
of which, pension costs	The pension costs consist of social security expenses and are strictly connected with staff costs growth.
1.2 Other operating costs	Majority of other operating costs is planned for trainings of the staff posted to ANS provision, utilities, rent, COM for AFIS rental fees, external services such as IT support and maintenance. What is more, some of PL Bydgoszcz's personnel has been contracted as external counterparties what also has a significant impact on the final cost values. The AFIS other operating costs are also rising in 2023 and 2024 which are stemming from the TWR modernization.
1.3 Depreciation	Depreciation of MET assets is maintaining the similar level over RP3. The main MET cost-driver is depreciation of AWOS system and MET software. In terms of AFIS, the values are rapidly growing in 2023 and 2024 due to planned and postponed TWR modernization.
1.4 Cost of capital	Costs of capital is falling YoY as the net book value of assets is declining due to its depreciation. The values for AFIS are rising in 2023 and 2024 as the planned investment in TWR modernization will be finished and entered into operation.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	The AFIS costs are rising in 2023 and 2024 due to the planned in the second half of 2023 TWR modernization, which has been postponed from 2020, caused by, among others, COVID-19 pandemic. The other cause of the cost growth is increased number of planned operating hours of AFIS comparing to 2020 and 2021, which were minimized in these years due to low traffic. For details see points 1.1-1.5 above.
2.2 Communication	Not applicable.
2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	The costs are rising mainly due to the growth in staff costs. For details see points 1.1-1.5 above.

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

2.8 Supervision costs	Not applicable.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
PL Bydgoszcz accounting policy is basing on the rules of Polish Accounting Act. It is not possible to provide full compliance with the IFR Standards, though PL Bydgoszcz is struggling to achieve coherence with IFRS at the maximum possible extent.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: <PL Bydgoszcz>
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
No changes in law having an impact on pension costs in RP3 are expected. For details, see point 1.1. in table above.

VI. CAA

Determined costs by nature and by service

Entity: CAA (including EUROCONTROL)	
1. Detail by nature (in nominal terms)	
1.1 Staff costs	Among others – costs of: remuneration, pension contributions, bonuses.
of which, pension costs	Pension contributions covering the 9.76% and 6.5% parts of wages (national pension scheme).
1.2 Other operating costs	Among others – costs of: materials, energy, utilities, business travels, furniture, renovation, trainings, rents.
1.3 Depreciation	Not applicable.
1.4 Cost of capital	Not applicable.
1.5 Exceptional items	Not applicable.
2. Detail by service (in nominal terms)	
2.1 Air Traffic Management	Not applicable.
2.2 Communication	Not applicable.
2.3 Navigation	Not applicable.
2.4 Surveillance	Not applicable.
2.5 Search and rescue	Not applicable.
2.6 Aeronautical Information	Not applicable.
2.7 Meteorological services	Not applicable.
2.8 Supervision costs	The growth of CAA costs in RP3 comparing to RP2 results from the planned rise of wages stemming from the government budget and the increase of obligations and task performed by the CAA in the field of air navigation service.
2.9 Other State costs	Not applicable.
Adjustments beyond the provisions of the International Financial Reporting Standards adopted by the Union pursuant to Regulation (EC) No 1126/2008	
The CAA, as a national budgetary unit financed from state budget, is obliged to follow accounting regulations applicable to national administration bodies. As a consequence, the CAA does not apply IAS but follows national regulations regarding budgetary units which are based on cash accounting rules.	

Pension costs

Note: The determined pension costs of the main ANSPs are detailed and justified in the body of the performance plan (item 3.4.3)

Entity: CAA (including EUROCONTROL)
Assumptions underlying the determined pension costs and expected evolution over Reference Period 3
The assumptions were based on the currently functioning national pension scheme. It is not expected to face any major changes over RP3.

Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)

g) For each entity, a description and justification of the method adopted for the calculation of depreciation costs (point 1.3 of Table 1): historical costs or current costs referred to in the fourth subparagraph of Article 22(4), and, where current cost accounting is used, provision of comparable historical cost data;

I. PANSA

In compliance with the Accounting Policy, historical cost accounting method is applied for the calculation of the depreciation costs. Depreciation is provided using the straight-line method over the estimated economic useful lives of the assets. The depreciation periods applied by PANSA remain unchanged as compared to previous reference periods. The economic useful life is periodically reviewed to ensure that depreciation periods are consistent with the expected pattern of economic benefits from items property, plant and equipment.

With regard to investments co-financed by the public funds, including EU Cohesion Fund and the Connecting Europe Facility fund, the full amount of depreciation costs is included in the determined costs. At the same time the subsidies are taken into account as other revenue – the calculation of other revenues fully follows provisions of article 25.3 of Regulation 2019/317 – see also point f) in the Additional Information to Table 2 below.

II. IMWM

Depreciation of appliances is always calculated from the next month after the takeover is completed. This calculation is done in accordance with expected operating life – in line with the operating life for the specific type of fixed assets as described in the 'Principles for establishing the cost-base for en-route charges and the calculation of the unit rates' - using the straight-line method and refers to historic cost of fixed assets depreciated and intangible and legal assets.

To calculate cost of capital the following pattern is used in the IMWM:

Cost of capital = (Average net value of fixed assets and possible adjustments of all assets determined by national regulatory body, currently operationally exploited or built, used by an institution serving air navigation + average net value of current assets, excluding interests, necessary for air navigation service) x weighted average of debt interest rate and of return on equity

IMWM follows EUROCONTROL Principles according to which only these assets can be calculated within the equity which operating period is expected to begin before the end of the year for which the cost calculation is made.

IMWM TNC -OTHER					
Equivalent in historic cost accounting					
	2020	2021	2022	2023	2024
Investment costs (in nominal terms in '000 national currency)					
1.3 Depreciation	1 026	1 073	1 372	1 372	2 092
1.4 Cost of capital	493	482	217	257	262
Average asset base					
3.1 Net book val. fixed assets	5 443	4 884	4 705	3 615	3 087
3.2 Adjustments total assets	0	0	0	0	0
3.3 Net current assets	10 728	10 225	3 369	4 755	4 892
3.4 Total asset base	16 171	15 109	8 074	8 370	7 979
Cost of capital %					
3.5 Cost of capital pre tax rate	3,05%	3,19%	2,69%	3,07%	3,28%
3.6 Return on equity	4,00%	4,00%	4,00%	4,00%	4,00%
3.7 Average interest on debts	1,34%	1,40%	1,40%	1,40%	1,40%
3.8 Share of financing through equity	64,29%	68,85%	49,62%	64,23%	72,31%

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

III. Radom Meteo

Radom Meteo uses the historical costs methodology for the calculation of depreciation costs. No assets revaluation has been included or is planned to be performed in the scope of RP3.

IV. Warmia I Mazury

Warmia i Mazury uses the historical costs methodology, therefore there is no need for additional information concerning comparable data on depreciation costs.

V. PL Bydgoszcz

PL Bydgoszcz uses the historical costs methodology for the calculation of depreciation costs. No assets revaluation has been included or is planned to be performed in the scope of RP3.

VI. CAA

Not applicable.

h) For each entity, description and underlying assumptions of each item of complementary information (point 3 of Table 1), including a description of the main factors explaining the variations over the reference period;

I. PANSA

PANSA	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	Cost of capital is calculated taking into account average value of the intangible assets and the tangibles assets as well as WACC rate (see item i) below).
3.12 Cost of leasing	For the purpose of establishing cost bases for RP3 PANSA follows EC recommendations and presents <u>lease payments under other operating costs</u> . It should be emphasized that depreciation charge for the leased asset, interest expense on a lease liability (as a consequence of IFRS 16 implementation) as well as right-of-use of leased asset <u>are not included in determined costs</u> (neither as depreciation nor as cost of capital).

II. IMWM

IMWM	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	See point f) and g).
3.11 Cost of capital	See point f), g) and i).
3.12 Cost of leasing	n/a

III. Radom Meteo

<Radom Meteo>	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above.
3.11 Cost of capital	Radom Meteo has not included in cost bases in RP2 the incurred cost of capital as its level were neglectable. Details of its evolution in RP3 are covered in item f) above.
3.12 Cost of leasing	The cost of leasing is not planned in RP3 and were not incurred in RP2.

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

IV. Warmia I Mazury

<Warmia i Mazury>	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	Cost of capital related to new and existing investments is a product of the forecasted values of NBV fixed assets and WACC.
3.12 Cost of leasing	Not applicable.

V. PL Bydgoszcz

<PL Bydgoszcz>	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Covered in item f) above
3.11 Cost of capital	The values of cost of capital stemming from new and existing investments are the product of the forecasted WACC and net book value of fixed assets.
3.12 Cost of leasing	Not applicable to PL Bydgoszcz.

VI. CAA

CAA	
Costs of new and existing investments (see also performance plan item 2)	
3.10 Depreciation	Not applicable.
3.11 Cost of capital	Not applicable.
3.12 Cost of leasing	Not applicable.

i) For each entity, description of the assumptions used to compute the cost of capital (point 1.4 of Table 1), including the composition of the asset base, the return on equity, the average interest on debts and the shares of financing of the asset base through debt and equity;

I. PANSA

PANSA	
Average asset base	
3.1 NBV fixed assets	The average net book value of fixed assets for terminal services provision is calculated taking into account the intangible assets and the tangible assets (in operation and under construction). It should be emphasized that leased assets are excluded from average asset base calculation. The average considers level of fixed assets at the beginning and at the end of each year.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	The value of net current assets is calculated taking into account approach recommended by CRCO when auditing PANSA's cost base in 2010 and applied since then, which is also consistent with EUROCONTROL Principles. It assumes that only assets that are necessary to provide ANS are taken into account. Planned current assets required to provide air navigation services are calculated taking into consideration latest available (for the year preceding the calculation) credit period associated to the payment of invoices (credit from customers and credit suppliers and staff). Methodology applied guarantees exclusion of interest bearing items.
Cost of capital %	
3.6 Return on equity	In order to properly reflect financial risk incurred when providing air navigation services PANSA applies a CAPM methodology for establishing return on equity. Assumptions taken into account to determine RoE rate for RP3 under the current submission:

Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)

	Capital structure – hypothetical efficient capital structure assuming 60% debt financing over whole RP3. Corporate tax rate – 19%, Risk free rate % (nominal) - the latest available yield of 10 years Polish government bonds rate reported by Eurostat is used (June 2021 publication for May 2021). Equity risk premium % (after tax) – 6.54% - an average of equity risk premium estimated for Poland by Damodaran (6.48% as per Jul 2020 submission) and Fernandez IESE Business School study (6.60% as per Mar 2020 submission). ERP estimated in such way applies for the whole RP3. Asset beta is 0.4. The asset beta is assumed taking into consideration estimates made by SDG for efficient cost of capital for RP2 (a range of 0.3 to 0.5). It is consistent with assumptions used for RP2 and initial PL RP3 PP dated Nov 2019 and reflects financial risk of running ANSP business. Equity beta for every single year of RP3 amounts to 0.89 and is a product of estimated asset beta, corporate tax rate and assumed hypothetical efficient capital structure described above.
3.7 Average interest on debts	Average interest on debts is calculated taking into account effective annual interest rates calculated based on the agreed operating credit facility and investment credit, both received from Bank Gospodarstwa Krajowego (BGK); average interest on debts calculation was performed taking into account costs already incurred till Jun 2021 and these forecasted to the end of repayment periods. It should be noted that PANSA as a public legal entity is obliged to use financial products offered by this state-owned bank (BGK) only.
3.8 Share of financing through equity	As recommended by SDG and expected by EC (exchanges during discussions on the initial PL RP3 PP dated Nov 2019) hypothetical efficient capital structure 60% through debt and 40% through equity was assumed for the whole RP3.

WACC calculation	2020	2021	2022	2023	2024
Capital structure (% equity)	40%	40%	40%	40%	40%
Capital structure (% debt)	60%	60%	60%	60%	60%
Corporate tax rate %	19%	19%	19%	19%	19%
Risk free rate % (nominal)	1,82%	1,82%	1,82%	1,82%	1,82%
Market rate (after tax)	8,36%	8,36%	8,36%	8,36%	8,36%
Market (equity) risk premium % (after tax)	6,54%	6,54%	6,54%	6,54%	6,54%
Asset beta	0,4	0,4	0,4	0,4	0,4
Debt beta	0	0	0	0	0
Equity beta	0,89	0,89	0,89	0,89	0,89
Return on Equity % (after tax)	7,61%	7,61%	7,61%	7,61%	7,61%
Return on Equity % (pre tax)	9,40%	9,40%	9,40%	9,40%	9,40%
Debt risk premium %	1,47%	1,60%	1,65%	1,71%	1,74%
Interest on debt % (pre tax)	3,29%	3,42%	3,47%	3,53%	3,56%
Interest on debt % (after tax)	2,66%	2,77%	2,81%	2,86%	2,89%
WACC % vanilla	5,02%	5,10%	5,13%	5,16%	5,18%
WACC % after tax	4,64%	4,71%	4,73%	4,76%	4,78%
WACC % (pre tax)	5,73%	5,81%	5,84%	5,88%	5,90%

II. IMWM

IMWM	
Average asset base	
3.1 NBV fixed assets	Average accounting net value of fixed assets was calculated on the basis of actually involved fixed assets, which serve meteorological services for civil aviation and on the basis of all planned purchases of fixed assets for above mentioned purposes.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	Average net value of working assets – <u>net working assets</u> - working assets excluding short-term liabilities; – <u>average net value of working assets</u> was calculated in the following way: (net working assets at the beginning of the year + net working assets at the end of the year) : 2. Working assets are all amounts due on account of the agreement for meteorological services for civil aviation calculated at the end of financial year.

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

	Taking into account the fact that there is a monthly settlement cycle, at the end of the year stays only a December instalment, namely 1/12 part of the amount written in the agreement. Short-term liabilities - accepted at an average index level resulting from the division of short term liabilities by working assets.
Cost of capital %	
3.6 Return on equity	Interest on equity for the years 2019-2024 - adopted at the level of 4% acc. interest rate presented in the performance plan for the reference period.
3.7 Average interest on debts	Interest on the loan to finance the purchase of AWOS systems in 2020 -1,34% and in the years 2021-2024 - 1,40%.
3.8 Share of financing through equity	Calculated as the ratio of equity to total capital employed.

III. Radom Meteo

<Radom Meteo>	
Average asset base	
3.1 NBV fixed assets	NBV of fixed assets was calculated as a average value of fixed assets between subsequent years, with respect of its depreciation.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	Net current assets were calculated as a difference between forecasted levels of current assets and liabilities.
Cost of capital %	
3.6 Return on equity	RoE was calculated basing on CAPM and PRB recommendations, including the risk-free rate based on the Poland's government bonds yields (Eurostat data), capped beta factor at level 0.4 and county risk premium based on average of available A. Damodaran, Fernandez-IESE and Dimson-Marsh-Staunton values.
3.7 Average interest on debts	Not applicable as Radom Meteo does not foresee any financial liabilities in RP3.
3.8 Share of financing through equity	Equal to 100% as Radom Meteo does not foresee any financial liabilities in RP3.

IV. Warmia i Mazury

<Warmia i Mazury>	
Average asset base	
3.1 NBV fixed assets	The NBV of fixed assets was calculated basing on the sum of values of fixed assets less depreciation.
3.2 Adjustments total assets	Not applicable.
3.3 Net current assets	Warmia i Mazury has taken into account the difference between the receivables and liabilities and their turnover ratios.
Cost of capital %	
3.6 Return on equity	Warmia i Mazury has taken into account the PRB recommendations. The RoE was calculate by using Capital Asset Pricing Model. Risk-free rate was based on the Poland's domestic long-term bonds' yield, while beta factor was capped and equal to 0.4, in line with PRB suggestions. There was no need for Hamada's equation application as forecasted debt is equal to 0. Risk premium values were based on the average of A. Damodaran and Fernandez-IESE calculations.
3.7 Average interest on debts	Not applicable as Warmia i Mazury has no external financing concerning MET services.
3.8 Share of financing through equity	The value is constant through RP3 and equal to 100%, see point 3.7 above.

V. PL Bydgoszcz

<PL Bydgoszcz>	
Average asset base	
3.1 NBV fixed assets	The net book value of fixed assets was calculated basing on monthly averages of fixed assets reduced by appropriate levels of depreciation.
3.2 Adjustments total assets	Not applicable.

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

3.3 Net current assets	PL Bydgoszcz has calculated net current assets by diminishing the product of receivables and receivables turnover ratios by the product of non-financial liabilities and liabilities turnover ratios.
Cost of capital %	
3.6 Return on equity	PL Bydgoszcz's calculated RoE by following the PRB recommendations. The CAPM model was used to determine the proper values. The domestic long-term bonds' yield was used as a risk-free rate, together with capped beta equal to 0.4, which was further levered using Hamada's equation. As for risk premium, PL Bydgoszcz has used the average of calculations performed only by A. Damodaran and Fernandez-IESE as Dimson-Marsh-Staunton values were not publicly available.
3.7 Average interest on debts	PL Bydgoszcz has used the average interest on debts basing on relation of actual and planned interests and external capital used for funding the MET services.
3.8 Share of financing through equity	The share of financing through equity was based on the real proportions of debt and equity used to finance the provision of ANS.

VI. CAA

Not applicable.

j) Description of the determined costs of common projects (point 3.9 of Table 1).

I. PANSA

Description of determined costs of common projects will be provided in the revised RP3 performance plan for Poland to be submitted by 1 October 2021.

II. IMWM

Not applicable.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz.

VI. CAA

Not applicable.

2. Actual costs and unit costs

a) For each entity and for each cost item, a description of the reported actual costs and the difference between those costs and the determined costs, for each year of the reference period;

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance. The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

I. PANSA

In the cost-efficiency area, the revised draft PL RP3 PP establishes also 2020 determined costs. Revised 2020 determined costs are equal to 2020 actual costs incurred by PANSA.

It should be noted that actual costs for the year 2020 included in the draft revised PL RP3 PP have been recalculated as compared to costs presented for the purpose of June 2021 submission. It led to slight increase in 2020 actual costs mainly due to exclusion of costs related to non-contractual use of land and revision of assumptions applied to cost of capital calculation (to ensure that cost of capital assumptions remain coherent over the whole RP3).

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: PANSA	
1.1 Staff costs	The actual staff costs for 2020 are lower by 7.4 % than 2019 staff costs mainly due to implementation of one-off cost containment measures taken in order to respond to traffic decrease and liquidity issues. Such decrease in staff costs is a result of temporary suspension of hiring new employees (including courses for ATCO), temporary suspension of contributions to the occupational pension scheme and group insurance, limited number of working hours on weekends and night hours, reduction of bonuses and rewards and overtime as well as use of furlough/downtime. Reduced 2020 costs are also linked to use of COVID-related state care allowance for small kids by some employees during lockdown and related school closure. All these drivers led to reduction of basic as well as non-obligatory remuneration components comparing to pre-pandemic period.
1.2 Other operating costs	The actual 2020 other operating cost are lower by 41.3% than in 2019 due to work reorganization (limited presence of employees on-site, remote work), temporary business travelling restrictions as well as temporary training suspension and lower cost of accommodation (cancellation of new recruitments for ATCO courses, use of furloughs/downtime for current students), as well as cancellation of conferences, events etc. Extraordinary measures undertaken following COVID-19 crisis, including revision of investment plan, had impact on temporary change in the level of energy and materials consumption, level of taxes and charges as well as temporary reduction in use of external services and limitations in the provision of some air navigation services. Optimisation (including cancellation/postponement) of repair schedules where possible, using own staff for some repairs instead of external contractors led to temporary reductions in repair services costs. It should be noted that some unexpected costs related to purchase of additional materials and external services needed to minimise possible spreading of COVID among employees have been incurred in 2020.
1.3 Depreciation	A slight increase in the level of depreciation costs in 2020 is mainly impacted by investments executed before the COVID pandemic especially in previous years (including towers at Kraków and Katowice airports) and in 1Q 2020. Starting from the outbreak of the pandemic PANSA has undertaken a complete review of CAPEX plan looking for possible savings in the level of expenditures, especially for the rest of 2020. It should be noted that 2020 actual depreciation presented in the charges' reporting tables does not include effects of implementation of IFRS16 – costs related to leasing are still disclosed under other operating costs.
1.4 Cost of capital	Increase in cost of capital comparing to 2019 is a result of different WACC rates applied in RP3 (including 2020) and 2019. 2020 actual WACC rate has been calculated taking into account updated CAPM assumptions reflecting financial

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

	risk of PANSA (as described above in point i). WACC for 2019 adopted in 2014 in RP2 PP did not reflect actual financial and regulatory risks. Slight decrease in average net book value of fixed assets as well as in average net asset base comparing to 2019 has an immaterial impact on cost of capital.
1.5 Exceptional items	Not applicable.

II. IMWM

RP3 Monitoring – Year 2020 vs. 2019			
ANSP: IMWM	2019A	2020A	Difference 2020-2019
1.1 Staff costs	4 030	4 718	688
1.2 Other operating costs	11 285	10 750	-535
1.3 Depreciation	940	1 026	86
1.4 Cost of capital	215	493	278
1.5 Exceptional items	0	0	0

Analysis of the actual costs for 2020 compared to the actual costs of 2019.

The increase in the costs of 2020 compared to the costs of 2019 was influenced, among others, by:

- an increase in the inflation rate from 2.10% in 2019 to 3.70% in 2020, this translated into an increase in the costs of materials and services despite the introduced COVID-19 savings
- in March 2020, an agreement was signed to amend the IMWM Collective Labor Agreement, as a result of which wages at the IMWM-PIB were regulated and equalized
- continuation of the implementation of new products for PANSA in 2020 - development of a manual for the VENTO application
- in December 2019, investment purchases were made - sensors for AWOS systems and a truck for the AWOS system service team were purchased, which resulted in an increase in depreciation costs in 2020.
- the increase in the cost of capital resulted from the increase in receivables at the end of 2020. This was the result of an annex to the contract concluded with the Polish Air Navigation Services Agency, under which, due to the aviation situation related to COVID-19, the partial payment for 2020 was postponed in the amount of PLN 35,4 million until April 2021.

III. Radom Meteo

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance.

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: Radom Meteo	
1.1 Staff costs	Years 2019 and 2020 were dedicated to restructuring process due to EPRA airport closure. Because of that and because of the changes in cost allocation (for details see point 1. c)) and EPRA airport closure adjustments stemming from 2019 (for details see part 2 point k) and historical sets of RP2 reporting tables and additional information), it is impossible to reliably compare the 2019 and 2020 actuals.
1.2 Other operating costs	
1.3 Depreciation	
1.4 Cost of capital	In 2019, the cost of capital, due its neglectable values, was not presented in cost bases (for details see point 1. f))
1.5 Exceptional items	Not applicable.

IV. Warmia I Mazury

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: <Warmia i Mazury>	
1.1 Staff costs	

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

1.2 Other operating costs	Warmia i Mazury was providing MET services in RP2, though the whole costs were allocated to the terminal cost base, what was decided during the revision of RP2 concerning the inclusion of EPSY airport into BFAB PP RP2. Therefore, comparing 2020 TNC MET and 2019 TNC MET costs are not comparable. Therefore, for the reliable comparison, 2020 ER and TNC MET costs has to be aggregated. The total MET costs in nominal terms were 65% higher than in 2019 as a consequence of the following factors: • increase in AWOS data costs provided by the external owner, • increase in MET working hours to 24/7, • inclusion of MET costs provided for AFIS, as AFIS in 2019 was provided outside SES regulations and MET costs provided for this ANS were not included in 2019 actuals.
1.3 Depreciation	
1.4 Cost of capital	
1.5 Exceptional items	

V. PL Bydgoszcz

As the local cost-efficiency performance targets for RP3 are currently subject to revision as part of the draft performance plans to be submitted by Member States to the Commission by 1 October 2021, in line with the exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627 of 3 November 2020), the monitoring of the 2020 actual performance is carried out against the 2019 actual performance.

The main drivers for differences between actual data for 2020 and actual data for 2019 are presented for each item of cost by nature in the tables below.

RP3 Monitoring – Year 2020 vs. 2019	
ANSP: <PL Bydgoszcz>	
1.1 Staff costs	Not applicable to PL Bydgoszcz as this ANSP has started providing services in SES in 2020.
1.2 Other operating costs	
1.3 Depreciation	
1.4 Cost of capital	
1.5 Exceptional items	

VI. CAA

RP3 Monitoring – Year 2020 vs. 2019	
STATE/NSA: CAA PL	
1.1 Staff costs	The actual staff costs and other operating costs for 2020 are higher than in 2019. The cost allocation between both terminal charging zones (TNC EPWA and TNC OTHER) is based on the actual IFR movements (MVS) broken down by airports. Due to the COVID-19 pandemic the MVS structure in 2020 has changed, compared to 2019 data, and this is reflected in the costs execution. Therefore the actual staff costs and other operating costs referring to TNC EPWA for 2020 will be lower than in 2019. Notwithstanding the above the total actual staff costs for both terminal charging zones for 2020 are higher than in 2019 and it was mainly the result of the growth of CAA costs in RP3 comparing to RP2 results from the planned rise of wages stemming from the government budget and the increase of obligations and task performed by the CAA in the field of air navigation service. As far as other operating costs are concerned the actual 2020 are higher than in 2019.
1.2 Other operating costs	
1.3 Depreciation	Not applicable
1.4 Cost of capital	Not applicable
1.5 Exceptional items	Not applicable

b) Description of the reported actual service units and a description of any differences between those units and the figures provided by the entity that is billing and collecting charges as well as any differences between those units and the forecast set in the performance plan, for each year of the reference period;

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

In 2020, air traffic and generated service units for TNC-Other were lower than planned in the initial RP3 PP dated Nov 2019 by 58% and lower by 55% than actual SU-L for TNC-Other in 2019 (SU-L served by all ATSPs operating in this charging zone). This was the result of the SARS Cov2 pandemic, which caused significant restrictions on both business and leisure travel. Until the beginning of March 2020, traffic was increasing as compared to 2019A, but the pandemic led to extraordinary traffic drop since March 2020, which persisted over all the following months of 2020.

I. PANSA

Terminal SU - Other	2019	2020	Difference	Difference (%)
Draft RP3 PP 11.2019 forecast		146 864		
Actual	138 516	62 267	- 76 249	-55.0%
Difference		- 84 597		
Difference (%)		-57.6%		

Table contains only PANSA service units

II. IMWM

Not applicable.

III. Radom Meteo

Not applicable.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury as this ANSP has not billed nor collected charges in en-route.
In 2020, Warmia i Mazury has handled 32 IFR SU-L at EPSY airport.

V. PL Bydgoszcz

PL Bydgoszcz has not provided AFIS services in SES in 2019.
PL Bydgoszcz has handled 52 IFR SU-L at EPBY airport in 2020.

Total for Poland

Terminal SU – Other –	2019	2020	Difference	Difference (%)
Draft RP3 PP 11.2019 forecast		146 864		
Actual	138 516	62 352	- 76 164	-55.0%
Difference		- 84 513		
Difference (%)		-57.5%		

c) Breakdown of the actual costs of common projects per individual project;

I. PANSA

Breakdown of the actual costs of common projects will be provided in the revised PL RP3 PP to be submitted by 1 October 2021.

II. IMWM

Not applicable.

III. Radom Meteo

Not applicable to Radom Meteo.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz.

VI. CAA

Not applicable.

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

d) Justification of the difference between the determined and the actual costs of new and existing investments of the air navigation service providers, as well as the difference between the planned and the actual date of entry into operation of the fixed assets financed by those investments for each year of the reference period;

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

e) Description of the investment projects added, cancelled or replaced during the reference period with respect to the major investment projects identified in the performance plan, and approved by the national supervisory authority in accordance with Article 28(4).

In respect of calendar year 2020, this information is to be provided in the annual monitoring report (see section 4 of the RP3 monitoring template).

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

ADDITIONAL INFORMATION TO REPORTING TABLES 2 – UNIT RATE CALCULATION

a) Description and rationale for establishment of the different charging zones, in particular with regard to terminal charging zones and potential cross-subsidies between charging zones;

There are two charging zones in Poland.

- I TCZ covering the EPWA airport,
- II TCZ covering the EPGD, EPKK, EPBY, EPKT, EPLL, EPPO, EPRZ, EPSC, EPWR, EPZG, EPMO, EPLB, EPRA, EPSY airports.

The presented scope of airports and configuration of terminal charging zones remains unchanged since 2017. The implementation of the configuration of two charging zones was developed among others to minimize the level of potential cross-subsidising.

Radom Meteo - Not applicable. The allocation keys for Radom Meteo has been presented in point 1. c), which were based on the official ICAO and WMO guidances, therefore there is no cross-subsidising between ER and TNC charging zones.

Warmia i Mazury - Not applicable. Warmia i Mazury provides only MET services that are allocated between ER and TNC. The allocation keys has been presented in part 1 c) and has been based on the recommendations stemming from WMO and ICAO Docs, therefore there is no cross-subsidising between ER and TNC. AFIS and COM are 100% allocated to TNC.

PL Bydgoszcz - Not applicable. Only MET services provided by PL Bydgoszcz are allocated between ER and TNC. The allocation keys were presented in part 1 c). The allocation was based on the provisions of World Meteorological Organization and International Civil Aviation Organization guidances, which results in no cross-subsidising between ER and TNC.

b) Description of the policy on exemptions and description of the financing means to cover the related costs;

According to national law (Article 130 (6) of Aviation Act of 3 July 2002) the following flights are exempted from air navigation charges (both en-route and terminal) in Poland:

- performed under Visual Flight Rules (VFR);
- mixed – where a part of the flight is performed under Visual Flight Rules (VFR) and the remaining part is performed under Instrument Flight Rules (IFR) – for the part of the flight performed in the Polish airspace exclusively under VFR rules;
- performed by aircraft of which the maximum take-off weight is less than 2 tons;
- performed exclusively for the transport, on an official mission, of the reigning monarch and his/her immediate family, head of state, head of government and government ministers; in all cases the flight purpose must be confirmed by the appropriate flight status indicator or remark on the flight plan;
- search and rescue, authorized by a competent SAR coordination body;
- military performed by Polish military aircraft or military aircraft of a country where flights performed by Polish military aircraft are exempted from the air navigation charges;
- performed for military purposes and exempted from charges, under international agreements ratified by Poland in statutory way;
- military performed by military aircraft under multinational NATO programmes, to which Poland is a contracting party, other than those mentioned above;
- flights performed by ANSP for the purpose of checking or testing equipment.

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

Costs of providing air navigation services to exempted flights are covered by the State budget – they are financed by the means of budgetary subsidy granted by the minister responsible for transport on the application of designated service provider

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

I. PANSA

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

	2020
Costs for exempted VFR flights	0
Costs for exempted IFR flights	2 870
Total costs for exempted flights	2 870

Costs items presented in '000

II. PL Bydgoszcz

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

	2020
Costs for exempted VFR flights	242
Costs for exempted IFR flights	29
Total costs for exempted flights	271

Costs items presented in '000

III. Warmia i Mazury

Actual costs incurred in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2020.

	2020
Costs for exempted VFR flights	128
Costs for exempted IFR flights	13
Total costs for exempted flights	142

Costs items presented in '000

Costs planned in relation to services to flights exempted from ANS charges (pursuant to Article 31(3) to (5) and Article 22(6) of Implementing Regulation (EU) 2019/317) in the charging zone in 2021.

The costs of exempted VFR flights and exempted IFR flights were financed by the ministry responsible for transport (state budget), in line with art. 130(7) of Polish Aviation Act.

	2021
Costs for exempted VFR flights - PANSA	0
Costs for exempted VFR flights – PL Bydgoszcz	117
Costs for exempted VFR flights – Warmia i Mazury	224
Costs for exempted IFR flights – total for PL	2 090
Total costs for exempted flights	2 431

Costs items presented in '000

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

c) Description of adjustments resulting from the traffic risk sharing mechanism in accordance with Article 27;

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(1) and (2)).

d) Description of the differences between determined costs and actual costs of year n as a result of the changes in costs referred to in Article 28(3) including description of the changes referred to in that Article;

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3)).

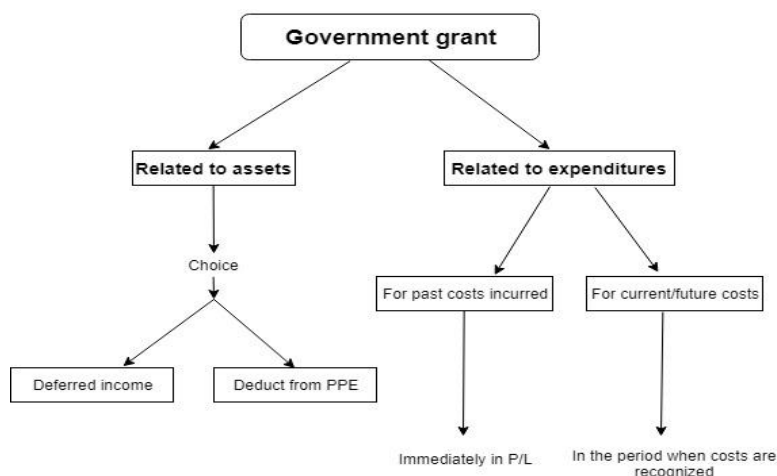
e) Description of adjustments resulting from unforeseen changes in costs in accordance with Article 28(3) to (6);

Not applicable for this submission – will be based on the combined year 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(3)).

f) Description of the other revenues, if any, broken down between the different categories indicated in Article 25(3);

I. PANSA

As regards public funds obtained from public authorities including financial support from Union assistance programmes PANSA fully follows provisions of article 25.3 of Regulation 2019/317 and passes on to airspace users **revenues recognised** under IAS 20 framework. It assumes that **public funds obtained are recognised in profit or loss on a systematic basis over the period in which PANSA recognises as expenses the related costs for which public funds are intended to compensate.**



Under this submission PANSA:

- assumes that revenue obtained by PANSA from commercial activities are not deducted from determined costs,
- does not assume revenue from contracts/agreements concluded with airport operators.

Terminal Charging Zone Poland Other Reference Period 3 (2020-2024)

II. IMWM

IMWM does not plan for the RP3 any additional income covering the costs of meteorological services for civil aviation, except for expected agreement between PANSA and IMWM, covering these costs. Also, IMWM does not provide the meteorological services for the military aviation and does not plan obtaining any income for such services in years 2020-2024. IMWM exchanges with the military services the results of aviation observations and forecasts, on the no-cost base. In this way the IMWM obtains (in no-cost way) the results of military aviation observations and forecasts, which are used by Institute to perform its services for the civil aviation.

III. Radom Meteo

Not applicable.

IV. Warmia i Mazury

Not applicable to Warmia i Mazury.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz

VI. CAA Not applicable.

g) Description of the application of the financial incentive schemes referred to in Article 11(3) and 11(4) in year n and the resulting financial advantages and disadvantages; description and explanation of the modulation of air navigation charges applied in year n under Article 32 where applicable, and resulting adjustments;

Financial incentive schemes

The description and justification of the parameters of the incentive scheme defined in accordance with Article 11(3) and 11 (4) are provided in the body of the performance plan under item 5.2.

Modulation of charges

It is not planned to implement any modulation of charges in RP3.

The actual application and relating financial advantages and disadvantages for 2020 is not applicable (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 3 (3)).

h) Description of adjustments relating to the temporary application of a unit rate under Article 29(5);

Not applicable for this submission – will be based on the combined period 2020-2021 after the adoption of the RP3 performance plan as per Article 16 (Exceptional measures for RP3 due to the COVID-19 pandemic (Regulation (EU) 2020/1627, Article 5(4)).

It is assumed that the difference in revenues referred to in Article 29(5) of Regulation 2019/317 will be recovered over 5 years period.

i) Description of the cross-financing between en route charging zones, or between terminal charging zones, in accordance with point (e) of Article 15(2) of Regulation 550/2004;

The eligible costs were allocated between en-route and terminal charging zones by using appropriate allocation keys. The topic of the cost allocation was elaborated in the Part I of Additional information.

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

j) Information on the application of a lower unit rate under Article 29(6) than the unit rate calculated in accordance with Article 25(2) and the means to finance the difference in revenue;

Not applicable for this submission.

k) Information and breakdown of the adjustments relating to previous reference periods impacting the unit rate calculation;

I. PANSA

The process of the discussion between NSA and EC on the treatment of non-contractual use of land (Branicki case) as unforeseeable new cost items not covered in the performance plan but required by law has been ongoing since 2nd half of 2020. Lately, the subject was raised in bilateral discussions with EC held in course of May and June 2021. Consequently, the approach to be followed seems to be defined. The solution discussed would be applied through a one-off correction of the unit rate of calendar year 2023 leading to effective settlement with AUs of eligible (justified) amount of non-contractual use of land. This approach is reflected in the revised draft RP3 performance plan for Poland as -1 573 kPLN adjustment related to RP2 impacting 2023 unit rate.

It has been agreed with the EC that over RP3 future payments related to future rulings on compensation for non-contractual use of land will continue to be recognized as cost exempt once the final amounts to be paid by PANSA are established and subject to payment.

II. IMWM

Not applicable.

III. Radom Meteo

The application of the inflation carry-overs from 2018 and 2019 resulted in -72.7 kPLN adjustment on 2020/2021 applicable unit rate.

The application of the traffic adjustment carry-overs from 2018 and 2019 resulted in -79.1 kPLN adjustment on 2020/2021 applicable unit rate.

The application of the other revenues carry-over stemming from the closure of EPRA airport in 2019 resulted in -189.0 kPLN adjustment on 2020/2021 applicable unit rate.

There are no other carry-overs from previous reference periods that have an impact on the unit rates neither in RP3 nor in later RPs.

IV. Warmia i Mazury

Warmia i Mazury was providing MET services in RP2 both in ER and TNC, though the whole costs were allocated to the terminal cost base, what was decided during the revision of RP2 concerning the inclusion of EPSY airport into BFAB PP RP2. Therefore, all adjustments relating to previous reference periods impacting the unit rate calculation are included in TNC.

The application of the inflation adjustments from 2018 and 2019 resulted in -143.8 kPLN adjustment on 2020/2021 applicable unit rate.

The application of the traffic adjustment from 2018 and 2019 resulted in -188.2 kPLN adjustment on 2020/2021 applicable unit rate.

There are no other carry-overs from previous reference periods that have an impact on the unit rates neither in RP3 nor in later RPs.

V. PL Bydgoszcz

Not applicable to PL Bydgoszcz, as this ANSP is providing services in SES since 2020 and has no carry-overs stemming from RP2

**Terminal Charging Zone Poland Other
Reference Period 3 (2020-2024)**

**ADDITIONAL INFORMATION TO REPORTING TABLE 3 – COMPLEMENTARY INFORMATION
ON COMMON PROJECTS AND ON UNION ASSISTANCE PROGRAMME**

I) Information on the costs of common projects and other funded projects broken down per individual project, as well as of public funds obtained from public authorities for these projects.

Detailed information on the costs of common projects and other funded projects, as well as of public funds obtained from public authorities for these projects will be provided by 1 October 2021.

Polish Performance Plan Third Reference Period (2020-2024) Revision

Annex C Consultations

This Annex provides an overview of the results of the consultation process during the revision of the Polish Performance Plan for RP3. The development of the revised Polish Performance Plan for RP3 was conducted by Polish NSA (CAA) in cooperation with stakeholders, including ANSPs, airspace users, airline associations, individual airlines, military AUs, representatives of airport operators and professional staff representative body. Due to the pandemic situation, the number of meetings was reduced and the Stakeholders Consultation on 31 August 2021, was conducted via teleconference.

During several meetings Polish NSA was presenting proposals of the changes to the Performance Plan developed in 2019 resulting from dramatic changes caused by COVID-19 pandemic. Discussions were focused on Key Performance Areas targets including environment, safety, capacity and cost-efficiency, and additionally on the incentive scheme mechanism. Through the consultation the priorities and requirements were discussed and there was opportunity to incorporate them in the plan. Stakeholders agreed with many of NSA proposals, nevertheless there were also areas of disagreement. Discussion during the meeting was open and created room for exchange for stakeholders to present their positions and expectations.

Polish NSA conducted the following meetings:

- 27 May 2021;
- 28 June 2021;
- 31 August 2021.

Additionally, as part of the work on the project, many other bilateral meetings were held between the NSA and individual ANSPs.

Meeting on 27 May 2021:

On 27 May 2021 a meeting with participation of the representatives of Polish CAA and Polish Air Navigation Services Agency (PANSa) was held at the CAA premises. It was focused on the issues related to the revision of the Performance Plan (PP) for RP3 and the assessment of the Agency's plans and results achieved in 2020. The goal of the meeting was to discuss the revised EU-wide performance targets on RP3 (2020–2024) and to present potential areas for development of local performance targets.

PANSa was also asked to provide all necessary information to update the data in Performance Plan and provide the most accurate information concerning performance areas and indicators.

Meeting on 28 June 2021:

On 28 June 2021 a meeting with participation of Polish CAA, the Institute of Meteorology and Water Management – National Research Institute (IMWM) and PANSa was held to discuss the possible further cooperation and reduction of some costs included in the Performance Plan for the third reference period.

Meeting on 31 August 2021:

Polish Performance Plan Third Reference Period (2020-2024) Revision

Annex E. Investments

Based on definition in Article 2 point 13 of the *Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013*, **12 investments have been currently identified as major investments for RP3** (i.e. their total value is above 5 million EUR in real terms 2017). All of them are to be carried out by PANSa.

Changes to initial RP3 performance plan dated 2019

Initial draft RP3 performance plan dated Nov 2019 identified 18 such investments. However, COVID-19 pandemic and related consequences for air traffic and financial position of PANSa led to necessity to review RP3 CAPEX plan. First verification was done already over Spring-Summer 2020, when PANSa has undertaken a complete review of CAPEX plan for the whole RP3 and beyond. The aim was on the one hand to look for possible savings in the level of expenditures, especially for the period 2020-2021, including possible postponement of projects (financial dimension of the review), and on the other to again validate the projects from the perspective of current operational needs and expected benefits, also in the light of expected changes to traffic levels (operational perspective of the review). As a result, the following groups of investment tasks were identified in 2020:

- investments aimed at ensuring service continuity and required level of service, which must be executed (priority tasks) – these include investments in ATM system, contingency infrastructure, elements of CNS infrastructure and investments related to flow management,
- investments subject to co-financing from public sources and covered by already concluded agreements which cannot be cancelled or suspended (e.g. LAN network, certain CNS infrastructure elements),
- investments which can be postponed without significant negative operational consequences (e.g. new PANSa HQ, some CNS elements incl. radiolocation infrastructure, virtualization of ATS at airports),
- investments, which despite being fully justified from the perspective of operational or financial benefits, can be suspended at least for the time being (e.g. Warsaw TWR or GBAS EPKK).

Moreover, restrictions related to the COVID-19 pandemic also impacted ability to execute some of the elements of the planned investments in line with initial schedules.

Following the comprehensive review of the investment plan in 2020, changes were implemented to a number of projects - some were cancelled, some were shifted in time, for some the scope has changed. As a consequence, the list of RP3 major investments has changed. This change was submitted to the NSA for approval and was subject to consultation with airspace users' representatives over Summer 2020.

During the works on revised draft RP3 performance plan, additional review of the CAPEX plan for RP3 and beyond was undertaken. It aimed at adjusting the schedule of expenditures as well as value estimated to current knowledge, including provisions of contracts concluded up to date, latest information from

contractors as well as considering actual 2020 expenditures and, where relevant, changes to exchange rate of PLN against EUR (where contracts are expressed in EUR).

Current RP3 plan dated 2021

Revised PANSA investment plan for RP3 reflects necessary and realistic level of CAPEX based on experiences from previous years and detailed analysis of investment needs and considers prospective financial position and liquidity of PANSA. It needs to be stressed, however, that considering the observed prices increase in construction market in Poland, value of certain investments might increase and actual expenditures may be higher than the current plan.

The current total value of PANSA CAPEX planned for RP3 equals to 966 388 kPLN (compared to 1 256 237 kPLN planed in the initial RP3 performance plan dated Nov 2019), out of which 927 320 kPLN is allocated to ANS (see table 2.1.1 in the performance plan). 84% of RP3 CAPEX is related to capacity.

To evaluate the major investments planned for RP3 and to assess their contribution to performance, PANSA has conducted updated benefit analyses with regard to the four key performance areas. For the purpose of quantifying the impact, based on detailed analyses of functionalities planned to be implemented and expected impact on performance, the 12 RP3 major investments were grouped into 3 groups.

Group 1:

- 01440701_Campus
- 21440701_ATM_OPS_Centre_Poznań
- IT430900_Modernization_of_the_ATM_system_2
- 03440701_iTEC
- 2440701_Communication_systems
- 06440701_VCS_system
- IT430404_Server_Business_Infrastructure

Group 2:

- IT430803_Radar_PSR/MSSR_Gdańsk
- IV440732_MLAT_system_for_FIR_Warsaw

Other:

- IT170202_Tower_at_the_Central_Hub_Airport
- IP470701_U-Space_Program
- IR470209_CWP_TWR

For groups 1 and 2 analysis of benefits and investment-related costs was performed jointly for all investments within each of those groups, resulting in calculation of Net Present Value (NPV) for these groups. As concerns group 1, all the projects within this group are closely interrelated and therefore it is not possible to conduct quantified analysis expressed in monetary terms for each of them separately – as some of the tasks are considered enablers for others any only joint execution of all tasks within this group will bring full expected benefits that can be quantified. As concerns group 2, there are also close links between the two projects, which together are aimed at ensuring service continuity through reduced risk of SUR coverage loss. For the three other investments individual analyses were performed.

In case of all calculations, the year 2015 was used as the base year (year 0, where flows are not discounted) – as first cash outflows took place in that year. Benefits start to be calculated from 2021

onwards. As for parameters, the ones recommended in EUROCONTROL Standard Inputs for Economic Analyses¹ were used. Exchange rates were based on European Central Bank data from July 2021. PANSA has used a long-term time horizon, considering EUROCONTROL latest traffic forecasts (where applicable, for 2041+ traffic at 2040 levels was assumed as constant). In addition, sensitivity analysis was performed by using Low/Base/High traffic scenarios. The calculated NPV takes into account the costs incurred by airspace users (instead of CAPEX) and benefits to airspace users.

The results of the financial analysis are presented below.

1) Group 1:

Traffic forecast	NPV (mPLN)
Low	3 454
Base	5 875
High	10 521

2) Group 2:

Traffic forecast	NPV (mPLN)
Low	8
Base	32
High	46

3) Tower_at_the_Central_Hub_Airport:

Traffic forecast	NPV (mPLN)
Low	6
Base	27
High	32

4) U-Space_Program²:

Traffic forecast	NPV (mPLN)
Low	14
Base	23
High	27

5) CWP_TWR:

Traffic forecast	NPV (mPLN)
Low	6
Base	16
High	19

¹ EUROCONTROL Standard Inputs for Economic Analyses - Edition 9, December 2020

² As the cost of the project is shared between TANS and non-ANS services, for the NPV purposes also related income from non-ANS activities was taken into account.

For group 2 (SUR infrastructure) additional quantification of financial consequences was based on assumed airport closure for 6 hours, 24 hours and 7 days. Financial consequence was calculated individually for each of the airports with radar approach. Results are presented below.

Duration of airport closure	EPWA (mPLN)	Regional airport ³ (mPLN)
6 hours ⁴	18-28	2-6
1 day	51	7-16
7 days	346	46-112

Results of the consultation of airspace users' representatives

Majority of the investments currently identified as major investments (except for Server Business Infrastructure and CWP TWR) were classified as major investments already in the initial RP3 performance plan dated Nov 2019 and were subject to consultation with stakeholders, including airspace users' representatives, over Summer 2019. During that consultation process information on the scope of the investments, main functionalities planned to be implemented and benefits expected in each of the four key performance areas, as well as calculated NPV for some of them, were presented to stakeholders. Following the consultation meeting organised on 22nd August 2019, comments on the investment part of the draft RP3 performance plan were received from IATA and LOT Polish Airlines. LOT Polish Airlines expressed their support to investments facilitating potential readiness of LOT Polish Airlines to become the main user of the new Solidarity Transport Hub, which constitutes strategic development project for Poland. IATA expressed appreciation for presentation of the scope, functionality and benefits of the main investments as well as the cost-benefit analysis, including net present value calculation results. At the same time IATA asked for some additional information on the benefits to be achieved already within RP3 – this information was provided to the Stakeholders in a letter dated 13th September 2019. Moreover, Ryanair in their letter dated 28th August 2019, asked for more details of the new major investments and for accompanying these with a cost-benefit analysis. As indicated above, information on the scope, main functionalities and benefits expected from the RP3 major investments was provided during the consultation meeting, which gave an opportunity to all stakeholders to ask additional questions – this was again communicated to Ryanair in Poland's response to the said letter. During the 2019 consultation process no final negative positions towards any of the investments proposed at that time in the draft RP3 PP was received.

Following the thorough review of the RP3 CAPEX plan by PANSA over Spring/Summer 2020 resulting from the COVID-19 pandemic outbreak, revised list of major investments was sent for consultation with airspace users' representatives in September 2020. Information provided at that time included changes to CAPEX values and schedules for their execution as well as clarification on the reasons for the changes. Following the consultation, comments to the proposed changes to the investment plan were received from LOT Polish Airlines and Lufthansa. During the consultations some questions were raised by these airspace users with regard to several investments, including Campus, U-Space Program, CWP TWR – the questions related mostly to changes to values of the projects or schedules for their execution. These questions were also considered by the NSA during assessment of revised CAPEX plan. Additional information on these changes was also provided in Monitoring Report 2020 for Poland, which was also sent to airspace users' representatives on July 9th 2021.

The outcome of the consultation on revised RP3 performance plan will be summarised in the document which will be submitted to the European Commission by October 1st 2021.

³ Depending on airport analysed.

⁴ Depending on scenario – assumed ATFM delays or full calculation of cost of holdings, diversions, cancellations etc.

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex F. Baseline values (cost-efficiency)

1. Baseline value for en-route cost efficiency targets (Reference to tab. 3.4.1. c.3) in PP)

In accordance with point 3.3(c) of Annex II of *Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013*, the draft Performance Plan should contain substantiated information in respect of the baseline values used for performance target setting for the calculation of the local cost-efficiency targets. Those baseline values are to be set in accordance with point (a) of Article 10(2) of above mentioned Regulation, including description and justification of the methodology used to estimate those values for each charging zone.

According to the recital (21) of the preamble to *Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903* the Union-wide baseline values for RP3 contained in Implementing Decision (EU) 2019/903 were set on the basis of estimates and forecasts regarding costs and traffic, in the absence of actual data for calendar year 2019. Taking into consideration the data known at the current submission, those baseline values should be revised in order to accurately reflect the actual costs and service units recorded for 2019 on a Union-wide level.

In the light of the above, Poland revised baseline values to reflect the actual costs and service units recorded for 2019 and decided to continue the methodology applied for the calculation of baseline value. In connection with the above, the methodology presented in this document is convergent with the one applied in the former PP RP3 project (i.e. in the project submitted to the European Commission in November 2019).

Based on the above, the level of *en-route* baseline value for Poland in real terms is equal to **866.0 million PLN₂₀₁₇ (889.6 million PLN in nominal terms)** and the DUC apportion between institutions stands as follows:

$$\text{Baseline value}_{\text{en-route}} = 175.01 \text{ PLN} \left\{ \begin{array}{l} \text{PANSA} = 156.36 \text{ PLN (89.3\% share of BV)} \\ \text{IMWM} = 5.45 \text{ PLN (3.1\% share of BV)} \\ \text{EUROCONTROL} = 10.68 \text{ PLN (6.1\% share of BV)} \\ \text{NSA} = 1.66 \text{ PLN (1.0\% share of BV)} \\ \text{Radom Meteo} = 0.16 \text{ PLN (0.1\% share of BV)} \\ \text{Warmia i Mazury} = 0.41 \text{ PLN (0.2\% share of BV)} \\ \text{PL Bydgoszcz} = 0.29 \text{ PLN (0.2\% share of BV)} \end{array} \right.$$

For calculating *en-route* baseline values the actuals for 2019 were taken into account, nevertheless some additional adjustments needed to be done. The proposed baseline value is higher than the actuals for 2019 (163.92 PLN), as we are aware that these figures shall present the actual situation in RP3 and also the circumstances concerning setting final figures for the last year of RP2 PP (stemming from the decisions made in revision of the en-route part of PP RP2 for the years 2017-2019).

Going further, it has to be underlined that the cost of capital rate applied in actuals for 2019 does not reflect risk incurred by PANSA and should not be considered as a reference point for RP3. It needs to be stressed that the WACC for 2019 in the revised RP2 PP was established artificially at the level not reflecting financial risk of running an ANSP business – the rate of 1.38% was much below even the risk-free rate for Poland in 2019 and in RP3. The artificial lowering of the rate was done solely to achieve

negative ER DUC trend over RP2. Poland holds the view that WACC rate applied for baseline value calculation for RP3 should reflect the efficient rate calculated in line with Steer Davies Gleave (SDG) methodology of 2014, as used in the revised RP2 PP for the period 2017-2018 (7.81%) which was approved by the EC. This approach would guarantee comparability of figures over RP2 and RP3 period and would reflect provisions of the EU Charging Scheme. Nevertheless, taking into consideration current market situation and EC recommendations, NSA decided to reduce this value to the level that represents the average value of the WACC planned by PANSa for RP3 (5.83%). In our opinion this approach reflects current risk of running business by PANSa and is fully in line with EC expectations.

What is more, the main MET service provider (IMWM) reduced the scope of services provided since January 2020. The reduction of the scope of the MET service provision applies to EPBY area which was handed over to PL Bydgoszcz. Thus, to ensure comparability of 2019 figures with the RP3, the negative adjustment to the costs underlying BV calculation for IMWM was made.

As for the other, so called 'small ANSPs' (Radom Meteo, Warmia i Mazury, PL Bydgoszcz – en-route MET providers at the regional airports), the baseline value for them was previously calculated using the actual average 2018 hour cost of service provision and adjusted to the planned average hours of service provision per day in RP3. To ensure data comparability, the same methodology was applied by using now the actual average 2019 costs (as actuals for 2019 are already available).

Referring to Warmia i Mazury, the adjustment is stemming from the increase of planned scope and time of service provision for this ANSP in RP3 (24h) at EPSY airport. Additionally, it has to be underlined that according to the EC decision upon the inclusion of EPSY airport in the middle of RP2, the MET service costs of WiM were allocated only to TNC area – in the current submission ER BV 2019 is adjusted by adding respective 2019 costs applicable to ER area, again to ensure comparability of 2019 BV with RP3 figures (terminal 2019 BV was respectively adjusted downwards by the costs applicable to ER). Referring to the Radom Meteo, the adjustments are stemming from the increase of planned time of services provision for Radom Meteo in RP3 (24h) at EPRA airport and the fact of EPRA closure for renovation in 2019. When it comes to PL Bydgoszcz, it should be indicated that it is a new entity without any historical costs and the baseline value for this ANSP was previously based on the average cost of similar MET providers in 2018. To ensure data comparability, the same methodology was applied for this submission, using now the actual average 2019 (as actuals for 2019 are already available). To ensure that no double counting takes place, IMWM costs underlying 2019 BV calculation were adjusted downwards, as explained in paragraph above. As the adjustments for the so called 'small ANSPs' may seem complicated, it has to be underlined that the sum of their final baseline values equals only to 0.86 PLN₂₀₁₇ (0.5% of baseline value for Poland), which is immaterial in the terms of general calculation and was done mainly for the local needs of NSA to have the proper view and tools to enforce cost-cutting of every ANSP to the appropriate levels.

What is more, it has to be clearly underlined that EUROCONTROL costs are beyond Poland's control. As the EUROCONTROL costs are expressed in EUR, the adjustment to the BV should reflect increase in exchange rate of EUR/PLN forecasted for RP3 as compared to actuals for 2019, to the growth of which contributed, among others, the outbreak of the COVID-19 pandemic. Analyses has shown that the EUROCONTROL costs planned for RP3, assigned to PL cost base may not be in line with Union-wide cost-efficiency targets, what has a negative impact on the cost efficiency target for Poland. NSA analyses show that the fair value of the adjustment should be equal to ca. +1.9 million PLN, but at this stage Poland decided not to include it in baseline value calculation.

With regard to NSA, no additional adjustments were made.

2. Baseline value for terminal cost efficiency (Reference to tab 3.4.2. c) in PP)

As for terminal charges, NSA was obliged to prepare the calculation of baseline value both for I Terminal Charging Zone (including only EPWA airport) and II Terminal Charging Zone (including 14 regional airports). The main idea concerning the calculation for terminal baseline values is consistent with the en-route – NSA has taken into account the actual costs for 2019 and provide the adjustments consistent with the methodology used for the en-route part of the PP.

Additionally, it should be noted that terminal part of PP for RP2 was not agreed to be included in the revision process and therefore the actuals for 2019 do not represent the real level of risk for this year, nevertheless NSA has decided not to make any additional adjustments in this regard concerning the cost of capital (PANSA's factor), leaving the risk on the level consistent with actuals for this year (3.52%). For the calculation of terminal baseline values (both for I and II TCZ) for PANSA and NSA, the actuals for 2019 has been used.

Referring to IMWM – in I TCZ no adjustments were made, and as far as II TCZ is concerned, in order to ensure comparability of 2019 figures with the RP3, the negative adjustment to the costs underlying BV calculation was made in connection to the reduction of the scope of MET service provision at EPBY area, since January 2020. As for the 'small ANSPs' (Radom Meteo – MET provider at EPRA, Warmia i Mazury – AFIS, COM and MET provider at EPSY, PL Bydgoszcz – AFIS and MET provider at EPBY), the baseline values were calculated basing on the actual average 2019 cost per hour and adjusted to the planned average hours of service providing per day in RP3. What is more, as PL Bydgoszcz is the new entity without any historical costs, therefore the baseline value for this ANSP was based on the average cost of similar AFIS and MET providers. It has to be underlined, that the sum of the baseline value components for 'small ANSPs' equals to 51.02 PLN₂₀₁₇ (6.2% of baseline value for Poland in II TCZ) which does not have a significant impact in the terms of general calculation.

Based on the information listed above, the level of TNC-EPWA baseline value for Poland is equal to **42.9 million PLN₂₀₁₇ (44.1 million PLN in nominal terms)** and the DUC apportion between institutions stands as follows:

$$\text{Baseline value}_{\text{TNC-EPWA}} = 397.72 \text{ PLN} \left\{ \begin{array}{l} \text{PANSA} = 373.08 \text{ PLN (93.8\% share of BV)} \\ \text{IMWM} = 13.24 \text{ PLN (3.3\% share of BV)} \\ \text{NSA} = 11.40 \text{ PLN (2.9\% share of BV)} \end{array} \right.$$

Based on the information listed above, the level of TNC-OTHER baseline value for Poland is equal to 114.9 million PLN₂₀₁₇ (118.0 million PLN in nominal terms) and the DUC apportion between institutions stands as follows:

$$\text{Baseline value}_{\text{TNC-OTHER}} = 829.51 \text{ PLN} \left\{ \begin{array}{l} \text{PANSA} = 656.52 \text{ PLN (79.1\% share of BV)} \\ \text{IMWM} = 99.76 \text{ PLN (12.0\% share of BV)} \\ \text{NSA} = 22.21 \text{ PLN (2.7\% share of BV)} \\ \text{Radom Meteo} = 8.45 \text{ PLN (1.0\% share of BV)} \\ \text{Warmia i Mazury MET} = 10.90 \text{ PLN (1.3\% share of BV)} \\ \text{Warmia i Mazury AFIS + COM} = 10.25 \text{ (1.2\% share of BV)} \\ \text{PL Bydgoszcz MET} = 14.68 \text{ PLN (1.8\% share of BV)} \\ \text{PL Bydgoszcz AFIS} = 6.74 \text{ (0.8\% share of BV)} \end{array} \right.$$

3. Conclusions - adjustments to the 2019 baseline value for the determined costs (Reference to tabs 3.4.1 c.3), 3.4.2 c.3) in PP) in nominal terms

In a view of European Commission expectations regarding the baseline values to be presented in nominal terms, the appropriate values with justification were presented in tables below. Additionally, the comparison to actuals for 2019 in nominal terms was made mainly for presentation purposes. The

presented baseline value for en-route area is equal to ca. **889.6 million PLN** in nominal terms and the deviation between the baseline values and actuals for 2019 is ca. **53.1 million PLN** in nominal terms.

Table 1. En-route charging zone – adjustments to the 2019 baseline value for the determined costs [kPLN, nominal terms]

Nature	Entity type	A2019	BV2019	Diff.	Diff. [%]
Staff costs	ANSP	526 489	526 489	0	0,0%
	MET	7 360	8 313	953	12,9%
	ECTL	0	0	0	-
	NSA	5 624	5 624	0	0,0%
Other operating costs	ANSP	113 964	113 964	0	0,0%
	MET	21 160	22 778	1 618	7,6%
	ECTL	52 967	52 967	0	0,0%
	NSA	2 624	2 624	0	0,0%
Depreciation	ANSP	89 719	89 719	0	0,0%
	MET	833	1 034	201	24,1%
	ECTL	0	0	0	-
	NSA	0	0	0	-
Cost of capital	ANSP	15 603	65 889	50 287	322,3%
	MET	144	155	11	7,7%
	ECTL	0	0	0	-
	NSA	0	0	0	-
Total		836 486	889 555	53 069	6,3%

Source: Own elaborations.

No additional adjustments were made with regard to baseline value for I TCZ, thus the baseline value is equal to actuals for 2019 for this charging zone. As far as baseline values for II TCZ is concerned, it is equal to ca. **118.0 million PLN** in nominal terms and the deviation and the difference to actuals for 2019 is ca. **3.2 million PLN**.

Table 2. I TCZ – adjustments to the 2019 baseline value for the determined costs [kPLN, nominal terms]

Nature	Entity type	A2019	BV2019	Diff.	Diff. %
Staff costs	ANSP	31 897	31 897	0	0,0%
	MET	293	293	0	0,0%
	NSA	838	838	0	0,0%
Other operating costs	ANSP	4 828	4 828	0	0,0%
	MET	1 182	1 182	0	0,0%
	NSA	391	391	0	0,0%
Depreciation	ANSP	3 329	3 329	0	0,0%
	MET	0	0	0	-
	NSA	0	0	0	-
Cost of capital	ANSP	1 367	1 367	0	0,0%
	MET	0	0	0	-
	NSA	0	0	0	-
Total		44 126	44 126	0	0,0%

Source: Own elaborations.

Table 3. II TCZ - adjustments to the 2019 baseline value for the determined costs [kPLN, nominal terms]

Nature	Entity type	A2019	BV2019	Diff.	Diff. %
Staff costs	ANSP	61 497	62 697	1 200	2,0%
	MET	4 555	5 104	549	12,0%
	NSA	2 097	2 097	0	0,0%
Other operating costs	ANSP	14 971	16 017	1 045	7,0%
	MET	12 577	12 529	-48	-0,4%
	NSA	979	979	0	0,0%
Depreciation	ANSP	11 972	12 120	148	1,2%
	MET	1 004	1 244	239	23,8%
	NSA	0	0	0	-
Cost of capital	ANSP	4 960	4 992	32	0,7%
	MET	222	224	2	0,9%
	NSA	0	0	0	-
Total		114 835	118 002	3 167	2,8%

Source: Own elaborations.

4. Summary

Presented explanations upon setting the local baseline values are in our opinion consistent with EU regulations i.e. article 10(2) a) of Regulation 2019/317, as well as with recital (21) of preamble to the Commission Implementing Decision (EU) 2021/891. The provisions stemming from Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to the COVID-19 pandemic were also taken into consideration. The calculation of baseline values reflects the actual costs and services units recorded for 2019 also including additional adjustments with reference to RP3 situation. Last but not least, it should be emphasized that NSA decided only to include some adjustments in order to not increase the gap between 2019 actuals and BV, nevertheless we believe that the other adjustments described in the document should also have been taken into account and are fully justified.

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex I. Parameters for the mandatory capacity incentives

Incentive scheme

PL CAA has established an incentive mechanism for the en-route capacity target and the arrival terminal capacity target as presented in part 3.3.1 and part 3.3.2. All targets were set on national level. The financial advantage or disadvantage from those incentive schemes shall be calculated on as a 0,5 % of the determined costs of year n of PANSa and recovered from (reimbursed to) airspace users through an increase (reduction) of unit rate respectively in year n+2.

En-route capacity

The en-route capacity target of 0.12 min/flight for year 2022 complies with the reference value presented in the PRB document “Advice on the revision of performance targets for RP3” published in March 2021. The incentive mechanism for en-route targets will be modulated in accordance with NOP published in November year n-1.

Dead band is set in symmetrical range 0,20 % around the pivot value, in which the actual ATFM delay does not lead to any bonuses or penalties.

The level of delays for which maximum bonus or penalty are to be applied is set automatically based on the Commission Implementing Decision (EU) 2021/ 891 setting revised Union-wide performance targets for the air traffic management network for the third reference period and repealing Implementing Decision (EU) 2019/903. For year 2022 it is set at value 0,07 min/ flight for Maximum bonus and 0,17 min/ flight for maximum penalties.

Terminal capacity

The incentive scheme for terminal capacity was set on state level on average arrival ATFM delay per flight. The incentive mechanism applies a modulation mechanism of terminal pivot values in accordance with points (c)(ii) of Article 11(3) will calculate the delay causes attributable to the ANSP related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual.

The modulated pivot value is calculated based on traffic and capacity simulation, since the traffic level in pandemic period 2020-2021 is not representative so the pivot value will be based on the forecast of terminal delays prepared by PANSa and current data available.

	2022	2023	2024
Target	0,21	0,24	0,23
Pivot value	0,07	0,05	0,04
PV/ total delay	33%	21%	17%

Dead band for terminal incentive scheme is set in symmetrical range 20 % of the pivot value, in which the actual ATFM delay does not lead to any bonuses or penalties. The value of the alert threshold

determines the level of delays for which maximum bonus or penalty are to be applied. For year 2022 it is set at value 0,035 for maximum bonus and 0,105 for maximum penalties.

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex P. Justifications for the local environment targets

As shown by the experience gathered so far during RP2 (2015–2019), as well as RP3 (2020, 2021), the value of the KEA indicator is influenced by numerous external factors, independent of ANSP. A good example of such situation is the fact that despite a significant decrease in traffic, in the period June–October 2020, the horizontal flight efficiency indicator for the actual trajectory on a monthly basis (HFE) – closely correlated with the KEA – increased significantly as compared to earlier 2020 months. The analysis showed that this was related to the decisions of airspace users – in particular, with flights that decided to fly over Poland instead of a more direct route (e.g. flights related to military missions, flights avoiding certain areas, e.g. conflict areas – Ukraine, MIL/State flights avoiding Kaliningrad airspace, goods from East Asia, possibly carrying medical equipment to Europe).

The KEA indicator for Poland is mainly influenced by external factors, among others by:

- 1) Weather conditions – weather phenomena have a major impact on aviation operations and they influence flight efficiency. The most important ones are wind, turbulence, precipitation (rain, snow); and their intensity and frequency. For example, ATFM regulations due to storms are quite frequent during the summer season, directly impacting airspace capacity and flight efficiency.
- 2) Geopolitical location – external geopolitical factors affecting KEA include the following:
 - Airlines registered in Russia are not allowed to fly via Ukrainian airspace and instead they often fly through Poland. Due to the concept of „achieved distance”, that works as a function of the great circle distance between Origin and Destination, the resulting KEA for these flights measured in EPWW is significantly above the average.
 - During periods of Donetsk airspace closure (a continuous closure from 2014 until now), the traffic (to/from Far East) is shifted to the South in order to avoid the Ukrainian airspace and the airspace above the significant part of the Black Sea (Simferopol FIR). Again, this has an impact on KEA that cannot be mitigated by Poland itself.
 - Crimea: a part of the Black Sea area is officially under the sovereignty of Ukraine (Simferopol FIR) but claimed by Russia to be controlled by it. Most of the airlines therefore prefer to avoid this airspace via South Europe. Part of flights previously planned via Simferopol FIR and Poland to/from Scandinavia are now flying via Bulgaria, Romania, Hungary, Slovakia/the Czech Republic and then via Poland. Rest of this flow to/from the western Europe (e.g. Amsterdam) is now completely avoiding the Polish airspace (after avoiding the Ukrainian airspace routing via Poland would increase distance).
 - Kaliningrad airspace: airlines flying through this area need to provide details (e.g. names of the passengers on board, ID numbers) to Russian authorities. As such data is not collected on Schengen flights, European airlines (e.g. SAS) are avoiding this area and prefer to fly via Poland and/or Baltic states.
 - Belarus airspace: similarly as in the case of Ukraine above, following the incident with Ryanair flight on May 23rd 2021, EU air carriers are advised not to fly via Belarus airspace, what for a number of connections means flying longer routes.
- 3) Decisions of airspace users:
 - Cost-optimised routes: based on long term observations, cost-optimised routes are preferred to shortest (most efficient) routes regardless of availability of free route airspace in the given area.

- Charging schemes: differences in costs of ANS provision lead to different ANS charges applied to flight crossing multiple airspaces. This gives aircraft operators a freedom to plan and operate the route in a way that would avoid expensive sectors, despite having to fly potentially longer trajectories in cheaper sectors. Big differences between ANS charges influence airlines' decisions.
- Weather-optimised routes: similarly to cost-optimisation, airline planning allows for optimisation of trajectory with regards to expected weather. So, for example, instead of flying the shortest route (against wind), airline may choose to operate on a longer route where the winds are favourable to the direction of flight. Even if such a trajectory is longer (and seems less efficient using KEA metric), the real environmental footprint of such flight can be in fact smaller than the one of a flight that operated on shortest route (and against the wind). This is possible thanks to reduction in flight time (when flying with wind) and associated decrease in fuel burned/emissions produced.
- Flight planning: airline flight planning affects flown routes as the main factor, which is visible especially on longer routes, where the focus is on minimum cost or time, not minimum distance. Also, the airlines flight planning systems do not always make full use of various tools and techniques facilitating re-routing and do not enable a full exploitation of conditional routes (CDRs) and/or FRA. ANSP therefore cannot influence the route selection which can affect its ability to manage their performance against the KEA metric.

It should be noticed that airspace users planning and tactical decisions made during execution of the flight have a greater impact on KEA than the availability of direct routes. Although ANSP offers free-route airspace, it does not guarantee a reduction in the KEA indicator.

- 4) Airspace capacity (outside EPWW), Network measures – sharing a boundary with one of the busiest and most complex airspaces in Europe, the Polish KEA is dependent also on capacity and staffing issues in Germany and other neighbouring countries:
 - Capacity and staffing issues outside EPWW (in neighbouring FIRs) have a potential to affect KEA performance in Poland. As an example, a flight from Asia to the UK may wish to avoid flying around congested German airspace and therefore its entry points to/from Poland are shifted accordingly. This results in different KEA measured for this flight.
 - Network measures: to mitigate bottleneck areas within Europe, capacity enhancement measures have been developed by the Network Manager (NM) and executed both at a strategic level, by implementing re-routings or level caps to mitigate constrained ACCs, and at a tactical level for example through measures to reduce the impact of unexpected bad weather conditions. Although this leads to a decrease in en-route delay at European network level (and post-ops adjustments allow NM to re-allocate delay resulting from eNM measures), there is currently no available study/mechanism that would quantify/redistribute additional distances flown in each country as a result of implementation of the NM measures.
 - Re-routing constraints are propagated either through the Network Manager (resulting in changes to flight plans) or on a tactical nature (such as STAM re-routing). Both constraints can have an impact on the horizontal flight efficiency metric.
- 5) Restricted airspace:
 - Military operations outside EPWW: when large military areas outside EPWW are activated for a prolonged duration (a couple of hours, day, etc.), these closures affect traffic flows to/from Poland and influence trajectories flown.

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex Q. Justifications for the local capacity targets

There is no inconsistency between National reference value and National target for 2022. The pivot values will be used for the purpose of calculating the financial advantages or disadvantages. The local CAPACITY pivot values for 2023–24 will be developed based on latest European Network Operations Plan.

The National reference values are based on the PRB document “Advice on the revision of performance targets for RP3” from March 2021 and analysis based on NEST tool simulation, referring to the data from 2019.

Available for the time being NOP Rolling Seasonal Plans are a specific version of the NOP covering the short period and do not present breakdown values for en-route capacity/delays. The European Network Operations Plan covering the period 2022–2026 will be prepared and presented for approval in Autumn 2021. So all the above documents couldn't be taken into consideration while setting the targets in current plans.

There are a lot of factors influencing the ATFM arrival delays forecast in FIR EPWW. In the case of TMA Warszawa and TMA Kraków, limitations of airport capacity and the rapid increase in traffic expected from 2022 may cause accumulation, and thus generate delays. In addition, the introduction of changes in the airspace and TMA Kraków capacity in the summer of 2022 – until the operational staff will have gained experience – may require a reduction in capacity during the transition period, which will result in the arrival delays in EPKK, EPKT airports in and possibly EPRZ.

Also, core night at EPWA airport can increase inbound and outbound traffic during the morning and evening rush hours, which could result in delays. The estimate level of delays was increased in the years 2022–2023 compared to 2020–2021 due to the possible increasing complexity of traffic.

A significant increase in military air traffic at TMA EPPO may result in delays for the EPPO airport due to the need to impose restrictions on civil traffic. In addition, large military exercises have been set up at least once a year since 2022. Historical record is no more than 1,200 minutes of delay. The annual aviation parade will be organised in the years 2022–2024. It will result in closure of EPWA and EPMO for the duration of the event, which is historically around 2,000 minutes of delays to both airports.

Main measures put in place to achieve the target for en-route ATFM delay per flight

A set of measures focused on the positive impact on the capacity performance includes the following actions:

- 1) In the staffing area:
 - continuation of new ATCOs training, while plans for additional recruitments to start 2020+ were suspended/revised, considering lower traffic levels expected by end of RP3 as well as difficulties related to training caused by low levels of traffic and COVID restrictions;
 - flexible staff planning during traffic peaks;
 - flexible roster responding to traffic complexity and week/weekend demand;
- 2) In the airspace area:
 - increasing No of sectors opened + extended hours of opening more sectors;
 - implementation of third layer of vertical split of ACC sectors within area of responsibility of Warszawa ACC (sectors JR in 2022, sectors TC in 2023);

- reorganisation of lower airspace in Poland (including TMAs) in order to optimise airspace configuration – 2022/2024;
- evolving ACC sector configurations and management to cope with updated STATFOR traffic forecast;
- development of FRA – successive introduction with neighbouring ANSP - Cross Border FRA;

- In operations area

- adaptation of the air traffic management system to operational needs and modernisation of the ATM System;
- improvement of comprehensive airspace management;
- development of tools supporting ATCOs and flow management optimisation (including Traffic Complexity Tool);
- continued investments in infrastructure (CNS) and technology allowing optimisation of airspace structures and optimisation of coverage in the Polish airspace as well as supporting contingency – current investment plan is described under investment part of this PP;
- ATFCM techniques including STAM – less sectors overload;
- FMP dynamic management: reaction on “core area” – tactical reduction of delays, closer cooperation with AUs, dynamic capacity/occupancy management, offload rerouting scenarios;
- full implementation of A-CDM, continued improvement of AMAN at Warsaw Chopin airport, implementation of local CDM in regional airports.

Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

Plans for the following years of RP3 include, among others:

- reorganisation of ACC Warszawa sector configuration - three layer vertical division - to be implemented under staged approach with the start in 2022/2023 (implementation postponed as compared to earlier plans due to traffic reduction following COVID-19 pandemic),
- reorganisation of TMA Kraków in 2022 – new sectors, new SID/STAR procedures,
- continuation of training process for new ATCOs (required increase in ATCO numbers as a result of planned airspace changes – new recruitments to start end 2022),
- refreshment training for current ATCOs to maintain their competence following the 2020-2021 significant traffic drop,
- continued investments in infrastructure (CNS) and technology allowing for optimisation of airspace structures and optimisation of coverage in the Polish airspace as well as supporting resilience, scalability and flexibility of service provision,
- continuation of flexible rostering,
- evolving ACC sector configurations and management to cope with updated traffic forecasts,
- continued FMP dynamic management,
- improvement of comprehensive airspace management.

Polish Performance Plan
Third Reference Period (2020-2024)
Revision

Annex R. Justification for the local cost efficiency targets

1. General information

Macroeconomic forecasts

1.1. Gross Domestic Product

The coronavirus (COVID-19) crisis has hit the economy growth of the Republic of Poland. After a long time of its stable growth, GDP dropped sharply in 2020 and is expected that the recession will have a long-lasting consequence. Following the decline of 2.7% in 2020, GDP is projected to recover by 3.5% in 2021 and to grow by 4.6% in 2022. This means that it is expected to be recorded below the level performed during the second half of the RP2. The expected GDP growth for each year of the RP3, based on forecasts from the International Monetary Fund is presented in the table below. For comparison, the table contains also the GDP's assumptions used for drafting the Polish PP for the RP2 (including its revision in the area of route charges for period 2017-2019) as well as the actual GDP growth for period 2015-2020 announced by EUROSTAT. The table also contains the GDP's values (actual for 2017-2020 and forecasted for the coming years) as officially announced in July 2021 by the National Bank of the Republic of Poland. Nevertheless, the outlook, remains uncertain amid still current epidemiological risks.

Table 1. GDP assumptions for the Republic of Poland for the RP3 and historical values.

Real GDP growth rate [%]	2015	2016	2017	2018	2019	2020	2021 F	2022 F	2023 F	2024 F
Initial assumptions for the purpose for the RP2 (<i>forecast</i>)	3.30	3.35	3.54	3.59	3.62					
EUROSTAT data (actual and provisional) ¹	4.20	3.10	4.80	5.40	4.70	-2.70				
IMF – WEO April 2021 (actual/forecast) ²	4.24	3.14	4.83	5.35	4.54	-2.72	3.47	4.54	3.98	3.01
National Bank of the Republic of Poland – GDP (actual and forecast) March 2021 ³			4.80	5.10	4.50	-2.70	5.00	5.40	5.30	
Assumed for the PP purpose for the RP3 (<i>forecast</i>)							3.47	4.54	3.98	3.01

1. <https://ec.europa.eu/eurostat/databrowser/view/tec00115/default/table?lang=en> [access July 2021].

2. https://www.imf.org/en/Publications/WEO/weo-database/2021/April/weo-report?c=914,913,963,918,960,944,967,921,943,962,964,968,922,942,186,926,&s=NGDP_RPCH,&sy=2015&ey=2026&ssm=0&scsm=1&ssc=0&ssd=1&ssc=0&sic=0&sort=country&ds=.&br=1 [access July 2021].

3. https://www.nbp.pl/home.aspx?f=/polityka_pieniezna/dokumenty/projekcja_inflacji.html [access July 2021].

1.2. Inflation

Inflation assumptions used for drafting the revision of PP for RP3 are consistent with the International Monetary Fund April 2021 forecast. The inflation assumptions have been presented in the table below. For comparison the table presents also the inflation values as officially published in July 2021 by the National Bank of the Republic of Poland.

Table 2. Inflation rates assumptions for the Republic of Poland for the RP3 and historical values.

Inflation rate [%]	2015	2016	2017	2018	2019	2020	2021 F	2022 F	2023 F	2024 F
Assumed for the purpose for the PP RP2 (revised, <i>determined</i>)	2.38	2.50	1.05	1.86	2.35					
EUROSTAT data (actual) ¹	-0.70	-0.20	1.60	1.20	2.10	3.70				
IMF – WEO April 2021 (actual/forecast) ²	-0.93	-0.58	1.98	1.60	2.31	3.40	3.20	2.52	2.53	2.50
National Bank of the Republic of Poland – Inflation Forecast July 2021 ³			2.00	1.60	2.00	3.40	4.20	3.30	3.40	
Assumed for the PP purpose for the RP3 (<i>forecast</i>)							3.20	2.52	2.53	2.50

1. <https://ec.europa.eu/eurostat/databrowser/view/tec00118/default/table?lang=en> [access July 2021].

2. https://www.imf.org/en/Publications/WEO/weo-database/2021/April/weo-report?c=914,913,963,918,960,944,967,921,943,962,964,968,922,942,186,926,&s=NGDP_RPCH,PCPIPCH,LUR,&sy=2015&ey=2026&ssm=0&scsm=1&ssc=0&ssd=1&ssc=0&sic=0&sort=country&ds=.&br=1 [access July 2021].
3. http://www.nbp.pl/home.aspx?f=/polityka_pieniezna/dokumenty/projekcja_inflacji.html [access July 2021].

1.3. Exchange rate

In order to calculate and present local targets in the field of cost efficiency, the national currency of the Republic of Poland (Polish zloty, PLN) was used. The table below presents exchange rate values used as an assumption for PP for RP2 and the actuals presented by EUROSTAT, Reuters and National Bank of the Republic of Poland. The table shows also the assumptions taken into account for the purpose of drafting Polish PP for the RP3. As for the RP3, Poland assumed the exchange rates as recommended by Polish MoF for average annual values for 2021-2024.

Table 3. EUR/PLN exchange rates assumptions for the RP3 and historical values.

Exchange rate [%]	2015	2016	2017	2018	2019	2020	2021 F	2022 F	2023 F	2024 F
Initial assumptions for the purpose for the RP2 (<i>forecast</i>)	4.18	4.18	4.18	4.18	4.18					
EUROSTAT data (actual) ¹	4.18	4.36	4.26	4.26	4.30	4.44				
Reuters (actual)	4.18	4.36	4.25	4.26						
National Bank of the Republic of Poland (actual) ²	4.18	4.36	4.26	4.26	4.30	4.44				
MoF of Republic of Poland recommendations for macroeconomic assumptions July 2020 ³				4.26	4.30	4.43	4.45	4.45	4.45	4.45
Assumed for the PP purpose for the RP3 (<i>forecast</i>)							4.45	4.45	4.45	4.45

1. https://ec.europa.eu/eurostat/databrowser/view/ert_bil_eur_a/default/table?lang=en [access July 2021]
2. <http://www.nbp.pl/homen.aspx?f=/kursy/kursyen.htm> [access July 2021].
3. [access July 2021]

2. Main measures put in place to achieve the targets for determined unit cost (DUC) for en-route / terminal ANS

The COVID-19 pandemic led to a sharp drop in air traffic on an unprecedented scale and to minimize its negative impact the adoption of specific measures was required. Those measures were specified in the Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 *on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to the COVID-19 pandemic*. In the light of the provisions of that regulation the Commission has been empowered to set revised Union-wide performance targets for the third reference period. In the light with the above the Commission Implementing Decision (EU) 2021/891 of 2 June 2021 *setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903* was published. Upon the setting of the revised performance targets Poland was obliged to establish a revised PP for RP3 containing those measures for that period.

To achieve compliance with the union-wide performance target in the key performance area of cost efficiency the appropriated measures had to be undertaken. The description of measures, taken by air navigation service providers concerned, is presented below.

2.1. PANSA

Measures undertaken by PANSA aimed at limiting staff costs include:

- review of ACC and APP ATCO employment plan (en-route charging zone) / EPWA TWR employment plan (I TCZ) / TWR ATCO employment plan at regional airports (II TCZ), which resulted in reduction of employment planned for the following years, also in terms of ATCO students/trainees,
- reduction of base salary for all staff categories (reduction from 1st January 2021),
- reduction of ATCOs remuneration over 2021-2023 as a result of application of Remuneration Scheme linking remuneration to traffic level served by a given unit – considering lower traffic levels.

- resignation from special remuneration conditions for TWR EPWA ATCOs related to RAD (I TCZ);
- development of revised standards for ANS provision at regional airports, including optimisation of periods/hours of provision of ATS services adjusting them to commercial IFR operations, as well as standards for ATCO positions at TWR units and tools supporting TWR ATCO work (II TCZ)
- reduction of ATCOs remuneration over 2021-2023 as a result of experience categories related to lower traffic (II TCZ).

To limit staff costs in the following years PANSa has also developed and consulted with social partners new internal Remuneration Scheme, which was submitted for approval to Minister responsible for transport in May 2021 (approval still pending).

Additionally, over 2020-2021 the following measures were implemented (they relate to all staff categories):

- use of furlough / downtime, in accordance with article 81 of Labour Law,
- temporary suspension of new employments,
- limitation of bonuses and rewards,
- temporary suspension of contributions to the occupational pension scheme and group insurance,
- reduction of contributions to the Company Social Benefits Fund,
- reduction of overtime, work during weekends/holidays and overnight hours.

Measures aimed at optimisation of other operating costs were focused mostly on:

- optimisation of cost levels, adjusting budgets (to the extent possible) to lower traffic levels, especially over 2020-2021,
- review and postponement of necessary expenditures to support liquidity,
- adjusting cost structure to new ways of executing tasks and projects,
- optimised use of resources, especially over 2020-2021, when the three waves of pandemic were negatively impacting execution of tasks within the timeframes initially foreseen due to sanitary restrictions, travel restrictions or limited supply related to health issues or quarantine procedures.

The measures implemented included:

- optimisation and change of schedules for investment tasks execution,
- abandonment or changes to timeframes of some OPEX-related tasks,
- reduction of costs related to preparation / maintenance of on-site workplaces through use of furlough/downtime, introduction of teleworking, use of holiday periods by employees, as well as introduction of additional care allowance days for parents by the State,
- limitation to necessary minimum (over 2020-2021) of trainings and business trips and postponement of required trainings,
- limitation over 2020-2021 of costs related to promotion and organization of meetings, conferences etc. and postponement of related budgets for the following years,
- changed approach to execution of some tasks and budgetary shifts between CAPEX and OPEX,
- changes to organisational structure.

The above measures significantly impacted the executed and planned level of costs related especially to:

- energy and supplies;
- taxes and charges, especially related to land and VAT tax recognised in costs,
- external services, especially those related to technical support and software upgrades, advisory services, analyses and expertise, legal services, IT support,
- trainings and business trips.

Moreover, implementation of new Organizational Scheme allowed for optimisation of division of competence and tasks among organisational units, what indirectly also impacted transparency of cost allocation among services.

As a consequence of difficult situation in the aviation sector caused by COVID-19 pandemic, which negatively impacted PANSa financial position, and considering the need to maintain liquidity and limit costs, PANSa has undertaken a thorough review of investment plan for the following years, aimed at CAPEX optimisation with due consideration of operational requirements of PANSa on the one hand, and financial capacity of PANSa on the other hand. As a result of this work, CAPEX plan for RP3 was reduced from initial 1 256 million PLN to 966 million PLN. This was additionally supported by optimisation of CAPEX schedules, following which part of expenditures was postponed as compared to the initial draft RP3 PP. All this led to

reduction of depreciation costs related to new investments executed over RP3, what directly translates into lower total depreciation costs.

Reduction in the amount of cost of capital is related to the two following factors:

- reduced cost of capital rate (WACC) as a consequence of updated assumptions which consider current market conditions and debt financing,
- reduced fixed asset base as a consequence of the CAPEX plan review described above under the depreciation part, as well as lower current asset base resulting from cost-containment measures.

2.2. Other ANSP (IMWM, Radom Meteo, Warmia i Mazury and PL Bydgoszcz)

IMWM, the main MET service provider in Poland has taken among others the following measures achieve the determined unit cost target:

- review of employment plan for 2021-2024, which resulted in temporary suspension of new employments for the following years, especially for 2021-2022,
- over 2020-2021 the limitation of bonuses and rewards was applied,
- taking measures, especially over 2020-2021
- limitation to the minimum of trainings and business trips and postponement of required trainings,
- optimization of costs levels that have a positive impact on other operating costs categories among others energy and supplies, external services especially those related to overhaul services; review of the level of indirect costs, which resulted in its reduction ca. 20-25% over 2021-2024.

Radom Meteo has achieved higher cost-efficiency by reducing the staff and costs to the minimal levels required for the company to survive until the reopening of EPRA airport which is currently planned in late 2022, instead of the previously assumed end of 2020. These actions were taken in order to not to close operationally the Radom Meteo company and to prevent AU from bearing additional costs stemming from the costly processes of reopening, recertification, redesignation, repurchasing assets and rehiring staff. What is more, despite significant reductions, Radom Meteo is still preparing MET products which are being sent to the international MET databases.

Referring to staff costs, it should be indicated that due to the EPRA closure the staff total values for 2020-2021 has been significantly reduced to the minimum required to fulfil the obligations stemming from the ANSP certificate and designation as MET provider. Additionally, due to changes in the scope of meteorological products provided, some labour intensity changes have been introduced, which affected the allocation between the ER/TNC during the closure of EPRA airport. As far as other operating costs are concerned, as well as staff costs, they have been reduced to the minimum levels required to fulfil the obligations stemming from the ANSP certificate and designation as MET provider, therefore the total values for 2020-2022 have been reduced to the marginal level. It has to be mentioned that despite the EPRA closure, the assets held by Radom Meteo are still in use as Radom Meteo keeps providing MET services and therefore are depreciating. The fixed assets currently maintained will be fully depreciated by the end of 2022. The depreciation planned in the 2023 and beyond will be related to the new equipment purchases, i.e. software, telecommunications equipment, server, sensors dedicated to the AWOS system. When it comes to cost of capital, the determined WACC values calculation was based on the recommendation of PRB. It should be noted that Radom Meteo does not plan to use any form of external financing in the RP3 perspective, nevertheless the current situation additional risks has been identified which led to the necessity of the reporting of the cost of capital, as its value is being no longer negligible.

When it comes to Warmia i Mazury, it should be stressed out that the extraordinary circumstances caused by the COVID-19 pandemic had a significant impact on the processes and measures for the implementation of the performance scheme in the third reference period 2020-2024. That has created an exceptional situation which needed to be addressed with specific temporary measures.

The main measures that have been introduced to achieve the cost-efficiency:

- temporarily wages reduction in the period from 1st April 2020 to 31th June 2020 (three months).
- all training planned by Warmia i Mazury from 1st April 2020 to 31th December 2020 (nine months) has been suspended.
- from 15th March 2020, the number of hours of providing air navigation services was reduced due to the implementation of the Regulation of the Council of Ministers of 13 March 2020 on air traffic ban in the Republic of Poland.
- all significant investments were postponed.

Going to PL Bydgoszcz, it should be emphasized that this institution has achieved higher cost-efficiency by reducing the working hours of services in 2020 and 2021 when the traffic was at the level significantly lower than previously assumed. In addition to this, PLB has postponed some investments (i.a. Tower modernization) which resulted in diminishing the total cost base for RP3 in terms of depreciation and cost of capital stemming from the investment activities.

3. Consistency with the union-wide target

3.1. En-route cost-efficiency target

The proposed local cost-efficiency target was set at the level of 2.1% resulting from the baseline value set at the level of 175.01 PLN (for details, see Annex F).

3.2. Terminal cost-efficiency target

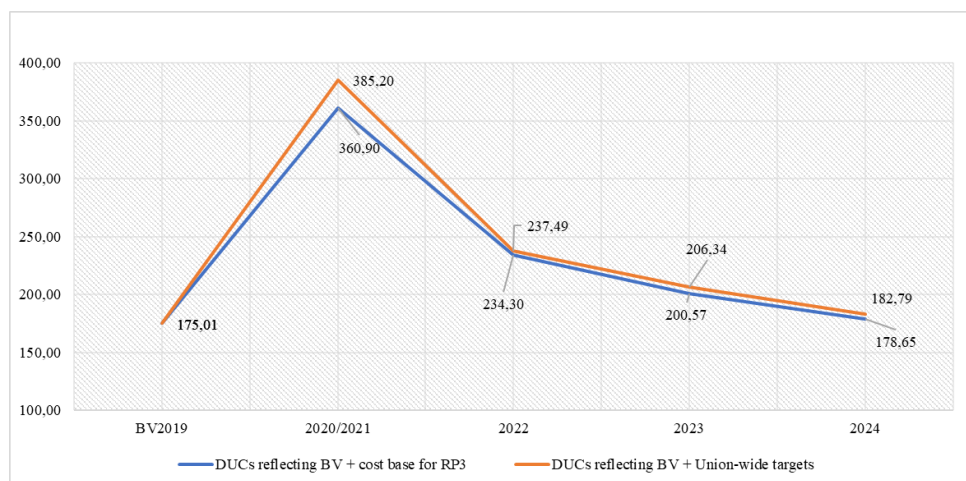
Poland was obliged to set two local terminal cost-efficiency targets, one for each charging zone (for details, see Annex F).

- TNC-EPWA – the baseline value has been set at the level of 397.72 PLN,
- TNC-OTHER – the baseline value has been set at the level of 829.51 PLN.

3.3. Justification

Taking into consideration the baseline value for en-route cost efficiency target for Poland (for details, see Annex F) the en-route short-term determined unit cost trend is to be consistent with the provision streaming from the article 4 of the *Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903*. Those values were set in consistency with the provisions streaming from Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391 and with the exceptional measures set in the Commission Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exceptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to the COVID-19 pandemic. The figure below presents en-route short-term determined unit cost trend for Poland in comparison with the union wide targets.

Figure 1. Evolution of local cost-efficiency trend for Poland in RP3 [PLN].



Source: Own elaboration.

Additionally, it has to be underlined, that Poland (as any other state) had to cope with the EUROCONTROL cost part allocated to PL cost base – taking the EUROCONTROL out of the calculation, Poland's cost-efficiency short term trend would be equal to 1.7% instead of 2.1%.

With regard to the long-term determined unit cost trend apart from the above, inconsistency with the Union-wide performance targets in the field of cost-efficiency is the result of the revision of the RP2 PP.

