

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

ADDITIONAL INFORMATION – 1 – Total 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), and a description of the methodology used for allocating those costs between different Charging Zones;

The cost base for en-route charges in Poland for RP2 consists of cost incurred by three organizations:

- **Polish Air Navigation Services Agency (PANSa)** – certified and designated provider of air traffic services and certified provider of CNS services and AIS,
- **Institute of Meteorology and Water Management - National Research Institute (IMWM)** – certified and designated MET services provider,
- **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 NSA costs.

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

In the RP1 the cost base for en-route charges in Poland consists of cost incurred by the same three organizations listed above, as well as the same charging zone was established. However, there is a change in the scope of designation of the MET services provider that impacts on the presentation of MET costs in the reporting tables. For the RP1 IMWM's designation covered ACC and TMA/CTR of 11 airports. For the RP2 the designation has been limited only to ACC (including SAR and FIS) – as a consequence for the purpose of presentation for the RP2 some MET cost has been shifted from IMWM's reporting table to PANSa's reporting table (see further explanation below).

	RP1	RP2
ER	PANSa (ATS, CNS, AIS, SAR coordination) IMWM (MET) CAA (NSA+MS) + EUROCONTROL costs	PANSa (ATS, CNS, AIS, SAR coordination + MET costs) IMWM (MET - limited) CAA (NSA+MS) + EUROCONTROL costs

In 2014 a public tender was published by PANSa for MET services for RP2. However, the tender has not finished positively – no offers meeting the requirements were presented. As a consequence, it was not possible for PANSa to purchase MET services on “commercial” basis and in order to ensure availability of required MET information necessary for air operations after 31.12.2014 Polish Minister responsible for transport had to designate MET SP for the remaining MET services (not covered by the initial designation of IMWM of April 2014), excluding Radom-Sadków (EPRA) airport (as the airport has not yet started commercial operations that require TWR service – start is foreseen before end of 2015), for the year 2015. The designation for the remaining MET information (information that was to be purchased by PANSa following the public tender, excl. EPRA) was granted to IMWM. It has to be underlined that the above resulted from objective circumstances (lack of offers presented during the tendering process). As a consequence, for the period 01.01.2015-31.12.2015 IMWM is designated to provide all ER MET services in the Polish airspace, except those related to EPRA. To reflect this situation in the charges' reporting tables for RP2 and in order to ensure transparency of information presented in the tables, the ER reporting tables were modified by shifting the amount of kPLN 9 560 of MET costs from Table 1 for PANSa to Table 1 for IMWM. In PANSa cost base the amount of kPLN 237 was left due to no designated MET SP for Radom airport. The amount of kPLN 9 560 originally (in RP2 performance plan dated June 2014) was shown in PANSa other operating costs. Following the shift to IMWM Table 1 the amount was apportioned among staff cost, other operating cost and depreciation cost, thereby influencing presentation of cost by nature for 2015 in

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Table 1 for all entities. It has to be stressed that such a shift does not impact the cost-efficiency target from the performance plan for RP2, nor the level of determined costs. It will only impact the contribution by each entity (shift between PANSA and IMWM) and only in terms of presentation of the figures for the purpose of preparing ER charges reporting tables.

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

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 services.

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.

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 way in order to reflect in the best possible way on the distribution of costs borne in operational activity (e.g. air sector capacity, number of operations, staff complement, salary level, power utilization etc.).

Due to objective reasons, PANSA's cost allocation between ER and TNC has to be modified starting from 2015. It results from the fact that following internal optimization in PANSA and related changes in service provision, some of previously used allocation keys cannot be used any longer.

For the purpose of allocating ANS costs between ER and TNC PANSA uses criteria that reflect clear organizational and operational separation of services in PANSA, which reflects their diversity. The division of costs between ER and TNC is based on airspace structures.

The costs of services provided in the controlled area (CTA), which includes the airways (AWY), and TMA are allocated to ER.

On the other hand, costs related to services provided in CTR (controlled zone) are allocated to TNC. 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, Poznań and Wrocław together, Kraków and Katowice together and Warsaw and Modlin together. 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. 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.

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

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 NDBs, VOR/DVORs, DMEs and ILSS takes into account range of these Nav aids, and as a consequence, their possible use in TMA than 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.

The cost of newly implemented operational system Pegasus 21 is allocated between ER and TNC on the basis of revenues from services provided.

Apart from the costs specified above, allocation of PANSA's costs between ER and TNC remains unchanged as compared with the RP1. Also cost allocation for some Nav aids as described above remains unchanged for the RP2.

Applied to 2014 costs, the change in allocation results in PANSA's costs shift between ER and TNC of about 10,8 million PLN (increase in TNC costs and respective decrease in ER costs). The change has been included in the RP2 determined costs forecast and reference point for the RP2 forecast (2014 starting point) has been modified accordingly when possible cost-efficiency improvements for

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the RP2 have been analysed. For the actual 2014 costs the same allocation keys are used as were used for the purpose of calculating these costs at the beginning of the RP1.

Due to expiry of designation of IMWM for MET TNC services at 31.12.2014, starting from 01.01.2015 no entity is designated for MET TNC services in Poland. As a consequence, MET services will have to be purchased following a public tender organized by PANSA. In result some MET costs will be reported in PANSA's ER cost base. According to *Guide to Aeronautical Meteorological Services Cost Recovery. Principles and guidance WMO-No. 904* some products which are not covered by IMWM designation are allocated to ER. In result there are some MET ER costs in PANSA's cost base. The allocation of MET costs presented in PANSA's cost base is like 40/60 accordingly for ER and TNC. This proportion reflects allocation of MET products as based on Annex II to WMO document No 904.

II. IMWM

See point h) and i) below.

III. CAA

Allocation of CAA's costs between ER and TNC is based on number of personnel (FTEs) executing tasks related to each of those two types of services defined in accordance with article 8.2 and 3 of the Regulation No 391/2013. The methodology, developed during Poland's technical integration with EUROCONTROL CRCO, remains unchanged since 2008.

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;

I. PANSA

From 2014 PANSA calculates costs of air navigation services provided to VFR flights through marginal cost methodology. As the result, the whole cost is allocated to En-Route. In the Reporting Tables for the RP1 the determined costs of VFR flights were calculated on the basis of previous methodology, whereby the cost related to VFR includes the costs of following activities: processing flight plans, validation of air traffic, NOTAM coordination and relevant statistics. The methodology of the cost allocation used by PANSA for the calculation of the 2014 cost base is in line with the methodology used for the calculation of TNC and en route costs for the RP1.

II. IMWM

IMWM calculates costs of VFR flights which are exempted from navigation charges using the marginal cost methodology, based on the use of meteorological information contained on IMWM website in the 'aviation' tab. No changes were introduced to the methodology in comparison to the RP1.

The costs of flights which are exempted from navigation charges were calculated using the marginal cost methodology, based on the use of meteorological information contained on IMWM website in the 'aviation' tab. This cost is calculated as follows:

- From the analysis of Internet connection load by a www.imgw.pl webpage results that it takes 11% of the leased bandwidth.
- *11% of the annual cost of Internet bandwidth = the cost of maintaining the website www.imgw.pl*
- The average number of entrances to the sub 'aviation' is 1.76% of all visits to the IMWM website, what after following calculation:
$$1.76\% \times \text{annual cost of maintaining the website}$$
gives an annual cost of maintaining sub 'aviation'.
- We assume that 50% of flights from these entries are subjects to exemptions from navigation charges (50% of the annual cost of maintaining the tab "aviation" = annual marginal cost of flights exempted from navigation charges).

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

For the RP2, due to limited scope of designation, no VFR costs are reported.

c) Description and justification of any adjustment beyond the provisions of the International Accounting Standards;

I. PANSA

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N/a. PANSA is fully in line with the International Accounting Standards.

II. IMWM

Taking into account the legal basis that states “where, owing to the legal status of the service provider, full compliance with the International Financial Reporting Standards is not possible, the provider shall endeavor to achieve such compliance to the maximum possible extent”, IMWM, as a research and development unit established on the basis of the decree No. 338/72 of 30.12.1972, issued by the Council of Ministers operates on the basis of the act dated 25 July 1985 concerning research-development units, and as a consequence uses Polish accounting standards. These standards are to large extent similar to IFRS. IMWM has adjusted the accounting principles to IFRS wherein it is allowed by the Article 10.3 of the Polish Accounting Act of 29 September 2004. This adjustment was implemented to the accounting principles by Chief Executive's in December 30, 2008.

III. CAA

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.

No changes in comparison to the RP1.

d) Description and explanation of the method adopted for the calculation of depreciation costs: historic costs or current costs. When current cost accounting is adopted, provision of comparable historic cost data;

I. PANSA

PANSA uses the historic cost method for the calculation of depreciation costs. No asset revaluation has been included in the asset base for air navigation charges.

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.

III. CAA

As a budgetary unit, following the national regulations on all public administration bodies, CAA does not calculate depreciation on its assets.

No changes in comparison to the RP1.

e) Justification for the cost of capital, including the components of the asset base, the possible adjustments to total assets and the return on equity;

I. PANSA

Assumptions for determining the cost of capital and the return on equity

PANSA determines the cost of capital based on the methodology of The Weighted Average Cost of Capital. It comprises the cost of equity and the cost of debt, weighted by their relative share in a company's capital structure.

PANSA estimates benefit from equity finance using the Capital Asset Pricing Model (CAPM). According to CAPM, Agency's cost of equity is equal to a market risk-free rate of return, plus a premium above the risk free rate to reflect the relative riskiness of the company and its investments.

For the RP1 the following values have been used.

ANSP/Entity: PANSA	RP1
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Assumptions for the Cost of Capital (WACC) in nominal terms	Determined		
	2012 D	2013 D	2014 D
Capital structure (% debt)	See NOTICE below	See NOTICE below	See NOTICE below
Corporate tax rate %	See NOTICE below	See NOTICE below	See NOTICE below
Risk free rate % (nominal)	See NOTICE below	See NOTICE below	See NOTICE below
Market (equity) risk premium % (after tax)	See NOTICE below	See NOTICE below	See NOTICE below
Asset beta	See NOTICE below	See NOTICE below	See NOTICE below
Debt beta	See NOTICE below	See NOTICE below	See NOTICE below
Equity beta	See NOTICE below	See NOTICE below	See NOTICE below
Return on Equity % (after tax)	See NOTICE below	See NOTICE below	See NOTICE below
Return on Equity % (pre tax) - T1 3.6	3,5%	3,5%	0,3%
Debt risk premium %	See NOTICE below	See NOTICE below	See NOTICE below
Interest on debt % (pre tax) - T1 3.7	5,95%	5,95%	5,95%
WACC % (pre tax) - T1 3.5	3,7%	3,8%	1,19%

NOTICE: PANSA's initial proposal for the cost of capital in 2012 amounted to 9,43% and corresponded to the return on equity equals 10-year bond yield after tax and inflation correction adjusted by risk premium (CAPM).

After the consultation process preceding the RP1 PANSA took a good note of airspace users' and CAA's expectations and has decreased the cost of capital to the level of 3,69% in 2012, 3,79% in 2013 and 1,79% in 2014, which was well below the 10-year bond rate in Poland (according to ECB data in first months of 2011 it amounted to ca. 6,2%). To ensure consistency of the Polish determined unit rate with the EU-wide cost-efficiency target the 2014 level of the cost of capital of PANSA has been further reduced by the CAA to 1,19%.

When calculating cost of equity for the RP2 the following assumptions have been taken initially into consideration by PANSA:

- risk free rate of return (4,42%) equal to long term government bond yields reported by Eurostat for month of January 2014 for Poland¹,
- the equity risk premium (4,80%) representing the excess return over the risk free rate assumed on the Damodaran approach basis,
- equity beta (0,515) measuring the correlation between the riskiness of an asset and that of the overall market. Estimated value is in line with equity beta's assumed by other providers for the RP1 and equity beta's assumed by regulated entities in a number of industries.

As far as PANSA does not plan to use debt financing in the whole RP2, the cost of debt has been assumed at 0,0% level.

It has to be noted that the WACC used for calculation of the cost of capital in the reporting tables was equal not to 8,43% (pre-tax rate) but 6,63% (post-tax rate). Additionally, for 2017-2019 the WACC has been further reduced by the CAA in order to ensure consistency of the Polish determined unit cost with the EU-wide cost-efficiency target for the RP2, similarly as it was done for 2014 (see notice to table concerning the RP1 above). As a consequence, PANSA's cost of capital for the RP2 is lower than allowed under the charging scheme provisions and reflects Polish commitment to reaching the EU-wide cost-efficiency target for the RP2.

After the consultation process preceding the RP2 PANSA took a good note of airspace users' and CAA's expectations and has decreased the cost of capital also for years 2015-2016. For the final cost base the following assumptions were used:

¹ <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=teimf050&plugin=1>

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- the RoE for 2015-2016 was reduced – lower risk-free rate was assumed (instead of 4,42% used before currently 4,03% is applied which reflects average interest on bonds in 2013),
 - modified asset beta (0,4 instead of previously used 0,5015).
- As a consequence, the cost of capital was lowered, in accordance with users' expectations.

ANSP/Entity: PANSA	RP2 PP					
Assumptions for the Cost of Capital (WACC) in nominal terms	Underlying assumptions for an "efficient" WACC	For the determined cost of capital				
		2015 D	2016 D	2017 D	2018 D	2019 D
Capital structure (% debt)	60%	0,0%	0,0%	0,0%	0,0%	0,0%
Corporate tax rate %	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%
Risk free rate % (nominal)	4,03%	4,03%	4,03%	4,03%	4,03%	4,03%
Market (equity) risk premium % (after tax)	4,80%	4,80%	4,80%	4,80%	4,80%	4,80%
Asset beta	0,40	0,40	0,40	0,40	0,40	0,40
Debt beta	0,00	0,00	0,00	0,00	0,00	0,00
Equity beta	0,89	0,40	0,40	0,40	0,40	0,40
Return on Equity % (after tax)	8,29%	5,95%	5,95%	5,95%	5,95%	5,95%
Return on Equity % (pre tax) - T1 3.6	10,23%	7,35%	7,35%	7,35%	7,35%	7,35%
Debt risk premium %	1,52%	1,92%	1,92%	1,92%	1,92%	1,92%
Interest on debt % (pre tax) - T1 3.7	5,55%	5,95%	5,95%	5,95%	5,95%	5,95%
WACC % (pre tax) - T1 3.5	7,42%	7,35%	7,35%	7,35%	7,35%	7,35%

ANSP/Entity: PANSA	Notional "efficient" WACC in RP2	Determined cost of capital in RP2
Capital structure (% debt)	60%	0%
Corporate tax rate %	19%	
Risk free rate % (nominal)	4,03% - explanation for the assumptions above	
Market / risk premium % (after tax)		4,8%
Asset beta	0,4	0,4
Debt beta	0	0
Debt risk premium %	Difference between interest on debt (%pre tax) and risk free rate (% nominal)	

The level of the cost of capital of PANSA for years 2017-2019 has been reduced by the CAA as compared to the assumptions presented in the above table 5,88% in 2017, 3,82% in 2018, 3,77% in 2019. This reflects Poland's commitment to reaching the local target consistent with EU-wide target.

Asset base

ANSP/Entity: PANSA	RP1 PP
Components of the asset base	
3.1 Net book val. fixed assets	The average net book value of fixed assets for en-route services provision has been taken into account.
3.2 Adjustments total assets	n/a
3.3 Net current assets	The calculation of the level of net current assets follows methodology recommended by the CRCO when auditing PANSA's cost base in 2010 and takes into account only the assets that are necessary to perform ANS, and as a consequence excludes interest bearing items.

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3.4 Total asset base	The increase in the total asset base is caused mainly by the implementation of the ATM new system and other investments which will have a significant impact on the reduction of the AFTM delays and from that point of view are necessary to be performed.
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Average asset base	2012 D	2013 D	2014 D	2012 A	2013 A	2014 A
Net book val. fixed assets	659 063	723 340	761 618	578 427	595 382	618 168
Adjustments total assets	0	0	0	0	0,0	0
Net current assets	27 869	72 692	118 452	-52 087	-32 482	5 777
Total asset base	686 932	796 032	880 070	526 341	562 900	623 945

ANSP/Entity: PANSA	RP2 PP
Components of the asset base	
3.1 Net book val. fixed assets	The average net book value of fixed assets for en-route services provision has been taken into account with the assumption that 85% of planned capex will be realized in the whole RP2. As a consequence, the asset base is lower than presented earlier for the purpose of consultation with stakeholders, which takes into account users' comments and expectations.
3.2 Adjustments total assets	n/a
3.3 Net current assets	The calculation of the level of net current assets follows methodology recommended by the CRCO when auditing PANSA's cost base in 2010 and takes into account only the assets that are necessary to perform ANS, and as a consequence excludes interest bearing items.
3.4 Total asset base	The increase in the total asset base is a result of planned investments (information on the investment plan is provided in subsequent part of this Plan). This is mainly due to the increase of the technological level, functionality of the ATM system and the development of CNS / ATM infrastructure.

Average asset base	2015	2016	2017	2018	2019
Net book val. fixed assets	667 037	692 675	717 722	779 482	800 198
Adjustments total assets	0	0	0	0	0
Net current assets	34 494	64 493	88 428	99 603	102 661
Total asset base	701 531	757 168	806 150	879 085	902 859

II. IMWM

Assumptions for determining the cost of capital and the return on equity

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 rule 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.

For the RP1 the following values have been used.

ANSP/Entity: IMWM	RP1		
Assumptions for the Cost of Capital (WACC) in nominal terms	Determined		
	2012 D	2013 D	2014 D
Capital structure (% debt)	80,0%	74,9%	68,0%
Corporate tax rate %	19,0%	19,0%	19,0%

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Risk free rate % (nominal)	5,25%	5,25%	5,25%
Market (equity) risk premium % (after tax)	0,00%	0,00%	0,00%
Asset beta			
Debt beta			
Equity beta	N/A	N/A	N/A
Return on Equity % (after tax)	5,25%	5,25%	5,25%
Return on Equity % (pre tax) - T1 3.6	6,48%*	6,48%*	6,48%*
Debt risk premium %	1,75%	1,75%	1,75%
Interest on debt % (pre tax) - T1 3.7	7,00%	7,00%	7,00%
WACC % (pre tax) - T1 3.5	6,90%*	6,87%*	6,83%*

* For the purpose of establishing air navigation charges cost base, IMWM used post-tax ROE. As a consequence values used in the reporting tables were lower than ones presented in the table above.

ANSP/Entity: IMWM	RP2 PP					
Assumptions for the Cost of Capital (WACC) in nominal terms	Underlying assumptions for an "efficient" WACC	For the determined cost of capital				
		2015 D	2016 D	2017 D	2018 D	2019 D
Capital structure (% debt)	60%	0,0%	0,0%	0,0%	0,0%	0,0%
Corporate tax rate %	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%
Risk free rate % (nominal)	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%
Market (equity) risk premium % (after tax)	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Asset beta	0,00	0,00	0,00	0,00	0,00	0,00
Debt beta	0,00	0,00	0,00	0,00	0,00	0,00
Equity beta	1,00	N/A	N/A	N/A	N/A	N/A
Return on Equity % (after tax)	4,00%	4,00%	4,00%	4,00%	4,00%	4,00%
Return on Equity % (pre tax) - T1 3.6	4,94%	4,94%	4,94%	4,94%	4,94%	4,94%
Debt risk premium %	1,52%	1,11%	1,11%	1,11%	1,11%	1,11%
Interest on debt % (pre tax) - T1 3.7	5,52%	5,11%	5,11%	5,11%	5,11%	5,11%
WACC % (pre tax) - T1 3.5	5,29%	4,94%*	4,94%*	4,94%*	4,94%*	4,94%*

* For the purpose of establishing air navigation charges cost base, IMWM uses post-tax ROE. As a consequence values used in the reporting tables are lower than ones presented in the table above.

Asset base

ANSP/Entity: IMWM	RP1 PP
Components of the asset base	
3.1 Net book val. 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	n/a
3.3 Net current assets	Average net value of working assets <ul style="list-style-type: none"> • <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:

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	<p>(net working assets at the beginning of the year + net working assets at the end of the year) : 2</p> <p>Working assets are all amounts due on account of the agreement for meteorological services for civil aviation 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 installment, namely 1/12 part of the amount written in the agreement.</p> <p>Short-term liabilities - accepted at an average index level resulting from the division of short term liabilities by working assets.</p>
3.4 Total asset base	The increase in the total asset base is caused mainly by the purchase of AWOS systems that was planned for the RP1.

Average asset base	2012 D	2013 D	2014 D	2012 A	2013 A	2014 A
Net book val. fixed assets	4 897	6 716	8 329	135	85	81
Adjustments total assets	0	0	0	0	0,0	0
Net current assets	1 345	1 294	1 349	1 166	1 237	1 376
Total asset base	6 243	8 010	9 678	1 301	1 323	1 457

IMWM	2014 D	2014 A
Cost of capital pre tax rate %	6,44	3,74
Return on equity %	5,25	3,74
Average interest on debts %	7,00	0,00

Due to the IMWM methodology of calculating cost of capital, which is used to calculate cost of capital for the whole activity of meteorological services of the Institute, and not for individual air navigation charges, for the purpose of calculating cost of capital for en route charges the actual rate of return on equity was assumed. This method of calculating is consistent with the calculation of cost of capital for previous years, i.e. 2012-2013 and at the same time results from existing in the area of MET, costs divisions to products, which are then assigned to specific navigation charges. Under the determined cost method that different approach to calculating actual cost of capital has no impact on ANS charges.

ANSP/Entity: IMWM	RP2 PP
Components of the asset base	
3.1 Net book val. 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	n/a
3.3 Net current assets	<p>Average net value of working assets</p> <ul style="list-style-type: none"> <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 <p>Working assets are all amounts due on account of the agreement for meteorological services for civil aviation 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 installment, namely 1/12 part of the amount written in the agreement.</p> <p>Short-term liabilities - accepted at an average index level resulting from the division of short term liabilities by working assets.</p>
1.4 Total asset base	There is no increase in the total asset base. No investments are planned within the scope of IMWM's limited designation.

Average asset base	2015	2016	2017	2018	2019
Net book val. fixed assets	860	773	652	454	289
Adjustments total assets	0	0	0	0	0

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

Net current assets	1 460	1 516	1 539	1 555	1 585
Total asset base	2 320	2 289	2 192	2 009	1 874

III. CAA

CAA does not calculate the cost of capital and does not include it in its cost base.

(f) total costs per airport for each airports with fewer than 70 000 IFR air transport movements per year, when these are provided in a consolidated way in the reporting table;

Not applicable to en-route Charging Zones

g) Definition of the criteria used to allocate costs between terminal and *en route* services for each airport within the scope of this Regulation;

Not applicable to en-route Charging Zones

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

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, Aerodrome Meteorological Offices - 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, nsMHS, 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; satellite communication SADIS; 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;

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

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 watch system
- Telecommunication infrastructure
- Hydrological-meteorological stations network
- Aerology measurements system
- Meteorological radars and air discharge systems
- Satellite data reception 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 watch system
- Hydrological-meteorological stations network
- Aerology measurements system
- Satellite data reception 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.

Changes in comparison to the RP1:

Due to limited scope of IMWM's designation, only part of the MET costs calculated as described above (both, direct and core costs) is included in ER cost base for the RP2. This part is based on scope of products that will be provided by IMWM in the RP2 under the designation.

i) Description of the methodology used for allocating total MET costs and MET core costs to civil aviation and between Charging Zones;

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

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

Breakdown of the cost of meteorological services to civil aviation between users of the service for the RP1 and the RP2 was compiled using the methodology of product in accordance with SES Law. In this elaboration, principle of costs transparency and charging individual users only for costs of services which they actually use has been applied.

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 Offices (BPM) and the Aerodrome 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 2012-2014 and 2015-2019. 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 aerodrome 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;
 - Labor 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 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.

The list of products which are being prepared for the users in the RP1 is in accordance with ICAO Annex 3.

For the RP2, due to limited scope of IMWM's designation, a list of MET products was prepared that divides all MET products into those delivered under designation and others. This list has been prepared following detailed analyses by IMWM, PANSa and CAA as was also consulted with Ministry of Infrastructure and Development as the body designation MET providers. Following this definition of products (division in two parts) and based on cost of each product delivered by IMWM the value of ER costs for IMWM was calculated. This value includes direct costs related to those products covered by designation as well as part of core costs (defined as described in letter h) above).

As indicated in letter a) above, ER costs include also part of MET costs that will be purchased by PANSa following a public tender. As described above, the allocation of MET costs presented in PANSa's cost base is like 40/60 accordingly for ER and TNC. This proportion reflects allocation of MET products as based on Annex II to WMO document No 904.

The value of MET costs in PANSa's cost bases was calculated on the basis of historic data on these costs (actual data for 2013 and forecast for 2014) as well as PANSa's experience from public tenders that were taking place before the date of submission of the performance plan for RP2. These costs

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

also reflect possible increase in MET costs that results from purchase and installation of new AWOS system at Polish airports – this installation needs to take place urgently as the systems currently used are outdated and cannot be used any longer. Full cost of AWOS is included in PANSA's cost bases and is allocated to ER and TNC respectively based on the product methodology presented above.

j) Nineteen months before the start of a reference period, description of the reported forecast costs and traffic;

Not applicable for this submission

k) Description of the reported actual costs and the difference from the determined costs, for each year of the reference period;

Data for 2012 has been reported as part of the 2012 NSA Monitoring Report. Data for 2012 was sent on October 30, 2013 by ETNA, further explanation was sent on November 26, 2013 also by e-mail (some slight modifications were made in the actual 2012 ER costs allocated by services without any impact for 2012 total costs in both - ER and TNC).

Part of data for 2013 has been reported in the 2013 NSA Monitoring Report. Data for 2013 was sent on October 31, 2013 by ETNA.

Part of data for 2014 has been included in the 2014 NSA Monitoring Report. Final, audited actual figures for PANSA, IMWM and CAA for 2014 are presented below. The same data is presented in reporting tables under actual 2014.

I. PANSA

RP1 Monitoring – Year 2014			
ANSP: PANSA*			
Cost details `000	2014 Actual	2014	
		Determined	Difference
Staff	403 494	425 555	-22 061
Other operating costs	142 272	90 292	51 980
Depreciation	49 971	69 561	-19 590
Cost of capital	2 003	10 503	-8 501
Exceptional items	0	0	0
Total costs	597 740	595 911	1 829

During the RP1, PANSA has been monitoring its costs, resources and expenditures in order to keep them at a rational and reasonable level.

Explanation of 2014 differences in each group of costs is presented below.

Staff Costs – The difference comes from realization of S4 Strategic Goal – Cost-Effectiveness. Number of Employees was lower than planned (1 804 vs 1 904 – 5,3% lower). Staff resources were used more flexible.

Other operating costs – The difference of 51 980 kPLN is the consequence of Increasing Provision for Compensation according to non-contractual usage of land, previously belonged to Branicki's Family. 76 680 kPLN of total compensation amounting to 92 364 kPLN was assigned to en-route Air Navigation Services. Excluding this onetime provision, PANSA reduced other operating costs by amount of 24 700 kPLN mainly due to lower consumption of materials and energy as well as lower costs of trainings, servicing and rental expenses.

Depreciation - The difference between planned and actual figures of depreciation for 2014 is due to the delay in completion of a few investments and fixed assets.

Cost of Capital – The difference is the consequence of lower asset base than assumed (by 29%) and lack of external financing of PANSA. That implicated decrease in cost of capital rate by 73%.

II. IMWM

RP1 Monitoring – Year 2014
ANSP: IMWM*

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

Cost details `000	2014 Actual	2014	Difference
		Determined	
Staff	4 910	6 017	-1 107
Other operating costs	12 232	11 829	403
Depreciation	38	1 044	-1 005
Cost of capital	54	623	-569
Exceptional items	0	0	0
Total costs	17 235	19 513	-2 278

Staff costs – The total staff costs planned for en-route amounted to PLN 6 017 108, actual total staff costs accounted for PLN 4 909 748. The excess was PLN 1 107 360 and results from cancellation of planned salary increases and reduction of employment in aeronautical weather observation systems (AWOS) service. Other reason of this is suspension of the bonus system for employees in 2014 due to the decisions on designation of the Minister of Infrastructure and Development.

Other operating costs – The total operating costs planned for en-route charges amounted to PLN 11 829 306. The actual total costs amounted to PLN 12 232 429. The difference accounts for PLN 403 123. The costs of data purchase from PANSA's existing AWOS system are also included in the other operating costs. IMWM had to prolong the period of purchasing AWOS data from PANSA for longer period than it was initially assumed due to delay in purchasing of new AWOS systems.

Depreciation - Depreciation planned was PLN 1 043 627, actual total costs amounted to PLN 38 298. Difference amounted to PLN 1 005 329, it results from withhold of investments related to purchasing of AWOS systems, which finally has not been realized, and other investments related to implementation of AWOS system (i.e. equipping service crew in cars and hardware, etc.).

Cost of capital - Planned cost of capital amounted to PLN 623 278, actual cost of capital accounted for PLN 54 483 and the difference was PLN 568 795. It results from unrealized equipment purchases of AWOS systems, on which credit was to be taken.

III. CAA + EUROCONTROL

For the CAA comparison of determined costs and actual figures is presented in the table below.

CAA en-route costs	2014A	2014D	Difference
Total (nominal 000 PLN)	6 162	7 252	-1 090
staff	4 127	4 617	-491
other operating costs	2 035	2 635	-599

Lower 2014 ER costs of the CAA result from lower total budget of the CAA than assumed when performance plan for RP1 was drafted, as well as restructuring process that was carried out over 2013-2014. The said restructuring process led to internal reallocation of resources as well as optimization of their use, also impacting the level of CAA ANS costs and within them also ER costs.

As regards total state costs (CAA+EUROCONTROL – see table below, where EUROCONTROL figures are preliminary figures as per May 22nd, 2015 still subject to the finalisation of the financial audit of the Annual Accounts of the EUROCONTROL) actual figures are higher than determined costs, what results mainly from differences in exchange rates (planned vs. actual). In the reporting tables EUROCONTROL preliminary figures are presented as actual cost for 2014 (preliminary EUROCONTROL figures were provided by EUROCONTROL Secretariat to members of the Enlarged Committee by email dated 22.05.2015 (kEUR 10 231)).

CAA+EUROCONTROL en-route costs	2014A	2014D	Difference
Total (nominal 000 PLN)	48 965	45 279	3 686
staff	4 127	4 617	-491
other operating costs	42 839	40 662	4 177

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

EUROCONTROL costs	2014A	2014D	Difference 2014D- 2014A
Total EUR (nominal 000)	10 231	10 007	-224
Exchange rate	4,18	3,80	-
Total PLN (nominal 000)	42 803	38 027	-4 776
<i>2014 actual costs are preliminary figures, still subject to change following audit of Eurocontrol financial results</i>			

l) Description of the reported actual service units and the differences both against the forecast and compared with the figures provided by EUROCONTROL, as appropriate, for each year of the reference period;

For the purpose of establishing costs and proposing unit rates for the RP1 STATFOR SU forecast has been used (SUF2, May 2011). Actual SU for 2012, 2013 and 2014 are based on EUROCONTROL STATFOR data as well (7-year IFR Flight Movements and Service Units Forecast 2013-2019 dated February 2013 for 2012, 7-year IFR Flight Movements and Service Units Forecast 2013-2019 dated February 2014 for 2013 and 7-year IFR Flight Movements and Service Units Forecast 2015-2021 dated February 2015 for 2014). The STATFOR figures are presented in the table below.

Year	Forecasted Total Service Unit	Actual Total Service Unit (Eurocontrol)	Difference
1	2	3	(3/4)
2014	4 161 000	3 930 688	-5,54%
2013	4 021 000	3 983 698	-0,93%
2012	3 898 889	3 854 458	-1,14%

m) Every year of the reference period, the difference between the investments of the air navigation service providers recorded in the Performance Plans and the actual spending, as well as the difference between the planned date of entry into operation of these investments and the actual situation.

Actual data for 2012 was reported in 2013 as a part of the 2012 NSA Monitoring Report. Actual data for 2013 for PANSa was reported as a part of the 2013 NSA Monitoring Report. Actual data for RP1 for IMWM is presented below. Information for PANSa on 2014 actual investments is part of the 2014 NSA Monitoring Report and is presented below, as well.

I. PANSa

Investments recorded for 2014 in PP for RP1 (both En-route and terminal) amounted to kPLN 114 068 and were realised in 67% (kPLN 76 557). In 2014 PANSa spent kPLN 106 261. Detailed information is shown in table below:

RP1 Monitoring – Year 2014			
ANSP: PANSa			
Capex '000	2014 NPP RP1	2014 Actual	2014 Difference
Radio location systems (PSR MSSR Warszawa, PSR/Mode SSR in Kraków and North-East Poland)	26 000	815	-25 185
Ground stations (Włocławek, Legnica, Drezdenko, Szymany, Poznań, Warszawa, Kokoszyki, Somolino, Trzebielino, Złota Karczma, Kraków) *	0	10 098	10 098
Integrated Area Control Centre in Warsaw	2 000	646	-1 354
Modernization and develop of the NAV structures in FIR Warszawa (DME:Wieluń, Trzebnica, Jędrzejów, N. Targ, Linin, Wiczo, Kmiecín, Karnice)(DVOR/DME: Łódź, Szczecin,Czempin) *	15 000	9 671	-5 329
TWR projects (Poznań, Kraków)	16 616	19 556	2 940
Modernization and develop of ILS/DME invsts.(Katowice, Warszawa, Szczecin) *	9 200	2 759	-6 441

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

Transmitter and receiver system needed to complete implementation of 8.33 kHz channel separation above FL 195	5 000	0	-5 000
Sub-total main Capex above	73 816	43 545	-30 271
Sub-total others (according to Performance Plan 2014)	40 252	33 012	-7 240
Total (according to Performance Plan)	114 068	76 557	-37 511
Total value of 2014 investments realized	106 261		

Investments planned for 2014, not completed in 2014, were finished in Q1 2015 (OR Szczecin, DVOR/DME Czempin and OR Warszawa) or will be finished by the end of 2015 (Hyperbolic radar system, DME Kmiecín, DME Karnice, OR Poznań, OR Rzeszów and OR Gdańsk). Delays in realisation of the Plan will not have negative effect on PANSA operating activity. Other Investments (PSR MSSR Warszawa and Radar for Kraków) are replacing current still operational assets and will be utilised successfully until final replacement.

II. IMWM

NPP for RP1 covered two planned investments, one were the AWOS systems and the second one the MAWS stations. It assumed purchase of AWOS for 5 airports (EPWA, EPKK, EPGD, EPBY (instead of EPPO) and EPWR) as well as purchase of additional equipment for MAWS for EPRZ and EPPO.

The purchase of AWOS systems did not take place due to public procurement law – related issue: cancellation of one of the bidding procedures and prolonged preparation of another one due to unforeseeable circumstances.

MAWS investments were performed in the RP1, but not in the assumed years (the end of realization of MAWS investments took place in 2014).

The table below shows summary of these plans against the realization.

	Name of investment	AWOS system	MAWS	TOTAL
	Description/ explanation of the changes	Delay caused by procurement issues.		
	Date of entry into operation planned in the PP	2012 - 2014	2012 - 2014	
	TOTAL planned CAPEX for the project (RP1) PLN	19 931 000	1 368 570	21 299 570
	Lifecycle (Amortisation period in years)	10	10	
2012 Investments planned for 2012 (Initial PP for RP1)	Planned CAPEX in the PP PLN	12 027 000	594 890	12 621 890
	Actual CAPEX PLN	0	125 454	125 454
	Deviation A-P PLN	-12 027 000	-469 436	-12 496 436
	Actual date of entry into operation	2013	2012 - 2014	
2013 Investments postponed/delayed from previous years (2012 PRB Monitoring report)	Planned CAPEX in the PP PLN	12 027 000	469 436	12 496 436
	Actual CAPEX PLN	0	390 000	390 000
	Deviation A-P PLN	-12 027 000	-79 436	-12 106 436
	Actual date of entry into operation	2014	2014	
2013 Investments planned for 2013 (Initial PP for RP1)	Planned CAPEX in the PP PLN	3 952 000	773 680	4 725 680
	Actual CAPEX PLN	0	0	0
	Deviation A-P PLN	-3 952 000	-773 680	-4 725 680
	Actual date of entry into operation	2014	2014	

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

2014 Investments postponed/delayed from previous years (2012 or 2013 Monitoring report)	Planned CAPEX in the PP PLN	15 979 000	853 116	16 832 116
	Actual CAPEX PLN	0	293 000	293 000
	Deviation A-P PLN	-15 979 000	-560 116	-16 539 116
	Actual date of entry into operation	closed	completed	
2014 Investments planned for 2014 (Initial PP for RP1)	Planned CAPEX in the PP PLN	3 952 000		3 952 000
	Actual CAPEX PLN	0		0
	Deviation A-P PLN	-3 952 000		-3 952 000
	Actual date of entry into operation	closed		

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

ADDITIONAL INFORMATION – 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 airports;

There is 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;
- 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.

c) Description of the other revenues, if any, broken down between the different categories;

I. PANSA

The income from other sources planned for years 2015-2019 is due to the expected possible payment from the European Union. PANSA applied for the refinancing of the several investments from the Infrastructure and Environment Operational Program. The income from other sources planned for years 2013-2014 was also due to the expected possible payment from the European Union.

For the RP2 it was assumed that starting 2013 respective depreciation corrections as well as cost corrections related to promotion, feasibility study, training and land purchase (deductions, presented as income from other sources) will contribute to ER cost base in the following years, with amounts presented in the table below. Due to actual lower level of other revenues than forecasted for the RP1, the differences between forecasted amounts of other revenues and actual will decrease the amounts of other revenues planned for the RP2. Final amounts of other revenues which are included in reporting tables are showed in the table below as well.

	2013	2014	2015	2016	2017	2018	2019	Total
Other revenues forecasted for RPI	25 053	21 705						46 758
Other revenues actual value	8 380	10 388						18 768
Adjustment	16 673	11 316						27 989
Other revenues forecasted for RPII			15 234	17 155	16 693	16 275	13 399	78 756
Correction for the RP2			-15 234	-12 755				27 989

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

Other revenues forecasted for RP2 considering correction	0	4 400	16 693	16 275	13 399	50 767
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II. IMWM

IMWM does not plan for the RP2 any additional income covering the costs of meteorological services for civil aviation, except for expected agreement between PANSa and IMWM, covering these costs. IMWM did not plan any additional income in the RP1 as well. Also, IMWM does not provide the meteorological services for the military aviation and does not plan obtaining any income for such services in years 2015-2019. 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. CAA

There are no revenues from other sources planned for the RP2, also there were no revenues from other sources planned in the RP1.

d) Description and explanation of incentives applied to users of air navigation services;

No incentives are applied on airspace users in Poland.

e) Description and explanation of the modulation of air navigation charges applied.

N/a.

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

ADDITIONAL INFORMATION – 3 – Complementary Information

a) Breakdown of the costs of common projects per individual project;

N/a.

b) Description of the amounts resulting from uncontrollable costs factors by nature and by factor, including the rationale and the changes in underlying assumptions;

Actual data for 2012 and 2013, as well as latest preliminary forecast for actual 2014 data are part of the 2014 NSA Report on costs exempt from cost-sharing. Data for these years has to be sent to the Commission before June 1st, 2015.

For RP1 the only category of uncontrollable costs shall be EUROCONTROL costs. Current information on differences between determined and actual costs in this category can be found in Table 3 as well as point k of Additional information to Table 1 above. The amount of uncontrollable costs for 2014 is still not final due to the lack of final actual EUROCONTROL costs for 2014, however it does not influence the eligibility of EUROCONTROL costs as uncontrollable costs exempt from cost-risk sharing mechanism.

c) Description of the carry-overs of over- or under-recoveries incurred by Member States up to the year 2011 for en route charges and up to the year 2014 for terminal charges;

The adjustment mechanism resulting from the differences recorded up to 2011 continues to be applied in line with the Charging Regulation. That is why under or over-recoveries incurred prior to the start of the RP1 should be taken into account during establishing unit rates for the RP2.

The table below presents balances of ER under/over recoveries of 2008-2011 that will be added to or deducted from chargeable cost base in the RP2.

Unit rates for 2015, 2016, 2017 will be affected by respective over-recoveries as shown in the table below.

Carry-over from	Balance of the year	To 2010	To 2011	To 2012	To 2013	To 2014	To 2015	To 2016	To 2017
2008	26 424	2 960	7 609	5 285	5 285	5 285			
2009	-21 976		-4 395	-4 395	-4 395	-4 395	-4 395		
2010	82 278			16 456	16 456	16 456	16 456	16 456	
2011	57 384				11 477	11 477	11 477	11 477	11 477
Total		2 960	3 214	17 345	28 822	28 822	23 537	27 932	11 477

d) Description of carry-overs resulting from the traffic risk-sharing mechanism;

The actual 2012 traffic was lower by 1,1% than forecasted. The actual 2013 traffic was lower by 0,9% than forecasted. As that is less than 2%, in accordance with the EC Charging Regulation the loss in revenue is not carried forward.

The actual 2014 traffic was lower by 5,54% than forecasted in PP for RP1. Therefore, kPLN 14 717, being 70% of revenue lost due to traffic variation above 2% from the forecast, has been registered in 2014 in relation to traffic risk-sharing mechanism. The amount of kPLN 14 717 will be carried forward to 2016.

The over / under-recovery mechanism from previous years, which was subject to the settlement in 2012 in amount of kPLN 13 956 in 2013 in the amount of kPLN 26 831, was not completely paid off due to the lower actual number of service units in relation to the amount predicted. Unsettled part of

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

the adjustment (kPLN 159 for 2012 and kPLN 249 for 2013) was included respectively in 2014 and 2015 cost base for calculation of the UR.

Similarly, the over / under-recovery mechanism from previous years, which was subject to the settlement in 2014 in amount of kPLN 28 822, was not completely paid off due to traffic lower by 5,54 %. Unsettled part of the adjustment, together with other carry-overs resulting from risk-sharing in 2014 (inflation adjustment, over / under recoveries from traffic variation) will be included in 2016 cost base for calculation of the UR (see item 3.3 in Reporting Table 2 – kPLN 1 407).

e) Description of carry-overs resulting from the cost sharing mechanism.

Except for EUROCONTROL costs (see letter b) above) in years 2012-2014 no factors listed in article 11a point 8 letter c) of Regulation No 1794/2006 as amended by Regulation No 1191/2010 occurred in Poland, hence no other differences relating to uncontrollable costs were identified to be carried over to the RP2. Actual data for 2012 and 2013, as well as latest preliminary forecast for actual 2014 data (final data still not available) are reported as part of the 2014 NSA Report on costs exempt from cost-sharing.

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

ADDITIONAL INFORMATION – 4 – Additional justifications for the RP2 Performance Plan

a) Contribution of the air navigation service providers to the achievement of the performance target

ANSP:	PANSA	Designated for:	ATS
Determined costs for RP2 (by nature)			
1.1 Staff costs			
Composition of the cost item:	Salaries, Contributions to pension and accident insurance and contributions to the Social Fund includes obligatory contributions to pension and accident insurance		
Explanations of the planning assumptions and annual variations in the cost item over RP2:	<p>PANSA is realising "Poland's Regional Planning Concept 2030" published on 27 April 2012 as appendix to the Resolution No 239 of the Council of Ministers dated 13 December 2011</p> <p>The following have a significant influence on Staff costs:</p> <ul style="list-style-type: none">- the increase in planned number of ATCOs in accordance with the document 'Air traffic controllers in PANSA in years 2014-2019', prepared by Personnel Training and Development Office;- increase of licensed ATCOs;- costs of salaries of air traffic controllers, according to the Remuneration Regulations in PANSA, depend on the individual level of experience, complexity of airspace and level of air traffic;- conducting the Real-time Simulation, involving the ATC staff, as a part of the new airspace and new ATC sectorisation project, planned to be implemented in 2015. <p>Bonus fund was planned on the basis of Remuneration Regulations, which includes incentive bonus system for employees, and is leading to:</p> <ul style="list-style-type: none">- ensure the smooth functioning of PANSA and air traffic safety,- ensure implementation of planned tasks,- improvement of PANSA's economic performance,- improved productivity and quality of work. <p>The bonus fund can be allocated to employees under the conditions such as: the scheduled tasks are realized and the planned PANSA's revenues are achieved.</p>		
Description of cost-efficiency improvements planned in RP2:	<p>To make the work of PANSA's employees more efficient and to increase the benefits resulting from increased efficiency, it is necessary to motivate employees for further development.</p> <p>The increased level of staff competence, improvement of their knowledge base and skills, will result in increased productivity and efficient use of resources.</p> <p>There is a need to highlighted that as soon as whole process of implementation new ATM system followed by airspace change will be finished PANSA will offer sufficient airspace throughput and performance as its contribution to the Network operational performance.</p>		
Main changes compared to RP1 (determined and actual costs):	During the implementation of PEGASUS_21 PANSA had to involve temporarily the staff above the normal work time to ensure adequate human resources in order to fulfill all the tasks.		
1.2 Other operating costs			
Content of the cost item:	Materials, Energy, Taxes and charges, Services (including MET), Other Costs		
Explanations of the planning assumptions and annual variations in the cost item over RP2:	<p>The variations in the level of other operating costs during the RP2 are caused by the necessity of the modernization of CNS/ATM infrastructure and other PANSA's technical infrastructure, as well as increased demand for spare parts and parts repair services due to aging of the technical infrastructure, as well due to the expected increase in prices of materials and repair services (inflationary increase). Another component of operating costs are costs of technical inspections and maintenance of facilities and equipment used by PANSA, telecommunications charges, consultancy services, rents and lease payments for rented office space. The infrastructure modernization performed by PANSA should lead to decrease of the technical maintenance costs of individual systems in the following years. The significant position in the other operating costs constitutes the mandatory insurance costs for annually renewed insurance policies, which cover liability and property. Costs of impairment charges belongs also to this group of costs.</p> <p>Trips are the next position of the operating costs. This item consists of business and training trips.</p> <p>The item of other operating costs includes also MET costs as described in letter a in Additional information – 1. These costs correspond to costs presented under Table 1 for PANSA in line 2.7 (Meteorological services). Presentation of these costs is in line with article 7.2 of the EC Charging Regulation No 391/2013.</p>		
Description of cost-efficiency improvements planned in RP2:	Undertaken and planned investment and development activities are aiming for state of the art alternative but proven technical solutions, ensuring the stable functioning of the Agency in the domains of communication, navigation and surveillance. The planned activity is essential to maintain the quality and safety of the services and enable air traffic growth.		
Main changes compared to RP1 (determined and actual costs):	It is assumed that after the implementation of new technical solutions such as: VCS, multilateration, GNSS, relative infrastructure maintenance costs should fall by several percent. However, implementation processes can temporarily increase operating costs. Similar effect should have parallel process of CNS/ATM infrastructure rationalization supported by extended cooperation with neighbouring ANSPs.		

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	Increase in these costs as compared to the RP1 results partly from inclusion of some MET costs. For any comparison between the RP2 and the RP1 MET costs should be deducted (in value presented in line 2.7 (Meteorological services) of PANSa Table 1.
1.3 Depreciation	
Composition of the cost item:	Fixed assets, Investments, Intangible assets
Explanations of the planning assumptions and annual variations in the cost item over RP2:	The rationale for the variations in depreciation is an increase of fixed assets, which value increases as a result of planned investments. This is mainly due to priority projects which are CNS infrastructure and Radar investment projects. PANSa adopted the assumption that 85% of planned capex will be realized in the whole RP2 taking into account i.a. historic data. It has to be underlined that PANSa aims to increase the capability of planned and executed investments and to this end introduced internal changes (including personal, organizational and procedural) that should allow to increase the % of investment realization in the RP2 as compared to the RP1 and before.
Description of cost-efficiency improvements planned in RP2:	PANSa's planned tasks have been harmonized with the company's strategy which was aligned with external strategic plans for the whole European ANS system (e.g. ATM Master Plan). Investments are spread over five-year periods in order to reach the strategic milestones including assumed performance measures and to maintain the unchanged high level of safety. Having taken traffic forecasts (en-route and terminal) into consideration, PANSa had to take a number of actions with the aim to maintain safety, improve capacity and cost-effectiveness parameters as well as to reach environmental goals.
Main changes compared to RP1 (determined and actual costs):	The new investment cycle cumulating with the commissioning of a new ATM system will lead to higher depreciation costs, with the annual depreciation costs systematically higher than in preceding years. Moreover, rebuilding of the ATM system will require the purchasing, upgrading or replacing of many devices. The assumption adopted to calculate depreciation that 85% of planned capex will be realized was not adopted in the RP1 and applies only to determined costs for the RP2.
1.4 Cost of capital	
Composition of the cost item:	See Additional Information 1 point e
Explanations of the planning assumptions and annual variations in the cost item over RP2:	See Additional Information 1 point e
Description of cost-efficiency improvements planned in RP2:	See Additional Information 1 point e
Main changes compared to RP1 (determined and actual costs):	See Additional Information 1 point e
1.5 Exceptional items	
Composition of the cost item:	n/a
Explanations of the planning assumptions and annual variations in the cost item over RP2:	n/a
Determined costs for RP2 (by service)	
Explanations of the annual variations in the cost items over RP2:	The cost of services varies in the same manner as cost by nature. For detail information please see items 1.1 – 1.4
Main changes compared to RP1 (determined and actual costs):	
Additional comments	
<p>FAB</p> <p>The performance plan takes into account also FAB dimension.</p> <p>In order to achieve benefits from FAB cooperation, both ANSP and FAB Council agreed Baltic FAB Implementation Program (BFAB IP). BFAB IP is more detailed version of plans that were submitted to the EC with the submission documents but also alters some of the project to reflect changing environment and situation in both States. BFAB IP defines three main streams of activities covering all areas related to FAB:</p> <ul style="list-style-type: none"> • Optimization of use of the Baltic FAB airspace; • Optimization of ANS provision and supervision within the Baltic FAB; • Best practice sharing and Baltic FAB Development. <p>Each stream of activities encompasses a set of specific projects with their implementation plans and actions towards optimum use of Baltic FAB airspace, beneficial evolution of ANS provision and supervision models and evolution of relationship with the neighboring FABs and neighboring non-EU countries. BFAB IP has been sent to the EC and is awaiting formal acceptance allowing for the formal start of common projects.</p> <p>Both ANSP in preparation to the IP execution, included in their cost base estimated costs of several projects (for example update of the P_21 system) and expected targets reflect assumption that BFAB IP projects will be executed and will achieve expected results.</p>	

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

SESAR

For the RP2 for cost planning PANSA also took into account involvement in SESAR activities. PANSA is fully committed to already commenced and future changes in the air traffic management across Europe. Acknowledging a great importance of SESAR as a very challenging, long term Air Traffic Management modernisation project, PANSA wants to actively participate in the formal structures of SESAR as well as in the implementing projects.

PANSA's objective is to participate in the SESAR deployment governance process as well as in the SESAR Joint Undertaking (SJU) as a full member. A full membership in the SJU and in the Deployment Manager will give PANSA a unique opportunity to have a real impact on the future SESAR Deployment Programme and will allow to tailor it best to the needs and expectations of the airspace users. SESAR projects aims to define, develop and deploy a modern and harmonised ATM system and its success is expected to contribute to the increase of the current capacity of systems, reducing ATM costs, reducing negative environmental impact and increasing safety.

PANSA plans around 2 million PLN every year in the cost base for the RP2 as its minimum contribution to the SESAR JU. Active participation in the SESAR programme requires the necessary human resources to meet all the requirements. The necessary tasks with regards to the SJU would include in particular management and coordination within PANSA and with the external partners, financial activities including reporting in the consortium, research and development tasks deriving from PANSA participation in the SJU.

Moreover, PANSA has formally expressed the interest in the management and implementation levels of the SESAR deployment governance following the European Commission's call for expressing of interests. In the near future PANSA wants to be further involved in this European modernization programme. PANSA intends to enter an industrial partnerships with European ANSPs and other operational stakeholders in order to prepare a common bid to the European Commission for the function of the SESAR Deployment Manager and, in case of selection, to be well organized to demonstrate the capacity to implement common projects.

ANSP:	IMWM	Designated for:	MET
Determined costs for RP2 (by nature)			
1.6 Staff costs			
Composition of the cost item:	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;		
Explanations of the planning assumptions and annual variations in the cost item over RP2:			
Description of cost-efficiency improvements planned in RP2:			
Main changes compared to RP1 (determined and actual costs):	Due to limited scope of IMWM's designation values of IMWM costs for the RP2 cannot be compared with those of the RP1. Values for the RP2 cover smaller number of MET products and therefore are lower.		
1.7 Other operating costs			
Content of the cost item:	Indirect costs proportional to remuneration fund and remuneration-related expenditures; materials and equipment spare parts; third party services; telecommunication, business trips inside and outside the country directly connected with meteorological services for civil aviation; trainings and conferences; lease of premises and meteorological ground; relevant part of core costs.		
Explanations of the planning assumptions and annual variations in the cost item over RP2:			
Description of cost-efficiency improvements planned in RP2:			
Main changes compared to RP1 (determined and actual costs):	Again, as in staff costs, due to limited scope of IMWM's designation values of IMWM costs for the RP2 cannot be compared with those of the RP1. Values for the RP2 do not include for example AWOS costs as those are not related to the scope of IMWM designation for the RP2.		
1.8 Depreciation			
Composition of the cost item:	Depreciation of fixed assets		
Explanations of the planning assumptions and annual variations in the cost item over RP2:	Depreciation costs include also small items related to fixed assets allocated to ER services within the scope of IMWM's designation for the RP2.		
Description of cost-efficiency improvements planned in RP2:			
Main changes compared to RP1 (determined and actual costs):	Determined costs for the RP1 included also depreciation on AWOS systems that were planned to be purchased by IMWM in the RP1. This investment was, however, not carried out. Values for the RP2 do not include AWOS systems as those are not related to the scope of IMWM designation for the RP2.		
1.9 Cost of capital			
Composition of the cost item:	See Additional Information 1 point e		
Explanations of the planning	See Additional Information 1 point e		

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assumptions and annual variations in the cost item over RP2:	
Description of cost-efficiency improvements planned in RP2:	See Additional Information 1 point e
Main changes compared to RP1 (determined and actual costs):	See Additional Information 1 point e
1.10 Exceptional items	
Composition of the cost item:	n/a
Explanations of the planning assumptions and annual variations in the cost item over RP2:	n/a
Determined costs for RP2 (by service)	
Explanations of the annual variations in the cost items over RP2:	The cost of services varies in the same manner as cost by nature. For detail information please see items 1.1 – 1.4
Main changes compared to RP1 (determined and actual costs):	Due to limited scope of IMWM's designation, values of IMWM costs for the RP2 cannot be compared with those of the RP1. Values for the RP2 cover smaller number of MET products and therefore are lower.
Additional comments	
The level of IMWM costs for the RP2 was estimated by the CAA on the basis on information and documents provided by IMWM, including the business plan provided in April 2014 as well as historic data.	

b) Assumptions underlying the calculation of pension costs comprised in the determined costs, including a description on the relevant national pension regulations and pension accounting regulations in place and on which the assumptions are based, as well as information whether changes of these regulations are anticipated.

Assumption used for the purpose of establishing determined cost values in the PP with regard to the pension contribution level is the contribution rate on the level of 9,76% (in accordance with the Act on Social Security System (OJ 2009 No 205, item 1585, as amended). This applies to all entities covered by the PP as all of them are subject to mandatory national pension scheme. Apart from this national obligatory system, PANSA has introduces additional pension scheme which is described below.

Entity PANSA

On the date 8th April, 2009 on the basis of administrative decision issued by the Polish Financial Supervision Authority the pension scheme of the PANSA employees pension scheme (hereinafter referred as to the "Scheme") was registered in the employees' pension schemes register.

The Scheme is structured as a group life insurance agreement with an insurance capital fund. The Scheme has been established based on the Employees Pensions Scheme Act, 20th April, 2004 (Journal of Laws of 2004, no 116, item 1207, as amended) and results from two agreements, concluded on 26th May, 2008. The first one was signed by PANSA and trade unions established and operating within a structure of PANSA (hereinafter referred as to the "Company Agreement"). The second one was concluded between PANSA and the insurance company acting as a fund manager (hereinafter referred as to the "Management Agreement"). Both agreements have been concluded for indefinite period.

Pursuant to the provisions stipulated in both agreements, PANSA is obliged to pay basic insurance premium. After registration of the Scheme in the respective register, PANSA acting as the employer is obligated to transfer the insurance premium to the insurance company.

The legal basis to establish the Scheme and to pay and transfer basic insurance premium result from an arrangement with trade unions operating within structure of PANSA (such arrangements shall be treated as an internal law), as well as from the provisions of the international public law (international conventions joined by the Republic of Poland) and provisions European and domestic law.

The termination of the functioning of the Scheme is possible under terms stipulated in the Company Agreement and the Management Agreement. Both of the agreements state that termination of the Scheme is possible if the termination arrangement will be agreed by PANSA with employees representation after three months termination period. PANSA may unilaterally terminate the Scheme with 12 months termination notice and only when prior to that date payment of the basic insurance

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premium has been postponed or the amount of the basic insurance premium has been decreased (pursuant to § 21 sec. 6 point 7 of the Company Agreement).

The following tables include amounts for PANSA as a whole entity. The division between ER and TNC is impossible due to PANSA's accounting record which does not allow for such presentation.

Description of the "Pay-As-You-Go" pension scheme (obligatory national scheme)

Pension assumptions for the "Pay-as-you-go" pension scheme					
ANSP/Entity: PANSA	2015 D	2016 D	2017 D	2018 D	2019 D
Total pension costs in respect of "Pay as you go" scheme (in nominal terms in national currency)	19 614 601	20 507 247	20 652 291	21 107 713	21 495 260
% Contribution rate of the ANSP to Pension scheme	0,0976	0,0976	0,0976	0,0976	0,0976
Number of employees contributing	1889	1928	1958	1978	2003
Pension Payments (in nominal terms in national currency)	19 614 601	20 507 247	20 652 291	21 107 713	21 495 260
Number of pensioners	21	19	31	28	19
Pensionable salary (in nominal terms in national currency)	200 971 281	210 120 739	211 601 543	216 271 848	220 242 153

Description of the Defined contributions pension scheme (additional PANSA scheme)

Pension assumptions for the "Defined contributions" pension scheme					
ANSP/Entity: PANSA	2015 D	2016 D	2017 D	2018 D	2019 D
Total pension costs in respect of "Defined contribution" scheme (in national currency)	22 709 844	23 409 045	24 059 723	24 349 524	24 770 547
% Contribution rate of the ANSP to Pension scheme	0,07	0,07	0,07	0,07	0,07
Number of pensionable staff	1517	1517	1517	1517	1517
Pensionable salary (in national currency)	324 423 633	334 414 067	343 708 832	347 849 261	353 864 917

Information only for ER are presented in tables below, but they include only part of information required above.

Pension assumptions for the "Pay-as-you-go" pension scheme					
ANSP/Entity: PANSA	2015 D	2016 D	2017 D	2018 D	2019 D
Total pension costs in respect of "Pay as you go" scheme (in nominal terms in national currency) ER	16 308 208	17 139 966	17 261 051	17 593 900	17 936 932
Total pension costs in respect of "Defined contribution" scheme (in national currency) ER	18 881 693	19 565 290	20 108 961	20 296 045	20 670 028

Entity CAA

Costs of pension contribution for CAA are presented in the following table.

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Pension assumptions for the "Pay-as-you-go" pension scheme					
ANSP/Entity: CAA	2015 D	2016 D	2017 D	2018 D	2019 D
Total pension costs in respect of "Pay as you go" scheme (in nominal terms in national currency) for CAA	2 762 104	2 817 346	2 873 693	2 931 167	2 989 791
Total pension costs in respect of "Pay as you go" scheme (in nominal terms in national currency) for ANS (ER+TNC)	512 124	522 006	520 983	528 272	541 470
Total pension costs in respect of "Pay as you go" scheme (in nominal terms in national currency) for ER	311 266	317 712	317 089	321 526	330 754
Total pension costs in respect of "Pay as you go" scheme (in nominal terms in national currency) for TNC	200 859	204 294	203 893	206 746	210 716

c) Interest rate assumptions for loans financing the provision of air navigation services, including relevant information on loans (amounts, duration, etc.) and explanation for the (weighted) average interest on debt used to calculate the cost of capital pre tax rate and the cost of capital comprised in the determined costs,

Not applicable. No entity plans loans in RP2.

d) If applicable, a description of any significant restructuring planned during the reference period including the level of restructuring costs and a justification for these costs in relation to the net benefits to the airspace users over time;

Not applicable.

e) if applicable, restructuring costs approved from previous reference periods to be recovered

Not applicable for RP1.

f) The level/composition of costs incurred following Article 6(2)(a) and (b) of Implementing Regulation (EU) No 391/2013 and included in the determined costs;

STATE/NSA	Poland (CAA + Eurocontrol costs)
Determined costs for RP2 (by nature)	
1.1 Staff costs	
Content of the cost item:	Staff remuneration (including salaries), social security contributions, Labour Fund contributions, Employee Benefit Fund contributions, medical staff assistance
Explanations of the planning assumptions and annual variations in the cost item over RP2:	<p>For the purpose of staff costs forecasting the following elements were taken into account:</p> <ul style="list-style-type: none"> • most recent CAA ER costs forecast for 2014 (based on the current total CAA budget and staff allocated to ER activities) – used as baseline for the RP2 ANS cost planning, • expected evolution of CAA NSA tasks over each year of the RP2, • assumed changes in the total CAA budget resulting from inflationary increase; it was assumed that total CAA budget after 2015 will increase at lower rate than forecasted inflation (2% p.a.), • assumed work efficiency improvements (see next line of the table).
Description of cost-efficiency improvements planned in RP2:	Cost forecast assumes annual efficiency improvement of 2% as regards ANS staff work efficiency. As a consequence, work efficiency shall be improved by 10% over the whole RP2.

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Main changes compared to RP1 (determined and actual costs):	CAA staff cost forecasting methodology remains as used for the RP1.
1.2 Other operating costs	
Content of the cost item:	For CAA costs: purchase of materials, equipment, external services, energy, utilities, rental costs, travel expenses, training costs, international organizations contributions, investment expenditures. Additionally these costs include also Eurocontrol cost base allocated to Poland.
Explanations of the planning assumptions and annual variations in the cost item over RP2:	For CAA: see item 1.1. above – the same assumptions were applied to other operating costs. Additionally for changes in the total CAA budget the planning takes into account necessity to perform investments in order to maintain technical and organizational capacity of CAA tasks execution.
Description of cost-efficiency improvements planned in RP2:	For CAA cost forecast assumes annual efficiency improvement of 2% as regards ANS staff work efficiency. As a consequence, work efficiency shall be improved by 10% over the whole RP2. For Eurocontrol costs they were included in amounts communicated by Eurocontrol converted into national currency (PLN) using exchange rate presented in chapter 1 of the performance plan (macroeconomic forecasts).
Main changes compared to RP1 (determined and actual costs):	Cost forecasting methodology remains as used for the RP1.
1.3 Depreciation	
Content of the cost item:	n/a
Explanations of the planning assumptions and annual variations in the cost item over RP2:	n/a
Description of cost-efficiency improvements planned in RP2:	n/a
Main changes compared to RP1 (determined and actual costs):	No changes.
1.4 Cost of capital	
Content of the cost item:	n/a
Explanations of the planning assumptions and annual variations in the cost item over RP2:	n/a
Description of cost-efficiency improvements planned in RP2:	n/a
Main changes compared to RP1 (determined and actual costs):	No changes.
1.5 Exceptional items	
Content of the cost item:	n/a
Explanations of the planning assumptions and annual variations in the cost item over RP2:	n/a
Determined costs for RP2 (by service)	
Explanations of the annual variations in the cost items over RP2:	See points 1.1 and 1.2 above. All CAA and Eurocontrol costs: Supervision costs cover costs of the CAA, while Eurocontrol costs are presented under Other state costs.
Main changes compared to RP1 (determined and actual costs):	No changes.

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Reference Periods 1 (2012-2014) and 2 (2015-2019)

Additional comments

For CAA actual 2013 ER costs are lower than assumed in the performance plan for RP1. Current cost forecast for 2014 is also significantly lower than previous forecast presented in the performance plan for RP1. It results mainly from the fact that the CAA total budget is lower than originally assumed.

Share of CAA ANS costs, and among them ER and TNC share, remains at a similar level over the whole RP2 – see table below:

	2014*	2015	2016	2017	2018	2019
Total CAA ANS costs (ER+TNC)	10 074 635	10 638 303	10 814 305	10 819 786	10 943 264	11 170 883
% change (n/(n-1))		5,59%	1,65%	0,05%	1,14%	2,08%
% share in total CAA budget	18,54%	18,54%	18,53%	18,13%	18,02%	18,11%
CAA ER costs	6 192 371	6 465 889	6 581 989	6 585 324	6 660 478	6 823 678
% change (n/(n-1))		4,42%	1,80%	0,05%	1,14%	2,45%
% share in total CAA ANS costs	61,46%	60,78%	60,86%	60,86%	60,86%	61,08%

*current forecast 04.2014

Increase in CAA budget is necessary to enable the CAA perform its functions, including those related to ANS. It has to be underlined that salaries at the CAA has been frozen (in nominal terms) since 2008. Despite significant increase in ANS related tasks (including performance scheme introduction) the CAA has not been supported by additional FTEs, including such that could allow increase in the level of ANS-related employment. In 2013 the CAA budget has been further reduced by 7% (in nominal terms). Due to budgetary restrictions over the last 2 years (2013-2014) the CAA was not able to include investment expenditures in its budget forecasts, what resulted in lack of new investments, including replacement investments. As a consequence, significant part of currently used equipment, including computer hardware and software, requires modernization and replacement. Therefore it was necessary to plan additional investment expenditure, part of which should be allocated also to ANS, including ER.

Calculation of Eurocontrol costs is based on Eurocontrol budget as presented below. The table presents also the exchange rate used for purpose of performance plan for RP2.

	2015	2016	2017	2018	2019
Eurocontrol total costs (000 EUR)	499 861	522 712	541 906	559 604	577 682
Eurocontrol costs - Poland (000 EUR)*	10 112	10 574	10 962	11 320	11 686
% change (n/(n-1))		4,57%	3,67%	3,27%	3,23%
Poland % share in total EUROCONTROL costs	2,02%	2,02%	2,02%	2,02%	2,02%
PLN/EUR exchange rate	4,18	4,18	4,18	4,18	4,18
Eurocontrol costs - Poland (000 PLN)	42 268	44 199	45 821	47 318	48 847
% change (n/(n-1))		4,57%	3,67%	3,27%	3,23%

*2015-2019 based on 2014 sharing keys.

g) Description of how the amounts resulting from uncontrollable costs factors in RP1 have been taken into account in the planned determined costs for RP2.

As the only actual uncontrollable item for the RP1 is EUROCONTROL contribution, no changes in assumptions were made resulting from the uncontrollable cost factors.

h) Assumptions for costs exempt from cost-sharing (deemed outside the control of the ANSP, Member State or qualified entities concerned) relating to RP2 costs.

Entity/ies concerned:	PANSA, IMWM, CAA
Costs exempt from cost-sharing in RP2 - Costs attributed to each in the Performance Plan, description and assumptions on which these costs are based.	

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(i) unforeseen changes in national pensions law, pension accounting law or pension costs resulting from unforeseen financial market conditions	<p>See AI-4 b) for the assumptions</p> <p>As there is not DBO pension scheme in place, only possible changes resulting from national legislation on pensions will be taken into account, that is possible increase or decrease in the percentage contribution (currently 9,76%). The assessment assumes increase of 1 percentage point in the level of pension contribution rate: from 9,76% to 10,76%.</p> <p>I. PANSA</p> <p>The share of the costs of the pension contributions in the total staff costs (gross remunerations with all applicable social contributions, Labour Fund and bridge pension scheme) used for the calculation of the determined costs (total ER+TNC) is equal to 4,11% in 2015, 4,09% in 2016. 3,98% in 2017, 3,95% in 2018. 3,90% in 2019.</p> <p>The impact of the change in the pension contribution level would cause changes in the total determined costs of PANSA (ER and TNC) of:</p> <ul style="list-style-type: none"> • PLN 2 002 845 in 2015, • PLN 2 095 260 in 2016, • PLN 2 100 815 in 2017, • PLN 2 147 504 in 2018, • PLN 2 186 799 in 2019. <p>Consequently, the share in the total staff costs would increase up to 4,51 % in 2015, 4,49 % in 2016. 4,37% in 2017, 4,34 % in 2018. 4,28% in 2019.</p> <p>The impact of the possible change in this PANSA's unforeseeable cost on the ER determined costs is presented jointly with the impact of the possible change in the PANSA's costs connected with national taxation law in the AI 4 letter h) point (iv).</p> <p>II. CAA</p> <p>There will be no impact of changes in the uncontrollable costs on the CAA determined costs for ER costs. This is due to the fact that in accordance with rules and practice applicable to budgetary units, such as the CAA, the total budget is a constant maximum that once established cannot change. In case when due to changes in applicable social security regulations these expenditures form the CAA budget would increase, the CAA would be required to limit other expenditures to as not to increase the level of the total budget.</p>
(ii) significant changes in interest rates on loans, which finance costs arising from the provision of air navigation services	Not applicable. No entity plans taking up a loan.
(iii) unforeseen new cost items not covered in the Performance Plan, but required by law	
(iv) unforeseen changes in national taxation law	<p>For the purpose of establishing determined cost values in the PP with regard to the property tax, the tax at the level of 2% was used (local regulations). For the purpose of the assessment of unforeseen changes in national taxation law the increase of 1 percentage point of the level of property tax rate was assumed (from 2% to 3%).</p> <p>I. PANSA</p> <p>The possible impact of the 1 percentage point change in the property tax rate would cause the increase in the determined costs (ER and TNC) by:</p> <ul style="list-style-type: none"> • PLN 665 699 in 2015, • PLN 682 002 in 2016, • PLN 699 423 in 2017, • PLN 717 044 in 2018, • PLN 734 992 in 2019.

En route Charging zone: Poland
Reference Periods 1 (2012-2014) and 2 (2015-2019)

	<p>The table below presents the impact of the possible changes of property tax and pension regulations on PANSA’s ER determined costs (000 PLN).</p> <table><tr><td>000 PLN</td><td>2015</td><td>2016</td><td>2017</td><td>2018</td><td>2019</td></tr><tr><td>ER</td><td>2 228</td><td>2 326</td><td>2 350</td><td>2 395</td><td>2 445</td></tr></table>	000 PLN	2015	2016	2017	2018	2019	ER	2 228	2 326	2 350	2 395	2 445
000 PLN	2015	2016	2017	2018	2019								
ER	2 228	2 326	2 350	2 395	2 445								
(v) unforeseen changes in costs or revenues stemming from international agreements	Applicable to EUROCONTROL costs. For assumptions see Additional information 4 point f above.												