

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

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.).

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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 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.

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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

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.

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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		
	Determined		
	2012 D	2013 D	2014 D
Assumptions for the Cost of Capital (WACC) in nominal terms			
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

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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 Damodoran 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:

- 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%

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

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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.
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.

Average asset base	2012 D	2013 D	2014 D
Net book val. fixed assets	659 063	723 340	761 618
Adjustments total assets	0	0	0
Net current assets	27 869	72 692	118 452
Total asset base	686 932	796 032	880 070

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

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%
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%

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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	<p>Average net value of working assets</p> <ul style="list-style-type: none"> net working assets- working assets excluding short-term liabilities average net value of working assets 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>	
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
Net book val. fixed assets	4 897	6 716	8 329

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Adjustments total assets	0	0	0
Net current assets	1 345	1 294	1 349
Total asset base	6 243	8 010	9 678

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"> net working assets- working assets excluding short-term liabilities average net value of working assets 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
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

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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), 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;
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

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- 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;

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

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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 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 as part of the 2013 NSA Monitoring Report. Final, audited actual figures for PANSA, IMWM and CAA for 2013 are presented below. The same data is presented in reporting tables under actual 2013.

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I. PANSA

RP1 Monitoring – Year 2013			
ANSP: PANSA*			
Cost details `000	2013 Actual	2013	
		Determined	Difference
Staff	385 660	413 985	-28 325
Other operating costs	60 048	87 469	-27 421
Depreciation	48 712	63 553	-14 841
Cost of capital	19 702	30 170	-10 468
Exceptional items	0	0	0
Total costs	514 122	595 177	-81 055

The total staff costs planned for ER amounted to PLN 413 985, actual total staff costs accounted for PLN 385 660. Lower labor costs than planned are associated with monitoring of staff costs by PANSA and pursue of a mechanism of optimizing these costs. According to staff costs, employment of non-ATCO staff has been suspended. In addition, implementation of P_21 system limited on-the-job training.

The other ER operating costs amounted to PLN 87 469. The actual total costs amounted to PLN 60 048. Lower than expected other operating costs are mainly due to lower actual costs of materials and energy, outsourced services as well as the cost of training and travel. In terms of materials and energy costs, the actual was lower than plan due to unrealized purchases of spare parts (there were not so many failures). Part of the cost was postponed to 2014 due to the shift of contract signing under public procurement law, such as IT spare parts. Due to the softer winter heating costs (gas oil) proved to be lower. Regarding the cost of other services – as the effect of negotiations, the cost of office lease agreement was lower than planned due to the crisis prevailing in the offices rental market. Moreover, costs of insurances (due to new contract in accordance with the public procurement law), business and trips were reduced too.

Depreciation planned was PLN 63 553, actual total costs amounted to PLN 48 712. It results from lower than planned investment plan realisation and postponed implementation of some fixed assets. Planned cost of capital amounted to PLN 30 170, actual cost of capital accounted for PLN 19 702. It results from lower than planned investments plan realisation and financing of the activity from PANSA own equity.

It can be noted that the actual 2013 figure for other operating costs for PANSA does not include any MET costs. All MET costs for ER are included into IMWM costs as covered by its designation.

II. IMWM

RP1 Monitoring – Year 2013			
ANSP: IMWM*			
Cost details `000	2013 Actual	2013	
		Determined	Difference
Staff	5 224 887	5 617 085	-392 198
Other operating costs	12 339 114	11 861 156	477 958
Depreciation	58 379	779 796	-721 417
Cost of capital	57 265	525 427	-468 162
Exceptional items	0	0	0
Total costs	17 679 534	18 783 353	-1 103 819

Staff costs – The total staff costs planned for en-route amounted to PLN 5 617 085, actual total staff costs accounted for PLN 5 224 887. The excess was PLN 392 198 and results from cancellation of planned salary increases and reduction of employment in aeronautical weather observation systems (AWOS) service.

Other operating costs – The total operating costs planned for en-route charges amounted to PLN 11 861 156. The actual total costs amounted to PLN 12 339 114. Main reason for exceeding

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operating costs by PLN 477 958 was underestimation of costs of basic systems when cost base was created. 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 779 796, actual total costs amounted to PLN 58 379. Difference amounted to PLN 721 417, 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 525 427, actual cost of capital accounted for PLN 57 265 and the difference was PLN 468 162. 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	2013A	2013D	Difference
Total (nominal 000 PLN)	6 316 448	7 291 179	-974 731
staff	4 210 977	4 642 278	-431 301
other operating costs	2 105 471	2 648 901	-543 430

Lower 2013 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. 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 still preliminary, awaiting audit results) actual figures are higher than determined costs, what results from differences in exchange rates (planned vs. actual).

CAA+EUROCONTROL en-route costs	2013A	2013D	Difference
Total (nominal 000 PLN)	48 451 657	44 488 512	3 963 145
staff	4 210 977	4 642 278	-431 301
other operating costs	44 240 680	39 846 234	4 394 446

EUROCONTROL costs	2013A	2013D	Difference 2013D- 2013A
Total EUR (nominal 000)	10 048	9 789	-259
Exchange rate	4,19	3,80	-
Total PLN (nominal 000)	42 135	37 197	-4 938
<i>2013 actual costs are preliminary figures, still subject to change following audit of Eurocontrol financial results</i>			

The updated forecasted data for 2014 for PANSA, IMWM and CAA are presented below (000 PLN):

I. PANSA

RP1 Monitoring – Current forecasts for Year 2014	
ANSP: PANSA	
1.1 Staff costs	424 177
1.2 Other operating costs	88 543
1.3 Depreciation	51 042
1.4 Cost of capital	6 852
1.5 Exceptional items	0

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

II. IMWM

RP1 Monitoring – Current forecasts for Year 2014	
ANSP: IMWM	
1.1 Staff costs	6 017
1.2 Other operating costs	11 829
1.3 Depreciation	150
1.4 Cost of capital	300
1.5 Exceptional items	0

The difference between determined cost and actual forecast of cost for 2014 (depreciation, cost of capital) results from partial realisation of investments related to purchasing of AWOS systems and investments related to implementation of AWOS systems (equipping service crew in cars and hardware, etc.).

III. CAA

RP1 Monitoring – Current forecasts for Year 2014	
CAA	
1.1 Staff costs	4 092
1.2 Other operating costs	2 101
1.3 Depreciation	
1.4 Cost of capital	
1.5 Exceptional items	

In the reporting tables EUROCONTROL current forecast of cost for 2014 is based on forecast provided by EUROCONTROL Secretariat to members of the Enlarged Committee by email dated 28.05.2014 (EUR 10 266).

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 and 2013 are based on EUROCONTROL STATFOR data as well (7-year IFR Flight Movements and Service Units Forecast 2013-2019 dated February 2013 for 2012 and 7-year IFR Flight Movements and Service Units Forecast 2013-2019 dated February 2014 for 2013). The STATFOR figures are presented in the table below.

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

The SU forecast for Poland for 2014 (based on EUROCONTROL STATFOR data - 7-year IFR Flight Movements and Service Units Forecast 2013-2019 dated February 2014) amounts to 4 172 564 (increase about 2,78% between the previous forecast and the current one).

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.

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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 2013 for IMWM is presented below.

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 the first half of 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	
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	352 000	352 000
	Deviation A-P PLN	-15 979 000	-501 116	-16 480 116
	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		

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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							8 380
Other revenues		10 711						10 711

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over RP2:	<ul style="list-style-type: none"> 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.
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	See points 1.1 and 1.2 above. All CAA and Eurocontrol costs: Supervision costs cover costs of

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variations in the cost items over RP2:	the CAA, while Eurocontrol costs are presented under Other state costs.
Main changes compared to RP1 (determined and actual costs):	No changes.

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.

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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.	
(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>

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

	<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. <p>The table below presents the impact of the possible changes of property tax and pension regulations on PANSAs ER determined costs (000 PLN).</p> <table><tr><th>000 PLN</th><th>2015</th><th>2016</th><th>2017</th><th>2018</th><th>2019</th></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.												