

POLISH PERFORMANCE PLAN
addendum on revised targets for RP1



SIGN-OFF SHEET

The President of Civil Aviation Office acting as National Supervisory Authority of the Republic of Poland carried out the addendum to Polish National Performance Plan for Air Navigation Service Providers in accordance with Commission Regulation (EU) No 691/2010 of 29 July 2010 *laying down a performance scheme for air navigation services and network functions and amending Regulation (EC) 2096/2005 laying down common requirements for the provision of air navigation services*. The Ministry of Infrastructure approved this addendum to Plan.

The Addendum to Polish National Performance Plan concerns the capacity target in accordance with the reference value provided by EUROCONTROL and cost-efficiency target.

AUTHORITY	NAME AND SIGNATURE	DATE
MINISTRY OF TRANSPORT, CONSTRUCTION and MARITIME ECONOMY (Approve)		
PRESIDENT of CIVIL AVIATION OFFICE		

1. Revised capacity target

1.1 Key figures for the revised capacity target

	2009A	2010A	2011	2012	2013	2014
Reference value from the capacity planning process of EUROCONTROL (en-route ATFM delay min per flight)				0,32	0,31	0,26
En-route ATFM delay prior to RP1 (en-route ATFM delay min per flight)	1,6	1,1	≈0,7			

Initial Performance Plan (June 2011)	National capacity target (en-route ATFM delay min per flight)				1,5	1,0	0,5
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Revised Performance Plan (December 2011)	National capacity target (en-route ATFM delay min per flight)				1,00	1,50	0,48
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Table 1 Revised National capacity target

1.2 Changes and justification for the revised capacity target

The addendum to Polish Performance Plan sets out revised target for the first reference period. **The target value for 2014 expressed in minutes of en route ATFM delay per flight differs from the indicative reference value calculated for Poland during EUROCONTROL capacity planning process.** The planned intermediate values of capacity target differ as well from the reference value. However current situation shows significant improvement in en route capacity in FIR Warszawa, which will result in decrease of en route ATFM delay even below the optimistic forecast, 0,9 min per flight in 2011. Operational limitation related to implementation of the new ATM system Pegasus 2012/2013, followed by the implementation of a new architecture of ACC sectors with a vertical split 2013/2014 firstly will negatively impact the ATC sector capacity and will result in temporary increase of ATFM En Route delay. The 2013 appears as a critical year in ensuring smooth and safe implementation of a new work environment for air traffic controllers. In 2014 there is predicted significant reduction of the delays. In connection with planned in this year final actions aiming the implementation of new system it won't be

able to reach the target consistent with the value calculated for Poland during EUROCONTROL capacity planning process. There is expected for the end of 2014, the decrease of delays approximately 30% with respect to very good result from 2011 and to obtain the benefits resulting from the implementation of new system.

The achievement of delay indicator at the level of 0,26 min/flight in 2014 (the EC recommendation of 23 November 2011) cannot be realized owing to the necessary postponement of the PEGASUS_21 implementation on one hand and the vertical split introduction process which is not to be completed before 2014 on the other.

PANSA predicts, namely, that the average delay in FIR Warsaw will reach 0,48 min./flight in 2014. However, it needs to be emphasized that the above-mentioned value will only be achieved if the implementation of the new ACC sectors' architecture with the vertical split completes successfully at the beginning of 2014. On top of that, it has to be noted that in the course of the new ACC sectors architecture's introduction, capacity restrictions could be imposed in order to guarantee safe and smooth implementation of the work environment for ATCOs.

PANSA's analyses show that in order to reach of fall below 0,26 minute of average per flight in 2014, traffic volume should have been below 620 thousand operations per year. The current traffic forecast of STATFOR and PANSA assumes 740 thousand operations for 2014.

1.3 Appropriate measures to reach the revised capacity target

PANSA has prepared some initiatives to increase the capacity including ATS route network improvements, employment of additional ATCOs (10 per year), dynamic management of sector opening schemes and monitoring of FDP processing capacity. Apart from the above described PANSA's activities enabling to increase airspace capacity ultimately and thus gradually reduce the ATFM delays, the crucial factors shaping the operational effectiveness in this area will be the following:

1. airspace structures development,
2. airways network development,
3. CNS/ATM systems solutions development and
4. ATS staff availability.

Year 2012

- Enhanced cooperation between FMP and DNM with the aim of improving traffic handling,
- Minor ATS route network improvements with the aim of increasing airspace accessibility through Night Routes/Night DCT, Direct Routes, Early Access to Weekend Routes, Free Routes,
- Implementation of changes in the airspace structures of TMA Gdańsk, TMA Poznań and TMA Wrocław with the aim of improving traffic distribution and relieving ACC sectors; the overriding objective of these solutions is the extension of ACC sectors through more efficient utilization of particular TMAs

especially for the time of UEFA EURO 2012™ and by the time the new ACC EPWW structure is implemented. In the face of a gap in ACC EPWW airspace capacity, which could not be closed due to a direct implementation of the new air traffic management system, the airspace modification leads to the extension of particular TMAs airspace in geographical and vertical range. As a result, a significant part of transit traffic will be under control of APP/TWR, which could offload some ACC sectors capacity, which – according to analysis and simulations done in PANSA – might be most loaded with air traffic during the sport event.

- Continuation of recruitment and training process for ACC ATCOs; PANSA's aim for 2012 is to maintain number of operationally available ACC ATCOs; it should be emphasized, that on the job training in 2012 may slow down due to staff training for the new ATM system which commenced in 2011.
- Improved sector configurations based on 8 elementary ACC sectors,
- The implementation of the new ATM system.

PANSA predicts that the above-mentioned activities will increase airspace capacity by 5% in 2012 which will allow to balance forecasted traffic growth for Poland and reach assumed delay target.

Year 2013

- Operational availability of the new ATM system,
- Achievement of the airspace capacity values observed before the implementation of the new ATM system,
- Further ATS route network improvements and implementation of preferred traffic flows,
- Evaluation of sectors' capacity through CAPAN simulation (Capacity Analysis),
- Improved sector configurations based on 9 ACC elementary sectors,
- Real Time Simulation for the new architecture of ACC sectors and preparations for the implementation of the airspace vertical split,
- Continuation of recruitment and training process for ACC ATCOs; the overriding aim of PANSA in terms of human resources issues is to maintain number of operationally available ACC ATCOs; it should be emphasized that on the job training in 2013 may run slower than expected due to transition into the new ATM system.

PANSA is of the view that due to implementation of the new ATM system in November 2012 and transition phase extended over first 5 months of 2013, no increase of capacity is planned in 2013.

Year 2014

- Implementation of the new architecture of ACC sectors with the vertical split,
- Re-evaluation of sectors' capacity,
- Optimization of traffic flows in the vertical split,
- Gradual introduction of new sector configurations,
- Continuation of recruitment and training process for ACC ATCOs; in accordance with the long-term recruitment and training plan for ATCOs, it is expected to have 8 new ACC ATCOs on board in 2014.

PANSA expects that the above-mentioned activities will allow to increase airspace capacity by at least 10%.

It needs to be strengthened that the forecasted airspace capacity values will be consulted with DNM in the framework of preparation of Five-Year Capacity Plan of PANSA.

At the same time, PANSA has defined a series of limitations which may hinder the realization of the above-presented airspace capacity improvement scenarios and impede delay reduction schedule.

The internal limitations are following:

Limitation	Effect
Longer than expected staff accommodation to the new system.	Lack of possibility to offer high capacity in peak hours and lack of possibility to make full use of dynamic capacity management.
Longer than expected period of trust building to the system among the staff.	Lack of possibility to offer high capacity in peak hours.
Delays in implementation of the new ACC sectorisation (introduction of the vertical split).	Impossibility to increase the overall capacity of the system.
Long period of staff adaptation to the vertical split environment.	Lack of possibility to offer high capacity in peak hours and lack of possibility to make full use of the dynamic capacity management.
Longer than planned process of staff shortages reduction.	Lack of possibility to launch new schemes of opening and increasing overall capacity of the system.

The external limitations that may have negative implications on delays reduction of delays by PANSA are following:

- Higher than forecasted air traffic growth rate in the Polish airspace in 2012-2014,
- Operational opening of Berlin Brandenburg International Airport in June 2012,
- European Football Championships UEFA EURO 2012™,

- Implementation of RVSM in the eastern part of the ICAO European region, and thus a new distribution of traffic and the possibility of air traffic increase in the Polish airspace,
- Implementation of new ATM systems or changes in airspace organization of neighboring FIRs.

To conclude, it needs to be emphasized that there is no room for PANSa to increase airspace capacity and reduce delays in future through a further increase in costs of ATCOs over their regular amount of working time.

It should be repeated that currently one of the basic actions enabling PANSa the control over delays is to maintain high productivity of air traffic controllers. ATCO-hour productivity indicator for 2009 amounted to 0,87 which ranked PANSa among best European ANSPs in this area (European average totaled 0,73 in 2009). On top of that, PANSa's ATCO-hour productivity gradually improves – it amounted to 0,91 in 2010 while the European average was 0,77, and for the nine months of 2011 the indicator added up to 0,99.

Yet in the face of technical limitations (lack of new ATM system), operational (no possibility to implement the vertical split and lack of transitory balancing of ACC and APP units capacity) and human resources (lack of sufficient number of qualified operational personnel), air traffic controllers productivity as an instrument enabling control over delays cannot be further increased.

Operating in the environment without new air traffic management system and without vertical split, PANSa – in the scope of air traffic capacity enhancement and delays reduction – achieved limiting parameters and their further increase may pose a risk for air traffic safety.

It should be emphasized that implementation of the new ATM system is a long-lasting process, not a one-time action. Benefits from its implementation will not be gained immediately but at least few months after system introduction, when specific data will be known e.g. speed of ATCOs accommodation to the new work environment.

The procedure of the new system implementation adopted by PANSa assumes its introduction with a possible lowest cost for airspace users.

2. Revised cost-efficiency target

2.1 Key figures for the revised cost-efficiency target

The tables below present total determined cost data as contained in the initial National Performance Plan submitted in June 2011 (Table 2) and as revised for the purpose of drafting this Addendum to the Plan (Table 3). All cost items are expressed in PLN.

The following subchapters present detailed description on the revised cost-efficiency target values.

Table 2. Initial national cost-efficiency target (in national currency)

Initial Performance Plan (June 2011)	2009A	2010A	2011 F	2012 D	2013 D	2014 D	2009-14 AAGR	2011-14 AAGR
Total determined costs in nominal terms	459 836 760	471 159 428	561 586 010	621 612 096	655 762 801	657 959 478	7,4%	5,4%
Inflation %		2,7%	4,1%	2,9%	2,6%	2,5%		
Inflation index (100 in 2009)	100,0	102,7	106,9	110,0	112,8	115,7		
Determined costs in real terms (at 2009 prices)	459 836 760	458 772 569	525 522 398	565 327 530	581 136 988	568 862 129	4,3%	2,7%
Total en-route Service Units	3 092 271	3 312 823	3 587 255	3 898 889	4 021 000	4 161 000	6,1%	5,1%
Real en-route determined unit rate (at 2009 prices)	148,71	138,48	146,50	145,00	144,53	136,71	-1,7%	-2,3%

Table 3. Verified national cost-efficiency target (in national currency)

Revised Performance Targets (December 2011)	2009A	2010A	2011 F	2012 D	2013 D	2014 D	2009-14 AAGR	2011-14 AAGR
Total determined costs in nominal terms	459 836 760	471 159 428	561 585 902	623 747 178	662 505 921	667 255 450	7,73%	5,92%
Inflation %		2,70%	4,10%	2,90%	2,60%	2,50%		
Inflation index (100 in 2009)	100	102,7	106,9	110	112,8	115,7		
Determined costs in real terms (at 2009 prices)	459 836 760	458 772 569	525 285 029	567 042 889	587 327 944	576 721 219	4,63%	3,16%
Total en-route Service Units	3 092 271	3 312 823	3 587 255	3 898 889	4 021 000	4 161 000	6,12%	5,07%
Real en-route determined unit rate (at 2009 prices)	148,71	138,48	146,43	145,44	146,07	138,60	-1,40%	-1,82%

2.2 Changes and justification for revised cost-efficiency target

2.2.1. GENERAL

There are a few main factors that influence the final cost-efficiency target presented in this Addendum.

Four of them are directly linked with the decisions and changes that have arisen after the approval of the June version of the Performance Plan:

1. Inclusion of Świdnik airport's costs in the Polish costs bases following designation of PANSa to provide air traffic services at this airport;
2. Actualization of the PANSa's costs bases for Modlin airport;
3. Postponement of putting into operation AWOS system by IMWM;
4. Actualization of the PANSa's investment and financial plans.

All the four drivers of changes are described further below.

The last change is connected with EUROCONTROL costs and is beyond the control of Poland:

1. Verification of the EUROCONTROL costs (Poland's contribution to the general budget).

Taking into account the fact that the change in the level of EUROCONTROL costs is beyond control of Poland, deterioration of the Polish cost-efficiency target should be assessed from the perspective of amendments resulting from decision taken at the national level. Therefore the table below presents the cost-efficiency target calculated under the assumption that the EUROCONTROL costs are at the same level as in June version of Performance Plan.

Table 4. Verified national cost-efficiency target (excluding changes in EUROCONTROL costs)

Revised Performance Targets (December 2011)	2009A	2010A	2011 F	2012 D	2013 D	2014 D	2009-14 AAGR	2011-14 AAGR
Total determined costs in nominal terms	459 836 760	471 159 429	561 586 010	623 747 178	662 505 921	667 266 450	7,73%	5,92%
Inflation %		2,70%	4,10%	2,90%	2,60%	2,50%		
Inflation index (100 in 2009)	100	102,7	106,9	110	112,8	115,7	2,96%	2,67%
Determined costs in real terms (at 2009 prices)	459 836 760	458 772 569	525 337 708	564 617 435	584 946 739	574 349 568	4,55%	3,02%
Total en-route Service Units	3 092 271	3 312 823	3 587 255	3 898 889	4 021 000	4 161 000	6,12%	5,07%
Real en-route determined unit rate (at 2009 prices)	148,71	138,48	146,45	144,81	145,47	138,03	-1,48%	-1,95%

Poland has decided to revise the scope of the Performance Plan with regard to terminal services to include one new airport - Świdnik airport. This was a direct consequence of a decision taken by the Minister of Transport, Construction and Maritime Economy designating PANSa to provide air traffic services at Świdnik airport, which is expected to start operations in the second half of 2012. As a consequence, all cost figures had to be recalculated to include costs of providing air navigation services at this airport.

Additionally, it appeared to be necessary to verify costs of providing air navigation services at Modlin airport. Costs for Modlin airport presented in the June version of the Performance Plan included only costs of initial preparatory works in this localization. It was necessary to ensure financing not only of these preparatory works but to ensure financial means necessary to provide air navigation services according to defined requirements. As a consequence the costs base for this airport has been verified so that the costs presented in this Addendum include all costs of providing air navigation services at Modlin airport.

The changes described above cause the increase in the total costs for both en route and terminal charges and have an impact of the final cost efficiency target. These changes impact mainly the terminal costs base. However, taking into account the methodology of the cost allocation between en-route and terminal charges for PANSa and CAO, they cause also slight modifications in the en-route costs base for both PANSa and CAO and have an impact on the final en-route cost-efficiency target.

In addition, there are some modifications in the PANSa and IMWM's costs bases caused by the postponement of the AWOS installation process by IMWM at some airports (for further information see subchapters describing contribution by entity).

Taking into account that PANSa has actualized its investment and financial plans, changes in its costs bases result also from these verifications. Almost all the changes made by PANSa in its financial and investment plans caused a decrease in the total PANSa's costs for 2012-2014.

The verification of the cost efficiency target also includes the changes in the level of EUROCONTROL costs. Due to the verification of the EUROCONTROL budget in October 2011, Poland has decided to amend the EUROCONTROL costs for 2012-2014 by adding to the national cost base the part of the EUROCONTROL costs resulting from increase in the Poland's contribution to the total EUROCONTROL budget.

The table below presents breakdown per entity of the verified en-route costs. Comparison of the cost from the table below with costs presented in Table 14 from the June Performance Plan shows that differences that appear in values for each of the accountable entity are at the level presented in Table 6 below. In a short brief, PANSa as well as the EUROCONTROL part of the en-route cost base are higher than the costs presented in the June Performance Plan. CAO and IMWM en-route costs are slightly lower as compared with the data from the June Performance Plan. The main changes in the cost base for each of the entities are explained in the next subpart – 'Contribution by entity' – of the Addendum.

Table 5. National determined en-route costs – breakdown per entity (in nominal terms in national currency)

ANS en-route costs by entity	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D
ANSP	000 PLN	395 480	402 185	499 659	562 377	599 284	602 709
% n/n-1			1,7%	24,2%	12,6%	6,6%	0,6%
MET	000 PLN	15 902	18 472	22 011	17 553	18 739	19 282
% n/n-1			16,2%	19,2%	-20,3%	6,8%	2,9%
CAA	000 PLN	6 409	6 480	6 897	6 842	7 286	7 249
% n/n-1			1,1%	6,4%	-0,8%	6,5%	-0,5%
EUROCONTROL	000 PLN	42 046	44 023	33 019	36 975	37 197	38 027
% n/n-1			4,7%	-25,0%	12,0%	0,6%	2,2%
Total determined costs in nominal terms	000 PLN	459 837	471 159	561 586	623 747	662 506	667 266
% n/n-1			2,5%	19,2%	11,1%	6,21%	0,7%

Table 6. ANS en-route costs comparison for all entities (in nominal terms in national currency)

Differences ANS en-route costs	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D
ANSP	000 PLN	0	0	0	-325	4 108	6 798
MET	000 PLN	0	0	0	-143	-45	-122
CAO	000 PLN	0	0	0	-5	-5	-4
EUROCONTROL	000 PLN	0	0	0	2 668	2 686	2 744
TOTAL determined en-route costs	000 PLN	0	0	0	2 195	6 744	9 416

Table 7. National determined en-route costs – Breakdown by nature (in nominal terms in national currency)

ANS en-route costs by nature	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D
Staff	298 435	304 452	354 824	408 366	431 502	441 038
% n/n-1		2,0%	16,5%	15,1%	5,7%	2,2%
Other operating costs*	111 366	115 719	131 665	139 454	137 840	141 785
% n/n-1		3,9%	13,8%	5,9%	-1,2%	2,9%
Depreciation	33 535	34 041	39 292	52 743	64 838	71 987
% n/n-1		1,5%	15,4%	34,2%	22,97%	11,0%
Cost of capital	16 500	16 947	35 805	23 184	28 325	12 456
% n/n-1		2,7%	111,3%	-35,2%	22,2%	-56,0%
Exceptional items						
% n/n-1						
Total determined costs in nominal terms	459 837	471 159	561 586	623 747	662 505	667 266
% n/n-1		2,5%	19,2%	11,0%	6,2%	0,7%

* includes Eurocontrol costs

2.2.2. CONTRIBUTION BY ENTITY

Polish Air Navigation Services Agency

PANSA has changed its cost base by adding the costs of Świdnik airport, recalculating costs for Modlin airport, updating the financial and investment plans and including postponement of AWOS system installation. The table below presents differences between total ANS PANSA costs from the June Performance Plan and the costs from this Addendum.

Table 8. Differences in PANSA total ANS costs

Differences in the PANSA total ANS costs	Currency	2011 F	2012 D	2013 D	2014 D	2014D/2011F
determined costs nominal values (NPP 06.2011)						
Staff	000 PLN	428 121	456 916	476 668	490 630	14,60%
Other operating costs	000 PLN	104 936	107 653	104 168	107 219	2,18%
Depreciation	000 PLN	48 755	61 076	73 717	81 171	
Cost of capital	000 PLN	45 842	29 909	34 740	12 706	
Exceptional items	000 PLN					
Total ANS costs	000 PLN	627 654	655 555	689 292	691 725	10,21%
% change $n/(n-1)$			4,45%	5,15%	0,35%	
determined costs nominal values (Addendum 01.2012)						
Staff	000 PLN	428 121	465 039	493 453	503 409	17,59%
Other operating costs	000 PLN	104 936	107 294	103 880	107 947	2,87%
Depreciation	000 PLN	48 755	60 342	73 317	82 174	
Cost of capital	000 PLN	45 842	27 089	32 343	13 924	
Exceptional items	000 PLN					
Total ANS costs	000 PLN	627 654	659 764	702 993	707 454	20,62%
% change $n/(n-1)$			5,12%	6,55%	0,63%	
determined costs nominal values (difference)						
Staff	000 PLN	0	8 123	16 785	12 779	
Other operating costs	000 PLN	0	-359	-288	728	
Depreciation	000 PLN	0	-734	-400	1 003	
Cost of capital	000 PLN	0	-2 821	-2 396	1 218	
Exceptional items	000 PLN					
Total ANS costs	000 PLN	0	4 209	13 701	15 728	

The total PANSA costs for the first reference period after all these changes will be higher than those presented in the June Performance Plan. Total ANS PANSA costs

for each year of the RP1 are presented in the table below broken down into en-route and terminal part.

Table 9. Verified total ANS PANSA costs

Year	Currency	En-route	Terminal	Total
2011	000 PLN	499 659	127 995	627 654
2012	000 PLN	562 377	97 387	659 764
2013	000 PLN	599 284	103 709	702 993
2014	000 PLN	602 709	104 744	707 454

En route

Due to the above mentioned changes PANSA's en-route cost base will be equal to PLN 562 377 068 in 2012, PLN 599 284 078 in 2013 and PLN 602 709 297 in 2014. The table below presents the differences in PANSA en-route cost base as compared to the June Performance Plan.

Table 10. Differences in the PANSA en-route costs by nature.

Differences in the PANSA en-route costs	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D	2014D/2011F
determined costs nominal values (NPP 06.2011)								
Staff	000 PLN	395 480	302 874	343 625	396 372	413 985	425 555	23,84%
Other operating costs	000 PLN	15 902	86 361	81 865	88 773	87 469	90 292	10,29%
Depreciation	000 PLN	6 409	38 904	38 663	52 209	63 553	69 561	
Cost of capital	000 PLN	42 046	16 266	35 506	25 348	30 170	10 503	
Exceptional items	000 PLN							
Total en-route costs	000 PLN	459 837	444 405	499 659	562 702	595 177	595 911	19,26%
% change $n/(n-1)$			-3,36%	12,43%	12,62%	5,77%	0,12%	
determined costs nominal values (Addendum 01.2012)								
Staff	000 PLN	395 480	302 874	343 625	399 190	421 345	430 497	25,28%
Other operating costs	000 PLN	15 902	86 361	81 865	87 729	86 062	89 202	8,96%
Depreciation	000 PLN	6 409	38 904	38 663	52 546	64 033	71 055	
Cost of capital	000 PLN	42 046	16 266	35 506	22 912	27 844	11 955	
Exceptional items	000 PLN							
Total en-route costs	000 PLN	459 837	444 405	499 659	562 377	599 284	602 709	20,62%

% change n/(n-1)			-3,36%	12,43%	12,55%	6,56%	0,57%	
determined costs nominal values (difference)								
Staff	000 PLN	0	0	0	2 818	7 360	4 942	
Other operating costs	000 PLN	0	0	0	-1 044	-1 407	-1 089	
Depreciation	000 PLN	0	0	0	337	480	1 494	
Cost of capital	000 PLN	0	0	0	-2 436	-2 325	1 451	
Exceptional items	000 PLN							
Total en-route costs	000 PLN	0	0	0	-325	4 108	6 798	

As a consequence of the abovementioned changes the cost-efficiency target will deteriorate and will be equal to average annual decrease in DUR between 2011 and 2014 of 1,82 %.

New airports

The main factor which has an influence on the level of PANSA en-route costs are additional costs of providing services at Świdnik and Modlin airports. For this purpose PANSA added to its cost bases PLN 10 989 022 in 2012, PLN 20 207 939 in 2013 and PLN 16 338 707 in 2014 (including costs of meteorological services: PLN 1 274 339 in 2012, PLN 1 515 141 in 2013 and PLN 1 961 599 in 2014). Cost for meteorological services are included in the PANSA cost bases because IMWM has not yet been designated for these two localizations.

PANSA calculated the total costs for Świdnik airport and recalculated the total costs for Modlin airport. The table below presents the total PANSA ANS costs for these two airports as added to the cost bases presented in this Addendum.

Table 11. PANSA ANS costs for two new airports (including costs for meteorological services)

ANS PANSA costs	2012	2013	2014
<i>EPMO</i>	8 585 559	14 705 706	11 941 272
terminal	7 277 963	11 567 285	10 541 080
en-route	1 307 596	3 138 421	1 400 192
<i>EPSW</i>	2 403 462	5 502 231	4 397 434
terminal	1 389 564	1 663 569	1 722 490
en-route	424 141	3 004 102	1 606 830
Total PANSA ANS costs for EPMO and EPSW	10 989 021	20 207 937	16 338 706
% n/n-1		86,3%	-21,2%

Actualization of financial and investment plans of PANSA

Since June 2011 PANSA has decided to introduce some changes in its financial and investments plan.

Description of the differences in operational costs in comparison to the previous version of the NPP broken down according to type is provided below.

Depreciation

Depreciation in 2012-2014 financial plan tends to increase. An increase in depreciation is justified by an increase in fixed assets, increasing due to planned investments.

Current figures of depreciation are as follows:

2012 - 61 222 454 PLN,

2013 - 73 937 213 PLN,

2014 - 82 626 112 PLN.

Changes in the value of this item in respective years as compared to the previous NPP result from verification of investment projects. The differences amount to: 64 669 PLN in 2012, (minus) -811 659 PLN in 2013, 413 033 PLN in 2014. In 2013 and 2014 an amount of 926 000 PLN was additionally included due to the launching of new airports in Modlin and Lublin/Świdnik.

Consumption of materials and raw material

The value of planned materials and raw material consumption costs amounts to:

2012 - 7 322 790 PLN,

2013 - 7 398 857 PLN,

2014 - 7 509 774 PLN.

In the years comprised in the plan additionally estimated materials and raw material consumption costs were included due to operational launch of new airports. These costs refer to items related to materials consumed by the Agency, cleaning products, books, car fuel, office materials in the amount of 9 142 PLN in 2012, 18 550 PLN in 2013 and 18 550 PLN in 2014.

A majority of material and raw materials consumption plan items have been verified concurrently. With regard to fuel consumption costs – other, oils and lubricating oils, the items should be considered in total. The costs include heating oil and aircraft fuel for Agency's radionavigation test flight airplanes. An increase in the cost plan in the aforementioned items relates to the update of values planned in June 2011 for the previous version of NPP due to a larger number of control and measurement flights and an increase in fuel prices in 2011. In effect of the changes introduced in the cost plan of this group, an increase of value was obtained to the amount of 255 578 PLN in 2012 and a decrease to the amount of 31 808 PLN in 2013 and 55 000 PLN in 2014.

Energy

Due to the planned launch of two new national airports, the costs of power consumption, costs of cold and hot water consumption and heating power have been estimated starting with 2012. The above-specified costs amounting to 3 035 PLN in 2012, 32 962 PLN in 2013 and 33 826 PLN in 2014 increased the cost value in this group in relation to the previous version of NPP. Simultaneously, as a result of the verification of investment projects and an increase in prices, PANSAs costs additionally include electric power costs to the amount of 5 054 PLN in 2012, 25 527 PLN in 2013, 45 505 PLN in 2014. Total energy costs are as follows:

2012 - 8 043 861 PLN,

2013 - 9 284 492 PLN,

2014 - 10 649 524 PLN.

Taxes and Charges

The item „Taxes and Charges” includes a planned Civil Aviation Office charge. Costs of the CAO are shown below:

2012 - 10 853 270 PLN,

2013 - 11 361 168 PLN,

2014 - 11 231 854 PLN.

The values presented above in relation to the NPP of June 2011 increased respectively by 17 159 PLN in 2012, 17 227 PLN in 2013, 17 296 PLN in 2014. The amount of CAO charge in the current 2012-2014 financing plan was calculated based on information from CAO concerning the amount of costs planned by CAO for 2012-2014 related to supervision of provision of air traffic services.

Items such as official charges and other handling charges, customs charges, property tax, perpetual usufruct tax and royalties were also verified and as a result decreased the amount of taxes and charges cost by 125 825 PLN in 2012, 242 011 PLN in 2013, 246 682 PLN in 2014.

For the purpose of the Performance Plan the CAO cost are, however, presented as a separate item and are not included in PANSAs costs.

Third Party Services

The cost of external services includes expenses incurred from services performed by external entities on behalf of PANSAs based on applicable contracts.

In the current Plan the following amounts of third party services have been adopted:

2012 - 83 051 166 PLN,

2013 - 87 139 286 PLN,

2014 - 91 033 018 PLN.

Costs of third party services planned for respective years increased by 969 739 PLN in 2012, 1 833 313 PLN in 2013, 3 127 218 PLN in comparison to costs planned to be achieved in the previous version of NPP. Increase in the cost values in this group

planned in relation with the launching of new airports from 2012 results from cost appraisal of parking charges, telecommunication charges, waste removal services performed by professional enterprises on behalf of PANSa, land lease costs, accommodation and buildings lease and other tangible services and amount for 6 922 PLN for 2012, 209 456 PLN for 2013, 214 583 PLN for 2014.

Within the scope of the contract with Institute of Meteorology and Water Management National Research Institute (IMWM), PANSa incurs costs of meteo coverage. This is the most considerable item of third party services costs. Cost planning for 2012-2014 was based on IMWM cost base, including an update of estimated time of AWOS system operation. At present the planned meteo coverage costs amount to 29 225 497 PLN in 2012, 36 585 164 PLN in 2013, 38 549 578 PLN in 2014. As compared to the previous version of NPP the above-mentioned costs increased by 1 088 531 PLN in 2012, 2 419 785 PLN in 2013 and 2 901 505 in 2014 respectively. Again, similar as with the CAO costs, in the Performance Plan IMWM costs are presented as a separate cost item and are not included in PANSa's costs.

In relation to the previous version of NPP, differences also occur with respect to rent and lease charges including planned line lease costs and costs of land on which technical facilities necessary for PANSa's operation are placed, as well as property comprising offices. In the respective years, among other things, costs of ensuring additional high throughput telecommunication links (STM1-34 Mb/s and 90 Mb/s) have been planned e.g. necessary to launch the PEGASUS_21 System. As a result of the update of respective cost items, the discussed above costs included in the plan decreased by 824 012 PLN in 2012, 506 880 PLN in 2013, and 519 552 PLN in 2014. Within the costs of third party services PANSa plans to incur considerable costs due to planned renovation and repairs. The cost of renovation and repair services for 2012-2014 includes first of all essential repairs and renovation (item: renovation and repairs of buildings and constructions). These include repairs and renovation of rooms and surfaces in PANSa's premises, repairs of radiocommunication masts. The costs of equipment and machinery repairs are connected to repairs or replacement of parts of vehicles or machinery utilized in PANSa, i.e. technical infrastructure indispensable for PANSa to perform its statutory tasks, including radiocommunication facilities. The cost value of repair services was estimated in the amount of 5 290 089 PLN for 2012, 6 584 161 PLN for 2013, 7 087 550 PLN for 2014. The costs planned for the repair services increased in relation to the previous version of NPP by 259 619 PLN in 2012, 1 135 201 PLN in 2013, 1 015 290 PLN in 2014 respectively. The increase results from including in the plans the old AWOS systems repairs indispensable for maintaining their operability until infrastructure restoration within the investment process carried out by IMWM NRI. The repair costs include an additional amount of 450 thousand PLN in 2012, 250 thousand PLN in 2013, 100 thousand PLN in 2014 related to maintenance and operation of the AWOS systems, in consideration of the latest new systems installation schedule of IMWM NRI. The above will be feasible under the assumption of achieving savings reported in repair services costs. Repair of the engines of PANSa's two navigational facilities control and measurement aircraft has been planned; the aircraft control aviation communication systems, navigation systems and airspace surveillance systems. The aircraft are PANSa's property.

The value of advisory services planned for 2012-2014 as compared to the previous version of NPP increased in 2012 by 1 663 217 PLN and in 2014 by 577 566 PLN,

whereas in 2013 the amount decreased by 89 759 PLN. A considerable growth in 2012 results mainly from a transfer of assets from 2011 to the next period, calculated from the planned acquisition of integrated IT business management system. For 2012 this item also included costs of maintaining Polish-Lithuanian PMO office created within the execution of subsequent phase of Baltic FAB implementation. The amounts of respective third party services borne by PANSA in respect of the project were also updated.

In relation to the previous version of NPP, the provisions of applicable contracts as well as tasks for next periods within the list of licenses requiring software upgrade and within the costs of IT services (including mainly costs of preparing Real Time Simulation (RTS)), and technical assistance including supervision and technical assistance, project assistance, service standby, system functionality upgrading modifications were analyzed and verified. . As a result of cost reducing effort, reserves were obtained in the amount of 175 565 PLN in 2012, 224 692 PLN in 2013 and 129 644 PLN in 2014.

Moreover, following the signing of contract in 2011 on more favourable terms with a third party providing security services on behalf of PANSA, planned costs decreased by 926 100 PLN in 2012, 1 056 000 PLN in 2013 and 881 076 PLN in 2014.

As concerns the other items constituting a minor share in third party services costs, a detailed verification was performed resulting in a decrease of planned costs within the period (i.e. mail charges, car wash, parking charges, technical overhauls, assembly and repair, car transport, mobile phone bills, bookbinding and printing services, waste charges, technical supervision charges, business consultancy, locksmith services, radio and television charges, office and room maintenance services, press services, geodetic services, courier services, advertising agency services, rain protection, legal consultancy, translation costs, audit and other tangible services). In comparison to the previous version of NPP the above mentioned costs were verified and decreased the costs of third party services by 115 951 PLN in 2012 and increased them by 155 658 PLN in 2013 and 163 129 PLN in 2014.

Staff Costs

The main item in planned value of current costs for 2012-2014 are costs of remuneration and personnel benefits. Total annual staff cost constitutes ca. 66% of total cost value. Staff costs which PANSA plans to incur in 2012-2014 were estimated based on an increase in the number of operations, airspace capacity with application of essential air traffic safety standards, consistent effort to decrease delays in air traffic and ensure better air traffic flow, which will require an increase in employment especially regarding air traffic services. The following amounts of staff costs were planned for respective years:

2012 - 476 426 232 PLN,
2013 - 503 510 540 PLN,
2014 - 512 788 586 PLN.

As compared to the previous version of NPP the values of staff costs planned for 2012-2014 are higher by ca. 2,0%, 3,5% and 2,5% respectively.

Due to the launching of new airports from 2012, in order to ensure airspace control services, PANSa will incur additional staff costs in relation to overnormative working time of air traffic controllers at other air traffic control centers until the personnel is complete. The estimated costs are as follows:

- for Modlin Airport: in 2012 - 6 677 944 PLN, in 2013 - 10 998 966 PLN, in 2014 - 6 509 588 PLN,
- for Lublin/Świdnik Airport: in 2012 - 1 520 628 PLN, in 2013 - 2 980 889 PLN.

To ensure APP services for Modlin Airport (additional APP sector in EPWA), plans include annual expenses in the amount of 1 033 368 PLN in 2012, 1 771 488 in 2013-2014.

Staff costs linked with air traffic controller employment will amount to the following:

- dedicated to Modlin Airport: in 2012 - 173 853 PLN, in 2013 - 651 774 PLN, in 2014 - 2 160 742 PLN,
- dedicated to Lublin/Świdnik Airport: in 2012 - 158 738 PLN, in 2013 - 840 606 PLN, in 2014 - 2 480 225 PLN.

The maintenance of technical operability of PANSa's air traffic control facilities at Modlin Airport will be ensured by PANSa/Warsaw technical services by means of currently employed personnel. In case of Lublin/Świdnik 2 technical CNS/ATM monitoring and control operational systems support personnel are planned to be employed. This will incur additional staff costs in 2012 - 131 052 PLN, in 2013-2014 - 262 104 PLN annually.

Moreover, in relation to the previous version of NPP, within the scope of planned staff costs, amounts of supportive meals for entitled employees were verified, amounts of benefits in kind following the Safety and Hygiene at Work regulations, costs of pecuniary allowances in lieu of uniforms, protective clothing, working clothing and cleaning items. Resulting difference included in this Plan amounted to (negative) - 41 962 PLN for 2012, (negative) -133 053 PLN for 2013, 11 245 PLN for 2014.

Within the staff costs an update of PANSa employees training costs plan was prepared. In comparison to the previous version of NPP, the training cost value for 2012 decreased by 188 634 PLN in 2012, 406 586 in 2013 and by 708 274 PLN in 2013. Changes result from the update of training material plan, especially an update of training related to fixed assets acquisition. The training plan (international, national, studies and courses) was verified with regard to developments planned for 2012 and adjusted to the possibility of participation in particular trainings of the employees (especially operational ones). The following years also include revised training items especially those regarding investment projects trainings.

Business Trips

In comparison with the previous version of NPP, the value of planned costs in relation to national and international business trips, within the years covered in the plan, decreased by 781 425 PLN in 2012, 463 971 PLN in 2013 and by 577 394 PLN in 2014. Currently the planned business trips costs amount to the following:

2012 - 9 589 448 PLN,

2013 - 9 565 274 PLN,

2014 - 9 466 305 PLN.

Business trip costs are often related to employees' business trips for workshops organized in Poland or abroad. Changes in cost items related to business trips result from updates on planned values and costs of training.

Other Costs

Within the scope of other costs, the costs of representation, monetary equivalents paid to employees for washing protective and working clothing as well as en-route costs related to the operation of PANSA's aircraft were verified to the effect of a decrease in these costs by 19 439 PLN in 2012, 68 588 PLN in 2013, 70 302 PLN in 2014.

Total other costs amount as follows:

2012 - 45 872 673 PLN,

2013 - 46 340 292 PLN,

2014 - 47 328 591 PLN.

The table below provides information on the 2011 closing balance figures as estimated at the end of 2011. The currently assumed values are different from those taken into account in the June Performance Plan and as a consequence influence certain calculations of costs for RP1. Initial June values and updated figures are presented in the table below.

Table 12. Changes in the opening balance sheet for 2012

Item	2011 (June 2011) as OB for 2012)	Adjustment	2011 (December 2011) as OB for 2012)	2012	2013	2014
Fixed Assets	726 017 332	-34 025 191	691 992 141	774 891 339	835 143 951	918 806 668
Current Assets	192 674 885	283 644	192 958 529	169 961 047	183 633 344	1 69 926 010
Total Assets	918 692 218	-33 741 548	884 950 670	944 852 385	1 018 777 295	1 088 732 678
Own Funds	623 010 197	16 981 404	639 991 601	667 200 723	697 243 524	709 902 627
Liabilities and liabilities provision	295 682 020	-50 722 952	244 959 068	277 651 662	321 533 772	378 830 051
Total Liabilities	918 692 217	-33 741 547	884 950 670	944 852 385	1 018 777 295	1 088 732 678

Current revision of the NPP reveals a considerable decrease in fixed assets (34 025 thousand PLN) in 2011 in comparison to the version from June 2011, resulting from actualization of the investment plan and non-utilization of investment loan arising thereof.

PANSA also expects an overrecovery mechanism in 2013. It must be pointed out that data for 2011 consists only of estimates since the closing of accounting books for this year has not been performed yet.

Institute of Meteorology and Water Management

Changes in the IMWM costs (both en-route and terminal) are caused by the postponement of the AWOS installation process by IMWM at some of the airports covered by the NPP. For the calculation of the costs presented in June Performance Plan, IMWM assumed that the process of the installation will start in April 2012. The procedure of the purchase has to be executed in compliance with a complex public procurement law. So far as the process of the purchase will not be finished by April 2012 the IMWM has to postpone the installation of AWOS systems for 5 airports from April till October 2012. In the subsequent years IMWM assumes postponements of the process for two AWOS systems each year from April till October. This change influences the cost base for both IMWM terminal and en –route charges as well as for the cost-efficiency target.

Postponement of the AWOS installation results in the following changes in the total IMWM ANS costs in the period 2012-2014 (as compared to the June version of the Plan):

Table 13. IMWM total ANS costs difference (in nominal terms)

IMWM costs by nature	2012 D	2013 D	2014 D
Staff	-563 239	-170 689	-179 487
Other operating costs	915 977	151 950	144 599
Depreciation	-472 189	47 492	-206 193
Cost of capital	-258 463	-80 994	-223 874
% n/n-1		-33,6%	81,8%
Exceptional items			
Total determined costs in nominal terms	- 377 913	-52 241	-464 955

En-route

The postponement of the AWOS installation process results in changes in en-route cost base. In the period 2012-2014 the IMWM en-route costs slightly decrease.

The table below presents the differences in the determined en route costs by nature as compared with IMWM costs presented in the June Performance Plan. Comparison of the costs by nature for 2012 indicates slight increase in the other operating costs – it is mainly due to the fact that in 2012 IMWM will pay PANSA for the necessary usage of the old PANSA's AWOS system. The other costs are lower than these presented in June version of the Performance Plan. The decrease in the staff costs is caused mainly by the postponement by 7 months of the recruitment process of additional support staff for AWOS services. The biggest decrease is noticeable in 2012, due to the fact that the workload necessary for handling support of five new systems is higher than the workload necessary in the subsequent years.

Table 14. IMWM en-route costs evolution (in nominal terms)

Differences in the IMWM en-route costs determined costs nominal values (NPP 06.2011)	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D	2014D/2011F
Staff	000 PLN	6 233	10 946	6 747	5 129	5 617	6 017	-
Other operating costs	000 PLN	9 499	9 669	14 336	11 756	11 861	11 829	-
Depreciation	000 PLN	75	1 035	628	457	780	1 044	17,49%
Cost of capital	000 PLN	96	373	300	415	525	623	
Exceptional items	000 PLN							
Total en-route costs	000 PLN	15 902	22 023	22 011	17 757	18 783	19 513	-
% change $n/(n-1)$			1,11%	6,44%	-0,73%	6,49%	-0,53%	11,35%
determined costs nominal values (Addendum 01.2012)								
Staff	000 PLN	6 233	10 946	6 747	4 819	5 518	5 925	-
Other operating costs	000 PLN	9 499	9 669	14 336	12 265	11 934	11 923	-
Depreciation	000 PLN	75	1 035	628	197	805	932	16,83%
Cost of capital	000 PLN	96	373	300	272	480	501	
Exceptional items	000 PLN							
Total en-route costs	000 PLN	15 902	22 023	22 011	17 553	19 739	19 282	-
% change $n/(n-1)$			38,49%	-0,05%	20,25%	12,45%	2,32%	12,40%
determined costs nominal values (difference)								
Staff	000 PLN	0	0	0	-310	-99	-92	
Other operating costs	000 PLN	0	0	0	509	73	94	
Depreciation	000 PLN	0	0	0	-121260	-300	-112	
Cost of capital	000 PLN	0	0	0	-143	-45	-122	
Exceptional items	000 PLN							
Total en-route costs	000 PLN	0	0	0	-204	-371	-232	

Depreciation in the 2012 will be lower than this presented in June performance Plan and it is directly the result of the postponement of the AWOS installation process. The same situation can be observed in the subsequent years 2013 and 2014.

In this period a slight decrease in the staff cost as well as in the other operating costs and the cost of capital is expected.

Civil Aviation Office

Change in the CAO ANS costs (en-route and terminal) is related to the verification of the scope of this Plan with regard to terminal services (described above). Inclusion of Lublin/Świdnik (EPSW) airport in the scope of this Plan necessitated verification of the CAO workload, and as a consequence costs, related to supervision of terminal navigation services. The methodology of calculating CAO total ANS, en-route and terminal costs described in the June version of the NPP remains unchanged as well as all other factors or figures – the change in the CAO costs presented in this Addendum results only from inclusion of EPSW within the scope of the CAO activities covered by this Plan.

Inclusion of EPSW resulted in the following increase of the CAO total ANS costs in the period 2012-2014 (as compared to the June version of the Plan):

Table 15. CAO total ANS costs difference (in nominal terms)

CAO	Currency	2012 D	2013 D	2014 D
determined costs nominal values				
Staff	PLN	10 925	10 968	11 012
Other operating costs	PLN	6 234	6 259	6 283
Depreciation	PLN			
Cost of capital	PLN			
Exceptional items	PLN			
Total ANS costs	PLN	17 159	17 227	17 295

En-route

As more workload is expected with regard to terminal services supervision (13 airports covered by the Plan instead of 12 originally planned) with unchanged workload related to en-route services, indirect CAO ANS costs needed to be allocated in a higher percentage to terminal charges. As a consequence, the determined en-route costs will be slightly reduced. Evolution of the CAO en-route costs is presented in the table below.

Table 16. CAO en-route costs evolution (in nominal terms)

CAO en-route costs	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D	2014D/ 2011F
determined costs nominal values (NPP 06.2011)								
Staff	000 PLN	4 479	4 615	4 452	4 359	4 642	4 617	3,71%
Other operating costs	000 PLN	1 930	1 865	2 445	2 487	2 649	2 635	7,77%
Depreciation	000 PLN							
Cost of capital	000 PLN							
Exceptional items	000 PLN							
Total en-route costs	000 PLN	6 409	6 480	6 897	6 847	7 291	7 252	5,15%
% change $n/(n-1)$			1,11%	6,44%	-0,73%	6,49%	-0,53%	
determined costs nominal values (Addendum 01.2012)								
Staff	000 PLN	4 479	4 615	4 452	4 356	4 639	4 615	3,66%
Other operating costs	000 PLN	1 930	1 865	2 445	2 486	2 647	2 633	7,72%
Depreciation	000 PLN							
Cost of capital	000 PLN							
Exceptional items	000 PLN							
Total en-route costs	000 PLN	6 409	6 480	6 897	6 842	7 286	7 249	5,10%
% change $n/(n-1)$			1,11%	6,44%	-0,80%	6,49%	-0,51%	
determined costs nominal values (difference)								
Staff	000 PLN	0	0	0	-3	-3	-2	
Other operating costs	000 PLN	0	0	0	-2	-2	-1	
Depreciation	000 PLN							
Cost of capital	000 PLN							
Exceptional items	000 PLN							
Total en-route costs	000 PLN	0	0	0	-5	-5	-4	

From the total Poland's en-route cost base perspective the difference is immaterial. It has no impact on the determined unit rate (national cost-efficiency target).

EUROCONTROL

EUROCONTROL costs that were included in the determined en-route costs for RP1 in the initial (June) version of the Plan represented the amount of Polish contribution to the budget of the Agency at the level that was communicated by the EUROCONTROL Central Route Charges Office to the Enlarged Committee Members on 24.05.2011. Poland's contribution was based on a scenario which was calculated using the overhead rules currently in force and submitted by correspondence to the Members of the Standing Committee on Finance on 15th of April 2011 (scenario 2 representing 38.7% for cost-allocation of overheads under the User Pay Principle). Poland's share in the Agency budget estimated at that time amounted to 1,794%.

In the following months EUROCONTROL carried out a verification of the budget sharing keys applicable for each Member State. As a consequence, in October 2011 new States' cost bases were communicated by EUROCONTROL for the period of 2012-2014. In case of Poland this new cost base was higher than the one communicated in April/May 2011. The difference resulted from two factors:

- an increase in the percentage share of Poland to 1,933%,
- an increase in the total amount of Part I of EUROCONTROL budget stemming from excluding UPP (Users Pay Principle) receipts from Surveillance Products & Services.

As a consequence, to ensure availability of financial resources to cover Poland's contribution to the Agency's budget, Poland had to modify its en-route determined costs to include the revised EUROCONTROL costs. However, in order to limit the negative impact on the cost-efficiency target and on airspace users, Poland decided to include in the en-route determined costs only this part of the cost base increase that corresponded to the modified percentage share in the total Agency budget (increase from 1,794% to 1,933%). It has been decided that the impact of the change in the total Part 1 of the Agency budget shall not be taken into account. These assumptions were also the basis for the final 2012 en-route cost base that was presented in November to the EUROCONTROL under the Multilateral Route Charges System regulations and was adopted by the Enlarged Committee for Route Charges and approved by the Enlarged Commission (Decision No 111).

The table below provides a comparison of the initial EUROCONTROL costs taken into account in the June version of the Plan, the cost base that was communicated to Enlarged Committee Members by email on 13.10.2011 and finally the costs that are included in the final en-route determined costs as approved by the Enlarged Commission Decision No 111 and as presented in this Addendum.

Table 17. EUROCONTROL costs evolution

	Currency	2011	2012	2013	2014
Poland cost-base 05.2011 (NPP June 2011)	000 EUR	8 365	9 028	9 082	9 285
Poland cost base 10.2011 (as communicated by EUROCONTROL)	000 EUR	8 365	9 722	9 919	10 100
Poland cost base 11.2011 (final 2012 cost base, NPP December 2011 - Addendum)	000 EUR	8 365	9 730	9 789	10 07

3. TERMINAL CHARGES

3.1. GENERAL

Similarly as with regard to en-route costs, there are a few factors which influence the final terminal ANS costs:

1. Inclusion of the Świdnik airport's costs in the Polish costs bases;
2. Actualization of the PANSA's costs bases for the Modlin airport;
3. Postponement of the launching the AWOS system by IMWM;
4. Actualization of the PANSA's investment and financial plans.

Additionally, for the purpose of preparing this Addendum, actualization of the terminal service units and movements' forecasts has been carried out.

Taking into account the decision of the Minister of Transport, Construction and Maritime Economy designating PANSa for providing air traffic services at Świdnik airport, PANSa and CAO had to recalculate their terminal costs bases. Due to the fact that IMWM so far has not been designated for these two new localizations, the costs of providing meteorological services for this airport are included in PANSa's cost base.

The postponement of the AWOS system installation by IMWM will also have an impact for the final terminal ANS costs presented in this Addendum.

The proposed actualization of PANSa's financial and investment plan will also influence the final figures presented in this document.

Taking into account the wider scope of the Performance Plan resulting from adding Świdnik and Modlin airport to the terminal determined costs, Poland was obliged to update the terminal service unit forecasts by adding the traffic forecasted for these two localizations.

The tables below present the initial and verified figures for final terminal ANS costs.

Table 18. Initial total terminal costs (in national currency)

Initial ANS terminal costs per entity (June 2011)	Currency	2009A	2010A	2011	2012	2013	2014
PANSa	000 PLN	110 415	104 443	127 995	92 853	94 116	95 814
% n/n-1			-5,41%	22,55%	-27,46%	1,36%	1,80%
IMWM	000 PLN	9 357	9 263	9 797	14 377	15 382	16 135
% n/n-1			-1,01%	5,77%	46,75%	6,99%	4,89%
CAO	000 PLN	3 167	2 593	3 621	3 848	4 053	3 962
% n/n-1			-18,12%	39,64%	6,26%	5,33%	-2,23%
Total terminal costs in nominal terms	000 PLN	122 939	116 299	141 413	111 077	113 550	115 911
Inflation %		4,00%	2,70%	4,10%	2,90%	2,60%	2,50%
Inflation index (100 in 2009)		100	102,7	106,9	110	112,8	115,7
Total terminal costs in real 2009 terms		122 939	113 278	132 331	101 020	100 628	100 215

Table 19. Verified total terminal costs (in national currency)

Revised ANS terminal costs per entity (December 2011)	Currency	2009A	2010A	2011	2012	2013	2014
PANSA	000 PLN	110 415	104 443	127 995	97 387	103 709	104 744
% n/n-1			-5,41%	22,55%	-23,91%	6,49%	1,00%
IMWM	000 PLN	9 357	9 263	9 797	14 202	15 374	15 902
% n/n-1			-1,01%	5,77%	44,96%	10,78%	3,43%
CAO	000 PLN	3 167	2 593	3 621	3 870	4 075	3 983
% n/n-1			-18,12%	39,64%	6,86%	5,32%	-2,26%
Total terminal costs in nominal terms	000 PLN	122 939	116 299	141 413	115 459	123 158	124 629
Inflation %		4,00%	2,70%	4,10%	2,90%	2,60%	2,50%
Inflation index (100 in 2009)		100	102,7	106,9	110	112,8	115,7
Total terminal costs in real 2009 terms		122 939	113 278	132 331	104963	109 207	107 717

Tale 20. Differences in terminal ANS costs

ANS terminal costs	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D
ANSP	000 PLN	0	0	0	4 534	9 593	8 930
MET	000 PLN	0	0	0	-174	-7	-233
CAO	000 PLN	0	0	0	22	23	21
Total terminal costst in nominal terms	000 PLN	0	0	0	4 382	9 609	8 718
Total terminal costs in real 2009 terms	000 PLN	0	0	0	3 984	8 519	7 535

Terminal service units forecasts

Taking into account that the costs for two new airports were added to the cost base, PANSA decided to actualize its service units' forecast for the period 2012-2014.

The table below presents the initial SU and MVS forecast as presented in the June Performance Plan and new verified SU and MVS forecast.

Table 21. Difference in terminal service units and movements forecast

Initial SU-L, MVS forecast	2009 A	2010 A	2011 F	2012 F	2013 F	2014 F
Total terminal service units (000)	127	133	140	147	150	153
% change $n/(n-1)$		5,01%	5,24%	4,89%	1,95%	2,30%
Number of IFR movements ('000)	143	147	156	179	183	187
% change $n/(n-1)$		3,27%	5,92%	14,79%	1,95%	2,27%
Verified SU-L, MVS forecast	2009 A	2010 A	2011 F	2012 F	2013 F	2014 F
Total terminal service units (000)	127	133	140	150	156	160
% change $n/(n-1)$		5,01%	5,24%	7,36%	3,72%	2,36%
Number of IFR movements ('000)	143	147	156	185	194	199
% change $n/(n-1)$		3,12%	5,92%	18,47%	4,86%	2,89%
Difference SU-L, MVS forecast	2009 A	2010 A	2011 F	2012 F	2013 F	2014 F
Total terminal service units (000)	0	0	0	3	6	7
Number of IFR movements ('000)	0	0	0	6	11	12

As the opening of the new airports may cause slight decrease in the number of service units and movements at some of the currently operating airports, PANSA decided to update also the forecast for some of the other airports. The table below presents the currently forecasted SU-L and movements for each airport.

Table 22. SU-L and movements forecast per airport.

Airports	2012 F		2013 F		2014 F	
	MVS	SU-L	MVS	SU-L	MVS	SU-L
EPWA	72 746	65 253	72 319	64 802	74 314	66 618
EPGD	17 087	12 992	17 413	13 240	17 745	13 492
EPKK	21 026	15 987	21 426	16 292	21 834	16 602
EPKT	16 210	12 325	16 519	12 560	16 833	12 799
EPLL	6 929	5 097	6 695	4 796	6 840	4 906
EPBY	2 842	2 161	2 896	2 202	2 952	2 244
EPPO	13 311	10 121	13 565	10 314	13 823	10 510
EPRZ	4 730	3 584	4 671	3 516	4 663	3 493
EPSC	6 846	5 205	6 976	5 304	7 109	5 405
EPWR	13 835	10 519	14 099	10 720	14 367	10 924
EPZG	697	530	711	540	724	551
EPMO	8 100	6 206	14 700	10 678	14 985	10 695
EPSW	457	299	1 462	899	2 167	1 310
Total	184 817	150 280	193 453	155 864	198 356	159 550

3.2. CONTRIBUTION BY ENTITY

Polish Air Navigation Services Agency

The main changes that influence the verified total terminal costs are:

1. Inclusion of the Świdnik airport's costs in the Polish costs bases;
2. Actualization of the PANSA's costs bases for the Modlin airport;
3. Postponement of the launching the AWOS system by IMWM;
4. Actualization of the PANSA's investment and financial plans;
5. Actualization of the terminal service units and movements' forecasts.

All the information concerning changes and justification made by PANSA are presented in the chapter 2 –En route charges and in the text above about terminal forecast.

Table 23. PANSA verified terminal costs

PANSA TNC costs	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D	2014D/ 2011F
determined costs nominal values								
Staff	000 PLN	77 724	77 564	84 496	65 849	72 108	72 912	-13,71%
Other operating costs	000 PLN	17 858	11 660	23 071	19 566	17 818	18 744	-18,75%
Depreciation	000 PLN	9 411	9 538	10 092	7 796	9 284	11 118	10,17%
Cost of capital	000 PLN	5 422	5 584	10 336	4 177	4 499	1 969	-80,95%
Exceptional items	000 PLN	0	0	0	0	0	0	
Total determined costs in nominal terms	000 PLN	110 415	104 345	127 995	97 387	103 709	104 744	-18,17%
% n/n-1			-5,50%	22,66%	- 23,91%	6,49%	1,00%	
determined costs real 2009 values								
Staff	000 PLN	77 724	75 525	79 070	59 887	63 902	63 039	-20,27%
Other operating costs	000 PLN	17 858	11 353	21 589	17 794	15 790	16 206	-24,93%
Depreciation	000 PLN	9 411	9 287	9 444	7 090	8 227	9 613	1,79%
Cost of capital	000 PLN	5 422	5 437	9 672	3 798	3 987	1 703	-82,40%
Exceptional items	000 PLN	0	0	0	0	0	0	
Total determined costs	000 PLN	110 415	101 602	119 775	88 569	91 907	90 560	-24,39%
% n/n-1			-7,98%	17,89%	- 26,05%	3,77%	- 1,47%	
Total Services units (000)		126,67	133,01	139,98	150,28	155,86	159,55	13,98%
Determined unit cost - nominal		871,67	784,48	914,36	648,04	665,38	656,50	-28,20%
% n/n-1			- 10,00%	16,56%	- 29,13%	2,68%	- 1,34%	
Determined unit cost - real 2009		871,67	763,86	855,65	589,36	589,66	567,60	-33,66%
% n/n-1			- 12,37%	12,02%	- 31,12%	0,05%	- 3,74%	

Institute of Meteorology and Water Management

The anticipated postponement of installation of the AWOS system till October 2012 (the planned data was April 2012 – for further information see the ne-route part above) causes some modification in the final terminal IMWM costs base. During the whole first reference period the terminal IMWM costs decrease. The table below presents difference in the terminal IMWM costs by nature as compared with the June Performance Plan.

The table below presents the changes in the IMWM terminal cost base for the first reference period.

Table 24. IMWM terminal costs evolution (in nominal terms)

Differences in the IMWM terminal costs	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D	2014D/ 2011F
determined costs nominal values (NPP 06.2011)								
Staff	000 PLN	3 668	2 552	3 003	4 153	4 600	4 975	65,69%
Other operating costs	000 PLN	5 590	6 016	6 381	9 518	9 713	9 781	53,29%
Depreciation	000 PLN	44	441	280	370	639	863	
Cost of capital	000 PLN	56	253	133	336	430	515	
Exceptional items	000 PLN							
Total terminal costs	000 PLN	9 357	9 263	9 797	14 377	15 382	16 135	64,69%
determined costs nominal values (Addendum 01.2012)								
Staff	000 PLN	3 668	2 552	3 003	3 899	4 528	4 887	62,74%
Other operating costs	000 PLN	5 590	6 016	6 381	9 924	9 791	9 833	54,10%
Depreciation	000 PLN	44	441	280	159	661	769	
Cost of capital	000 PLN	56	253	133	220	394	413	
Exceptional items	000 PLN							
Total terminal costs	000 PLN	9 357	9 263	9 797	14 202	15 374	15 901	62,30%
determined costs nominal values (difference)								
Staff	000 PLN	0	0	0	-253	-72	-88	
Other operating costs	000 PLN	0	0	0	406	78	52	
Depreciation	000 PLN	0	0	0	-211	-245	-94	
Cost of capital	000 PLN	0	0	0	-116	-63	-102	
Exceptional items	000 PLN							
Total terminal costs	000 PLN	0	0	0	-174	-7	-233610	

For the year 2012 a decrease in the staff costs, depreciation and the cost of capital can be noticed. The other operating costs are slightly higher as IMWM has to pay PANSa for the usage of PANSa's old AWOS system for 7 months more. Because of the postponement of the putting the new systems into operation IMWM also postponed the employment of the new staff necessary for the AWOS support.

There were no other changes made in the IMWM terminal cost base as compared to the June version of the national Performance Plan.

Civil Aviation Office

Evolution of the CAO terminal costs is presented in the table below.

Table 25. CAO terminal costs evolution (in nominal terms)

CAO terminal costs	Currency	2009 A	2010 A	2011 F	2012 D	2013 D	2014 D	2014D/ 2011F
determined costs nominal values (NPP 06.2011)								
Staff	000 PLN	2 213	2 484	2 338	2 450	2 580	2 523	7,92%
Other operating costs	000 PLN	954	1 004	1 284	1 398	1 472	1 440	12,15%
Depreciation	000 PLN							
Cost of capital	000 PLN							
Exceptional items	000 PLN							
Total terminal costs	000 PLN	3 167	3 488	3 621	3 848	4 053	3 962	9,42%
% change $n/(n-1)$			10,14%	3,83%	6,26%	5,33%	-2,23%	
determined costs nominal values (Addendum 01.2012)								
Staff	000 PLN	2 213	2 484	2 338	2 464	2 595	2 536	8,49%
Other operating costs	000 PLN	954	1 004	1 284	1 406	1 481	1 447	12,74%
Depreciation	000 PLN							
Cost of capital	000 PLN							
Exceptional items	000 PLN							
Total terminal costs	000 PLN	3 167	3 488	3 621	3 870	4 075	3 983	10,00%
% change $n/(n-1)$			10,14%	3,83%	6,86%	5,32%	-2,26%	
determined costs nominal values (difference)								
Staff	000 PLN	0	0	0	14	14	13	
Other operating costs	000 PLN	0	0	0	8	8	8	
Depreciation	000 PLN							
Cost of capital	000 PLN							
Exceptional items	000 PLN							
Total terminal costs	000 PLN	0	0	0	22	23	21	

The change (increase) in the CAO terminal costs is caused by two factors:

- inclusion of costs related directly to supervision of air traffic services provided at EPSW airport,

- changed percentage allocation of indirect costs (resulting from increased workload related to terminal services with simultaneous unchanged workload related to en-route services – shift from en-route to terminal cost base).

Again, from the perspective of the total Polish terminal cost base the difference indicated above is immaterial.

Provision for new airports

All the information on terminal costs presented above covered 13 airports that are included in the scope of this Performance Plan (12 airports covered by the initial June NPP and Świdnik airport). These constitute the terminal determined costs that can be currently forecasted and for sure will constitute the basis for terminal charges' calculations for the subsequent years of RP1.

However, currently available information indicates that it is likely that during RP1 some additional new airports may be opened in Poland. Therefore it is necessary to somehow ensure financing of ANS at those new airports, taking into account the fact that the EC legal provisions on performance scheme do not foresee amendments to the NPP during the reference period in situations other than when alert thresholds are exceeded.

Taking into account the plans for establishing some new airports which probably will start operating in 2013 and 2014, Poland decided to create a provision for the costs of ANS at these new airports. These costs are calculated on the basis of marginal costs method and will not have any impact on the final en-route cost-efficiency target presented in this document. The provision covers costs of providing services by PANSa and IMWM as well as respective costs of supervision of ANS by the CAO.

For the purpose of calculating this provision Poland decided to classify the airports in accordance with article 54.4 of the Polish Aviation Act (OJ 2006 No 100, item 696, as amended), op.cit.: *4. Dependent on the role played in the development of the country, the airports can be classified as local (communal, poviát-governed) and over-local (regional, national)*. Based on this classification Poland decided to identify the basic and additional equipment for each class (national, regional and local). For the detailed explanation for the standards see annex 2 of the Addendum.

Assuming that four new airports will start operating during RP1 (two in 2013 and another 2 in 2014) – one regional and one local each year – the total provision will be equal to PLN 22 351 798. The table below presents the total value of the provision for the new airports estimated for each of the entity.

Table 26. Provision for terminal costs for the new airports

Provision for the new airports by entity	Currency	2013	2014
PANSa	PLN	7 088 085	14 176 170
METEO	PLN	1 211 476	2 6963 000
CAO	PLN	34 453	69 179
Total provision	PLN	7 653 433	14 698 365

For the purpose of the calculation it was assumed that PANSA will provide its services at 2 regional new airports and for providing services by IMWM and supervision CAO costs for 4 new airports in Poland (2 local and 2 regional, 2 of which will be open in 2013 (one regional and one local) and another 2 in 2014) were taken into account.

For the planned new airports PANSA assumes operational ATM standards and CNS equipment as well as Meteo for a controlled regional airport as follows:

- ILS CAT I on one approach direction;
- introductory aid DVOR/DME or NPA/APV – R-NAV;
- TWR services 8/7 (to be interpreted: eight hours a day, seven days a week)
- permanent Meteo services.

Estimated real costs (and investments) of adjusting the provider of ATM/CNS services to ensure control services on newly opened controlled airport in Poland are shown in the table below.

Table 27. Estimated real annual cost of ensuring ATM/CNS services at a newly opened controlled airport (EPXX) in 2013 and 2014 (prices as per 2011)

No	Item	Total value of investment (PLN)	Average yearly cost (PLN)		
			Depreciation	Other operational costs	Personnel costs
1	Airspace arrangement*				56 380
2	Preparation of Instrument Approach Procedure Chart (IAPCH)*				46 736
3	Operational documentation*				2 808
4	AIP*				79 390
5	Certification and mapping*				5 000
6	Human resources*				5 135 707
	TWR controllers				4 673 003
	Technical services				462 704
7	Investments		1 131 951	630 113	
	ILS				
	Investment cost	2 285 000			
	Other costs		152 333	291 236	
	DVOR/DME				
	Investment cost	2 949 263			
	Other costs		196 618	62 234	
	Tower (TWR)				
	Investment cost	3 200 000			
	Costs of operation		320 000	165 231	
	COM infrastructure				
	Investment cost	4 600 000			
	Costs of operation		463 000	111 412	
	Total estimated annual costs		7 088 085		

*Personnel costs including costs of acquisition and certification

Total estimated costs of adjusting the provider of ATM/CNS services to ensure control services on a newly opened regional controlled airport in Poland excluding the meteo coverage and CAO supervision oscillates around 7,1 MM PLN.

The average annual cost of the aforementioned items refers not to the first, but to the next whole year of operation of a local entity. The average annual staff costs included in human resources item (among others TWR controllers and technical services) also comprise of mandatory costs of national insurance and work fund. A forecast of tower (TWR) investment derivative costs and communication infrastructure (COM) has also been taken into consideration. The values presented in the table are an extrapolation of data coming from the projects executed by the Agency so far, presented without a detailed analysis of cost apportionment in time. Due to interdependence of tasks some of them may be performed after the completion of remaining ones.

Due to the fact that for the local airport's standard do not include the CNS equipment and TWR services, PANSa does not include the provision for two local airports in its part of the provision.

Table below presents the costs for meteorological services per year calculated for local and regional airport.

Table 28. Costs of providing the meteorological services in regional and local airport.

Type of airport	Currency	2013 D	2014 D
Local	PLN	530 895	453 016
Regional	PLN	680 581	893 485

COST OF CAPITAL AND RETURN ON EQUITY

There were some slight modifications made with regard to the cost of capital of PANSa and IMWM (the two accountable entities that include cost of capital in their determined costs). The tables below present the assumptions used by IMWM and PANSa for calculating their cost of capital.

Table 29. PANSa cost of capital for en-route charges (nominal values, '000 PLN).

PANSa costs of capital for en-route ('000 PLN)	2011	2012	2013	2014
Net book value fixed assets	534 338	627 407	697 791	796 340
Adjustments total assets	0	0	0	0
Net current assets	68 472	11 764	35 464	56 345
Total asset base	602 810	639 170	733 255	852 685
Cost of capital pre tax rate - base	5,89%	3,58%	3,80%	1,40%
Return on equity - base	5,90%	3,50%	3,50%	0,32%
Average interest on debts - base	5,75%	5,95%	5,95%	5,95%

PANSa decided to use, for the calculation of the cost of capital, the verified values of the Opening Balance for 2012 resulting from actualization of the investment plan and non-utilization of investment loan arising thereof (for detailed information please see Table 12 of this Addendum). The update of the investment plan for the subsequent years has also a direct impact on the level of the cost of capital for en-

route charges in the whole RP1. It has to be underlined that the level of return on equity and interest on debt remains at the same level as included in the June Performance Plan. Changes in the level of WACC expressed in % result only from changes of the financing structure being a consequence of updated 2012 Opening Balance.

As a consequence PANSA's cost of capital for en –route charges is lower by PLN 2 435 727 in 2012 and by 2 325 231 in 2013 and is higher in 2014 by PLN 1 451 396.

The table below presents the values used by IMWM for the calculation of the cost of capital.

Table 30. IMWM cost of capital for en-route charges.

IMWM costs of capital for en-route (‘000 PLN)	2011	2012	2013	2014
Net book val. fixed assets	3 195	3 145	6 295	6 564
Adjustments total assets	0,0	0,0	0,0	0,0
Net current assets	1 591	1 186	1 189	1 294
Total asset base	4 786	4 330	7 484	7 858
Cost of capital pre tax rate - base	6,3%	6,3%	6,4%	6,4%
Return on equity - base	5,3%	5,3%	5,3%	5,3%
Average interest on debts - base	7,0%	7,0%	7,0%	7,0%

As was mentioned in this Addendum all the modifications made in the IMWM costs base result from the postponement of the AWOS installation process. Postponement of the AWOS installation process caused also changes in the costs of capital for en-route charges. As compared to the values presented in June, IMWM cost of capital for en-route charges is lower by PLN 142 748 in 2012, by PLN 44 938 in 2013 and by 121 954 in 2014..

The same modifications were used for the recalculation of the cost of capital for terminal charges. As a consequence PANSA cost of capital is equal to PLN 4 176 602 in 2012, PLN 4 498 982 in 2013 and 1 969 486 in 2014. The verified cost of capital for IMWM is PLN 220 384 in 2012, PLN 394 223 in 2013 and PLN 413 447 in 2014.

INVESTMENTS

PANSA's planned operations have been grouped around PANSA's strategic partial goals. This chapter comprises information on most considerable amendments to investments planned by PANSA for the years 2012-2014. Amendments to the Investment Plan resulted from the following reasons:

- modification of PANSA's strategic concept regarding facilities (e.g. Auxiliary Center completion dates),
- modification of IATCS construction concept,

- necessity to adjust PANSA's investment plans to investment projects carried out by airports (exchange the order of DVOR/DME performance with ILS in Szczecin, rescheduling ILS Warszawa RWY33 performance from 2012 to 2013),
- take-over of investment implementation (ILS/DME) from PANSA by Modlin airport and Świdnik airport.

It should be noted that amendments to the Investment Plan do not influence the following:

- timelines of investment implementation in new airports,
- opening date of new airports in Modlin and Świdnik,
- implementation of PANSA's strategic targets especially with regard to Capacity.

The main amended investment projects include:

- Implementation of PEGASUS_21 system,
- Implementation of radars in selected locations,
- Modernization and development of CNS infrastructure.

Due to amendments to Pegasus_21 system implementation schedule (second half of 2012), caused by the signing of an annex to the contract on project implementation, payment was postponed. Amount planned to be paid in 2012 adds up to 9 912 thousand PLN. This investment will considerably influence the increase of sector capacity in upper airspace (in place of currently operating AMS 2000+). New solutions will facilitate introduction of vertical airspace sector division and implementation of new system tools (MTCD, SYSCO, MONA), designed to decrease workload of air traffic controllers. Increase of airspace capacity and increase of its throughput will directly decrease the level of current delays.

Preliminary planned expenses for the construction of Integrated Air Traffic Control Center (IATCC), revealed in the NPP in the amount of 11 500 thousand PLN, were decreased to the amount of 2 965 thousand PLN. The difference amounting to 8 535 thousand PLN results from modification of the IATCC construction concept.

The next group of investment projects considerably influencing the amendment of the investment plan amount include projects related to maintenance and development of navigational infrastructure. Actions taken in this respect are directed to adjust airspace capacity to forecasted air traffic level, thus facilitating conditions to increase or retain the level of safety with respect to ensured air traffic services. In the long time perspective, selected elements of ground navigational infrastructure (among others DME) will continue operation as sensors for ensuring safety of air traffic operations in case of failure or degradation of GNSS signal, which is intended to become a common use navigational system.

The NPP version of June 2011 assumed the amount of 13 020 thousand PLN, which has now increased to 18 243 thousand PLN (difference of 5 223 thousand PLN). Increase of the amount of planned capital expenditure for the performance of 11 investment projects including: 1 NDB, 4 DME and 6 DVOR/DME results mainly from:

- a) an increase of planned investment value of DVOR/DME in Łódź due to specificity of facility location (ca. 2 400 thousand PLN);

- b) an increase of planned value DVOR/DME Bydgoszcz by ca. 1 400 thousand PLN due to a supplementary investment (construction of gate, road);
- c) an acceleration of DVOR/DME Szczecin implementation due to adjustment of navigational aids to airport infrastructure (over 1 500 thousand PLN);
- d) an acceleration of DVOR/DME Modlin and finishing the project in 2011 due to adjustment to Modlin airport opening date (over 1 000 thousand PLN).

The investment value planned to be incurred from the radiocommunication system, as introduced in the NPP June version, amounted to 14 220 thousand PLN, constituting a variance of 5 035 thousand PLN in comparison to the current plan. Decrease in the planned expenditure value for implementation of 10 investment projects concerning radiocommunication facilities results mainly from:

- a) milestone scheduling of radiocommunication facilities implementation within the scope of radiocommunication facility Warszawa project to ensure continuity of operation (variance 1 400 thousand PLN);
- b) integrating the following 4 tasks into one radiocommunication facilities Gdańsk project: Kokoszki, Somomino, Złota Karczma and Trzebielino with postponement of part of the project to 2013 (variance ca. 2 600 thousand PLN) ;
- c) postponement of radiocommunication facility Kraków construction to 2013 (745 thousand PLN).

Actions planned within the scope of adjusting the radiocommunication system relate to the new airspace sector division due to become effective upon implementation of the new ATM system – PEGASUS_21. Implementation of data transmission service in accordance with Link2000+ and in accordance with Regulation No. 29/2009¹ of the European Commission is to increase ACC sector capacity. Projects to develop ground infrastructure with package commutation sub-system will also be implemented. Development of package backbone network based on IP protocol will ensure feasibility to implement new services (AMHS, OLDI/FMTP, VoIP), as well as co-sharing and access from any location within the territory of the country. It is assumed that in the future standard pilot-controller communication will be performed utilizing digital format data transmission, whereas voice service will be utilized in exceptional situations.

Another investment project to impact the amount of the investment plan was modernization of VCS voice transmission systems. In the NPP June version the amount of expenditure was 5 000 thousand PLN and was then overestimated to the amount of 1 028 thousand PLN. Difference of 3 972 thousand PLN is due from rescheduling (postponement to subsequent years) and resulting in amendments to the Investment Plan 2012 in relation to Investment Plan 2011 constituting the basis for NPP expenditure.

Surveillance systems constitute the key element of integrated air traffic control system enabling safe and effective air traffic control. In view of the increase in air

¹ Regulation No. 29/2009¹ of the European Commission as of 16 January, 2009 specifying the requirements for data connection services in single European sky.

traffic operations, it is essential to ensure infrastructure allowing for air traffic control at least to maintain current safety level. New sources of surveillance data will be implemented within the performance of the project (both of reinstatement and development characteristics), e.g. Poznań radar system, Kraków, Wrocław, north-east region and PSR MSSR Warszawa radiolocation systems. PANSA's target is to implement new technical solutions reinstating the current sole surveillance information source, i.e. radar upon accomplishment by hyperbolic systems (multilateration) or ADS-B systems of development level enabling their certification and operational implementation as well as implementation of extended functionality systems as compared to current solutions (secondary radars utilizing Mode S).

Increase of the amount of planned capital expenditure for the performance of 5 investment projects from 17 480 thousand PLN to 21 459 thousand PLN (variance 3 979 thousand PLN) results mainly from:

- a) an increase of planned investment value of Wrocław radar due to rescheduling of project implementation date (ca. 5 800 k PLN);
- b) a decrease in planned expenditure on north-east radiolocation system since it is contingent upon the construction of a radar in Wrocław (upon the start-up of a new radar in Wrocław, facilities relying on the current radar will be utilized in north-east radiolocation system (930 thousand PLN);
- c) a decrease in planned expenditure for a radar in Poznań (ca. 680 k PLN) due to an update of amounts upon the contract and the schedule.

Actions taken to maintain and develop airport infrastructure shall ensure procedures for imprecise, manual approach and increase the operational capacity of the airport as well as extending the number of available approach procedures. Decrease in planned expenditure value for implementation of 5 investment projects (from 6 010 thousand PLN to 3 510 thousand PLN) regarding ILS/DME is mainly due to:

- a) the postponement of ILS/DME direction 33 Warszawa implementation date due to adjustment to Warsaw Airport investment plans (1 800 thousand PLN);
- b) the rescheduling of DVOR/DME and ILS implementation in Szczecin (1 200 thousand PLN);
- c) the takeover of ILS/DME (1 025 thousand PLN) investment implementation by Modlin Airport;
- d) arrangements made with Świdnik Airport to take over implementation of the investment (610 thousand PLN in 2012 and 2,8 million PLN in 2013).

The table below includes the most substantial amendments to PANSA's investment projects for 2012-2014 as compared to NPP as drawn up in June 2011.

Table 31. PANSAs Investment Projects for 2014-2014 (denominated in PLN)

Area/Domain	Name of Project	2012			2013			2014		
		Planned expenditure in accordance with Investment Plan 2012-2016	NPP Planned expenditure in 2012 in accordance with Investment Plan 2011-2015	Difference in relation to NPP	Planned expenditure in accordance with Investment Plan 2012-2016	NPP Planned expenditure in 2012 in accordance with Investment Plan 2011-2015	Difference in relation to NPP	Planned expenditure in accordance with Investment Plan 2012-2016	NPP Planned expenditure in 2012 in accordance with Investment Plan 2011-2015	Difference in relation to NPP
ATM	System ATM PEGASUS_21	9 911 931	0	9 911 931	0	0	0	0	0	0
SUR	Radiolocation systems	21 459 415	17 480 000	3 979 415	24 900 000	24 380 000	520 000	26 000 000	26 000 000	0
COM	Radiolocation facilities (Ground stations)	9 185 000	14 220 000	- 5 035 000	12 520 000	16 880 000	-4 360 000	4 895 000	0	4 895 000
NAV	Modernization and development of NAV infrastructure (DME, DVOR)	18 242 900	13 020 000	5 222 900	9 225 000	9 475 000	-250 000	9 100 000	15 000 000	-5 900 000
NAV	Modernization and development of NAV – ILS infrastructure	2 500 000	6 010 000	- 3 510 000	4 322 561	5 990 000	-1 667 439	2 500 000	9 200 000	-6 700 000
COM	Modernization of voice transmission systems VCS (Poznań, Wrocław, Rzeszów, Gdańsk, Warszawa)	1 028 331	5 000 000	- 3 971 669	7 000 000	2 000 000	5 000 000	0	0	0
Facility infrastructure	Integrated Air Traffic Control Center (Training and administration Office Block (IATCC))	2 965 000	11 500 000	- 8 535 000 PLN	0	20 000 000	-20 000 000	0	2 000 000	-2 000 000

Due to amendments in investment plan and inclusion of new airports as well as rescheduling of AWOS deliverance date, costs of TNC and En-Route in 2012-2014 will decrease by 1 518 044 PLN

The table below presents differences in planned depreciation cost for 2012-2014 as provided in National Performance Plan and revaluation of PANSAs contribution to NPP submitted to CAO on 10 January, 2012.

Table 32. differences in PANSAs planned depreciation

	2012	2013	2014	Total 2012-2014
Depreciation as Planned in National Performance Plan of June 2011	61 157 784	73 822 871	81 287 079	216 267 735
Change in Depreciation due to Investment Plan Optimization	-1 633 887	-982 880	323 930	-2 292 836
Change in Depreciation due to Inclusion of New Airports	0	926 000	926 000	1 852 000
Change in Planned Depreciation due to Update of AWOS Facilities Deliverance Date	1 698 556	171 221	89 102	1 958 880
Depreciation as Planned in NPP of January 2012	61 222 454	73 937 213	82 626 112	217 785 778
Influence of Changes on PANSAs costs				1 518 044

2.3 Appropriate measures to reach the revised cost-efficiency target

All measures described in the June Performance Plan remain valid.

2.4 Information on uncontrollable costs

Poland decided to establish costs beyond control of entities subject to this Plan and responsible for its approval in line with the cost categories listed in Article 11.8 point c of the amended Charging Regulation. As mentioned in point 2.4. *Parameters for risk-sharing and incentives* of the Polish NPP any unforeseen changes in national legally binding pension regulations and pension accounting regulations that are obligatorily applicable to the entities covered by this Plan, unforeseen changes to national taxation law, unforeseen and new cost items not covered by this national Performance Plan but obligatorily required by law, unforeseen changes in costs or revenues stemming from international bilateral or multilateral agreements concluded by Poland, including possible new costs that will have to be incurred by the entities covered by this Plan in accordance with these agreements and significant (not lower than 2 percentage points) changes in interest rates on loans as compared to the assumptions of this Plan concerning calculation of the cost of capital will be regarded as the uncontrollable costs and will not be subject to the cost-risk mechanism as described in Article 11a of the amended Charging Regulation.

Assumptions used for the purpose of establishing determined cost values in the NPP with regard to the above mentioned cost categories are listed below:

- VAT rate: basic rate 23%, reduced rate 8% (in accordance with Polish VAT Act of 11 March 2004 (OJ 2011 No 177, item 1054, as amended)),
- property tax: 2% (local regulations),
- pension contribution level: 9,76% (in accordance with the Act on Social Security System (OJ 2009 No 205, item 1585, as amended)).

With regard to EUROCONTROL costs (costs stemming from international agreements) and interest rates detailed information on assumptions made is provided in respective subchapters of the Plan concerning contribution by each accountable entity (Chapter 3).

For other costs regarded as uncontrollable costs (as listed above) covering unforeseeable new costs no assumptions as regards level of these costs could be made at the time of drafting the Plan.

Table 33 below present information on the taxes and pension contributions, calculated in accordance with the above mentioned assumptions, included in the determined costs (total for ER and TNC) for the RP1.

Table 33. Taxes and pension contributions included in the total determined costs in the Poland's Performance Plan (000 PLN)

ER+TNC	VAT			Property tax			Pension contributions		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
PANSA	321*	346*	368*	1 413	1 495	1 560	15 436	16 626	16 981
IMWM	negligible	negligible	negligible	0	0	0	768	845	910
CAO	negligible	negligible	negligible	0	0	0	538	571	564
Total	321	346	368	1 413	1 495	1 560	16 742	18 042	18 455

* Including VAT on vehicles (23 % VAT rate) and other (including costs of hotel and gastronomic services – 8% VAT)

Information on possible impact of changes in the respective regulations determining the level of these uncontrollable costs is provided below. The impact is assessed for each of the accountable entities separately. For the purpose of this assessment the following assumptions were made:

- change in the level of VAT tax rate of 1 percentage point: from 23% to 24% and from 8% to 9%, respectively,
- change in the level of property tax rate of 1 percentage point: from 2% to 3%,
- change in the level of pension contribution rate of 1 percentage point: from 9,76% to 10,76%.

With regard to interest rate on loans, the assessment assumes increase of 2 percentage points.

PANSA

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) will be equal to 3,78 % in 2012, 3,89 % in 2013 and 3,86% in 2014.

The impact of the change in the pension contribution level would cause changes in the total determined costs of PANSA (ER and TNC) of:

- PLN 1 581 592 in 2012,
- PLN 1 703 516 in 2013,
- PLN 1 739 832 in 2014.

Consequently, the share in the total staff costs would increase up to 4,15 % in 2012, 4,27 % in 2013 and 4,24 % in 2014.

The possible impact of the 1 percentage point change in the VAT tax rate on the determined costs would be equal to:

- PLN 28 387 increase in 2012,
- PLN 30 555 increase in 2013,
- PLN 31 884 increase in 2014.

The possible impact of the 1 percentage point change in the property tax rate would cause the increase in the determined costs by:

- PLN 479 802 in 2012,
- PLN 492 843 in 2013,
- PLN 505 440 in 2014.

The table below presents the impact of the possible changes in the two groups of PANSA's unforeseeable costs on the terminal and en route determined costs.

Table 34. Impact of possible changes of tax and pension regulations on PANSA's terminal and en route determined costs (000 PLN).

000 PLN	2012	2013	2014
En route	1 800	1 919	1 959
Terminal	291	309	319

With regard to the cost of capital, in case of PANSA the assumed increase of interest rate of 2 percentage points would lead to increase of interest on debt from the initially assumed 5,95% to 7,95%. With all other values unchanged (total asset base, return on equity, share of debt financing as presented in the Performance Plan Table 35

and additional information to terminal charges' reporting tables) that would lead to increase in en-route and terminal costs, respectively, as presented in the table below.

Table 35 Impact of possible changes in the level of interest on debt on PANSA's terminal and en route determined costs (000 PLN).

000 PLN	2012	2013	2014
En route	1 066	1 889	2 730
Terminal	192	286	383

IMWM

The total share of the costs of the pension contributions in the total staff costs (gross remunerations with all applicable social contributions and Labour Fund) used for the calculation of the determined costs will be equal to 8,1% during the period 2012-2014.

The impact of the change in the pension contribution level would cause changes in the total determined costs of IMWM (ER and TNC) of:

- kPLN 79 in 2012,
- kPLN 87 in 2013,
- kPLN 93 in 2014.

Consequently, the share in the total staff costs would increase up to 8,9% in the period 2012-2014.

The possible impact of the 1 percentage point increase in the pension contribution would cause the increase in the total staff costs by 0,84% in 2012, 0,85% in 2013 and 0,85% in 2014.

The table below presents the impact of the possible changes in the two groups of IMWM's unforeseeable costs on the terminal and en route determined costs.

Table 36 Impact of possible changes of tax and pension regulations on IMWM's terminal and en route determined costs (000 PLN).

000 PLN	2012	2013	2014
En route	43	48	51
Terminal	36	39	42

With regard to the cost of capital, in case of IMWM the assumed increase of interest rate of 2 percentage points would lead to increase of interest on debt from the initially assumed 7% to 9%. With all other values unchanged (total asset base, return on equity, share of debt financing as presented in the Performance Plan Table 40 and additional information to terminal charges' reporting tables) that would lead to increase in en-route and terminal costs, respectively, as presented in the table below.

Table 37 Impact of possible changes in the level of interest on debt on IMWM's terminal and en route determined costs (000 PLN).

000 PLN	2012	2013	2014
En route	100	120	132
Terminal	81	98	109

CAO

There will be no impact of the above mentioned changes in the uncontrollable costs on the CAO determined costs for both en route and terminal costs. This is due to the fact that in accordance with rules and practice applicable to budgetary units, such as the CAO, the total budget is a *constans* maximum that once established cannot change. In case when due to changes in applicable VAT or social security regulations these expenditures form the CAO budget would increase, the CAO would be required to limit other expenditures to as not to increase the level of the total budget.

3. Other information

Polish Performance Plan described the consultation process, however the written comments from IATA were not included due to late delivery. The document assesses the capacity targets as insufficiently ambitious. The difference between indicative reference value of ATFM En Route delay calculated for Poland by EUROCONTROL 0,26 min per flight and national target 0,6 min per flight is unacceptable. Taking into consideration stakeholders comments the capacity target was reduced in June to 0,5 min per flight.

With regard to the cost-efficiency target users' representatives' comments provided during the works on the NPP focused on the proposed cost reallocation and compliance of the national target with the EU-wide one. IATA believed that the cost reallocation was unjustified. Taking this comment into account, during the finalization of the NPP CAO again verified the reallocation to make sure that it does not burden en-route users with any costs that are related to purely terminal services. The new cost-allocation shall also foster future cross-border arrangements within the Baltic FAB. With regard to the users' expectations of the national target to be fully compliant with the EU-wide, to be understood as 3,5% reduction of the DUR p.a. over the RP1, following the consultation Poland improved its cost-efficiency target by moving it closer to the users' expectations. During the consultation the average reduction of DUR between 2011 and 2014 accounted for -1,43% p.a., while in the final June NPP it amounted to -2,28% p.a. Further cost limitations would hinder the achievement of capacity target, what has been extensively described in the Plan.

En-route charges reporting tables

Table 1 - Total Costs

Charging zone name	Poland					Period of reference : 2012-2014				
Consolidation - all entities										
	Forecast Costs*		Determined Costs			Actual costs				
Cost details	2010F*	2011F*	2012	2013	2014	2010	2011	2012	2013	2014
1. Detail by nature (in nominal terms)										
1.1 Staff	318,9	354,8	408,4	431,5	441,0	304,5				
1.2 Other operating costs	134,4	131,7	139,5	137,8	141,8	115,7				
1.3 Depreciation	39,9	39,3	52,7	64,8	72,0	34,0				
1.4 Cost of capital	16,6	35,8	23,2	28,3	12,5	16,9				
1.5 Exceptional items	0,0	0,0	0,0	0,0	0,0	0,0				
1.6 Total costs	509,9	561,6	623,7	662,5	667,3	471,2				
Total % n/n-1		10,1%	11,1%	6,2%	0,7%					
Staff % n/n-1		11,3%	15,1%	5,7%	2,2%					
Other op. % n/n-1		-2,0%	5,9%	-1,2%	2,9%					
2. Detail by service (in nominal terms)										
2.1 Air Traffic Management	319,4	357,4	400,0	428,4	429,0	296,1				
2.2 Communication	18,2	22,0	19,8	21,3	21,7	13,1				
2.3 Navigation	33,0	36,6	48,7	50,6	51,1	24,6				
2.4 Surveillance	36,4	45,3	51,9	56,2	58,7	35,0				
2.5 Search and rescue	0,1	0,8	0,4	0,4	0,6	0,1				
2.6 Aeronautical Information	37,3	37,6	41,1	41,8	40,9	33,4				
2.7 Meteorological services	22,0	22,0	18,1	19,3	20,1	18,5				
2.8 Supervision costs	7,2	6,9	6,8	7,3	7,2	6,5				
2.9 Other State costs	36,2	33,0	37,0	37,2	38,0	44,0				
2.10 Total costs	509,9	561,6	623,7	662,5	667,3	471,2				
Total % n/n-1		10,1%	11,1%	6,2%	0,7%					
ATM % n/n-1		11,9%	11,9%	7,1%	0,1%					
CNS % n/n-1		18,6%	15,8%	6,4%	2,7%					
3. Complementary information on the cost of capital and on the cost of common projects (in nominal terms)										
Average asset base										
3.1 Net book val. fixed assets	448,6	537,5	630,6	704,1	802,9	467,9				
3.2 Adjustments total assets	0,0	0,0	0,0	0,0	0,0	0,0				
3.3 Net current assets	151,4	70,1	12,9	36,7	57,6	15,4				
3.4 Total asset base	599,9	607,6	643,5	740,7	860,5	483,2				
Cost of capital %										
3.5 Cost of capital pre tax rate	2,8%	5,9%	3,6%	3,8%	1,4%	3,5%				
3.6 Return on equity										
3.7 Average interest on debts										
Cost of common projects										
3.8 Common Project 1										
4. Complementary information on inflation and on total costs in real terms										
4.1 Inflation % (1)	2,7%	4,1%	2,9%	2,6%	2,5%					
4.2 Price index - Base 100 in 2009	102,7	106,9	110,0	112,8	115,7					
4.3 Total costs real terms (2)	496,5	525,5	567,3	587,1	576,9	458,8				
Total % n/n-1		5,9%	7,9%	3,5%	-1,7%					
5. Deduction of costs allocated to exempted VFR flights (in nominal terms)										
5.1 Total costs	509,9	561,6	623,7	662,5	667,3	471,2				
5.2 Costs for exempted VFR flight	2,5	1,1	0,6	0,6	0,6	1,8				
5.3 Total costs after deduction	507,4	560,5	623,1	661,9	666,7	469,3				

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

(1) Forecast inflation used for establishing the determined costs in nominal terms - actual inflation

(2) Determined costs (performance plan) in real terms - actual costs in real terms - base 100 in 2009

(3) Determined costs (after deduction of VFR costs) reported at line 1.1 - Reporting Table 2 (in nominal terms)

*Forecast data used for the calculation of the corresponding unit rates (i.e. November 2009 data for 2010 F; November 2010 data for 2011 F)

Charging zone name	Poland						Period of reference : 2012-2014				
ANSP Name	PANSA										
		Forecast Costs*		Determined Costs			Actual costs				
Cost details	2010F*	2011F*	2012	2013	2014	2010	2011	2012	2013	2014	
1. Detail by nature (in nominal terms)											
1.1 Staff	302,9	343,6	399,2	421,3	430,5	292,7					
1.2 Other operating costs	86,4	81,9	87,7	86,1	89,2	58,7					
1.3 Depreciation	38,9	38,7	52,5	64,0	71,1	33,9					
1.4 Cost of capital	16,3	35,5	22,9	27,8	12,0	16,9					
1.5 Exceptional items	0,0	0,0	0,0	0,0	0,0	0,0					
1.6 Total costs	444,4	499,7	562,4	599,3	602,7	402,2					
Total % n/n-1		12,4%	12,6%	6,6%	0,6%						
Staff % n/n-1		13,5%	16,2%	5,5%	2,2%						
Other op. % n/n-1		-5,2%	7,2%	-1,9%	3,6%						
2. Detail by service (in nominal terms)											
2.1 Air Traffic Management	319,4	357,4	400,0	428,4	429,0	296,1					
2.2 Communication	18,2	22,0	19,8	21,3	21,7	13,1					
2.3 Navigation	33,0	36,6	48,7	50,6	51,1	24,6					
2.4 Surveillance	36,4	45,3	51,9	56,2	58,7	35,0					
2.5 Search and rescue	0,1	0,8	0,4	0,4	0,6	0,1					
2.6 Aeronautical Information	37,3	37,6	41,1	41,8	40,9	33,4					
2.7 Meteorological services	0,0	0,0	0,5	0,6	0,8	0,0					
2.8 Supervision costs	0,0	0,0	0,0	0,0	0,0	0,0					
2.9 Other State costs	0,00	0,0	0,0	0,0	0,0	0,0					
2.10 Total costs	444,4	499,7	562,4	599,3	602,7	402,2					
Total % n/n-1		12,4%	12,6%	6,6%	0,6%						
ATM % n/n-1		11,9%	11,9%	7,1%	0,1%						
CNS % n/n-1		18,6%	15,8%	6,4%	2,7%						
3. Complementary information on the cost of capital and on the cost of common projects (in nominal terms)											
Average asset base											
3.1 Net book val. fixed assets	441,6	534,3	627,4	697,8	796,3	467,6					
3.2 Adjustments total assets	0,0	0,0	0,0	0,0	0,0	0,0					
3.3 Net current assets	149,2	68,5	11,8	35,5	56,3	14,0					
3.4 Total asset base	590,8	602,8	639,2	733,3	852,7	481,6					
Cost of capital %											
3.5 Cost of capital pre tax rate	2,8%	5,9%	3,58%	3,80%	1,40%	3,5%					
3.6 Return on equity	3,5%	5,9%	3,5%	3,5%	0,32%	3,5%					
3.7 Average interest on debts	7,4%	5,8%	5,95%	5,95%	5,95%	0,0%					
Cost of common projects											
3.8 Common Project 1											
4. Complementary information on inflation and on total costs in real terms											
4.1 Inflation % (1)	2,7%	4,1%	2,9%	2,6%	2,5%						
4.2 Price index - Base 100 in 2009	102,7	106,9	110,0	112,8	115,7						
4.3 Total costs real terms (2)	432,7	467,6	511,5	531,1	521,1	391,6					
Total % n/n-1		8,1%	9,4%	3,8%	-1,9%						
5. Deduction of costs allocated to exempted VFR flights (in nominal terms)											
5.1 Total costs	444,4	499,7	562,4	599,3	602,7	402,2					
5.2 Costs for exempted VFR flights	0,6	1,1	0,637	0,632	0,596	0,8					
5.3 Total costs after deduction (3)	443,8	498,6	561,7	598,7	602,1	401,4					
Costs and asset base items in '000 000 PLN - Service units in '000 000											
(1) Forecast inflation used for establishing the determined costs in nominal terms - actual inflation											
(2) Determined costs (performance plan) in real terms - actual costs in real terms - base 100 in 2009											
(3) Determined costs (after deduction of VFR costs) reported at line 1.1 - Reporting Table 2 (in nominal terms)											
*Forecast data used for the calculation of the corresponding unit rates (i.e. November 2009 data for 2010 F; November 2010 data for 2011 F)											

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

(1) Forecast inflation used for establishing the determined costs in nominal terms - actual inflation

(2) *Determined costs (performance plan) in real terms - actual costs in real terms - base 100 in 2009*

(3) *Determined costs (after deduction of VET costs) reported at line 1.1 - Reporting Table 2 (in nominal terms)*

*Forecast data used for the calculation of the corresponding unit rates (i.e. November 2009 data for 2010 F; November 2010 data for 2011 F)

Table 1 - Total Costs

Charging zone name	Poland					Period of reference : 2012-2014				
MET Service provider name	IMWM									
	Forecast Costs*		Determined Costs			Actual costs				
Cost details	2010F*	2011F*	2012	2013	2014	2010	2011	2012	2013	2014
1. Detail by nature (in nominal terms)										
1.1 Staff	10,9	6,7	4,8	5,5	5,9	7,1				
1.2 Other operating costs	9,7	14,3	12,3	11,9	11,9	11,2				
1.3 Depreciation	1,0	0,6	0,2	0,8	0,9	0,1				
1.4 Cost of capital	0,4	0,3	0,3	0,5	0,5	0,1				
1.5 Exceptional items										
1.6 Total costs	22,0	22,0	17,6	18,7	19,3	18,5				
Total % n/n-1		-0,1%	-20,2%	6,8%	2,9%					
Staff % n/n-1		-38,4%	-28,6%	14,5%	7,4%					
Other op. % n/n-1		48,3%	-14,4%	-2,7%	-0,1%					
2. Detail by service (in nominal terms)										
2.1 Air Traffic Management										
2.2 Communication										
2.3 Navigation										
2.4 Surveillance										
2.5 Search and rescue										
2.6 Aeronautical Information										
2.7 Meteorological services	22,0	22,0	17,6	18,7	19,3	18,5				
2.8 Supervision costs										
2.9 Other State costs										
2.10 Total costs	22,0	22,0	17,6	18,7	19,3	18,5				
Total % n/n-1		-0,1%	-20,2%	6,8%	2,9%					
ATM % n/n-1										
CNS % n/n-1										
3. Complementary information on the cost of capital and on the cost of common projects (in nominal terms)										
Average asset base										
3.1 Net book val. fixed assets	6,9	3,2	3,1	6,3	6,6	0,2				
3.2 Adjustments total assets	0,0	0,0	0,0	0,0	0,0	0,0				
3.3 Net current assets	2,2	1,6	1,2	1,2	1,3	1,3				
3.4 Total asset base	9,1	4,8	4,3	7,5	7,9	1,6				
Cost of capital %										
3.5 Cost of capital pre tax rate	4,1%	6,3%	6,3%	6,4%	6,4%	5,6%				
3.6 Return on equity	3,5%	5,3%	5,3%	5,3%	5,3%	5,6%				
3.7 Average interest on debts	3,5%	7,0%	7,0%	7,0%	7,0%	0,0%				
Cost of common projects										
3.8 Common Project 1										
4. Complementary information on inflation and on total costs in real terms										
4.1 Inflation % (1)	2,7%	4,1%	2,9%	2,6%	2,5%					
4.2 Price index - Base 100 in 2009	102,7	106,9	110,0	112,8	115,7					
4.3 Total costs real terms (2)	21,4	20,6	16,0	16,6	16,7	18,0				
Total % n/n-1		-3,9%	-22,5%	4,0%	0,4%					
5. Deduction of costs allocated to exempted VFR flights (in nominal terms)										
5.1 Total costs	22,0	22,0	17,6	18,7	19,3	18,5				
5.2 Costs for exempted VFR flights	1,9	0,0	0,0	0,0	0,0	1,0				
5.3 Total costs after deduction	20,1	22,0	17,6	18,7	19,3	17,4				

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

(1) Forecast inflation used for establishing the determined costs in nominal terms - actual inflation

(2) Determined costs (performance plan) in real terms - actual costs in real terms - base 100 in 2009

(3) Determined costs (after deduction of VFR costs) reported at line 1.1 - Reporting Table 2 (in nominal terms)

*Forecast data used for the calculation of the corresponding unit rates (i.e. November 2009 data for 2010 F; November 2010 data for 2011 F)

Table 1 - Total Costs

Charging zone name	Poland					Period of reference : 2012-2014				
State - NSA	CAO+Eurocontrol costs									
	Forecast Costs*		Determined Costs			Actual costs				
Cost details	2010F*	2011F*	2012	2013	2014	2010	2011	2012	2013	2014
1. Detail by nature (in nominal terms)										
1.1 Staff	5,1	4,5	4,4	4,6	4,6	4,6				
1.2 Other operating costs	38,3	35,5	39,5	39,8	40,7	45,9				
1.3 Depreciation										
1.4 Cost of capital										
1.5 Exceptional items										
1.6 Total costs	43,5	39,9	43,8	44,5	45,3	50,5				
Total % n/n-1		-8,1%	9,8%	1,5%	1,8%					
Staff % n/n-1		-12,8%	-2,1%	6,5%	-0,5%					
Other op. % n/n-1		-7,5%	11,3%	1,0%	2,0%					
2. Detail by service (in nominal terms)										
2.1 Air Traffic Management										
2.2 Communication										
2.3 Navigation										
2.4 Surveillance										
2.5 Search and rescue										
2.6 Aeronautical Information										
2.7 Meteorological services										
2.8 Supervision costs	7,2	6,9	6,8	7,3	7,3	6,5				
2.9 Other State costs (inc.ECTL)	36,2	33,0	37,0	37,2	38,0	44,0				
2.10 Total costs	43,5	39,9	43,8	44,5	45,3	50,5				
Total % n/n-1		-8,1%	9,8%	1,5%	1,8%					
ATM % n/n-1										
CNS % n/n-1										
3. Complementary information on the cost of capital and on the cost of common projects (in nominal terms)										
Average asset base										
3.1 Net book val. fixed assets										
3.2 Adjustments total assets										
3.3 Net current assets										
3.4 Total asset base										
Cost of capital %										
3.5 Cost of capital pre tax rate										
3.6 Return on equity										
3.7 Average interest on debts										
Cost of common projects										
3.8 Common Project 1										
4. Complementary information on inflation and on total costs in real terms										
4.1 Inflation % (1)	2,7%	4,1%	2,9%	2,6%	2,5%					
4.2 Price index - Base 100 in 200	102,7	106,9	110,0	112,8	115,7					
4.3 Total costs real terms (2)	42,3	37,4	39,9	39,4	39,1	49,2				
Total % n/n-1			6,7%	-1,1%	-0,7%					
5. Deduction of costs allocated to exempted VFR flights (in nominal terms)										
5.1 Total costs	43,5	39,9	43,8	44,5	45,3	50,5				
5.2 Costs for exempted VFR flights										
5.3 Total costs after deduction	43,5	39,9	43,8	44,5	45,3	50,5				
Costs and asset base items in '000 000 PLN - Service units in '000 000										
(1) Forecast inflation used for establishing the determined costs in nominal terms - actual inflation										
(2) Determined costs (performance plan) in real terms - actual costs in real terms - base 100 in 2009										
(3) Determined costs (after deduction of VFR costs) reported at line 1.1 - Reporting Table 2 (in nominal terms)										
*Forecast data used for the calculation of the corresponding unit rates (i.e. November 2009 data for 2010 F: November 2010 data for										

Table 2 - Unit rate calculation					
Charging zone name : Poland					
Consolidation - all entities					
Unit rate calculation	2010F	2011F	2012	2013	2014
1. Determined costs in nominal terms and inflation adjustment					
1.1 Determined costs in nominal terms - VFR excl. - Table 1	507,4	560,5	623,1	661,9	666,7
1.2 Actual inflation rate - Table 1					
1.3 Forecast inflation rate - Table 1	2,7%	4,1%	2,9%	2,6%	2,5%
1.4 Inflation adjustment - Article 1.7.2 : year n amount to be carried over					
2. Forecast and actual total service units					
2.1 Forecast total service units (performance plan)	3,0	3,6	3,9	4,0	4,2
2.2 Actual total service units	3,3				
2.3 Actual / forecast total service units (in %)	8,9%				
3. Costs subject to traffic risk sharing (ANSP)					
3.1 Determined costs in nominal terms - VFR excl. (reported from Table 1)	443,8	498,6	561,7	598,7	602,1
3.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n					
3.3 Traffic - Article 1.4.2 : amounts carried over to year n					
3.4 Traffic risk sharing - Article 1.4.2 : add. revenue carried over to year n					
3.5 Traffic risk sharing - Article 1.4.2: revenues losses carried over to year n					
3.6 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n					
3.7 Bonus or penalty for performance - Article 1.11.2					
3.8 Over(-) or under(+) recoveries (1) : amounts carried over to year n	-2,9	-2,9	-14,0	-17,3	-17,3
3.9 Total for the calculation of year n unit rate	440,9	495,7	547,8	581,3	584,8
3.10 Traffic risk sharing - Article 1.4.2 : add. rev. year n to be carried-over					
3.11 Traffic risk sharing - Article 1.4.2 : revenue loss year n to be carried-over					
Parameters for traffic risk sharing					
3.12 % additional revenue returned to users in year n+2 - Article 1.4.2			70%	70%	70%
3.13 % loss of revenue borne by airspace users - Article 1.4.2			70%	70%	70%
4. Costs not subject to traffic risk sharing - Article 11a (2)					
4.1 Determined costs in nominal terms - VFR excl. (Table 1)	63,6	61,9	61,4	63,2	64,6
4.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n					
4.3 Traffic - Article 1.4.2 : amounts carried over to year n					
4.4 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n					
4.5 Over(-) or under(+) recoveries (1) : amounts carried over to year n	0,06	-0,3	-3,4	0,0	0,0
4.6 Total for the calculation of year n unit rate	63,6	61,6	58,0	63,2	64,6
5. Other revenues - applied unit rate (in national currency)					
5.1 Revenues from other sources - Article 1.3	0,0	0,6	0,0	0,0	0,0
5.2 Grand total for the calculation of year n unit rate	505	557	606	645	649
5.3 Year n unit rate (in national currency)	165,92	155,18	155,37	160,29	156,05
5.4 ANSP component of the unit rate	144,98	138,01	140,50	144,57	140,54
5.5 MET component of the unit rate	6,63	6,47	3,83	4,66	4,63
5.6 NSA-State component of the unit rate	14,30	10,71	11,05	11,06	10,88
5.7 Year n unit rate that would have applied without other revenues	165,92	155,35	155,37	160,29	156,05
Costs, revenues and other amounts in '000 000 PLN - Service units in '000 000					
(1) Over/under recoveries incurred up to the year of entry into force of the determined cost method					

Table 2 - Unit rate calculation					
Charging zone name : Poland					
ANSP name :PANSA					
Unit rate calculation	2010F	2011F	2012	2013	2014
1. Determined costs in nominal terms and inflation adjustment					
1.1 Determined costs in nominal terms - VFR excl. - Table 1	443,8	498,6	561,7	598,7	602,1
1.2 Actual inflation rate - Table 1					
1.3 Forecast inflation rate - Table 1	2,7%	4,1%	2,9%	2,6%	2,5%
1.4 Inflation adjustment - Article 1.7.2 : year n amount to be carried over					
2. Forecast and actual total service units					
2.1 Forecast total service units (performance plan)	3,0	3,6	3,9	4,0	4,2
2.2 Actual total service units	3,3				
2.3 Actual / forecast total service units (in %)	8,9%				
3. Costs subject to traffic risk sharing (ANSP)					
3.1 Determined costs in nominal terms - VFR excl. (reported from Table 1)	443,8	498,6	561,7	598,7	602,1
3.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n					
3.3 Traffic - Article 1.4.2 : amounts carried over to year n					
3.4 Traffic risk sharing - Article 1.4.2 : add. revenue carried over to year n					
3.5 Traffic risk sharing - Article 1.4.2: revenues losses carried over to year n					
3.6 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n					
3.7 Bonus or penalty for performance - Article 1.11.2					
3.8 Over(-) or under(+) recoveries (1) : amounts carried over to year n	-2,9	-2,9	-14,0	-17,3	-17,3
3.9 Total for the calculation of year n unit rate	440,9	495,7	547,8	581,3	584,8
3.10 Traffic risk sharing - Article 1.4.2 : add. rev. year n to be carried-over					
3.11 Traffic risk sharing - Article 1.4.2 : revenue loss year n to be carried-over					
Parameters for traffic risk sharing					
3.12 % additional revenue returned to users in year n+2 - Article 1.4.2			70%	70%	70%
3.13 % loss of revenue borne by airspace users - Article 1.4.2			70%	70%	70%
4. Costs not subject to traffic risk sharing - Article 11a (2)					
4.1 Determined costs in nominal terms - VFR excl. (Table 1)					
4.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n					
4.3 Traffic - Article 1.4.2 : amounts carried over to year n					
4.4 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n					
4.5 Over(-) or under(+) recoveries (1) : amounts carried over to year n					
4.6 Total for the calculation of year n unit rate					
5. Other revenues - applied unit rate (in national currency)					
5.1 Revenues from other sources - Article 1.3	0,0	0,6			
5.2 Grand total for the calculation of year n unit rate	440,9	495,06	547,8	581,3	584,8
5.3 Year n unit rate (in national currency)	144,98	138,01	140,50	144,57	140,54
5.4 ANSP component of the unit rate	144,98	138,01	140,50	144,57	140,54
5.5 MET component of the unit rate					
5.6 NSA-State component of the unit rate					
5.7 Year n unit rate that would have applied without other revenues	144,98	138,18	140,50	144,57	140,54
Costs, revenues and other amounts in '000 000 PLN - Service units in '000 000					
(1) Over/under recoveries incurred up to the year of entry into force of the determined cost method					

Table 2 - Unit rate calculation						
Charging zone name : Poland		Period of reference : 2012-2014				
MET Service provider name : IMWM						
Unit rate calculation		2010F	2011F	2012	2013	2014
1. Determined costs in nominal terms and inflation adjustment						
1.1 Determined costs in nominal terms - VFR excl. - Table 1		20,1	22,0	17,6	18,7	19,3
1.2 Actual inflation rate - Table 1						
1.3 Forecast inflation rate - Table 1		2,7%	4,1%	2,9%	2,6%	2,5%
1.4 Inflation adjustment - Article 1.7.2 : year n amount to be carried over						
2. Forecast and actual total service units						
2.1 Forecast total service units (performance plan)		3,0	3,6	3,9	4,0	4,2
2.2 Actual total service units		3,3				
2.3 Actual / forecast total service units (in %)		8,9%				
3. Costs subject to traffic risk sharing (ANSP)						
3.1 Determined costs in nominal terms - VFR excl. (reported from Table 1)						
3.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n						
3.3 Traffic - Article 1.4.2 : amounts carried over to year n						
3.4 Traffic risk sharing - Article 1.4.2 : add. revenue carried over to year n						
3.5 Traffic risk sharing - Article 1.4.2: revenues losses carried over to year n						
3.6 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n						
3.7 Bonus or penalty for performance - Article 1.11.2						
3.8 Over(-) or under(+) recoveries (1) : amounts carried over to year n						
3.9 Total for the calculation of year n unit rate						
3.10 Traffic risk sharing - Article 1.4.2 : add. rev. year n to be carried-over						
3.11 Traffic risk sharing - Article 1.4.2 : revenue loss year n to be carried-over						
Parameters for traffic risk sharing						
3.12 % additional revenue returned to users in year n+2 - Article 1.4.2						
3.13 % loss of revenue borne by airspace users - Article 1.4.2						
4. Costs not subject to traffic risk sharing - Article 11a (2)						
4.1 Determined costs in nominal terms - VFR excl. (Table 1)		20,1	22,0	17,6	18,7	19,3
4.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n						
4.3 Traffic - Article 1.4.2 : amounts carried over to year n						
4.4 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n						
4.5 Over(-) or under(+) recoveries (1) : amounts carried over to year n		0,0	1,2	-2,6	0,0	0,0
4.6 Total for the calculation of year n unit rate		20,2	23,2	14,9	18,7	19,3
5. Other revenues - applied unit rate (in national currency)						
5.1 Revenues from other sources - Article 1.3						
5.2 Grand total for the calculation of year n unit rate		20,2	23,2	14,9	18,7	19,3
5.3 Year n unit rate (in national currency)		6,63	6,47	3,83	4,66	4,63
5.4 ANSP component of the unit rate						
5.5 MET component of the unit rate		6,63	6,47	3,83	4,66	4,63
5.6 NSA-State component of the unit rate						
5.7 Year n unit rate that would have applied without other revenues		6,63	6,47	3,83	4,66	4,63
Costs, revenues and other amounts in '000 000 PLN - Service units in '000 000						
(1) Over/under recoveries incurred up to the year of entrv into force of the determined cost method						

Table 2 - Unit rate calculation					
Charging zone name : Poland					
State - NSA : CAO+Eurocontrol					
Unit rate calculation	2010F	2011F	2012	2013	2014
1. Determined costs in nominal terms and inflation adjustment					
1.1 Determined costs in nominal terms - VFR excl. - Table 1	43,5	39,9	43,8	44,5	45,3
1.2 Actual inflation rate - Table 1					
1.3 Forecast inflation rate - Table 1	2,7%	4,1%	2,9%	2,6%	2,5%
1.4 Inflation adjustment - Article 1.7.2 : year n amount to be carried over					
2. Forecast and actual total service units					
2.1 Forecast total service units (performance plan)	3,0	3,6	3,9	4,0	4,2
2.2 Actual total service units	3,3				
2.3 Actual / forecast total service units (in %)	8,9%				
3. Costs subject to traffic risk sharing (ANSP)					
3.1 Determined costs in nominal terms - VFR excl. (reported from Table 1)					
3.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n					
3.3 Traffic - Article 1.4.2 : amounts carried over to year n					
3.4 Traffic risk sharing - Article 1.4.2 : add. revenue carried over to year n					
3.5 Traffic risk sharing - Article 1.4.2: revenues losses carried over to year n					
3.6 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n					
3.7 Bonus or penalty for performance - Article 1.11.2					
3.8 Over(-) or under(+) recoveries (1) : amounts carried over to year n					
3.9 Total for the calculation of year n unit rate					
3.10 Traffic risk sharing - Article 1.4.2 : add. rev. year n to be carried-over					
3.11 Traffic risk sharing - Article 1.4.2 : revenue loss year n to be carried-over					
Parameters for traffic risk sharing					
3.12 % additional revenue returned to users in year n+2 - Article 1.4.2					
3.13 % loss of revenue borne by airspace users - Article 1.4.2					
4. Costs not subject to traffic risk sharing - Article 11a (2)					
4.1 Determined costs in nominal terms - VFR excl. (Table 1)	43,5	39,9	43,8	44,5	45,3
4.2 Inflation adjustment - Article 1.7.2 : amount carried over to year n					
4.3 Traffic - Article 1.4.2 : amounts carried over to year n					
4.4 Uncontrollable costs - Article 1.4.2 : amounts carried over to year n					
4.5 Over(-) or under(+) recoveries (1) : amounts carried over to year n	0,0	-1,5	-0,8	0,0	0,0
4.6 Total for the calculation of year n unit rate	43,5	38,4	43,1	44,5	45,3
5. Other revenues - applied unit rate (in national currency)					
5.1 Revenues from other sources - Article 1.3					
5.2 Grand total for the calculation of year n unit rate	43,5	38,4	43,1	44,5	45,3
5.3 Year n unit rate (in national currency)	14,30	10,71	11,05	11,06	10,88
5.4 ANSP component of the unit rate					
5.5 MET component of the unit rate					
5.6 NSA-State component of the unit rate	14,30	10,71	11,05	11,06	10,88
5.7 Year n unit rate that would have applied without other revenues	14,30	10,71	11,05	11,06	10,88
Costs, revenues and other amounts in '000 000 PLN - Service units in '000 000					
(1) Over/under recoveries incurred up to the year of entry into force of the determined cost method					

Assumed standards of ANS for regional and local airports

To ensure the safety of air navigation as well as the financing of services and infrastructure within terminal navigation charges (TNC) and en-route charges (ER), the following standards of equipment provided by a designated provider of air navigation services are adopted:

- ✓ basic (elementary/fundamental),
- ✓ additional (provided adequately to the demand, after carrying out analyses justifying their possibility of financing within one charging zone or indicating financing in a separate zone).

Table A. Basic Additional Operational ATM Standards and CNS and Meteo Facilities for Respective Types of Airports.

No.	Category of Public Airport	Kind and Time ATS. Basic Equipment NAV *	Additional kind and time ATS. Additional equipment NAV (adequately to demand) **
1	Overlocal	National	ILS Cat II on one approach direction. ILS Cat I on the second direction. Introductory aid DVOR/DME or SBAS. TWR services 24/7 Permanent Met services.
2		Regional	ILS Cat II on one approach direction or APV CAT II (GBAS) ILS Cat II on the second direction or APV CAT I (GBAS) ILS CAT I or APV I/II (SBAS) on the remaining. Introductory aid DVOR/DME or SBAS. TWR services 24/7 Permanent Met services
			ILS Cat I on one approach direction Introductory aid DVOR/DME or SBAS. TWR services 12/7, AFIS 12/7 .Permanent Met services
3	Local	Poviat-governed, communal	n/a Approach NPA LNAV/LP or DVOR/DME. AFIS services 12/7*** Access to Met services data.

The standards of equipment and ensuring services as described in the table above should be implemented in consideration of the following:

** the implementation of basic equipment and services will be executed within maximum 2 years from the approval of NPP and will be performed in accordance with the approved financing plan of the ATM/CNS services provider designated for the given airport.*

*** additional services and equipment will be ensured if analysis demonstrates that airport capacity and availability are insufficient for the implementation of short-term (max 3 years) forecast of services demand at an airport as specified in the airport's General Plan. Additional investments and/or services will be ensured provided that the TNC charge in the airport qualification zone does not increase.*

**** 12/7 shall be read as twelve hours a day, seven days a week.*