

Performance Review Body designated by the European Commission



PRB Annual monitoring report 2013 Volume 3 – Report on Capital Expenditure

Fact validated edition Edition date: 14/11/2014



Volume 3 – Report on Capital Expenditure

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1 INTRODUCTION

1.1 Context and purpose of this Volume 3 of the 2013 performance monitoring report

- 1.1.1 One of the Commission's main priorities is to connect the technological pillar of the SES (SESAR) with the Performance Scheme. In its own words, "technology deployment should be performance-driven"; in other terms, technology deployment should be decided if and only if such deployment brings demonstrated performance gains at network or at least local level, and/or contributes to the defragmentation of service provision and economies of scale. To ensure this, it implies for the Commission to monitor the main ANSP investments, check whether they are materialised according to budget and schedule, and assess their consistency with SESAR deliverables.
- 1.1.2 Member States' reporting obligations on CAPEX/investments are based on Articles 3(3)(i) and 18(4) of the performance Regulation (EU) No 390/2013. However, during RP1, the assessment of investment/CAPEX is carried out against the RP1 adopted performance plans, adopted under the regime of Regulation (EU) No 691/2010 (the initial performance Regulation), where transparency on investment was less demanding. RP1 is therefore a transitional period and is to be used as a learning exercise towards the accurate and detailed reporting that will be requested as of 2015.
- 1.1.3 A first CAPEX monitoring report was delivered in October 2013^{1,} covering the year 2012. For the present 2013 monitoring report, substantial preparatory work has been carried out, resulting in the preparation of a report template pre-filled with the data from the RP1 performance plans and the 2012 actual data and information. This was meant to facilitate the NSA's fulfilment of their reporting obligations.
- 1.1.4 The purpose of this document is to deliver a "*Capital expenditure report at Union-wide* and local levels including information on deferment of investments and associated impacts"², covering the year 2013 and also taking a view on the continuity between 2012 and 2013 and, as appropriate, the 2014 re-planning.
- 1.1.5 This work has been carried out making use of EUROCONTROL expertise in the areas of ATM performance, economics and European ATM Master Plan reporting under a flexible resources allocation scheme. To carry out its work, this additional workforce was placed under PRB Chairman's authority.

1.2 Approach, scope and methodology

- 1.2.1 This report is based on the data and information transmitted by Member States through the sources of information detailed in paragraph 1.3 below.
- 1.2.2 One of the main needs of the Commission is to ascertain whether, the "essential operational changes" of the European ATM Master Plan and also the Interoperability Regulations are being deployed in a timely manner, so as to comply with existing SESAR deployment requirement and constitute a robust basis towards the deployment of common, projects. It is important to bear in mind that, at the moment of adopting the National or FAB performance plans for RP1, the update of the European ATM Master Plan was not yet adopted and work on the pilot common project (PCP) was not yet started. For this reason, this report can, only endeavour to trace the progress made at FAB and State level with the implementation of the relevant ESSIP objectives (which constitute the level 3 of the Master Plan) that are prerequisites or precursors to the PCP and to identify, where possible, whether investments made in 2013 are supportive of, or at least compatible with the PCP as published on 28 June 2014³.
- 1.2.3 The aim of this 2013 CAPEX report, the second one of its kind, is therefore to reinforce the connection between the performance and technological pillars of the SES, make FABs, States and ANSPs aware of their obligations, seek their cooperation and

prepare for a strengthening of reporting requirements in RP2. Useful findings are highlighted everywhere where possible.

- 1.2.4 Whilst providing analysis at European, FAB and State levels, this report only addresses the CAPEX of the air traffic service providers subject to the performance Regulation, i.e. concretely the ANSPs in charge of en-route air navigation services and in a majority of cases terminal air navigation services. It does not address the CAPEX of Regulatory Authorities (CAAs, Ministries), autonomous Meteorological service providers, or of the local terminal air navigation services not submitted to the provisions of the performance Regulation.
- 1.2.5 The assessment performed in this report was based on two aspects: the economical assessment of the reported 2013 CAPEX values (planned against actual CAPEX) and the assessment of the consistency of the investments, their schedule and progress reported in the NSAs' annual report against the relevant ATM Master Plan elements, making use of the other existing sources of information, mainly the ATM Master Plan reporting process (ESSIP). The purpose was not to carry out an exhaustive review of the ESSIP process but simply to examine the investments reported as "main" by the NSAs in their report on 2013 against the ESSIP reporting process to check consistency or lack thereof and, from there, try and highlight findings (risk of delay, deployment on schedule, etc.).
- 1.2.6 As the CAPEX was reported at State level, this is where the examination started, and findings were then aggregated at FAB level for a regional view and try and highlight whether there was or not a FAB or Regional approach.
- 1.2.7 Both the economic and the "compliance with Master Plan" assessments were then assembled with a view to ensuring consistency of findings and, where possible and appropriate, draw general conclusions.

1.3 Sources of information

- 1.3.1 <u>The performance Regulation (EU) No 390/2013: Annual Member States' Monitoring</u> <u>reports</u>: Article 18.4 required Member States to report by 1st June 2014 on the monitoring of their performance plans in the year 2013.
- 1.3.2 <u>The charging Regulation (EU) No 391/2013</u>: Article 9.2 requires that the reporting table and additional information detailed in Annexes II, VI and VII of the Regulation be made available by 1st June each year, including the actual figures and information for the previous year. As per Paragraph 2(m) of Annex II, this includes *"every year of the reference period, the difference between the investments of the air navigation service providers recorded in the performance plans and the actual spending, as well as the difference between the planned date of entry into operation of these investments and the actual situation*. The information on 2013 actual figures and information has been collected by the Commission in June 2014. However the level of detail on investments varies substantially from State to State.
- 1.3.3 <u>The ATM Master Plan reporting process for 2013</u>: The ESSIP Report is the step following the annual process leading to the publication of the LSSIP documents. Together with the ESSIP Plan, it constitutes the Level 3 of the European ATM Master Plan. As a complement to the analysis of the progress of ESSIP-related deployments at ECAC level, it also includes a specific FAB view, developed by each individual FAB initiative. The LSSIP documents are the result of a detailed and iterative process between EUROCONTROL and the national stakeholders from Member States. These documents, containing amongst others information on investments, show the situation at the end of the year, and are generally available, duly signed by all national stakeholders, between February and May of the following year.
- 1.3.4 <u>Other sources of information</u>: Where possible and necessary, use was made of: (a) the

data reported for ACE Benchmarking Reports (when planned CAPEX was missing from NPPs for RP1), (b) 2012 and 2013 Annual Reports (for total ANS (gate-to-gate) costs as reported for the cost-efficiency monitoring), (c) information on 2012-2014 from Annex C to the charging reporting scheme (in order to understand the rationale / correlation between planned and actual data for depreciation / cost of capital), (d) Annual Plans, (e) Investment Plans, (f) Annual Reports or financial results".

1.4 Compilation and coherence of investment-related information

- 1.4.1 Planned 2013 CAPEX was assessed against the actual CAPEX reported in compliance with the Performance Scheme Regulation. Where information was incomplete or was missing alternative sources of data were used for the assessment (Charges reporting / Annual reports).
- 1.4.2 It is important to note that in order to ensure consistency with the costs /CAPEX provided in the adopted NPPs, actual costs / CAPEX are expressed in real terms (2009 prices).
- 1.4.3 Total CAPEX of the main projects was examined at ANSP level. The information was aggregated at EU and FAB levels.
- 1.4.4 With respect to the actual CAPEX for 2013, the following findings can be highlighted:
 - The following FAB States <u>have provided all quantitative data</u> with detailed explanations, ensuring transparency with regard to the status, to amounts spent for 2013, updated planning for 2014 and expected commissioning dates for each project. They give a clear and precise picture of the situation.
 - (i) BALTIC FAB, DANUBE FAB, SW FAB.
 - (ii) FAB CE (except for Austria and Slovenia), FABEC (except for Belgium),
 - (iii) UK-Ireland (except for Ireland).
 - The following FAB States <u>have not provided all quantitative and qualitative data</u> for 2013:
 - BLUE MED FAB States: Cyprus, Greece and Italy have sent their reporting on the 23rd, 12th and 16th of June respectively and the latter State has sent only preliminary results;
 - (ii) FABEC States: Belgium and MUAC (submitted through The Netherlands and Belgium) have provided its actual 2013 and 2014 updated planning CAPEX data and) with a long delay;
 - (iii) NEFAB States: Estonia has sent its reporting the 10th of June and incomplete. Norway has included its 2012 CAPEX actual spending, which was not provided last year, but no additional qualitative details were reported;
 - (iv) DK-SE: Denmark has provided only minimal quantitative data with few explanations;
 - (v) UK-Ireland: Ireland has disclosed its 2013 CAPEX data with an important delay: the 19th of June. In addition, the quality of data is very poor since only the total actual CAPEX were disclosed with no transparency on the investment policy.
 - A number of States/ ANSPs have not disclosed the dates of entry into operation of their projects, the CAPEX allocation for en-route/terminal, the assessed impact on performance targets, the lifetime of the future assets, or the link with the European ATM Master Plan.
 - A series of inconsistencies between reporting (Monitoring report versus Charges or

ATM Master Plan reporting) were noticed for several States, e.g. the list of projects or the planned schedule until deployment are not always consistent between the different reporting streams.

 Several States/ANSPs have not respected the deadline of 1 June to report suitable CAPEX information in their 2013 report (i.e. Ireland, Belgium, Cyprus, Greece, Italy, Malta, Estonia). Problems were also encountered in terms of granularity, scope and level of details of its investments/projects.

1.5 About this document

- 1.5.1 <u>Chapter 2</u> provides a FAB view in alphabetical order. It first contains a FAB overview with in particular the degree of implementation of the relevant ESSIP objectives (a good starting point before, in the next exercises, focusing on SESAR Essentials and PCP implementation) and a description of the regional initiatives when they exist, within the FAB or with other partners.
- 1.5.2 <u>Chapter 3</u> is devoted to each State in alphabetical order, describing the 2013 CAPEX for each State's ANSP (Within FABEC a specific section is devoted to the Maastricht UAC).
- 1.5.3 A list of ESSIP objectives is proposed in Annex I to facilitate reading.

2 FAB LEVEL

2.1 BALTIC FAB

EXECUTIVE SUMMARY

- 2.1.1 BALTIC FAB States have provided all quantitative data with detailed explanations, ensuring transparency with regard to the status, spent amounts for 2013, updated planning for 2014 and expected commissioning dates for each project. It gives a clear and precise picture of the situation.
- 2.1.2 BALTIC FAB has spent 32.8M€₂₀₀₉ (-83.7%) less than planned, of which 32.4M€₂₀₀₉ (98% of the total amount) by PANSA and only 500k€₂₀₀₉ by Oro Navigacija.
- 2.1.3 The main explanation for these unspent amounts refers to delays due to public procurement or operational and technical issues (for PANSA) or "tender procedures for the common project" or to projects finished in advance with low budgets (for Oro Lithuania).
- 2.1.4 BALTIC FAB ANSPs have spent 6.2M€₂₀₀₉ for main CAPEX in 2013, most of it (6M€₂₀₀₉) for planned 2013 projects and only 200k€₂₀₀₉ for projects carried-over from 2012. However, it is noted that from the total amount planned (i.e. 24.6M€₂₀₀₉) only 25% was spent in 2013.
- 2.1.5 As for the total amounts carried-over from 2012 (7M€₂₀₀₉) only 200k€₂₀₀₉ have been spent and they are not expected to be carried forward to 2014. This change is reflected only in PANSA's depreciation costs, which are expected to decrease by 23.8% on average, whilst for Oro Navigacija depreciation is foreseen to increase by 3.8% on average in RP1 due to the "*upgrade of the main ATM system EUROCAT*".
- 2.1.6 No new projects were included in the investment list for 2013 or 2014.



Figure 1: 2013 BALTIC FAB (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)				
BALTIC FAB	Plan	Actual	A - P (M€)	A/P (%)	
TOTAL CAPEX	39.2	6.4	-32.8	-83.7%	
MAIN CAPEX	31.6	6.2	-25.4	-80.3%	
% Main vs. Total	80.7%	97.9%		21.3%	
% Total CAPEX vs. Gate-to-gate ANS costs	22.7%	4.3%		-80.9%	

Table 1: 2013 BALTIC FAB ANSP 2013 CAPEX (Actual vs. Planned)

- 2.1.7 The actual percentage of main into total CAPEX is of 97.9%, instead of a planned 80.7%, as a result of cancelling "other" CAPEX (PANSA).
- 2.1.8 The percentage of total CAPEX into gate-to-gate costs for BALTIC FAB ANSPs has decreased in 2013 by 80.9% (i.e. 4.3% actual vs. 22.7% planned). This is explained by a significant lower CAPEX (-83.7% actual vs. planned for 2013 and also a decline in gate-to-gate ANS costs (-14.7%).
- 2.1.9 However, it is noted that the fall in ANS costs is a result of a combined effect for the two ANSPs (see the chart below).





BALTIC FAB 2013 (Gate-to-gate) MAIN CAPEX break-down: (ANSP level)	Plan	Actual	A - P	A/P (%)
CAPEX originally planned for 2013 (PP)	24.6	6.0	-18.6	-75.5%
CAPEX from previous years carried over to 2013	7.0	0.2	-6.8	-97.0%
New 2013 unplanned CAPEX	0.0	0.0	0.0	
TOTAL (M€2009, real terms)	31.6	6.2	-25.4	-80.3%

Table 2: 2013 BALTIC FAB ANSP originally planned vs previous years CAPEX

2.1.10 From the total amount spent for 2013 (6.4M€₂₀₀₉), PANSA has spent 5.6M€₂₀₀₉, of which 2M€₂₀₀₉ for the "Modernization and development of the navigation infrastructure in FIR Warsaw", 1.5M€₂₀₀₉ for "Modernization and development of ILS/DME investments" and 1.5M€₂₀₀₉ for TWRs modernization.

2013 TOTAL CAPEX (gate-to- gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT
Oro-Navigacija	-0.7	0.3	-0.4
PANSA	-32.6	0.3	-32.3
BALTIC FAB (M€2009, real terms)	-33.3	0.6	-32.7

Table 3: 2013 BALTIC FAB ANSPs Net result

2.1.11 €300k was spent above the budget by each ANSP (see details in section 3.16 and 3.21). Total RP1 planned CAPEX will not be affected.

2014 & RP1 PLANNING UPDATE

BALTIC FAB – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	29.0	36.8	33.8	39.2	34.1	107.0
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	22.4	15.6	14.4	6.4	10.3	31.0
Deviation U-P	-6.6	-21.2	-19.4	-32.8	-23.8	-76.0
Deviation (%) U/P	-22.7%	-57.5%	-57.5%	-83.7%	-70.0%	-71.1%
MAIN Planned CAPEX (PP RP1)	17.5	23.1	21.3	31.6	16.3	69.2
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	16.0	12.6	14.4	6.2	10.2	30.8
Deviation U-P	-1.6	-10.5	-6.9	-25.4	-6.2	-38.5
Deviation (%) U/P	-8.9%	-45.5%	-32.6%	-80.3%	-37.5%	-55.5%

Table 4: RP1 BALTIC FAB ANSP CAPEX Update

- 2.1.12 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for BALTIC FAB is foreseen to be 76M€₂₀₀₉ lower than the amount originally planned. This is due to significant reduced actual CAPEX budgets for all RP1 years (see above).
- 2.1.13 It is noted that, for the period 2010-14, the actual total CAPEX is expected to decrease by 17.6%, though it was planned to increase (+4.1%). Nevertheless, the actual main CAPEX seems to decrease less than planned (i.e. -10.6% actual vs. -1.8% planned).

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.1.14 Participating ANSPs are ORO NAVIGACIJA and PANSA.

		Baltic FAB			
		PL	LT		
	ATC17				
	COM09				
ATC-ATC	COM10				
	ITY-COTR				
	ITY-FMTP				
	FCM01				
ATC-Central	FCM03				
	FCM05				
	ATC16				
CNS	COM11				
CNS	ITY-AGDL				
	ITY-SPI				
	AOM19				
	AOM21				
	ATC02.2				
Common	ATC02.5				
Implementation	ATC02.6				
	ATC02.7				
	ATC12				
	ITY-ADQ				

	Legend:	
Completed	Planned	Partly Completed
Late	No Plan	Not Applicable

Table 5: Consistency with the European ATM Master Plan (ANSP view)

- 2.1.15 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to the Baltic FAB. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects.
- 2.1.16 This table shows a much improved situation as compared to the 2012 Monitoring report.
- 2.1.17 As for ATC02.2 "Implement ground based safety nets Short Term Conflict Alert (STCA) level 2", Poland is late due to the setting to work of the new ATM system with enhanced safety-nets capabilities by November 2013. Compliance review and further update of training materials based is scheduled in 6 months. The objective is expected to be completed by Poland by June 2014.
- 2.1.18 The 2013 monitoring report does not mention any FAB/regional project. There was no update on the "*detailed Baltic FAB opportunities implementation (quick wins) plan*" identified in last year's report.
- 2.1.19 Lithuania, which operates the Thales EUROCAT system, is not a Member of COOPANS ("COOPeration between Air Navigation Services providers"), which is the structure of cooperation, harmonisation, development, installation and maintenance of the system, including procurement aspects.
- 2.1.20 Poland uses a different, iTEC (INDRA) system. .

2.2 BLUE MED FAB

EXECUTIVE SUMMARY

- 2.2.1 The BLUE MED FAB States have not provided all economic quantitative and qualitative data for 2013. Cyprus, Greece and Italy have sent their report on 23rd, 12th and 16th of June respectively and the latter State has only sent "preliminary" results.
- 2.2.2 In general, there is a lack of consistency in the reporting mechanisms between the 2013 report and the ATM Master Plan reporting process. The 2013 reports were not properly updated with the correct links to the ATM Master Plan elements. Additionally, there is no consistency between the FAB partners on the implementation of the adopted BLUE MED Implementation Program.
- 2.2.3 BLUE MED FAB has spent 13.5M€₂₀₀₉ (+10.3%) more than planned in 2013 (+7.8M€₂₀₀₉ by ENAV). However, ENAV has stated that an update for the 2013 Monitoring exercise will follow and that the actual amounts for "other" projects are preliminary. MATS and HCAA have also exceeded their planned budget for 2013 (see details below). No additional qualitative information with regard to the status of the projects was provided and none of the planned dates of entry into operation were updated.
- 2.2.4 As for the total amounts carried-over from 2012 (78.6M€₂₀₀₉), 94.4M€₂₀₀₉ were actually spent in 2013, of which 92.7M€₂₀₀₉ by ENAV.
- 2.2.5 HCAA has changed its investment policy and has not spent any amount for the originally planned projects (i.e. "PATROCLOS Upgrade (FDPS)" and "Thessaloniki/ Makedonia International Airport SMR/ASMGCS"), but has included two new projects in its 2013 investment (amounting to 1.8M€₂₀₀₉).



Figure 3: 2013 BLUE MED FAB (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)				
BLUE MED FAB	Plan	Actual	A - P (M€)	A/P (%)	
TOTAL CAPEX	131.4	144.9	13.5	10.3%	
MAIN CAPEX	90.0	106.3	16.3	18.1%	
% Main vs. Total	68.5%	73.3%		7.1%	
% Total CAPEX vs. Gate-to-gate ANS costs	14.1%	15.9%		12.9%	

Table 6: 2013 BLUE MED FAB (ANSPs) 2013 CAPEX (Actual vs. Planned)

2.2.6 The actual percentage of main into total CAPEX is 73.3%, higher in comparison to the planned one (68.5%). The percentage of total CAPEX into gate-to-gate costs for BLUE MED FAB ANSPs has increased by 12.9% (i.e. 15.9% actual vs. 14.1% planned). This is explained by higher CAPEX (+10.3% actual vs. planned for 2013) and by a slight decline in gate-to-gate ANS costs (-2.3%). However the situation per ANSP is very heterogeneous and Greece, due to the lack of planned data, is not included in this result (see the chart below).



BLUE MED FAB 2013 MAIN CAPEX break- down:	Plan	Actual	A - P	A/P (%)
CAPEX originally planned for 2013 (PP)	11.4	10.1	-1.3	-11.1%
CAPEX from previous years carried over to 2013	78.6	94.4	15.7	20.0%
New 2013 unplanned CAPEX	0.0	1.8	1.8	
2013 TOTAL MAIN CAPEX	90.0	106.3	16.3	18.1%

Table 7: 2013 BLUE MED FAB (ANSPs) main CAPEX break-down

2.2.7 From the total amount spent for 2013 planned projects (10.1M€₂₀₀₉), MATS has spent 8M€₂₀₀₉ but without transparency on the break-down per projects, and DCAC has spent 2.1M€₂₀₀₉ (of which 1.5M€₂₀₀₉ for "Eurocat C main system").

2013 TOTAL CAPEX (gate-to- gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT	
DCAC Cyprus	-1.7	0.0	-1.7	
HCAA Greece	0.0	1.8	1.8	
ENAV Italy	-35.1	42.9	7.8	
MATS Malta	0.0	5.6	5.6	
BLUE MED FAB (M€2009, real terms)	-36.8	50.3	13.5	

Table 8: 2013 BLUE MED FAB CAPEX Net result

2.2.8 Total actual CAPEX spent by ENAV in 2013 (92.7M€₂₀₀₉) was for carried-over projects from 2012. A significant exceed in budget is noted for "4 Flight" (+40.3M€₂₀₀₉) without being explained.

2014 & RP1 PLANNING UPDATE

2.2.9 Only Malta has updated 2014 planned CAPEX through the charges reporting scheme. It is noted that an additional .1.1M€₂₀₀₉ is foreseen to be spent by DCAC in 2014 (no details provided).

BLUE MED FAB – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	190.0	150.7	147.3	131.4	105.6	384.4
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	186.3	117.3	77.8	144.9	106.7	329.5
Deviation U-P	-3.7	-33.5	-69.5	13.5	1.1	-54.9
Deviation (%) U/P	-1.9%	-22.2%	-47.2%	10.3%	1.0%	-14.3%
MAIN Planned CAPEX (PP RP1)	133.9	110.6	104.4	90.0	66.8	261.3
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	134.9	70.3	77.8	106.3	67.9	252.1
Deviation U-P	1.0	-40.3	-26.6	16.3	1.1	-9.2
Deviation (%) U/P	0.7%	-36.5%	-25.5%	18.1%	1.6%	-3.5%

Table 9: RP1 BLUE MED FAB CAPEX Update
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2.2.10 The RP1 updated planned CAPEX for BLUE MED FAB is foreseen to be 54.9M€₂₀₀₉ (-14.3%) lower than the amount originally planned. This is due to a significantly reduced actual spending for 2012 (see above). However the situation is uncertain due to Italy's "preliminary" situation.

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.2.11 Participating ANSPs are DCAC, HCAA, ENAV, MATS and NATA (Albania).

		BLUE MED					
		AL	CY	GR	IT	МТ	
	ATC17						
	COM09						
ATC-ATC	COM10						
	ITY-COTR						
	ITY-FMTP						
	FCM01						
ATC-Central	FCM03						
	FCM05						
	ATC16						
CNS	COM11						
CNS	ITY-AGDL						
	ITY-SPI						
	AOM19						
	AOM21						
	ATC02.2						
Common	ATC02.5						
Implementation	ATC02.6						
	ATC02.7						
	ATC12						
	ITY-ADQ						
l egend:							

	Legend:	
Completed	Planned	Partly Completed
Late	No Plan	Not Applicable

Table 10: Consistency with the European ATM Master Plan (ANSP view)

- 2.2.12 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to the BLUE MED FAB. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects.
- 2.2.13 This table shows a slightly improved situation as compared to the 2012 Monitoring report but still a much contrasted situation in the implementation levels.
- 2.2.14 With regards to the ESSIP Objectives which have significant relevance from the point of view of the ATM Master Plan implementation and the Pilot Common Project Regulation, the following issues have to be noted:
 - ITY-COTR: Implementation of ground-ground automated co-ordination processes:
 - (i) Coordination and transfer is implemented in Albania, almost implemented in Greece and planned in Cyprus. Italy is late because the project is strictly linked with DLS implementation and Malta has some delay due to the upgrade of its ATM systems.
 - FCM05: Implementation of interactive rolling NOP:
 - (i) BLUE MED States are planning the implementation of interactive rolling NOP by the end of 2016. Only Greece declares no plan for the moment.
 - ITY-AGDL: Initial ATC air-ground data link services above FL-285:
 - (i) Albania is not an EU member and is not planning any activities for the moment.

Greece declares no plan as well but plans are under development. Cyprus and Malta are planning the implementation of DLS, while Italy is late.

- ITY-SPI: Surveillance performance and interoperability:
 - (i) Albania is not an EU member and is not planning any activities for the moment but is considering some implementation in the future. Malta has already completed the implementation; Cyprus, Greece and Italy are planning to be compliant by 2017.
- AOM19: Implement advanced airspace management:
 - (i) Albania, Cyprus and Greece will be compliant by 2016. Italy has partly completed the foreseen activities and Malta considers the objective not applicable since there are no national military requirements.
- 2.2.15 BLUE MED FAB has an ongoing Implementation Phase undertaken through a BLUE MED Implementation Programme, involving four EU Countries (Cyprus, Greece, Italy and Malta). However, this Programme is currently not linked to the ATM Master Plan, and there is also no consistency amongst FAB BLUE MED partners for the implementation of the projects and their date of entry into operation.

2.3 DANUBE FAB

EXECUTIVE SUMMARY

- 2.3.1 DANUBE FAB States have provided actual 2013 CAPEX information, explaining the planned amounts not spent. Details about the amounts carried-over and the entry into operation of most projects were also disclosed and an informative updated planning was provided for 2014, with complete quantitative and qualitative data.
- 2.3.2 The level of details provided for CAPEX projects was not sufficient to allow for full assessment of compliance with the ATM Master Plan, however on the basis of provided information it seems that the links to the ATM Master Plan are correct and the deadlines of implementation are in line with information provided in other reporting mechanisms (the ATM Master Plan reporting process).
- 2.3.3 The DANUBE FAB partners have joint initiatives, but they relate more to processes and harmonization and do not require major investment decisions. Therefore they were not traced back in the 2013 CAPEX report.
- 2.3.4 DANUBE FAB spent 38.1M€₂₀₀₉ (-74.5%) less than planned, of which 25.5M€₂₀₀₉ less was spent by ROMATSA and 12.6M€₂₀₀₉ by BULATSA. As for the main projects, 3.5M€₂₀₀₉ was spent for projects carried-over from 2012 and 3.5M€₂₀₀₉ for the projects planned for 2013.
- 2.3.5 The main explanation for these unspent amounts refers to delays due to public procurement or contractual issues (for BULATSA) and a new structure for several projects or revision of budgets (for ROMATSA).



Figure 5: 2013 DANUBE FAB (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)					
DANUBE FAB	Plan	Actual	A - P (M€)	A/P (%)		
TOTAL CAPEX	51.1	13.0	-38.1	-74.5%		
MAIN CAPEX	47.7	7.0	-40.7	-85.3%		
% Main vs. Total	93.3%	53.7%		-42.4%		
% Total CAPEX vs. Gate-to-gate ANS costs	25.0%	5.9%		-76.2%		

Table 11: 2013 DANUBE FAB (ANSPs) 2013 CAPEX (Actual vs. Planned)

- 2.3.6 The actual percentage of main into total CAPEX is 53.7%, lower in comparison to the planned one (i.e. 93.3%). This change is due to Romania's decision of a higher spending in "other" projects than main projects (see details in section 3.23).
- 2.3.7 The percentage of total CAPEX into gate-to-gate costs for DANUBE FAB ANSPs has decreased by 76.2% (i.e. 5.9% actual vs. 25% planned). This is explained by a significant decline in total CAPEX (-74.5% actual vs. planned for 2013) accompanied by a rise in gate-to-gate ANS costs (+7%) (see chart below).





DANUBE FAB 2013 MAIN CAPEX break- down:	Plan	Actual	A - P	A/P (%)
CAPEX originally planned for 2013 (PP)	34.5	3.5	-31.0	-89.9%
CAPEX from previous years carried over to 2013	13.2	3.5	-9.7	-73.4%
New 2013 unplanned CAPEX		0.0	0.0	
2013 TOTAL MAIN CAPEX	47.7	7.0	-40.7	-85.3%

Table 12: 2013 DANUBE FAB (ANSPs) main CAPEX break-down

2.3.8 From the total amount spent for main projects in 2013 (7M€₂₀₀₉), ROMATSA has spent 4.1M€₂₀₀₉, mainly for "ATM System ROMATSA 2015+"(2.8M€₂₀₀₉), and BULATSA has spent 2.9M€₂₀₀₉ in particular for "SATCAS upgrade" and "A-SMGCS"(2.2M€₂₀₀₉), projects carried-over from 2012.

2013 TOTAL CAPEX (gate-to- gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT
BULATSA	-14.5	1.8	-12.6
ROMATSA	-28.5	3.0	-25.5
DANUBE FAB (M€2009, real terms)	-43.0	4.9	-38.1

Table	13:	2013	DANUBE	FAB	CAPEX	Net Result
I GINIO		2010	DINIODE		U /1 L /1	itot itoouit

2.3.9 From the total exceed in budget, BULATSA has spent 1M€₂₀₀₉ more for A-SMGCS and 700k€₂₀₀₉ for "NEW Sofia Tower project", whilst ROMATSA has spent 3M€₂₀₀₉ for "other" projects (no details provided).

2014 & RP1 PLANNING UPDATE

2.3.10 The planned 2014 CAPEX was updated by both States. It is noted that for 18.1M€₂₀₀₉ for BULATSA and 12.2M€₂₀₀₉ for ROMATSA are foreseen to be spent in addition to the plan.

DANUBE FAB – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	24.2	43.9	47.4	51.1	35.8	134.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	11.5	19.0	16.4	13.0	66.1	95.5
Deviation U-P	-12.7	-24.9	-31.0	-38.1	30.3	-38.8
Deviation (%) U/P	-52.4%	-56.8%	-65.3%	-74.5%	84.6%	-28.9%
MAIN Planned CAPEX (PP RP1)	22.6	37.4	43.3	47.7	31.7	122.8
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	5.9	16.6	8.8	7.0	38.7	54.5
Deviation U-P	-16.7	-20.8	-34.5	-40.7	7.0	-68.2
Deviation (%) U/P	-73.8%	-55.7%	-79.6%	-85.3%	22.0%	-55.6%

Table 14: RP1 DANUBE FAB CAPEX Update

- 2.3.11 After assessing 2013 results and the 2014 update, the RP1 planned CAPEX for DANUBE FAB is foreseen to be 38.8M€₂₀₀₉ (-28.9%) lower than the amount originally planned. This is the combined result of a significantly reduced actual CAPEX spending for 2012 and 2013 and a surplus planned for 2014 (see above).
- 2.3.12 However, due to the discrepancy between the level of total actual investments in 2010 (11.5M€₂₀₀₉) and the updated planned level foreseen for 2014 (66.1M€₂₀₀₉), total CAPEX for the period 2010-14 is expected to increase by 54.7% on average (vs. +10.3% planned).

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.3.13 Participating ANSPs are BULATSA and ROMATSA.

		DANUBE FAB	
		BG	RO
	ATC17		
	COM09		
ATC-ATC	COM10		
	ITY-COTR		
	ITY-FMTP		
	FCM01		
ATC-Central	FCM03		
	FCM05		
	ATC16		
CNS	COM11		
CNS	ITY-AGDL		
	ITY-SPI		
	AOM19		
	AOM21		
	ATC02.2		
Common	ATC02.5		
Implementation	ATC02.6		
	ATC02.7		
	ATC12		
	ITY-ADQ		

	Legend:	
Completed	Planned	Partly Completed
Late	No Plan	Not Applicable

Table 15: Consistency with the European ATM Master Plan (ANSP view)

- 2.3.14 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to the DANUBE FAB. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects. This table shows an improved situation as compared to the 2012 Monitoring report and a very high level of mutual alignment in implementing ESSIP objectives.
- 2.3.15 As for ATC02.7 "Implement ground based safety nets Approach Path Monitor level 2", none of the ANSPs has defined or approved implementation plans to implement this ESSIP objective.
- 2.3.16 With regards to the ESSIP Objectives which have significant relevance from the point of view of the ATM Master Plan implementation and the Pilot Common Project Regulation, the following issues have to be noted:
 - ITY-ADQ: Ensure quality of aeronautical data and aeronautical information
 - (i) The ADQ objective is planned, however some of the lines of actions due in 2013 were planned to be implemented in 2014.
- 2.3.17 There are several activities and projects described at FAB level in the ATM Master Plan reporting process but they cover more operational and coordination aspects and therefore may not be considered as main investments.

2.4 DK-SE FAB

EXECUTIVE SUMMARY

- 2.4.1 Sweden has provided all quantitative data with detailed explanations for the status of the projects and some additional information from its Business Plan. Denmark has provided only minimal quantitative data with few explanations.
- 2.4.2 Neither Denmark nor Sweden provides an exhaustive update of the links of their projects to the ATM Master Plan elements.
- 2.4.3 LFV and NAVIAIR are both COOPANS members and have the same version of the COOPANS ATM system. DK-SE FAB has a close cooperation with NEFAB concerning airspace development (Free Route Airspace above FL285, planned for implementation in 2015).
- 2.4.4 Denmark-Sweden FAB has spent 4.7M€₂₀₀₉ (-23.4%) less than planned, of which 4.5M€₂₀₀₉ were not spent by LFV and 200k€₂₀₀₉ by NAVIAIR.
- 2.4.5 The entire actual amount spent for the main projects (10.2M€₂₀₀₉) was for the projects planned in the Performance Plans for 2013. No carried-over or new projects were included in the 2013 actual list.
- 2.4.6 The main reason for the amounts non-spent refers to "The difference for COOPANS is mainly a result of one more member in COOPANS as well as that we now have a better picture of the activities/steps needed. The COOPANS members have made hard prioritizations of their system needs to keep investments low."



Figure 7: 2013 DK-SE FAB (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)					
DR-SE FAB	Plan	Actual	A - P (M€)	A/P (%)		
TOTAL CAPEX	20.2	15.5	-4.7	-23.4%		
MAIN CAPEX	11.2	10.2	-0.9	-8.2%		
% Main vs. Total	55.2%	66.2%		19.9%		
% Total CAPEX vs. Gate-to-gate ANS costs	7.2%	5.9%		-18.1%		

Table 16: 2013 Denmark-Sweden FAB (ANSPs) 2013 CAPEX (Actual vs. Planned)

- 2.4.7 The actual percentage of main into total CAPEX is of 66.2% in comparison to the planned one (i.e. 55.2%). This change is due to both ANSPs' decision to have a higher spending for main projects than for "other" projects.
- 2.4.8 The percentage of total CAPEX into gate-to-gate costs for Denmark-Sweden ANSPs has decreased by 18.1% (i.e. 5.9% actual vs. 7.2% planned). This is explained by a significant decline in total CAPEX (-23.4% actual vs. planned for 2013) accompanied by a decline in gate-to-gate ANS costs (-6.6%) (see details in the chart below).



Figure 8: 2013 Denmark-Sweden FAB Total CAPEX vs. (gate-to-gate) ANS costs deviations

DK-SE FAB 2013 MAIN CAPEX break-down:	Plan	Actual	A - P	A/P (%)
CAPEX originally planned for 2013 (PP)	11.2	10.2	-0.9	-8.2%
CAPEX from previous years carried over to 2013	0.0	0.0	0.0	
New 2013 unplanned CAPEX		0.0	0.0	
2013 TOTAL MAIN CAPEX	11.2	10.2	-0.9	-8.2%

Table 17: 2013 Denmark-Sweden (ANSPs) main CAPEX break-down

2.4.9 From the total amount spent for main projects in 2013 (10.2M \in_{2009}), LFV has spent 4.2 \in_{2009} , of which 2.4M \in_{2009} for "COOPANS," and NAVIAIR has spent 6.1M \in_{2009} (of which 3.7M \in_{2009} for ATM Systems – COOPANS and 2.4M \in_{2009} for "CNS Systems – LINK 2000 (CPDLC) +WAM".

2013 TOTAL CAPEX (gate-to-gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT
NAVIAIR	-1.2	1.0	-0.2
LFV Sweden	-4.6	0.1	-4.5
DK-SE FAB (M€2009, real terms)	-5.8	1.1	-4.7

Table 18: 2013 Denmark-Sweden FAB CAPEX Net result

2.4.10 From the total spent above the planned budget in 2013, NAVIAIR has spent 1M€₂₀₀₉ more for CNS systems (see details in section 3.6).

2014 & RP1 PLANNING UPDATE

2.4.11 The planned 2014 CAPEX was updated only by Sweden. It is noted that 1.2M€₂₀₀₉ are foreseen not to be spent in 2014 as compared to initial plan, although two new projects are now included in the list for the year.

DK-SE FAB – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	36.1	32.6	19.7	20.2	19.8	59.7
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	28.3	22.4	15.6	15.5	18.6	49.7
Deviation U-P	-7.8	-10.2	-4.1	-4.7	-1.2	-10.0
Deviation (%) U/P	-21.5%	-31.2%	-20.7%	-23.4%	-5.9%	-16.7%
MAIN Planned CAPEX (PP RP1)	33.6	29.6	10.8	11.2	8.2	30.2
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	27.2	21.6	10.5	10.2	9.0	29.8
Deviation U-P	-6.4	-8.0	-0.3	-0.9	0.7	-0.4
Deviation (%) U/P	-19.0%	-27.1%	-2.7%	-8.2%	9.6%	-1.4%

Table 19: RP1 Denmark-Sweden CAPEX Update

- 2.4.12 After assessing 2013 results and the Sweden 2014 update, the RP1 planned CAPEX for Denmark-Sweden FAB is foreseen to be 10.0M€₂₀₀₉ (-16.7%) lower than the amount originally planned. This is the result of reduced actual spending.
- 2.4.13 Total CAPEX for the period 2010-14 is expected to decrease by 9.9% on average (vs. 13.9% planned).

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.4.14 Participating ANSPs are NAVIAIR and LFV.

		Denmark-S	weden FAB
		SE	DK
	ATC17		
	COM09		
ATC-ATC	COM10		
	ITY-COTR		
	ITY-FMTP		
	FCM01		
ATC-Central	FCM03		
	FCM05		
	ATC16		
CNR	COM11		
CNS	ITY-AGDL		
	ITY-SPI		
	AOM19		
	AOM21		
	ATC02.2		
Common	ATC02.5		
Implementation	ATC02.6		
	ATC02.7		
	ATC12		
	ITY-ADQ		

Legend:					
Completed	Planned	Partly Completed			
Late	No Plan	Not Applicable			

Table 20: Consistency with the European ATM Master Plan (ANSP view)

- 2.4.15 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to the DK-SE FAB. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects.
- 2.4.16 Overall the implementation alignment in DK-SE FAB is very good. There are no major differences apart from AIS. LFV and NAVIAIR are working very closely together in both ESSIP-planning and ESSIP reporting and focus on synchronize status reports in areas of common interest. Slightly different reporting principles are still there, but work is ongoing to close these gaps. There are no factors restricting harmonised service in the FAB.
- 2.4.17 LFV and NAVIAIR are both partners in COOPANS and have the same version of the COOPANS ATM system. The COOPANS project is a joint procurement programme with other ANSPs (in the same FAB and outside DK-SE FAB) with the aim to reduce and share the investment cost in the ATM systems upgrade.
- 2.4.18 DK-SE FAB has a close cooperation with NEFAB concerning airspace development. The implementation of seamless Free Route Airspace above FL285 is prioritised with planned implementation in 2015.
- 2.4.19 With regards to the ESSIP Objectives which have significant relevance from the point of view of the ATM Master Plan implementation and the Pilot Common Project Regulation, the following issues have to be noted:
 - FCM05: Implementation of interactive rolling NOP:

- (i) The differences in implementation status are due to different reporting principles. No operational need has been identified by LFV or NAVIAIR that can justify the cost for implementing a technical system. The solution in use is deemed to satisfy the operational needs for the foreseeable future.
- ITY-ADQ: Ensure quality of aeronautical data and aeronautical information:
 - (i) The Danish Transport Authority is still in the process of initiating a project in order to implement the ADQ regulation (EU 73/2010). NAVIAIR has no plan for implementing this objective as a result of lack of or late availability of guidance material and community specifications providing means of compliance as well as complexity in addressing the data originators. In Sweden implementation is in progress and planned to be completed 2017.

2.5 FAB CE

EXECUTIVE SUMMARY

- 2.5.1 All FAB CE States, except for Austria and Slovenia, have provided all quantitative data with detailed explanations, ensuring transparency with regard to the status, amounts spent for 2013, updated planning for 2014 and expected commissioning dates for each project.
- 2.5.2 Majority of the States did not provide an exhaustive update of the links of their projects to the ATM Master Plan. Inconsistencies in terms of reported dates of implementation as well as lists of projects were noted between the 2013 report and other sources of information coming from different reporting mechanisms (mainly the ATM Master Plan reporting process). FAB CE provided in the ATM Master Plan reporting process a list of relevant FAB projects that covers investments and other processes, harmonisation activities or administrative improvements. However, none of the projects described by the FABCE States in the 2013 CAPEX reports was identified as FAB project.
- 2.5.3 The FAB CE results for 2013 show a total net amount of 23.2M€₂₀₀₉ (-28.8%) spent less, in particular due to HungaroControl (-10.3M€₂₀₀₉) and ANS CR (-8.5M€₂₀₀₉). (see details in sections 3.12.4 and 3.5.3).
- 2.5.4 The entire actual amount spent for main projects (38M€₂₀₀₉) was mainly for the amounts carried-over from 2012 (29.8M€₂₀₀₉ or 80% from total actual spent) and only 6.3M€₂₀₀₉ for the projects planned for 2013. Several new projects were included in the list in 2013 by ANS CR, LSP SR and Slovenia Control.
- 2.5.5 The main reason for the non-spending of the planned amounts refers to delays and changes of timing or strategies for several main projects.



Figure 9: 2013 FAB CE (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)					
FAD CE	Plan	Actual	A - P (M€)	A/P (%)		
TOTAL CAPEX	80.6	57.4	-23.2	-28.8%		
MAIN CAPEX	58.2	37.1	-21.1	-36.2%		
% Main vs. Total	72.1%	64.6%		-10.5%		
% Total CAPEX vs. Gate-to-gate ANS costs	16.8%	13.2%		-21.7%		

Table 21: 2013 FAB CE (ANSPs) 2013 CAPEX (Actual vs. Planned)

- 2.5.6 The actual percentage of main into total CAPEX is 64.6% in comparison to the planned one (i.e. 72.1%). This change is due to the decisions of several ANSPs to have a higher spending for "other" projects than for the main ones (i.e. ANS CR, HungaroControl and LPS SR).
- 2.5.7 The percentage of total CAPEX into gate-to-gate costs for FAB CE ANSPs has decreased by 21.7% (i.e. 13.2% actual vs. 16.8% planned). This is explained by a significant decline in total CAPEX (-28.8% actual vs. planned for 2013) accompanied by a decline in gate-to-gate ANS costs (-9%). It is noted that for all the FABCE ANSPs both actual CAPEX and actual gate-to-gate ANS costs in 2013 are lower than the planned values (see the chart below).



Figure 10: FABCE Total CAPEX vs. ANS (gate-to-gate) Costs Deviations

FAB CE 2013 MAIN CAPEX break-down:	Plan	Actual	A - P	A/P (%)
CAPEX originally planned for 2013 (PP)	28.9	6.3	-22.6	-78.2%
CAPEX from previous years carried over to 2013	29.3	29.8	0.5	1.8%
New 2013 unplanned CAPEX		2.0	2.0	
2013 TOTAL MAIN CAPEX	58.2	38.0	-20.1	-34.6%

Table 22: 2013 FAB CE (ANSPs) main CAPEX break-down

2.5.8 From the total amount spent for main projects in 2013 (i.e. 38M€₂₀₀₉), Austro Control has spent 26.6M€₂₀₀₉ (72%), of which 96% for carried-over projects from 2012 (see

2013 TOTAL CAPEX (gate-to- gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT
Austro Control	-7.8	6.8	-1.1
ANS CR	-11.4	2.9	-8.5
HungaroControl	-10.3	0.0	-10.3
LPS SR	-4.3	1.9	-2.4
Slovenia Control	-2.8	1.2	-1.6
FAB CE (M€2009, real terms)	-36.6	12.7	-23.8

Figure 1).

Table 23: 2013 FAB CE CAPEX Net result

2.5.9 From the total exceed in budget, Austro Control has spent 6.8M€₂₀₀₉ in particular for "Tower LOWS" and "NG AATMS", LPS SR 1.9M€₂₀₀₉ in addition for "Construction work in Mosnik" and VCS upgrade and Slovenia Control has spent 1.2M€₂₀₀₉ in particular for "New ATCC technical systems".

2014 & RP1 PLANNING UPDATE

- 2.5.10 The planned 2014 CAPEX was updated by all States except for Slovakia. It is noted that 17.1M€₂₀₀₉ (23.3%) are foreseen not to be spent, due to the combined result of:
- 2.5.11 ANS CR (-27.7M€₂₀₀₉; a significant downwards revision of the 2014 planned budget, see section3.5)) and HungaroControl, (+11.9M€₂₀₀₉, upwards adjustment of the 2014 planned CAPEX, see details in section3.12). Austro Control and Slovenia Control have foreseen a small shrink for their budgets in 2014.

FAB CE – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	95.3	121.6	140.5	80.6	73.6	294.7
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	84.1	72.0	112.4	57.4	56.4	226.2
Deviation U-P	-11.2	-49.5	-28.1	-23.2	-17.1	-68.5
Deviation (%) U/P	-11.8%	-40.8%	-20.0%	-28.8%	-23.3%	-23.2%
MAIN Planned CAPEX (PP RP1)	51.0	73.6	98.1	58.2	51.8	208.0
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	29.1	43.2	79.2	37.1	34.0	150.3
Deviation U-P	-21.9	-30.3	-18.9	-21.1	-17.8	-57.8
Deviation (%) U/P	-42.9%	-41.2%	-19.2%	-36.2%	-34.4%	-27.8%

Table 24: RP1 FAB CE CAPEX Update

- 2.5.12 After assessing 2013 results and the 2014 update, the RP1 planned CAPEX for FAB CE is foreseen to be 68.5M€₂₀₀₉ (-23.2%) lower than the amount originally planned. This is the result of reduced actual spending for all the years (see in particular ANS CR results, section 3.5).
- 2.5.13 Total CAPEX for the period 2010-14 is expected to decrease by 9.5% on average (vs. 6.3% planned).

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.5.14 Participating ANSPs are Austro Control, BHANSA, ANS CZ, Croatia Control, HungaroControl, LPS and Slovenia Control.

		FAB CE						
		CZ	SK	AT	HU	SI	HR	BA
ATC-ATC	ATC17							
	COM09							
	COM10							
	ITY-COTR							
	ITY-FMTP							
	FCM01							
ATC-Central	FCM03							
	FCM05							
	ATC16							
CNS	COM11							
CNS	ITY-AGDL							
	ITY-SPI							
Common Implementation	AOM19							
	AOM21							
	ATC02.2							
	ATC02.5							
	ATC02.6							
	ATC02.7							
	ATC12							
	ITY-ADQ							
Legend:								

Completed	Planned	Partly Completed
Late	No Plan	Not Applicable

Table 25: Consistency with the European ATM Master Plan (ANSP view)

- 2.5.15 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to FAB CE. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects.
- 2.5.16 A quick view on the FAB CE implementation status of 2013 compared with 2012 reveals in general a positive trend, considering that the number of:
 - 'Late' objectives remained stable,
 - 'Planned' objectives increased by 20%,
 - 'Partly Completed' objectives decreased by 35%, and
 - 'Completed' objectives increased by 42 %.
- 2.5.17 With regards to the ESSIP Objectives which have significant relevance from the point of view of the ATM Master Plan implementation and the Pilot Common Project Regulation, the following issues have to be noted:
 - COM10: Migrate from AFTN to AMHS:
 - (i) Migration from AFTN to AMHS shows a huge variety of implementation status within FABCE. The Basic ATSMHS has been reached by the majority of the FAB CE ANSPs; further additional boundary gateways are conceptually not foreseen.
 - FCM05: Implementation of interactive rolling NOP:

- (i) All ANSPs except Croatia have plans to implement the interactive rolling NOP by the end of 2016.
- COM11: Implementation of Voice over Internet Protocol (IP) in ATM:
 - (i) This objective has been put to a planning status by the majority of the FAB CE ANSPs; Croatia has not indicated plans yet. It is worth noting that Hungary plans implementation by the end of 2014 already.
- ITY-COTR: Implementation of ground-ground automated co-ordination processes:
 - (i) Most of the ATM systems seem to be technically capable to implement the basic messages. A specific issue contributing to the LATE status of, e.g. Austria is the CPDLC specific implementation of the LOF and NAN message, now foreseen by October 2014. For further details refer to ITY-AGDL.
- ITY-ADQ: Ensure quality of aeronautical data and aeronautical information:
 - (i) The interpretation of finalisation criteria of ANSP related ADQ actions, seems to be wide spread. The three milestones as prescribed in the EC IR until 2017 create a wrong interpretation of the current status description.
- 2.5.18 The main bias was found in the overall ANSP-wide indication *partly completed*, although some actions for the milestone in 07/2013 were definitely indicated as *late* (Croatia, Slovakia, Czech Republic). Austria seems to have reached the milestone in 07/2013. Nevertheless, all ANSPs have plans in place to reach the further milestones until 2017.
- 2.5.19 There is no FAB CE related ADQ process. Actions for the milestone in 07/2013 were definitely indicated as *late* (Croatia, Slovakia, Czech Republic). Austria seems to have reached the milestone in 07/2013. Nevertheless, all ANSPs have plans in place to reach the further milestones until 2017.
- 2.5.20 FAB CE provided in the ATM Master Plan reporting process a list of relevant FAB projects. No direct links to the ATM Master Plan were provided but the list covers amongst others FMTP implementation, Regional Communications Infrastructure Development and Air Ground Data Link. Some of the FAB CE States have provided more details regarding these projects through the reporting on the implementation level of their ESSIP Objectives and in the list of national projects of the ATM Master Plan reporting process. However, the list of projects described by each FAB CE State in the 2013 CAPEX reports does not include any of the projects at FAB level.

2.6 FABEC

EXECUTIVE SUMMARY

- 2.6.1 All FABEC States have provided their CAPEX at the due date, except for Belgium (30 July 2 months after the deadline) and MUAC (27 June). France and Germany have reported all quantitative data with detailed explanations, ensuring transparency with regard to the status, spent amounts for 2013, updated planning for 2014 and expected commissioning dates for each project.
- 2.6.2 Belgium has provided the information on actual CAPEX for 2013 broken down per domains and not per projects. Additional information was provided by FABEC States through the charges reporting scheme.
- 2.6.3 For all of the FABEC States the links of the CAPEX projects to the ATM Master Plan elements were provided in an unsatisfactory manner. Additionally inconsistencies in the dates of implementation were noted between the 2013 report and other sources of information (the ATM Master Plan reporting process) in all of the cases.
- 2.6.4 FABEC has spent of 100.8M€₂₀₀₉ (-24.9%) less than planned in 2013, of which 74.7M€₂₀₀₉ by DSNA, 22.8M€₂₀₀₉ by LVNL, 14.2M€₂₀₀₉ by Belgocontrol and 9.4M€₂₀₀₉ by MUAC. It is noted that DFS spent 18.5M€₂₀₀₉ more than planned as a combined result of an increase in budget for the "main" CAPEX (+33M€₂₀₀₉) and a decrease in "other" CAPEX (-14.5M€₂₀₀₉) (see details in section 3.10).

2013 TOTAL CAPEX (gate-to-gate)	Spent less than plan	Spent more than	NET RESULT
Belgocontrol	-14.4	0.2	-14.2
DSNA	-77.3	2.6	-74.7
DFS	-42.4	60.8	18.5
LVNL	-22.9	0.1	-22.8
MUAC	-10.1	0.8	-9.4
Skyguide	-1.4	3.1	1.7
FABEC (M€2009, real terms)	-168.5	67.7	-100.9

Table 26: 2013 FAB EC CAPEX Net result

- 2.6.5 The entire actual amount spent for main projects (185.8M€₂₀₀₉) was in particular for the projects originally planned for 2013 (PP) (154.4M€₂₀₀₉ or 83% from main actual spent) and 23M€₂₀₀₉ for the amounts carried-over from 2013. It is noted that 8.5M€₂₀₀₉ were spent for "new" projects, not foreseen originally for this year.
- 2.6.6 The main reason for the non-spent amounts refers to delays and changes of timing and strategies for several main projects.



Figure 11: 2013 FABEC (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)				
FABEC	Plan	Actual	A - P (M€)	A/P (%)	
TOTAL CAPEX	405.6	304.8	-100.8	-24.9%	
MAIN CAPEX	234.5	185.8	-48.7	-20.8%	
% Main vs Total	57.8%	61.0%		5.5%	
% Total CAPEX vs Gate-to-gate ANS costs	14.4%	11.2%		-22.4%	

Table 27: 2013 FABEC (ANSPs) 2013 CAPEX (Actual vs. Planned)

- 2.6.7 The actual percentage of main into total CAPEX is 61% in comparison to the planned one (i.e. 57.8%). This change is due to the fact that several ANSPs decided to spend more for the main projects than for the "other" projects (i.e. DSNA, DFS and Skyguide).
- 2.6.8 The percentage of total CAPEX into gate-to-gate costs for FABEC ANSPs has decreased by 22.4% (i.e. 11.2% actual vs. 14.4% planned). This is explained by a significant decline in total CAPEX (-24.9% actual vs. planned for 2013) accompanied by a decline in gate-to-gate ANS costs (-3.1%).
- 2.6.9 However, for most of the ANSPs both CAPEX and ANS costs have decreased in 2013 (actual vs. plan) except for DFS and Skyguide, which recorded an increase in CAPEX (+18% and +5%). LVNL recorded a slight increase in costs (+2%) but it is counterbalanced by the significant decline in CAPEX (-67%) (see the chart below).


Figure 12: FABEC Total CAPEX vs. ANS (gate-to-gate) Costs Deviations

2.6.10 FABEC has spent 185.8M€₂₀₀₉ for main projects in 2013, 83% being spent for projects planned for this year in the Performance Plans.

FABEC 2013 MAIN CAPEX break-down:	Plan	Actual	A-P	A/P (%)
CAPEX originally planned for 2013 (PP)	182.6	154.4	-28.2	-15.5%
CAPEX from previous years carried over to 2013	51.9	23.0	-28.9	-55.7%
New 2013 unplanned CAPEX		8.5	8.5	
2013 TOTAL MAIN CAPEX	234.5	185.8	-48.7	-20.8%

Table 28: FABEC 2013 MAIN CAPEX break-down

2.6.11 From the total amount spent for <u>main projects</u> DFS has spent 93.7M€₂₀₀₉ (50%), of which 91% for projects planned for 2013 (see section 3.10) and DSNA has spent 72.1M€₂₀₀₉ (39% of total actual CAPEX spent by FABEC) mainly for the same category.

2014 & RP1 PLANNING UPDATE

- 2.6.12 The planned 2014 CAPEX was updated by all States. It is noted that 36.9M€₂₀₀₉ (9.7%) are foreseen not to be spent in 2014, due to the combined result of:
 - Downwards revision of the planned (PP RP1) budgets for DSNA (-34.7M€₂₀₀₉), MUAC (-9M€₂₀₀₉) and LVNL (-27.2M€₂₀₀₉); and
 - Upwards revision of the planned (PP RP1) budgets for DFS (+23.5M€₂₀₀₉), Belgocontrol (+7.3M€₂₀₀₉) and Skyguide (+3.1M€₂₀₀₉).

FABEC – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	330.1	340.1	343.3	405.6	389.9	1138.8
TOTAL Updated CAPEX (2009-13 Actual)(2014P update)	248.0	280.9	284.7	304.8	347.0	936.5
Deviation A-P	-82.1	-59.3	-58.6	-100.8	-42.9	-202.3
Deviation (%) A/P	-24.9%	-17.4%	-17.1%	-24.9%	-11.0%	-17.8%
MAIN Planned CAPEX (PP RP1)	179.3	178.5	165.6	234.5	231.0	631.2
MAIN Actual CAPEX (2009-13 Actual)(2014P update)	113.4	155.3	110.6	185.8	196.9	493.3
Deviation A-P	-65.9	-23.2	-55.0	-48.7	-34.1	-137.8
Deviation (%) A/P	-36.7%	-13.0%	-33.2%	-20.8%	-14.8%	-21.8%

Table 29: RP1 FAB EC CAPEX Update

- 2.6.13 After assessing 2013 results and the 2014 update, the RP1 planned CAPEX for FAB EC shows 202.3M€₂₀₀₉ (-17.8%) less than the amount planned for the Performance Plans for RP1, as a result of reduced actual spending for all the years..
- 2.6.14 <u>Total CAPEX</u> for 2010-14 is expected to increase by 8.8% on average (vs. +4.2% planned), whilst <u>Main CAPEX</u> is foreseen to increase by 14.8% (vs.6.5% planned).

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.6.15 Participating ANSPs are Belgocontrol, DSNA, DFS, ANA, LVNL, Skyguide and MUAC.

		FABEC						
		NL	BE	LU	DE	FR	СН	MUAC
	ATC17							
	COM09							
ATC-ATC	COM10							
	ITY-COTR							
	ITY-FMTP							
	FCM01							
ATC-Central	FCM03							
	FCM05							
	ATC16							
CNS	COM11							
CNS	ITY-AGDL							
	ITY-SPI							
	AOM19							
	AOM21							
	ATC02.2							
Common	ATC02.5							
Implementation	ATC02.6							
	ATC02.7							
	ATC12							
	ITY-ADQ							
Legend:								

Completed	Planned	Partly Completed
Late	No Plan	Not Applicable

Table 30: Consistency with the European ATM Master Plan (ANSP view)

- 2.6.16 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to FABEC. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects.
- 2.6.17 With regards to the ESSIP Objectives which have significant relevance from the point of view of the ATM Master Plan implementation and the Pilot Common Project Regulation, the following issues have to be noted:
 - All ANSP relevant ATC to ATC objectives have either been planned or have already been implemented, fully or partly, within FABEC. Exceptions are for: DSNA where there is delay on 4 of the 5 objectives caused by the progress plan for DSNA's next generation ATM system. Belgocontrol reports "late" for the ITY-COTR objective because the implementation of the ground-ground automated coordination processes has not been put in place with all neighbours.
 - Belgocontrol and MUAC report "late" in the implementation of enhanced tactical flow management services.
 - DSNA reports "late" in the implementation of collaborative flight planning due to ambiguity in message specifications.
 - Except for ANA Luxembourg and DFS, all ANSPs have plans in place for the implementation of Voice over Internet Protocol (VoIP) in ATM. DFS considers the COM11 objective not mature enough for implementation.
 - ATC12: Implement automated support for conflict detection and conformance monitoring: The implementation of this objective is very much dependent on the capabilities of the provider's (legacy) ATM systems. Both DFS and DSNA report "late" on this objective. DFS implementation is pending iTEC based system upgrade for all ACCs but UAC Karlsruhe where the capabilities are available. Similarly, DSNA's implementation is dependent of the 4-Flight system upgrades for all ACCs but Brest and Bordeaux, where the legacy ATM system will be upgraded in 2015.
 - ITY-ADQ: Ensure quality of aeronautical data and aeronautical information: LVNL, DFS and DSNA report "late".

2.7 NEFAB

EXECUTIVE SUMMARY

- 2.7.1 The NEFAB States have not provided all quantitative and qualitative data for 2013.
- 2.7.2 Estonia sent its report on 10th of June with incomplete data (ANS costs are missing). There was no transparency on the amounts spent in 2013 or planned for 2014.
- 2.7.3 Norway has included its 2012 CAPEX actual spending, which was not provided last year, but no additional qualitative details were reported.
- 2.7.4 The links to the ATM Master Plan for the CAPEX projects were not updated in a satisfactory manner for any of the NEFAB States. Additionally inconsistencies were noticed for the reported dates of entry into operation with comparison to the information provided in other sources (the ATM Master Plan reporting process). None of the States reported any investment project at FAB level.
- 2.7.5 Some minimal information in respect to 2013 investments was provided through the charges reporting scheme by Latvia and Norway.
- 2.7.6 The NEFAB situation shows a total net amount of 9.4M€₂₀₀₉ (-31%) spent less, of which 8.2M€₂₀₀₉ was not spent by Finavia and 1.1M€₂₀₀₉ not spent by LGS. It is noted that Avinor has exceeded its planned budget for 2013 (see details below).
- 2.7.7 No additional qualitative information was given with regard to the status of the projects and none of the planned entry into operation was updated, except for one main project by Finavia.



Figure 13: 2013 NEFAB (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)					
NEFAB	Plan	Actual	A - P (M€)	A/P (%)		
TOTAL CAPEX	30.5	21.1	-9.4	-30.7%		
MAIN CAPEX	23.7	16.9	-6.7	-28.4%		
% Main vs. Total	77.5%	80.2%		3.4%		
% Total CAPEX vs. Gate-to-gate ANS costs	10.6%	9.3%		-12.7%		

Table 31: 2013 NEFAB (ANSPs) 2013 CAPEX (Actual vs. Planned)

- 2.7.8 The actual percentage of main into total CAPEX is 80.2% in comparison to the planned one (i.e. 77.5%). This is a result of cancelling "other" CAPEX (Avinor) or reduced spending in "other" CAPEX vs. initially planned (Finavia). However EANS has spent only 1.1M€₂₀₀₉ for "other" CAPEX and €100k for the main ones.
- 2.7.9 The percentage of total CAPEX into gate-to-gate costs for NEFAB ANSPs has decreased by 12.7% (i.e. 9.3% actual vs. 10.6% planned). At FAB level, this is explained by lower CAPEX (-30.5% actual vs. planned for 2013) and by a significant decline in gate-to-gate ANS costs (-6.6%) (for the deviations at ANSP level, see the chart below).



Figure 2: NEFAB Total CAPEX vs. ANS (gate-to-gate) Costs Deviations	Figure 2: NEFAB Total CAPEX v	3. ANS (gate-to-gate)	Costs Deviations
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NEFAB 2013 MAIN CAPEX break-down:	Plan	Actual	A - P	A/P (%)
CAPEX originally planned for 2013 (PP)	23.7	16.1	-7.5	-31.8%
CAPEX from previous years carried over to 2013	0.0	0.0	0.0	0.0
New 2013 unplanned CAPEX		0.9	0.9	0.0
2013 TOTAL MAIN CAPEX	23.7	17.0	-6.6	-28.0%

Table 32: 2013 NEFAB (ANSPs) main CAPEX break-down

2.7.10 From the total amount spent for 2013 main CAPEX (i.e. 17M€₂₀₀₉), Avinor has spent 12.6M€₂₀₀₉ (see details in section 3.20), LGS has spent 2.3M€₂₀₀₉ (see details in section 3.15), Finavia 2.1M€₂₀₀₉ (see in section 3.8) and EANS €100k (see in section 3.7). Two new projects were included in Finavia's investment list.

2013 TOTAL CAPEX (gate-to-gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT
EANS Estonia	-1.0	1.1	-0.5
Finavia	-9.5	1.3	-8.2
LGS Latvia	-2.4	1.3	-1.1
Avinor Norway	-0.4	0.8	0.5
NEFAB (M€2009, real terms)	-13.3	4.5	-9.3

Table 33: 2013 NEFAB CAPEX Net result

2.7.11 As for exceed in budget, Finavia has spent 1.3M€₂₀₀₉ more for several projects in 2013 (i.e. +0.4M€₂₀₀₉ for "Eurocat system upgrade", 400k€₂₀₀₉ for surface movement radar and 500k€₂₀₀₉ for "Controller pilot Data-link"); Estonia has spent for "other" not detailed projects and Latvia has spent 300K€₂₀₀₉ for "ATRACC" and 900K€₂₀₀₉ for "VHF Modernisation Riga FIR".

2014 & RP1 PLANNING UPDATE

2.7.12 Only Avinor has not updated its 2014 planned CAPEX through 2013 reporting exercise. It is noted that the additional 6.3M€₂₀₀₉ that are foreseen to be spent more than planned are mainly due to Finavia (3.3M€₂₀₀₉) and Estonia (2.8M€₂₀₀₉).

NEFAB – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	30.2	34.8	45.3	30.5	31.5	107.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	24.1	21.3	24.4	21.1	37.7	83.2
Deviation U-P	-6.1	-13.5	-21.0	-9.4	6.3	-24.1
Deviation (%) U/P	-20.1%	-38.8%	-46.3%	-30.7%	20.0%	-22.4%
MAIN Planned CAPEX (PP RP1)	30.0	33.4	31.5	23.7	22.3	77.4
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	21.1	20.9	18.3	17.0	27.1	63.2
Deviation U-P	-8.9	-12.5	-13.2	-6.6	5.6	-14.2
Deviation (%) U/P	-29.8%	-37.5%	-42.0%	-28.0%	25.3%	-18.3%

Table 34: RP1 NEFAB CAPEX Update

- 2.7.13 After assessing the 2013 results and the 2014 planning update, the RP1 updated planned CAPEX for NEFAB is foreseen to be 22.1M€₂₀₀₉ (-22.4%) lower than the amount originally planned. This is due to a significantly reduced actual spending for 2012 and 2013 (see above).
- 2.7.14 Overall, for the period 2010-14, total CAPEX is expected to increase by 11.8% (vs. 1.0% planned). Furthermore, the actual main CAPEX seems to increase (+7.3%) though it was initially forecasted to decrease by 7.2%.

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.7.15 Participating ANSPs are EANS, Finavia, LGS and Avinor.

		NEFAB						
		NO	FI	EE	LV			
	ATC17							
	COM09							
ATC-ATC	COM10							
	ITY-COTR							
	ITY-FMTP							
	FCM01							
ATC-Central	FCM03							
	FCM05							
	ATC16							
CNS	COM11							
CNS	ITY-AGDL							
	ITY-SPI							
	AOM19							
	AOM21							
	ATC02.2							
Common	ATC02.5							
Implementation	ATC02.6							
	ATC02.7							
	ATC12							
	ITY-ADQ							
Legend:								

	Legena.	
Completed	Planned	Partly Completed
Late	No Plan	Not Applicable

Table 35: Consistency with the European ATM Master Plan (ANSP view)

- 2.7.16 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to the NEFAB. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects. NEFAB has a close cooperation with LFV and NAVIAIR (DK/SE-FAB) concerning airspace development. In this cooperation the implementation of a seamless Free Route Airspace above FL 285 across the two airspace blocks is prioritised in the short term with planned implementation towards the end of 2015. The activity is targeted to connect Free Route Airspace in the two FABs, ensuring a continuous Free Route Airspace (AOM21). The activity is organised as a project called North European Free Route Airspace NEFRA.
- 2.7.17 The NEFAB produces a joint effort within the scope of IDSG (Interim Deployment Steering Group). The ANSPs' work organised as FAB has clearly increased the cooperation, coordination and ATM systems deployment status awareness among the ANSPs, helping to form a better FAB-view picture of how ESSIP-objectives have been and should be deployed. At the moment this mainly applies only to ESSIP-objectives which are included in the IDSG IDP (Interim Deployment Programme), but is expected to lead into better deployment coordination among all ESSIP-objectives soon after the actual Deployment Manager (DM) organisation has been established during 2015.

2.8 SW FAB

EXECUTIVE SUMMARY

- 2.8.1 SW FAB States have provided all data with detailed explanations, ensuring transparency with regard to the status of the projects, the amounts spent for 2013, the updated planning for 2014 and the expected commissioning dates. The reporting gives a clear and precise picture of the situation.
- 2.8.2 The links to the ATM Master Plan elements were provided in a correct manner and consistency has been kept in the description and the dates of entry into operation between the 2013 report and other sources of information (the ATM Master Plan reporting process). However no project described in the 2013 reports were identified as FAB projects.
- 2.8.3 The SW FAB results for 2013 show a total net amount of 45.7M€₂₀₀₉ (-46.1%) spent less than planned of which 34.1M€₂₀₀₉ were not spent by AENA and 11.5M€₂₀₀₉ by NAV Portugal.
- 2.8.4 From the total actual CAPEX (53.4M€₂₀₀₉), only 11.2M€₂₀₀₉ were endorsed for the main projects, the rest (42.2M€₂₀₀₉) were attributed to the "other" category by AENA. It was explained that "several investments included in this group are necessary to achieve the projects identified as Main projects, but have not been included directly as a part of the investment of these projects."
- 2.8.5 The entire actual amount spent for main projects (11.2M€₂₀₀₉) was for the projects planned for 2013. No projects carried-over or new projects were included in the list in 2013 by SW FAB.



Figure 14: 2013 SW FAB (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)					
SW FAD	Plan	Actual	A - P (M€)	A/P (%)		
TOTAL CAPEX	99.1	53.4	-45.7	-46.1%		
MAIN CAPEX	30.1	11.2	-18.9	-62.8%		
% Main vs. Total	30.4%	21.0%		-31.0%		
% Total CAPEX vs. Gate-to-gate ANS costs	9.4%	5.5%		-41.4%		

Table 36: 2013 SW (ANSPs) 2013 CAPEX (Actual vs. Planned)

2.8.6 The actual percentage of main into total CAPEX is 21% in comparison to the planned one (i.e. 30.4%). This change is due to AENA's decision to have a higher spending for main projects than for "other" projects (see details in section 3.26).

2.8.7 The percentage of total CAPEX into gate-to-gate costs for SW FAB ANSPs has decreased by 41% (i.e. 5.5% actual vs. 9.4% planned). This is explained by a significant decline in total CAPEX (-46.1% actual vs. planned for 2013) accompanied by a decline in gate-to-gate ANS costs (-8.1%) (see details in the chart below).



Figure 15: 2013 SW FAB Total CAPEX vs. (gate-to-gate) ANS costs deviations

2.8.8 From the total amount spent for main 2013 projects (i.e. 53.4M€₂₀₀₉), AENA has spent 89% (see details in section 3.26).

2013 TOTAL CAPEX (gate-to-gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT
NAV Portugal	-13.8	2.3	-2.7
AENA Spain	-34.1	0.0	-34.1
SW FAB (M€2009, real terms)	-47.9	2.3	-36.8

Table 37: 2013 SW FAB CAPEX Net result

2.8.9 NAV Portugal has exceeded the planned budget for buildings and other main projects (see details in section 3.22)

2014 & RP1 PLANNING UPDATE

2.8.10 After updating 2014 planned CAPEX it is noted that 89.9M€₂₀₀₉ are foreseen not to be spent, due to the important reduction in budget for both ANSPs.

SW FAB – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	158.5	164.6	168.1	99.1	166.4	433.6
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	165.4	130.5	130.5 81.3		76.5	211.2
Deviation U-P	6.9	-34.0	-86.8	-45.7	-89.9	-222.4
Deviation (%) U/P	4.3%	-20.7%	-51.6%	-46.1%	-54.0%	-51.3%
MAIN Planned CAPEX (PP RP1)	111.9	118.6	34.1	30.1	17.3	81.5
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	105.0	91.9	14.2	11.2	29.7	55.1
Deviation U-P	-6.9	-26.7	-19.9	-18.9	+12.4	-26.4
Deviation (%) U/P	-6.2%	-22.5%	-58.3%	-62.8%	+71.5%	-32.4%

Table 38: RP1 SW FAB CAPEX Update

- 2.8.11 After assessing the 2013 results, and 2014 update, the RP1 planned CAPEX for SW FAB is foreseen to be 222.4M€₂₀₀₉ (-51.3%) lower than the amount originally planned. This is due to an important decrease in actual spending.
- 2.8.12 Total CAPEX for the period 2010-14 is expected to decrease by 17.5% on average (vs. +1.2% planned).

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.8.13 Participating ANSPs: AENA and NAV Portugal

		SW FAB				
		ES	PT			
	ATC17					
	COM09					
ATC-ATC	COM10					
	ITY-COTR					
	ITY-FMTP					
	FCM01					
ATC-Central	FCM03					
	FCM05					
	ATC16					
CNS	COM11					
CNS	ITY-AGDL					
	ITY-SPI					
	AOM19					
	AOM21					
	ATC02.2					
Common	ATC02.5					
Implementation	ATC02.6					
	ATC02.7					
	ATC12					
	ITY-ADQ					

Legena:							
Completed	Planned	Partly Completed					
Late	No Plan	Not Applicable					

Table 39: Consistency with the European ATM Master Plan (ANSP view)

- 2.8.14 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to the SW FAB. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects.
- 2.8.15 With regards to the ESSIP Objectives which have significant relevance from the point of view of the ATM Master Plan implementation and the Pilot Common Project Regulation, the following issues have to be noted:
 - ITY-COTR: Implementation of ground-ground automated co-ordination processes:
 - (i) ITY-COTR is reported late for both Spain and Portugal. The delays accumulated in the implementation of ITY-COTR are due to the complexity of ground-ground coordination between ACCs.
 - ITY-FMTP: Apply a common flight message transfer protocol (FMTP):
 - (i) ITY-FMTP is late in Spain and planned in Portugal. ITY-FMTP will be deployed in consecutive phases by NAV Portugal by 2014 and by AENA by 2015. In both

cases the final implementation date goes beyond the deadline of Regulation (EC) No 633/2007, as amended.

- (ii) The lower completion degree within Spain can be explained by the complexity of the ground-ground coordination between Barcelona ACC – Canarias ACC – Madrid ACC – Sevilla ACC.
- FCM05: Implementation of interactive rolling NOP:
 - (i) FCM05 has no implementation planning in Spain and has been reported as Missing Data in Portugal. FCM05 was introduced in the ESSIP Plan for 2013 for the first time.
- COM11: Implementation of Voice over Internet Protocol (IP) in ATM:
 - (i) All SLoA implementation of the new 2013 objective are planned for both Spain and Portugal by 2020. The FAB ANSPs have planned the implementation of the VoIP Protocol by the end of 2020. SLoA ASP01 and ASP02 were already completed in Spain in 2013.
- ITY-AGDL: Initial ATC air-ground data link services above FL-285:
 - (i) The coordinated objective implementation of ITY-AGDL will be performed in consecutive phases in the Portuguese ANSP by 2015, and the Spanish ANSP by 2016. In both cases the final implementation dates are beyond the regulation 29/2009 deadline.
- AOM19: Implement Advanced Airspace Management:
 - (i) The comparison between 2012 and 2013 AOM19 reported completion degree in Spain shows an apparent regression. This objective has been changed from Completed to No Plan in LSSIP 2013. This was caused by 3 not planned SLoA (ASP05, ASP08 and ASP09). The rest of SLoA allocated to ANSP have been already completed. Therefore the application of 'less advanced SLoA' status to determine the stakeholder status has led to a regression from 'Partially Completed' to 'No Plan'. On the other hand, Portugal has a lower completion degree but has planned all SLoA, except for two cases, that are 'Not Applicable' due to Civil/Military close coordination CDR being suppressed since 2003.
- ITY-ADQ: Ensure quality of aeronautical data and aeronautical information:
 - (i) The regulated objective ITY-ADQ is reported late within the FAB, in contrast of the planned status reported in 2012. Spain has all SLoA completed or planned to be implemented in time with the exception of ASP02 Establish formal arrangements. In Portugal, only one SLoA is complete, the rest have been reported as late. The ADQ implementation is currently being prepared and planned to be fully achieved by July/2017 due to the SLoA ASP07 Implement all data requirements which is under development in both countries and expected to be fully compliant in time to 2017.

2.9 UK-IRELAND FAB

EXECUTIVE SUMMARY

- 2.9.1 Overall, UK has provided the quantitative data with detailed explanations, ensuring transparency with regard to the status; amounts spent for 2013 and updated planning for 2014. No information was provided on the expected commissioning dates for any project. It is assumed that the original planning has not changed. The appropriate links to the ATM Master Plan elements were provided only for 2 projects.
- 2.9.2 Ireland has disclosed its 2013 CAPEX data with an important delay (19th June 2014). In addition, the quality of the data is very poor since only the total actual CAPEX were disclosed with no transparency on the investment policy. Consequently no sound assessment on the investment policy for Ireland is possible at this stage. Due to very limited information provided, no assessment of the links to the ATM Master Plan was possible.
- 2.9.3 None of the projects described in the 2013 reports was identified as FAB project.
- 2.9.4 UK Ireland FAB has spent a total net amount of 41.8M€₂₀₀₉ (-27.5%) less than planned, of which 33.7M€₂₀₀₉ were not spent by NATS and 8.1M€₂₀₀₉ by IAA.
- 2.9.5 From the total actual CAPEX (110.2M€₂₀₀₉), 95.1M€₂₀₀₉ (86%) were endorsed for the main projects. This amount was for the projects planned for 2013. No carried-over or new projects were included in the list in 2013 by UK-Ireland FAB.



Figure 16: 2013 UK Ireland (Actual vs. Plan) TOTAL CAPEX

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

LIV Iroland EAD	2013 CAPEX (M€2009, real terms)						
	Plan	Actual	A - P	A/P (%)			
TOTAL CAPEX	152.0	110.2	-41.8	-27.5%			
MAIN CAPEX	122.3	95.1	-27.2	-22.3%			
% Main vs. Total	80.5%	86.3%		7.3%			
% Total CAPEX vs. Gate-to-gate ANS costs	19.8%	16.6%		-16.2%			

Table 40: 2013 UK-Ireland (ANSPs) 2013 CAPEX (Actual vs. Planned)

- 2.9.6 The actual percentage of main into total CAPEX is 86.3% in comparison to the planned one (i.e. 80.5%). This change is due to NATS's decision to have a higher spending for main projects than for "other" projects (see details in section 3.29).
- 2.9.7 The percentage of total CAPEX into gate-to-gate costs for UK-Ireland ANSPs has decreased by 16.2% (i.e. 16.6% actual vs. 19.8% planned). This is explained by a significant decline in total CAPEX (-27.5% actual vs. planned for 2013) accompanied by a decline in gate-to-gate ANS costs (-13.5%). A significant decline in CAPEX in 2013 is noted for IAA (75% less than initially planned) (see details in the chart below).



Figure 17: 2013 UK-Ireland FAB Total CAPEX vs. (gate-to-gate) ANS costs deviations

2.9.8 From the total amount spent for 2013 (i.e. 110.2M€₂₀₀₉), NATS has spent 97% (see details in section 3.29).

2013 TOTAL CAPEX (gate-to- gate)	Spent below the planned budget	Spent above the planned budget	NET RESULT
IAA Ireland	-8.1	0.0	-8.1
NATS UK	-43.0	9.3	-33.7
UK-Ireland FAB (M€2009, real terms)	-51.1	9.3	-41.8

Table 41: 2013 UK- Ir	eland CAPEX Net Result
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2.9.9 NATS has exceeded the planned budget for "Centre System Software Development" due to additional spending on legacy systems.

2014 & RP1 PLANNING UPDATE

2.9.10 The planned 2014 CAPEX was transparently updated only by NATS. It is reported that 15.7M€₂₀₀₉ are forecasted not to be spent in RP1. On the other hand, IAA has updated its 'Total 2014 planned CAPEX' and a difference of 200k€₂₀₀₉ is forecasted to be needed in addition.

UK-Ireland – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	154.7	162.9	158.2	152.0	154.8	465.0
TOTAL Updated CAPEX (2009-13 Actual)(2014P update)	143.0	114.7	127.5	110.2	139.1	376.8
Deviation A-P	-11.7	-48.2	-30.7	-41.8	-15.7	-88.2
Deviation (%) A/P	-7.6%	-29.6%	-19.4%	-27.5%	-10.2%	-19.0%
MAIN Planned CAPEX (PP RP1)	88.9	94.2	120.5	122.3	126.6	369.4
MAIN Actual CAPEX (2009-13 Actual)(2014P update)	93.5	68.7	100.9	95.1	118.0	314.0
Deviation A-P	4.6	-25.5	-19.5	-27.2	-8.7	-55.4
Deviation (%) A/P	5.2%	-27.1%	-16.2%	-22.3%	-6.8%	-15.0%

Table 42: RP1 UK-Ireland FAB CAPEX Update

- 2.9.11 After assessing the 2013 results and the 2014 update, the RP1 planned CAPEX for UK-Ireland FAB is foreseen to be 88.2M€₂₀₀₉ (-19%) lower than the amount originally planned. This is due to the important decrease in actual spending mainly for NATS.
- 2.9.12 Total CAPEX for the period 2010-14 is expected to decrease by 0.7% on average.

CONSISTENCY WITH THE EUROPEAN ATM MASTER PLAN

2.9.13 Participating ANSPs: IAA and NATS.

		UK-Ireland FAB			
		UK	IE		
	ATC17				
	COM09				
ATC-ATC	COM10				
	ITY-COTR				
	ITY-FMTP				
	FCM01				
ATC-Central	FCM03				
	FCM05				
	ATC16				
CNS	COM11				
CNS	ITY-AGDL				
	ITY-SPI				
	AOM19				
	AOM21				
	ATC02.2				
Common	ATC02.5				
Implementation	ATC02.6				
	ATC02.7				
	ATC12				
	ITY-ADQ				
		_egend:			

	<u>Legena.</u>	
Completed	Planned	Partly Completed
Late	No Plan	Not Applicable

Table 43: Consistency with the European ATM Master Plan (ANSP view)

2.9.14 The table above is extracted from the 2013 ESSIP report. ESSIP constitutes level 3 of the European ATM Master Plan and this table depicts the state of progress for the deployment of the ESSIP objectives that are relevant to the UK-Ireland FAB. It addresses the ESSIP objectives relevant to FAB development which relate to interoperability aspects.

- 2.9.15 With regards to the ESSIP Objectives which have significant relevance from the point of view of the ATM Master Plan implementation and the Pilot Common Project Regulation, the following issues have to be noted:
 - FCM05: Implementation of interactive rolling NOP:
 - (i) Very new objective and the ANSPs plan to work together to deliver a FAB solution.
 - ATC12: Implement automated support for conflict detection and conformance monitoring:
 - (i) The UK will not have this objective complete until 2020.
 - ITY-ADQ: Ensure quality of aeronautical data and aeronautical information:
 - (i) Both ANSPs are late but work continues on meeting these requirements. Both ANSPs have advanced plans to meet the deadline for this objective.

3 ANSP LEVEL¹

3.1 Austria (Austro Control)

OVERVIEW

- 3.1.1 Austria has provided a revised planning for the main CAPEX figures for 2013 (i.e. €27.7M new vs. €8.2M initial planning through PP for RP1) but the total planned amount for the year was not affected as this is the result of the cancellation of the budget for the "other" projects (planned initially for a €19.6M). For the purpose of this exercise the new planning was considered.
- 3.1.2 Austria has provided actual 2013 CAPEX and has updated the 2014 planned CAPEX. Some information on the reasons for the non-spent planned amounts was given and updates on the new entry into operation for some of the projects.
- 3.1.3 Additional information was provided through the charges reporting scheme with regard to *"cost reduction programme"*:

"a. Due to the reduced traffic volume no new requirements were accepted and the allocated budgets were reduced to a minimum.

b. Active cost reduction and shifts by improved technical architecture and solutions:

i. Domain COM (Implementation of the AGDL Infrastructure for CPDLC is delayed due to lack of delivery from the industry (SITA/ARINC))

ii. Domain AIM-MET (Visual Weather; HW MET Neu 2020; HW VDI; increased efficiency by AIM Portal)

iii. Domain ATM (NG-AATMS external Program manager cost savings; Project restructuring due to AWAM prioritization; CDM implementation was delayed due to integration challenges concerning TSAT update frequency and de-icing procedures in both airport Vienna and ANSP system

iv. Domain NAV DME: Required reduction of life cycle cost and introduction of "smart procurement" principles in FAB-CE require a move to 2014

v. Small deviations for smaller investments are required due to impact of regulatory change."

3.1.4 Furthermore, some revisions in the payment plan were considered:

"i. Revised payment plans due to COOPANs project planning changes and split between ACC and LAU implementation.

ii. TWR Salzburg payment plan delay due to adjustments in agreement with Airport Salzburg and rescheduled project plan by steering board."⁴

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Austro Control	2013 CAPEX (M€2009, real terms)					
	Plan	Actual	A - P	A/P (%)		
TOTAL CAPEX	27.7	26.6	-1.1	-3.9%		
MAIN CAPEX	27.7	26.6	-1.1	-3.9%		
% Main vs. Total	100.0%	100.0%		0.0%		
% Total CAPEX vs. Gate-to-gate ANS costs	14.6%	15.8%		8.1%		

Table 44: 2013 Austria ANSP CAPEX (Actual vs. Planned)

¹ All ANSP assessments are expressed in €2009, real terms

- 3.1.5 Having as a reference the new planned value for CAPEX 2013, Austro Control has spent €1.1M (-3.9%) less than planned in 2013, of which -€1M due to the revision in budget for the projects carried-over from 2012 and -€100k due to the savings for the main 2013 CAPEX.
- 3.1.6 This result is distorted because of the revised planning for main CAPEX in 2013 (i.e. €8.8M initial planning in the PP vs. €1.1M the revised planned CAPEX reported for the 2013 monitoring).
- 3.1.7 An additional revision is also provided for the carried-over's from 2012 (i.e. €17.4M carried-over planned following the 2012 monitoring exercise vs. €26.6M revised planning reported for the 2013 monitoring).
- 3.1.8 Even more, the €28M originally planned for "other" CAPEX in 2013 was cancelled and no amounts were actually spent. As a result, the actual main equals the total CAPEX.
- 3.1.9 Austro Control explained that "*MLAT completion originally planned in 2013, due to some pending delivery payment moved in 2014, initial date for putting in operation according plan, final integration to the NG-AATMS with B2.5 in Q4/2014 moved to Q1/2015 due to delay in COOPANS implementation*" and only €200K were spent in 2013.
- 3.1.10 It was however observed that, though a delay is reported for "Tower LOWS" "due to cost sharing with AP-SBG and rescheduled project plan by steering board", an additional €4.3M was spent for this project in 2013. The planned budget was also exceeded for NG AATMS (+€1.9M) as a result of a "revised payment plan due to COOPANS project planning changes and split between ACC and LAU implementation; ACC in time and budget , LAU delayed".
- 3.1.11 The percentage of total CAPEX into gate-to-gate costs for Austro Control has increased in 2013 by 8.1% (i.e. 15.8% actual vs. 14.6% planned). This is explained by -11.1% "Cost Effect"⁵ and -3.9%"CAPEX Effect"⁶.
- 3.1.12 Details are provided in the table below.

Austro Control Investments	o for year 2013										
	Reference to European		TOTAL	Amount of Capital expenditures (M€2009, real terms)					Date of entry into operation		
Name of investment	ATM MP (ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	Lifecycle (Amortisation period in years)	route/ terminal ANS (%)	Planned in the PP	Actual
		Main CAPEX from	previous	years carr	ied over to	o 2013					
		MLAT completion originally planned in 2013,									
MLAT Austria	n/a	due to some pending delivery payment moved in 2014, initial date for putting in operation according plan, final integration to the NG-AATMS with B2.5 in Q4/2014 moved to Q1/2015 delay in COOPANS implementation	4.2	0.0	0.0	0.0		10	not planned	2014	n/a
NG AATMS	n/a	Revised payment plan due to COOPANS project planning changes and split between ACC and LAU implementation; ACC in time and budget, LAU delayed	36.1	4.7	6.7	1.9		15	not planned	Feb-13	Feb-13
Tower LOWS	n/a	Delay due to cost sharing with AP-SBG and rescheduled project plan by steering board; Tower LOWS comprise support for TWR and APP services	13.6	1.4	5.7	4.3		30 building / 15 ATM system / 10 COM / Infrastr. 15	not planned	Nov-13	Feb-14
Surveillance Infrastructure	n/a	Revised planning due to resource availability and prioritisation changes	6.7	0.0	0.5	0.5		10	not planned	Jul-17	n/a
En-route (Navigation)	n/a	Reprioritisation and scheduling due to resource availability	2.5	0.8	0.2	-0.7		10	100%R	Jul-17	n/a
Other CAPEX		Reprioritisation and scheduling due to resource availability	108.4	19.6	12.5	-7.1		10	100%T	Jul-17	n/a
Sub-total main CAPEX (1)				26.6	25.6	-1.0	-3.6%				
		Investments pla	nned for 2	013 (Revise	ed PP for l	RP1)					
									not		
MLAT Austria	n/a	see above	4.2	0.2	0.2	0.0	4.2%	10	planned	2014	Dec-13
NG AATMS	n/a	see above	36.1	0.0	0.0	0.0	-100.0%	15	not planned	2013	n/a
Tower LOWS	n/a	see above	13.6	0.0	0.0	0.0	-100.0%	30 building / 15 ATM system / 10 COM / Infrastr. 15	not planned	2013	n/a
Surveillance Infrastructure	n/a	see above	10.7	0.0	0.0	0.0	-100.0%	10	not planned	2017	n/a
En-route (Navigation)	n/a	see above	2.6	0.0	0.0	0.0	-100.0%	10	100%R	2017	n/a
Landing (Navigation)	n/a	n/a	2.7	0.9	0.8	-0.1	-11.2%	10	100%T	2017	n/a
Sub-total main CAPEX (2)			69.9	1.1	1.0	-0.1	-10.2%				
Total main CAPEX (1)+(2)			69.9	27.7	26.6	-1.1	-3.9%				
Other CAPEX (planned in the (3) (in M€)	e PP for 2013)	Other EOL Replacement - COM infrastructure - Regulatory	0.0	0.0	0.0	0.0					
Total CAPEX (1)+(2)+(3)			69.9	27.7	26.6	-1.1	-3.9%				

Table 45: 2013	Austria ANSP	Investments
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2014 & RP1 PLANNING UPDATE

3.1.13 Further to the 2014 CAPEX planning update, €1M is expected not to be spent due to changes in strategy and reduction in budgets. However €20M are foreseen to be spent for carried-over projects from previous years and only €100K to be spent from the 2014 planned budget.

Austro Control – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	42.3	45.2	33.0	27.7	21.1	81.7
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	41.2	27.4	37.8	26.6	20.1	84.5
Deviation U-P	-1.1	-17.8	4.8	-1.1	-1.0	2.8
Deviation (%) U/P	-2.6%	-39.4%	14.6%	-3.9%	-4.7%	3.4%
MAIN Planned CAPEX (PP RP1)	27.9	29.8	17.4	27.7	21.1	66.2
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	14.0	15.8	18.7	26.6	20.1	65.4
Deviation U-P	-13.9	-14.0	1.3	-1.1	-1.0	-0.7
Deviation (%) U/P	-49.8%	-47.1%	7.7%	-3.9%	-4.7%	-1.1%

Table 46: RP1 Austria ANSP CAPEX Update

- 3.1.14 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Austria ANSP is €2.8M higher than planned. This is due to an excess in the budget recorded in 2012 not compensated by the non-spending in 2013 and potentially in 2014.
- 3.1.15 For 2010-14 the actual total CAPEX is expected to be -16.5% lower on average. However, due to the budget constrictions and consequently the decision to cancel the budget for "other" CAPEX for both 2013 and 2014, the trend for the main actual CAPEX is different than originally planned (i.e. +9.4%, the revised trend vs. -6.8%, the planned one). On the other hand, the average deviation for the main actual vs. planned total CAPEX is foreseen to be -7.2% in average over the period.

CONSISTENCY WITH EUROPEAN ATM MASTER PLAN

- 3.1.16 The list of investments for the 2013 report has not been updated with the links to the European ATM Master Plan and the National Performance Plan for Austria refers only to high level ATM functions. The granularity and descriptions of the investments are too generic and do not allow for detailed assessment with regards to the consistency with the European ATM Master Plan.
- 3.1.17 However, the information provided in the ATM Master Plan reporting process for Austria provides more details for the assessment but it has to be noted that the granularity of the described projects is different. The projects covered by the ATM Master Plan reporting process correspond only partially to the list from the 2013 report (NG-AATMS, MLAT and Surveillance infrastructure). The projects enumerated in the ATM Master Plan reporting process provide clear links to the ATM Master Plan through the link to relevant ESSIP Objectives, i.e. ATC Objectives for NG-AATMS, ITY-AGDL for Air Ground Data Link, ITY-SPI for ARTAS, ACID and AWAM, COM09 for OLDI over IP and PENS. All these Objectives are reported to be implemented in 2014; therefore it can be assumed that they are included in the investment costs covered by the generic function descriptions of the 2013 report (COM, SUR and NAV). For the NG-AATMS investment the ATM Master Plan reporting process provides for the links related to all ATC Objectives that are either already Completed or Planned within the deadlines set up in the ATM Master Plan.
- 3.1.18 With regards to NG-AATMS investment the date of entry into operation provided in the 2013 report indicates 2013 which is the date of implementation relating only to phase 1 for ACC. The ATM Master Plan reporting process provides for 2015 as the date of implementation of phase 2 (APP, MIL and LAU). No details for the investment projects related to the implementation of ITY-COTR and ITY-ADQ were provided, however it has to be noted that these two Objectives which have potential network effect are reported as Late by Austria in their ATM Master Plan reporting process. For the projects mentioned in the ATM Master Plan reporting process the progress of implementation is satisfactory and in line with the explanations provided by Austria for the 2013 report.
- 3.1.19 The NG AATMS project is part of the COOPANS procurement program. The aim of this program is to reduce and share the investment cost in the ATM systems upgrades between several States and it has intra- and inter-FAB dimension (not only limited to FAB CE). The AGDL project listed in the ATM Master Plan reporting process for Austria is also part of the FAB CE projects.

3.2 Belgium (Belgocontrol)

OVERVIEW

- 3.2.1 Belgium provided information about five projects in their 2013 report.
- 3.2.2 Four projects reported are correctly linked to ESSIP Objectives and OI Steps/Enablers. For SURVEILLANCE project the links to the ATM Master plan are incomplete, i.e.: it is correctly linked to Enabler CTE-S5, but the link to Enabler CTS-S9b is missing.
- 3.2.3 Out of 5 projects reported, only one ATM RFC's CANAC 2 is not reported in the ATM Master Plan reporting process. However it is correctly linked to Level 2 elements of the ATM Master Plan.
- 3.2.4 For the METEO project, no links to ATM Master Plan, no description, scope or schedule were provided so it is not possible to make an assessment
- 3.2.5 For investments for 2012, 2013 and 2014, the description/explanation of changes is well described for all projects. There is consistency between the monitoring reporting and in the LSSIP reporting for the five projects in terms of project's description and scope.
- 3.2.6 The verification of the consistency of the schedules of implementation between the 2013 report and the ATM Master Plan reporting process was not possible due to the fact that Belgium did not provide any dates of entry into operation for the projects reported. Belgium did not report any project at FAB level. There are ten projects reported by Belgium and other FABEC States as FAB Projects in their ATM Master Plan reporting process but none of these projects is part of the set of projects defined in the Belgium 2013 report.
- 3.2.7 Belgocontrol has spent €14.2M (-73.2%) less than planned in 2013, of which €7.9M due to the not-spent amounts from the carried-over projects from 2012, €5.1M from the non-spent amounts for the projects planned for 2013 and €1.1M for "other" projects.

Palgocontrol	2013 CAPEX (M€2009, real terms)								
Bergoconitor	Plan	Actual	A - P	A/P (%)					
TOTAL CAPEX	19.4	5.2	-14.2	-73.2%					
MAIN CAPEX	17.3	4.2	-13.1	-75.5%					
% Main vs Total	89.2%	81.5%		-8.7%					
% Total CAPEX vs Gate-to-gate ANS costs	14.5%	3.9%		-72.9%					

Table 47: 2013 Belgium	ANSP CAPEX	(Actual vs.	Planned)
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- 3.2.8 Actual CAPEX for all "main" projects are disclosed per domain (Surveillance, Navigation, Communication etc.) which makes difficult any assessment per project. From the information provided it is noted that several delays in the procurement and implementation of the Mode S radars upgrade generated a significant underspent for the "Surveillance" projects and also the delays in procurement generated underspent amounts for "Navigation" (-€1.8M). It is also understood that these amounts are carried-over to 2014 and are foreseen to be spend over RP1.
- 3.2.9 The actual percentage of main into total CAPEX is lower than planned (i.e. 81.5% actual in comparison to 89.2%).
- 3.2.10 The percentage ratio of Total CAPEX into gate-to-gate costs for Belgocontrol has decreased by 72.9% (i.e. 3.9% actual vs. 14.5% planned). This is explained by 73.2% "CAPEX Effect"⁶ and 0.8% "Cost Effect"⁵.

Belgocontrol investments for year 2013											
	Reference to			Amount o (M€	of Capital exp 2009, real te	penditures rms)				Date of ent operati	ry into ion
Name of investment	European ATM MP (ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	TOTAL planned CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	Lifecycle (Amortisatio n period in years)	Alloc. En-route/ terminal ANS (%)	Planned in the PP	Actual
Investments postponed/delayed from previous years (2012 PRB Monitoring report)											
SURVEILLANCE	SURO2, SUR04, CTE- S5	Carry-over from 2012 (in nominal terms)	13.9	5.0	0.0	-5.0	-100.0%	8	50% ER - 50% Terminal	2013	n/a
NAVIGATION	AO-0201	Carry-over from 2012 (in nominal terms)	6.8	2.5	0.0	-2.5	-100.0%	8	59% ER - 41% Terminal	n/a	n/a
COMMUNICATION	AOM-0601	Carry-over from 2012 (in nominal terms)	1.8	0.1	0.0	-0.1	-100.0%	8	65% ER - 30% Terminal	n/a	n/a
АТМ	ITY-AGVCS	Carry-over from 2012 (in nominal terms)	4.5	0.3	0.0	-0.3	-100.0%	8	66% ER - 34% Terminal	n/a	n/a
METEO	CM-0201	Carry-over from 2012 (in nominal terms)	0.2	0.0	0.0	0.0		8	54% ER - 46% Terminal	n/a	n/a
VARIOUS		Carry-over from 2012 (in nominal terms)	0.5	0.1	0.0	-0.1	-100.0%				
Sub-total main capex (1) (in M€)			27.7	7.9	0.0	-7.9					
		Investment	s planned fo	r 2013 (Rev	vised PP for I	RP1)					
SURVEILLANCE	SURO2, SUR04, CTE- S5, AOP-04.1, AOP-04,2	Delay in the procurement and mplementation of the Mode S upgrade of the radar at Liège Alriport (Knock-on effect delay implementation approach radars for Brussels, Ostend and Charlerol). Delay in the preparation of the procurement of the surface movement radars for Charlerol and Liège Ariport. Change of Scope as a result of concertation with the airport authorities and the CAA)	13.9	4.6	2.5	-2.1	-46.0%	8	72%R-28%T	2013	n/a
NAVIGATION	AOM-0601	Delay in the procurement and implementation of the ILS 05R and 23L for Liège Airport as well of the DVOR/DME replacement (see explanation for 2012).	6.8	2.1	0.3	-1.8	-86.2%	8	100%T	2014/15	n/a
COMMUNICATION	ITY-AGVCS	Delay in the procurement and implementation of the replacement of one VHF radio-chain (delayed beyond 2014). On the other hand, a significant number of trunking radio's have been acquired in 2013.	1.8	0.5	0.6	0.1	27.0%	8	69%R-31%T	2015/16	n/a
АТМ	CM-0201	For 2013, a provision was included in the budget for the implementation of RFCs; it was not necessary to completely spend the provision.	4.5	1.9	0.8	-1.1	-59.7%	8	68%R-32%T	n/a	n/a
METEO			0.2	0.0	0.1	0.1		8	60%R-31%T- 9%Other	2013	n/a
VARIOUS		The planned replacement of the projection system has been postponed to beyond 2014.	0.5	0.3	0.0	-0.3	-100.0%				
Sub-total main capex (2) (i	nM€)		27.7	9.4	4.2	-5.1	-54.8%				
Total main CAPEX (1)+(2)			55.4	17.3	4.2	-13.1	-75.5%				
Other CAPEX (planned in the PP for 2013) (4) (in M€)			4.3	2.1	1.0	-1.1	-54.0%				
Total capex (1)+(2)+(3)+(4)	(in M€)		59.7	19.4	5.2	-14.2	-73.2%				

Table 48: 2013 Belgium ANSP Investments

2014 & RP1 PLANNING UPDATE

3.2.11 The planned 2014 CAPEX was updated and €7.3M is foreseen to be spent in addition to the initial planned amount, due to the carried –overs from 2013 mentioned in the section above. The planned amounts for the 2014 projects (€2.9M) are foreseen to be spent in accordance with the original planning for the Performance Plan for RP1.

Belgocontrol – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	19.4	11.6	15.5	19.4	3.4	38.3
TOTAL Updated CAPEX (2009-13 Actual)(2014P update)	12.8	7.4	6.4	5.2	10.7	22.3
Deviation A-P	-6.6	-4.2	-9.1	-14.2	7.3	-16.0
Deviation (%) A/P	-34.1%	-35.9%	-58.8%	-73.2%	215.0%	-41.8%
MAIN Planned CAPEX (PP RP1)	16.1	10.9	13.4	17.3	2.6	33.3
MAIN Actual CAPEX (2009-13 Actual)(2014P update)	10.3	6.7	5.5	4.2	8.6	18.3
Deviation A-P	-5.8	-4.2	-7.9	-13.1	6.0	-15.0
Deviation (%) A/P	-36.2%	-38.4%	-59.0%	-75.5%	231.6%	-45.0%

Table 49: RP1 Belgium ANSP CAPEX Update

- 3.2.12 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Belgium ANSP amounts to less €16M (-41.8%) than originally planned. This is due to an important under-spending in 2012 and 2013 actual CAPEX (see above).
- 3.2.13 For 2010-14 the actual total CAPEX is expected to be on average -4.4% lower than planned. However, due to the significant deviation foreseen for the 2014 planned CAPEX (+215% actual vs. planned total CAPEX) the annual average deviation actual vs. planned for 2010-14 for both total and main CAPEX is foreseen to be positive (i.e. +2.6% on average for total CAPEX and +4.5% for main CAPEX).

CONSISTENCY WITH EUROPEAN ATM MASTER PLAN

- 3.2.14 Out of 5 projects reported two are correctly linked to ESSIP Objectives and OI Steps/Enablers. For the Mode S project, it is correctly linked to Enabler CTE-S5, but the link to Enabler CTS-S9b is missing. Links to the ATM Master Plan are incomplete for:
 - A-SMGCS should be linked to ESSIP Objectives AOP04-1 / AP04-2 and OI Steps AO-0102.
- 3.2.15 Out of 5 projects reported, only one RFC's CANAC 2 is not reported in the ATM Master Plan reporting process. For investments for 2013 and 2014, the description/explanation of changes is missing for all projects. The information provided in the ATM Master Plan reporting process is more detailed, the projects are well described and comprehensive.
- 3.2.16 The RFC's CABAC2 project reported in the investment planned for 2013 is not reported in the ATM Master Plan reporting process document.
- 3.2.17 Belgium did not report any project at FAB level.
- 3.2.18 There are ten projects reported by Belgium and other FABEC States as FAB Projects in their ATM Master Plan reporting process but none of these projects is part of the set of projects defined in the Belgium 2013 report.

3.3 Bulgaria (BULATSA)

OVERVIEW

- 3.3.1 Bulgaria has provided a revised planning for the CAPEX figures for 2013 (i.e. €16.8M new planning vs. €8.5M initial plan through PP for RP1) without providing the rationale behind this change. For the purpose of this exercise the new planning was considered.
- 3.3.2 Bulgaria has provided its actual 2013 CAPEX information, explaining in detail the planned not spent amounts. Bulgaria has disclosed also details about the carried-over amounts and the entry into operation of most projects. An informative updated planning was provided for 2014, with complete quantitative and qualitative data.
- 3.3.3 Bulgaria has updated also the references to SESAR/ESSIP/IDP.
- 3.3.4 Detailed information was provided through the charges reporting with regard to the decrease in depreciation costs for 2012 and 2013 due to postponements of several investments⁷. In addition, the actual spending was detailed per project together with explanations for the changes in investment policy. However, slight differences were noted between the planned/actual totals reported through the 2013 monitoring report and the charges submission.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)							
BULAISA	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	16.8	4.2	-12.6	-75.0%				
MAIN CAPEX	15.1	2.9	-12.2	-80.9%				
% Main vs. Total	89.6%	68.4%		-23.6%				
% Total CAPEX vs. Gate-to-gate ANS costs	21.3%	5.9%		-72.4%				

Table 50: 2013 Bulgaria	ANSP CAPEX	(Actual vs.	Planned)
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- 3.3.5 Having as a reference the new planned value for CAPEX 2013, BULATSA has spent €12.6M less than planned in 2013 (-75%), of which €9.5M because of the revision in the budget for the projects carried-over from 2012. For many of these projects *"the procurement procedure is delayed*" (i.e. €3.7M were not spent for "New UHF" and "NEW TMA PSR & MODE S SSR at Sofia Airport").
- 3.3.6 Additionally, several main projects planned in 2013 were postponed and carried-over to 2014, also due to delays in the procurement procedure (i.e. €3M were postponed for "VOR DME", "National radio microwave network", "VDL-Mode 2" and "IT").
- 3.3.7 As a result, the actual percentage of main into total CAPEX is significantly lower than planned (i.e. 68.4% in comparison to 89.6%).
- 3.3.8 The percentage of total CAPEX into gate-to-gate ANS costs for BULATSA has decreased in 2013 by 72.4% (i.e. 5.9% actual vs. 21.3% planned). This is explained by -75% "CAPEX Effect"⁶ and a -9.5% "Cost Effect"⁵.

BULATSA Investments for year 2013											
	Reference to European		TOTAL	Amount (M	of Capital €2009, rea	expenditures I terms)		Lifecycle	Alloc. En- route/ terminal ANS (%)	Date of e opera	entry into ation
Name of investment	ATM MP (ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	(Amortisat ion period in years)		Planned in the PP	Actual
		Main CAPEX fr	om previ	ous years o	arried ove	er to 2013	1			1	
New En-route PSR and Mode S SSR	LO-8, CM- 0801, CTE-S5		10.0	6.1	0.0	-6.1	-100.0%	12	100%R	2015	2016
SATCAS upgrade	LO-8, CM- 0801, CTE-S5	A specific stage of the project is completed.	4.5	1.9	1.0	-0.9	-47.7%	5	97.38%R- 2.62%T	2013	2013
NEW UHF	AOM-0804, 0803, CTE-C5	The procurement procedure is delayed but ongoing and contract is expected to be signed by the end of 2014.	2.8	1.2	0.0	-1.2	-96.3%	Jan-00	various	2014	2015
NEW TMA PSR & MODE S SSR at Sofia Airport	LO-8, CM- 0801, CTE-S5	The procurement procedure is delayed but ongoing and contract is expected to be signed by the end of 2014.	2.8	2.5	0.0	-2.5	-100.0%	12	95%R-5%T	2015	2016
A-SMGCS	L10, AO-0201	Contract signed in 2012 at 33% lower price than planned.	2.7	0.0	1.0	1.0		12	100%T	2012	2014
ADS-B en-route approach WAM	AUO-0402, CTE-S5, CTE- S1	The procurement procedure is delayed but ongoing and contract is expected to be signed by the end of 2014.	0.9	0.0	0.0	0.0		12	various	2012	2015
Weather Radars		The project is in progress.	0.4	0.0	0.1	0.1		15	75%R-25%T	2012	2014
Sub-total main CAPEX (1)			24.0	11.7	2.2	-9.5	-81.3%				
		Main CAPEX o	riginally	planned fo	r 2013 (PP	for RP1)					
DME-DME	IDP WP6, ESSIP NAV 03, ATM MP OIs AOM- 0601	The first stage of the project is completed in 2012. The second stage of the projest is not started yet.	1.8	0.3	0.0	-0.3	-100.0%	15	100%R	2014	n/a
NEW Sofia Tower project	n/a	The project is completed in 2012. Some payments due from previous period remitted in 2013.	0.0	0.0	0.7	0.7		12_40	30.56%R- 69.44%T	2013	2012
VOR – DME	IDP WP6, ESSIP NAV 03, ATM MP OIs AOM- 0601	The procurement procedure is delayed but ongoing and contract is expected to be signed by the end of 2014.	3.8	1.2	0.0	-1.2	-100.0%	15	100%R- 0%T; >95%R	2015	2015
National radio microwave network	IS-0204, 0702, CTE- C10	The procurement procedue is delayed. Contract is expected to be signed in 2014	1.2	0.9	0.0	-0.9	-100.0%	12	94.58%R- 5.42%T	2014	2014
VDL-Mode 2	IDP WP 4, ESSIP ITY – AGDL, ATM MP: OIs AUO 0301	Contract is expected to be signed in 2014.	1.0	0.7	0.0	-0.7	-100.0%	12	100%R	2014	2014
п	n/a	The contract was signed at the end of 2013. The payment and delivery will be in 2014.	0.9	0.2	0.0	-0.2	-100.0%	5	various	current	2014
Sub-total main CAPEX (2)			8.6	3.3	0.7	-2.7	-79.6%				
Total main CAPEX (1)+(2)			14.6	15.1	2.9	-12.2	-80.9%				
Other (3) Total CAPEX (1)+(2)+(3)			0.0 14.6	1.8 16.8	1.3 4.2	-0.4 -12.6	-24.3%				

Table 51: 2013 Bulgaria ANSP Investments

2014 & RP1 PLANNING UPDATE

3.3.9 The planned 2014 CAPEX was updated and +€18.1M is expected to be spent in addition to the initial plan partly due to the carried-overs mentioned above (+€4.4M). The excess of budget foreseen for "SATCAS upgrade" (+€2.3M) and the new projects planned for the year (+€6.9M) have also contributed to this increase.

BULATSA – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	2.3	15.6	23.3	16.8	7.2	47.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	1.9	4.0	7.5	4.2	25.3	36.9
Deviation U-P	-0.4	-11.6	-15.9	-12.6	18.1	-10.4
Deviation (%) U/P	-17.1%	-74.5%	-68.0%	-75.0%	253.1%	-21.9%
MAIN Planned CAPEX (PP RP1)	2.2	10.6	22.0	15.1	5.9	42.9
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	0.5	2.4	6.4	2.9	19.5	28.8
Deviation U-P	-1.7	-8.1	-15.6	-12.2	13.6	-14.1
Deviation (%) U/P	-76.5%	-76.9%	-70.9%	-80.9%	232.1%	-32.9%

Table 52: RP1 Bulgaria ANSP CAPEX Update

- 3.3.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Bulgaria ANSP is -€10.4M lower than originally planned. This is due to the combination of important decrease of spending in 2012 and 2013 and the surplus in budget for 2014. (See above).
- 3.3.11 The total CAPEX for the period 2010-2014 is expected to increase by 90.8% due to a significant change in the 2014 planned CAPEX (i.e. €25.3M update planning vs. €7.2M originally foreseen). On the other hand, the average deviation for the main actual vs. planned CAPEX is foreseen to be -43% on average over the period, because the significant decreases recorded in the first years do not break-even with the huge increase foreseen for 2014 (see table above).

CONSISTENCY WITH EUROPEAN ATM MASTER PLAN

- 3.3.12 There is no detailed description of the projects/investments. In some cases the title gives a good hint of the project but in other cases is difficult to understand the scope of the project and therefore difficult to check the correctness of the referenced links to ESSIP objectives and OIs. A small description of the project, its scope and objectives is needed and would certainly contribute to improve the quality of the information provided.
- 3.3.13 Due to this lack of description the proposed links to OIs, is in some cases, difficult to assess.
- 3.3.14 The CAPEX projects were correctly linked to ESSIP Objectives, OI steps and IDP projects where applicable.
- 3.3.15 The dates indicated in the ATM Master Plan reporting process (ESSIP Objectives Implementation) are in accordance with the reported tables of investment (actual), except for the following projects:
 - DME-DME is linked to NAV 03 with a completion date (ESSIP Objective Implementation) foreseen for 2016. In the investment table it is indicated 2014.
 - VOR-DME- is linked to NAV 03 with a completion date (ESSIP Objective Implementation) foreseen for 2016. In the investment table it is indicated 2015.

3.4 Cyprus (DCAC Cyprus)

OVERVIEW

- 3.4.1 Cyprus has submitted its 2013 Monitoring Report, including CAPEX data on the 20th June 2014 only, long after the required deadline (1st June 2014). Apart from the actual 2013 amounts spent, Cyprus has also updated the dates for entry into operation for some of the projects, but provided no details on the status of the projects, or the reasons for the postponements.
- 3.4.2 Some information has been made available through the charges reporting scheme with regard to the actual amounts spent and the expected entry into operation and also regarding the impact on the decrease in depreciation costs for 2013⁸.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)							
DCAC Cyprus	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	5.4	3.7	-1.7	-31.1%				
MAIN CAPEX	5.4	3.7	-1.7	-31.1%				
% Main vs. Total	100.0%	100.0%		0.0%				
% Total CAPEX vs. Gate-to-gate ANS costs	14.8%	10.9%		-26.0%				

Table 53: 2013 Cyprus ANSP CAPEX (Actual vs. Planned)

- 3.4.3 Cyprus had not provided any planned CAPEX for any of the RP1 years in its adopted RP1 Performance Plan. Therefore the planned amounts for 2013 were considered the ones provided for this exercise together with the amounts carried-over from 2012.
- 3.4.4 In 2013 DCAC has spent €1.6M for projects carried-over from 2012. It was stated that two of the projects were "accomplished with less expenditure than budgeted" (i.e. "Ground to Air Tx/Rx" and "ATC Simulator". For three main projects (AMHS", "VCCS Acropolis upgrade and Backup", "DME Larnaca and Pafos") nothing was spent in 2013 and the entry into operation was postponed to later years. However, for the projects planned for 2013, DCAC has spent €2.1M, of which €1.5M for "Eurocat C main system".
- 3.4.5 No "other" CAPEX for DCAC was reported in 2013, so the actual percentage of main into total CAPEX is 100%.
- 3.4.6 The percentage of total CAPEX into gate-to-gate costs for DCAC has decreased by 26% (i.e. 10.9% actual vs. 14.8% planned). This is explained by "CAPEX Effect"⁶ (-31.1%) and -6.9% "Cost Effect"⁵.

DCAC Cyprus Investments for year 2013	CAC Cyprus Investments for year 2013										
	Reference to European	Description/ explanation	TOTAL planned CAPEX for the project (RP1)	Amount of Capital expenditures (M€2009, real terms)				Lifecycle	Alloc. En	Date of entry into operation	
Name of investment	ATM MP (ESSIP objectives/ OI Steps/ Enablers)	of the changes/ Other comments		2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	ation period in years)	route/ terminal ANS (%)	Planned in the PP	Actual
		Main CAPEX fr	om previo	ous years c	arried ove	er to 2013					
Eurocat C - upgrade redundancy of Nicosia ACC	GEN01	n/a	1.8	0.2	0.2	0.0	-8.9%	8	n/a	2012	2013
Ground to Air Tx/Rx	COM01, COM02	accomplished with less	2.4	1.5	1.4	-0.1	-8.9%	8	n/a	2012(14)	2013
ATS Message Handling System (AMHS)	COM10	postponed	1.9	1.6	0.0	-1.6	-100.0%	8	n/a	2012(14)	n/a
Lamaca radar upgrade	NAV06, SUR01, SUR02, SU303, SUR04	n/a	0.1	0.1	0.1	0.0	2.4%	8	n/a	2012	2013
Sub-total main capex (1)			6.2	3.4	1.6	-1.7	-51.6%				
		Main CAPEX of	originally	planned fo	r 2013 (PP	for RP1)					
Eurocat C - main system	ATC02.1,02.2, 02.5, 02.6, 02.7, 04, 12, DPS01	n/a	2.0	1.4	1.5	0.0	2.4%	n/a	n/a	2013	2013
ADS-B	NAV06,SURd1, SURd2	n/a	0.4	0.2	0.2	0.0	11.3%	n/a	n/a	2012(13)	n/a
ATC Simulator	EC805/2010	accomplished with less investments than budgeted	0.6	0.1	0.1	0.0	2.4%	n/a	n/a	2013	2013
VCCS Acropolis upgrade and Backup	GEN01	postponed	0.5	0.4	0.4	0.0	2.4%	n/a	n/a	2013	2013
Pafos and Lara SSR Radars	NAV06, SUR01,02, 03, 04	postponed	2.8	0.0	0.0	0.0		n/a	n/a	2013(14)	n/a
DME Lamaca and Pafos	NAV06	postponed	0.6	0.0	0.0	0.0		n/a	n/a	2012(13)	2012
Sub-total main capex (2)			6.9	2.0	2.1	0.1	3.1%				
Total main CAPEX (1)+(2)			13.1	5.4	3.7	-1.7	-31.1%				
Other (3)			0.0	0.0	0.0	0.0					
Total capex (1)+(2)+(3)			13.1	5.4	3.7	-1.7	-31.1%				

Table 54: 2013 Cyprus ANSP Investments

2014 & RP1 PLANNING UPDATE

- 3.4.7 The planned 2014 CAPEX has not been updated. It is assumed to be null (not available for the original planning through the Performance Plan for RP1).
- 3.4.8 It is noted that DCAC is going to postpone several projects in 2014 and these costs will be carried-over to RP2 years (Source: charges reporting for year 2014).

DCAC Cyprus – RP1 CAPEX update	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	2.5	7.5	5.3	5.4	0.0	10.7
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	5.3	2.4	3.4	3.7	0.0	7.1
Deviation U-P	2.8	-5.1	-1.9	-1.7	0.0	-3.6
Deviation (%) U/P	113.9%	-67.8%	-36.2%	-31.1%		-33.6%
MAIN Planned CAPEX (PP RP1)	2.2	7.5	5.2	5.4	0.0	10.6
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	4.9	2.1	3.4	3.7	0.0	7.1
Deviation U-P	2.7	-5.4	-1.8	-1.7	0.0	-3.5
Deviation (%) U/P	122.4%	-71.6%	-35.1%	-31.1%		-33.1%

Table 55: RP1	Cyprus	ANSP	CAPEX	Update
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- 3.4.9 After assessing 2013 results, the RP1 planned CAPEX for DCAC is foreseen to be €3.6M (-33.6%) lower than planned.
- 3.4.10 This is due to a significant decline in spending for 2012 and 2013. (See above).

3.4.11 A sound assessment is difficult to produce for the period 2010-14, since 2014 data is missing.

CONSISTENCY WITH EUROPEAN ATM MASTER PLAN

- 3.4.12 For Investments for the year 2013 which were postponed or delayed from previous years or are planned by Cyprus for the year 2013, most of the projects have been correctly linked to the ATM Master Plan elements (ESSIP Objectives). It should be noted that in the ESSIP Plan 2012 all Surveillance Objectives were replaced by the ITY-SPI ESSIP Objective. All projects, except one reported for investments in the year 2013 are in consistency with those reported through the ATM Master Plan reporting process. The ATM Master Plan reporting process includes the introduction of the basic OLDI functionality as a planned project for 2013. However, this project is not included in the provided list of planned investments. No new main projects in 2013 which are not included in the Performance Plan were provided.
- 3.4.13 For all the projects planned for investment in the year 2013, most of the dates of entry into operation are consistent with the planned implementation dates of the relevant ATM Master Plan ESSIP objectives. For some projects, there is a deviation of one year. Cyprus should strive to better align the planned dates of entry into operation for investments with those reported through the ATM Master Plan reporting process to achieve consistency.
- 3.4.14 BLUE MED FAB has an ongoing Implementation Phase undertaken through a solid BLUE MED Implementation Programme, involving four European Countries (Cyprus, Greece, Italy and Malta). However, the FAB BLUE MED Implementation Programme is currently not linked to the ATM Master Plan. For Cyprus, none of the national projects is consistent and compliant with the eleven projects planned in the FAB BLUE MED Implementation Programme. There is also no consistency amongst FAB BLUE MED partners as far as the date of entry into operation of the projects defined in the FAB BLUE MED Implementation Programme is concerned.

3.5 Czech Republic (ANS-Czech Republic)

OVERVIEW

- 3.5.1 The Czech Republic has provided all quantitative data with detailed explanations was reported, ensuring transparency with regard to the status, spent amounts for 2013, updated planning for 2014 and expected commissioning dates for each project. It gives a clear and precise picture of the situation.
- 3.5.2 Additional useful information is provided also through the charges reporting scheme⁹. However, the new project ("Ostrava airport building") and the spent amount for "other" CAPEX in 2013 were disclosed only through this reporting. It was explained that "*The development of individual investment projects was different from performance plan due to reasons connected to their technical and operational implementation and also due to delays caused by the process of tendering.*"
- 3.5.3 Furthermore, it is explained that actual depreciation costs for RP1 are expected to be consistent with the planned values, despite the investment budget less spent, as supervision costs were originally included.

	2013 CAPEX (M€2009, real terms)								
	2013 CAPEX (M€2009, real Plan Actual A - P 22.4 13.9 -8.5 11.4 2.9 -8.6 51.0% 20.5% - 20.1% 13.6% -	A - P	A/P (%)						
TOTAL CAPEX	22.4	13.9	-8.5	-37.8%					
MAIN CAPEX	11.4	2.9	-8.6	-74.9%					
% Main vs. Total	51.0%	20.5%		-59.7%					
% Total CAPEX vs. Gate-to-Gate ANS costs	20.1%	13.6%		-32.6%					

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Table 56: 2013 Czech Republic ANSP CAPEX (Actual vs. Planned)

- 3.5.4 ANS CR has spent €8.5M (-37.8%) less than planned in 2013 mainly due to significant savings achieved for "New DPS system (Neopteryx)" (-€10.5M). Detailed qualitative explanations were provided for this change in the budget, and following to the delay in the tender procedure, commissioning date has also changed for this project (see details in the table below).
- 3.5.5 The <u>actual spent amount for 2013 (€13.9M)</u> is the result of (1) projects planned for 2013 (€100k), (2) several projects carried-over from 2012 (i.e. €2.5M), (3) a new project (€300k) for "Ostrava airport building" and (4) "other" projects (€11.1M).
- 3.5.6 Although important budget restrictions were in place for the main CAPEX, this policy was not adopted for "other" CAPEX and additional €100K were spent in 2013. Therefore, the actual percentage of main into total CAPEX is 20.5% in comparison to the planned one (i.e. 51%).
- 3.5.7 The percentage of total CAPEX into gate-to-gate costs for ANS CR has decreased by 32.6% (i.e. 13.6% actual vs. 20.1% planned). This is explained by "CAPEX Effect"⁶ (- 38% actual vs. planned 2013) and -7.7% "Cost Effect"⁵.

ANS CR Investments for yea	ır 2013										
	Peference to			TOTAL expenditu real		nt of Capital itures (M€2009, eal terms)		Lifecyc le	Alloc.	Date of entry into operation	
Name of investment European ATM MP (ESSIP objectives/ OI Steps/ Enablers) Description/ explanation of the changes/ Other comments		CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%) satior period in years		En- route/ terminal ANS (%)	Planned in the PP	Actual	
		Main CAPEX from previous yea	ars carried	l over to 2	013						
Radars for primary coverage	CTE-S4a	This project was finished. The total CAPEX was 85.4 mil. CZK.	4.9	0.0	1.2	1.2		7	100%R	2013	2013
Acquisition of new SIMU LS (for Aviation Academy)	HUM172-04	The project has been delayed for about 8 months due to recurrent of tender procedure. Overall capital expenditures of the project will be reduced to aprox. 31 million CZK.	1.5	0.0	0.3	0.3		7	82%R- 18%T	2014-15	2013-16
Implementation of EFS for TWR Prague	ARPORT-31	This project was finished. The total capex was 77.5 mil. CZK.	2.0	0.0	0.0	0.0		7	100%T	2013	2013
Aviation Academy Building - total building reconstruction	n/a	This project was finished. The total CAPEX was 80.91 mil. CZK.	0.0	0.0	1.0	1.0		30	82%R- 18%T	2013	2015
Sub-total main capex (1)			0.0	0.0	2.5	2.5					
		Investments planned for 2013	(Revised	d PP for F	RP1)						
New DPS system (Neopteryx)	AGSWIM-56, AIRPORT- 31, AOC-ATM-12,13,14, CTE-C2b ER APP, ATC15, 100, 119-124, 129, 130, 133, 136, 138, HUM171-01, 07	See Note 1 below	49.2	10.6	0.1	-10.5	-99.5%	10	85%R- 15%T	2018	2019
Data communication -renewal, transition to IPv6	GGSWIM-51	See Note 2 below	2.8	0.9	0.0	-0.9	-99.2%	7	78%R- 22%T	2014/ 17/ 19	2016
Sub-total main capex (2)			0.0	11.4	0.1	-11.4	-99.5%				
Ostrava airport buildings - build up of security centre			0.0	0.0	0.3	0.3					
Sub-total main capex (3)			0.0	0.0	0.3	0.3				2012	2015
Total main CAPEX (1)+(2)+(3)			0.0	11.4	2.9	-8.6	-74.9%				
Other (4)		n/a	0.0	11.0	11.1	0.1	0.9%				
Total capex (1)+(2)+(3)+(4)			0.0	22.4	13.9	-8.5	-37.8%				

 Table 57: 2013 Czech Republic ANSP Investments

<u>Note 1</u>: "It was decided, in accordance with the Czech public procurement act, to choose the supplier of the new DPP system by awarding the contract by means of a competitive dialogue. This contract would be awarded to the tenderer who is capable of meeting the project requirements and also offers the most competitive price.

Due to the very complex and time consuming competitive dialogue procedure, the project has run into a delay. Currently, a follow-up negotiation procedure with prior notification is under way. The date for the changeover to the new system is scheduled to be carried out by the end of 2019, within the second reference period."

<u>Note 2:</u> "The financial amounts for years 2012-3 were planned to build a new data infrastructure for Neopteryx (DPS NS), see clear link of both projects in the table. Changes in the timing of the Neopteryx project therefore reflected in the schedule of a new data infrastructure for the DPS system. The new schedule will be updated after the signature of the contract for NEOPTERYX because the time to implement data infrastructure is half that delivery of the DPS system."

2014 & RP1 PLANNING UPDATE

- 3.5.8 The 2014 planned CAPEX was updated. €27.7M of savings are expected due to the revision of the main CAPEX budget (-€17.5M) and the cancellation of "other" CAPEX (-€10.2M).
- 3.5.9 For the same reasons as in 2013, an additional €14M will not be spent for "New DPS system" and €1.8M are forecasted not to be spent for "VCS & Radio communication replacement" *"due to the merger of projects OBR and VCS for regional Airports"* and the need to *"synchronize technical specifications of projects SNS (Super Low Sector) and CIVMIL integration"*.

ANS CR – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	21.0	21.0	34.3	22.4	31.8	88.5
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	17.1	15.5	14.9	13.9	4.1	32.9
Deviation U-P	-3.9	-5.5	-19.5	-8.5	-27.7	-55.6
Deviation (%) U/P	-18.5%	-26.1%	-56.7%	-37.8%	-87.1%	-62.8%
MAIN Planned CAPEX (PP RP1)	6.2	6.6	21.7	11.4	21.5	54.7
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	5.6	4.3	4.6	2.9	4.1	11.6
Deviation U-P	-0.6	-2.3	-17.1	-8.6	-17.5	-43.1
Deviation (%) U/P	-10.3%	-34.4%	-78.8%	-74.9%	-81.0%	-78.9%

Table 58: RP1 Czech Republic ANSP CAPEX Update

- 3.5.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for the ANS CR is €55.6M (-62.8%) lower than originally planned. This is due to important budget revisions for the entire timeframe.
- 3.5.11 It is noted that for 2010-14 the actual total CAPEX is 30.1% lower on average though it was foreseen to rise by 10.9%. Nevertheless, due to the cancellation of "other" investments the actual main CAPEX is only -7.5% lower. On the other hand, the deviation for the main actual vs. planned total CAPEX is foreseen to be -55.9% on average over the period.

CONSISTENCY WITH EUROPEAN ATM MASTER PLAN

- 3.5.12 In the 2013 report the links to European ATM Master Plan were reported as ATM Master Plan enablers instead of ESSIP Objectives where applicable. In majority of the cases the links were correct, however in some cases the provided links do not exist in the ATM Master Plan portal DataSet08 (HUM172-04, AGSWIM-56, GGSWIM-51, HUM171-01,07, CTE-C9). Three projects from the 2013 report are also reported through the ATM Master Plan reporting process, i.e.: Implementation of EFS for TWR Prague, New DPS system (Neopteryx) and Data communication -renewal, transition to IPv6.
- 3.5.13 The New DPS system (Neopteryx) in the 2013 report covers the link only to ATC 15 Objective whereas in the ATM Master Plan reporting process it is mentioned that for this specific project most of AOM and ATC ESSIP Objectives apply. Additionally, in the 2013 report the investment "Data communication -renewal, transition to IPv6" is linked to ATM Master Plan enabler GGSWIM-51; however it should be linked directly to ESSIP Objective COM09. The same should apply to the "Transformation of AIS to AIM" which should be linked directly to ITY-ADQ Objective (see the clarification in the note of the template saying: Where ESSIP Objective is applicable for the investments, the OI steps or Enablers should not be provided. Where there are no ESSIP Objectives

applicable, OI steps or Enablers should be provided). The progress in the implementation of the investment projects is satisfactory and in line with the details reported in the ATM Master Plan reporting process.

3.5.14 The following investments are mentioned in the ATM Master Plan reporting process but are not mentioned in the 2013 report. They have potential network effect and are supporting the SESAR operational concept: Implementation of Air Ground Datalink (ITY-AGDL planned to be implemented in 2015) and Implementation of ADS-B (ITY-SPI planned to be implemented in 2019). No projects linked to ITY-FMTP and ITY-ADQ were mentioned in the 2013 report, however these two ESSIP Objectives are declared as Late in the ATM Master Plan reporting process which may have negative network impact.

3.6 Denmark (NAVIAIR)

OVERVIEW

- 3.6.1 Denmark has provided some quantitative data with minimal explanations. No information was provided on the expected commissioning dates for any of the projects. It can be inferred that some delays are expected, since "CNS Systems LINK 2000 (CPDLC) +WAM" had a late start in 2013, the initially planned operational date.
- 3.6.2 In addition, some information was provided on "other" investments: "Some building improvements projects and IT-projects at NAVIAIR premises have been postponed to 2014, as part of an overall prioritization."
- 3.6.3 No additional information was provided through the charges reporting scheme in respect to the 2013 actual investments.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

NAVIAID	2013 CAPEX (M€2009, real terms)							
NAVIAIN	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	7.7	7.5	-0.2	-3.0%				
MAIN CAPEX	5.5	6.1	0.6	10.8%				
% Main vs. Total	71.0%	81.1%		14.2%				
% Total CAPEX vs. Gate-to-gate ANS costs	7.2%	7.8%		7.3%				

Table 59: 2013 Denmark ANSP CAPEX (Actual vs. Planned)

- 3.6.4 In 2013 NAVIAIR has spent €200k (-3.0%) less than planned, of which €400k due to the revision in budget for ATM Systems COOPANS. However, €1M was spent more than planned in 2013 for "CNS Systems LINK 2000 (CPDLC) +WAM" because of a shift in the planning phase of the project.
- 3.6.5 An important decrease is noted for "other" CAPEX (-€800k or -36.7%). Nevertheless it is observed that the spending increase in the main CAPEX is compensated by the decline in "other" investments, resulting overall in -€200k less spent for the year.
- 3.6.6 As a result, the actual percentage of main into total CAPEX is higher than planned (i.e. 81% in comparison to 71%).
- 3.6.7 The percentage of total CAPEX into gate-to-gate costs for NAVIAIR has increased by +7.3% (i.e. 7.8% actual vs. 7.2% planned). This is explained by "Cost Effect"⁵ (-9.7%) and -3%"CAPEX Effect"⁶.

NAVIAIR Investments for year 2013											
	Reference to European		TOTAL	Amount of Capital expenditures (M€2009, real terms)				Lifecycle		Date of entry into operation	
Name of investment	ATM MP (ESSIP objectives/ OI Steps/ Enablers)*	Description/ explanation of the changes/ Other comments	CAPEX for the 2013 2013 project Planned Actual (RP1) CAPEX CAPEX A-P		Alloc. En- route/ terminal ANS (%)	Planned in the PP	Actual				
		Main CAPEX originally plan	nned for	2013 (PF	for RP1)					
ATM Systems- COOPANS	n/a	The RP1 COOPANS Build 2 plan was based on a roadmap estimate. The exact price, scope and schedule has therefore been slightly revised since definition of the RP1 investment budget.	17.6	4.1	3.7	-0.4	-9.5%	n/a	n/a	2012	n/a
CNS Systems - LINK 2000 (CPDLC) +WAM	n/a	Investments in WAM and LINK2000 was initiated in 2013 which was a shift in planning compared to the Performance Plan for RP1. Both investments will be launched in RP1.	5.5	1.4	2.4	1.0	71.6%	n/a	n/a	2013	n/a
Sub-total main capex (1)			23.1	5.5	6.1	0.6	10.8%				
Other CAPEX (planned in the PP for 2013) (2)		Some building improvements projects and IT at Naviair premises have been postponed to 2014, part of overall prioritisation.	10.1	2.2	1.4	-0.8	-36.7%				
Total capex (1)+(2)			33.2	7.7	7.5	-0.2	-3.0%				

 Table 60: 2013 Denmark ANSP Investments

2014 & RP1 PLANNING UPDATE

3.6.8 The 2014 Plan was not updated. For the RP1 planning update it is assumed that 2014 CAPEX will remain at the same level as originally foreseen.

NAVIAIR – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	16.7	20.0	7.7	7.7	7.8	23.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	15.4	14.3	6.5	7.5	7.8	21.8
Deviation U-P	-1.3	-5.8	-1.3	-0.2	0.0	-1.5
Deviation (%) U/P	-7.9%	-28.8%	-16.2%	-3.0%	0.0%	-6.4%
MAIN Planned CAPEX (PP RP1)	14.3	17.0	5.2	5.5	4.9	15.6
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	14.2	13.4	4.2	6.1	4.9	15.2
Deviation U-P	-0.1	-3.6	-1.0	0.6	0.0	-0.4
Deviation (%) U/P	-0.8%	-21.3%	-18.5%	10.8%	0.0%	-2.4%

Table 61: RP1 Denmark ANSP CAPEX Update

- 3.6.9 After assessing 2013 results, the RP1 planned total CAPEX for NAVIAIR is -€1.5M lower than planned. On the other hand, main CAPEX is only €400k lower than planned. This is explained by the non-spent amounts for "other" CAPEX.
- 3.6.10 It is noted that for 2010-14 the total CAPEX is expected to be only 15.6% lower on average. However the average deviations of actual vs. planned total CAPEX for this timeframe is foreseen to be -14% in average over the period.
- 3.6.11 The trend foreseen for the actual main CAPEX for 2010-14 is close to the planning (i.e. -23.5% actual versus -23.6% planned), whilst the average deviation (actual vs. plan) for the period is expected to be -9%.

CONSISTENCY WITH EUROPEAN ATM MASTER PLAN

- 3.6.12 No direct links to the ATM Master Plan were provided in the 2013 report or in the revised NPP. The investment projects are divided into three sections: ATM systems (COOPANS), CNS systems (Link2000 and WAM) and "other" (buildings and IT upgrades). The description of the projects in the revised NPP through the links to the SES IRs allows correlating projects with the following ATM Master Plan elements: ATM systems with ITY-FMTP, ITY-AGDL, ITY-COTR and CNS systems with ITY-AGDL and ITY-SPI.
- 3.6.13 Two projects listed in the ATM Master Plan reporting process cover the investment projects from the 2013 report i.e. COOPANS and WAM. However, there is lack of consistency between the information provided in the ATM Master Plan reporting process, the 2013 report and the revised NPP. Certain elements of the COOPANS and WAM projects (ITY-AGDL, FCM01, ITY-COTR, ITY-SPI) are reported in the ATM Master Plan reporting process at State level as No Plan or Late which might affect the timely implementation for Naviair
3.7 Estonia (EANS)

OVERVIEW

- 3.7.1 Estonia has submitted its 2013 Monitoring Report data long after the deadline (1st June 2014) and provided only the actual amounts for the CAPEX. No information was provided on the status of the projects or on the expected commissioning dates for any of the projects.
- 3.7.2 The 2014 Planned CAPEX was updated but there without transparency on the amounts foreseen to be spent.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

EANS	2013 CAPEX (M€2009, real terms)							
EANS	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	1.7	1.2	-0.5	-30.5%				
MAIN CAPEX	1.7	0.1	-1.7	-95.0%				
% Main vs. Total	100.0%	0.0%		-100.0%				
% Total CAPEX vs. Gate-to-gate ANS costs	12.5%	9.3%		-25.5%				

Table 62: 2013 Estonia ANSP CAPEX (Actual vs. Planned)

- 3.7.3 In 2013 EANS has spent -30.5% (-€500k) less than planned. EANS has included one main project, "MSSR/WAM" for which €100k was spent (vs. €1.31 planned), but no qualitative details were provided.
- 3.7.4 No carry-overs from 2012 or new projects were included in the list.
- 3.7.5 EANS has spent €1.1M for "other" CAPEX (not planned initially).
- 3.7.6 The percentage of total CAPEX into gate-to-gate costs for EANS has decreased by 25.5% (9.3% actual vs. 12.5% planned) due to "CAPEX Effect"⁶ (-30%) and "Cost Effect"⁵ (-7%).

EANS Estonia Investments for y	ear 2013										
	Reference to European ATM	Description/ explanation of	TOTAL planned	Amount of Capital expenditures (M€2009, real terms)		Day A/B	Lifecycle (Amortis	Alloc. En	Date of entry into operation		
Name of investment	objectives/ Ol Steps/ Enablers)	the changes/ Other comments	for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	(%)	ation period in years)	terminal ANS (%)	Planned in the PP	Actual
		Investments	planned	for 2013 (R	evised PP	for RP1)					
MSSR/WAM	WAM	n/a	0.2	0.1	0.0	-0.1	-92.4%	10	100%R	2014	n/a
AMHS	AMHS, SWIM	n/a	0.0	0.0	0.0	0.0	-100.0%	10	% of SU	2014	n/a
Sub-total main CAPEX (1)			0.2	0.1	0.0	-0.1	-95.1%				
Other CAPEX (planned in the PP for 2013) (2)		n/a	0.0	0.0	0.1	0.1					
Total CAPEX (1)+(2)			2.7	0.1	0.1	0.0					

Table 63: 2013 Estonia ANSP Investments

3.7.7 The planned 2014 CAPEX has been updated and €200k is expected to be spent in addition to the plan, for MSSR/WAM and "other" projects.

EANS – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	5.0	5.7	3.4	1.7	1.2	6.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	4.9	4.8	4.6	1.2	4.0	9.8
Deviation U-P	-0.2	-0.9	+1.3	-0.5	+2.8	3.5
Deviation (%) U/P	-3.5%	-16.0%	37.6%	-30.5%	236.1%	56.3%
MAIN Planned CAPEX (PP RP1)	5.0	5.7	1.2	1.7	1.2	4.2
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	4.8	4.4	1.6	0.1	2.8	4.5
Deviation U-P	-0.2	-1.3	+0.4	-1.7	1.6	+0.4
Deviation (%) U/P	-3.9%	-22.4%	32.8%	-95.0%	136.0%	8.8%

Table 64: RP1 Estonia ANSP CAPEX Updat
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- 3.7.8 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for EANS is foreseen to be €3.5M (+56.3%) higher than planned. This is due to a surplus in spending (2012) and an additional €2.8 foreseen for 2014 (see details above).
- 3.7.9 It is noted that for the period 2010-14 the total CAPEX is expected to decrease by 4.7% (vs. -30.2% planned). However, if the forecast for 2014 will be applied, the average deviation between actual and planned total CAPEX for the timeframe is expected to increase by 44.8% on average.

- 3.7.10 The information provided in the 2013 report does not include any link to the European ATM Master Plan, be it L3 (ESSIP Plan and related objectives) or L2 (OI steps and related enablers).
- 3.7.11 None of the 2 projects reported in the 2013 report are also reflected in the list of national projects provided through the ATM Master Plan reporting process. Nonetheless, there is a direct link between project AMHS and L3 of the Master Plan, via ESSIP objective COM10. The ATM Master Plan reporting process refers to project DLC/CPDLC (infrastructure development and ATM system upgrade for CPDLC implementation; schedule 2013-2015, linked to Master Plan L3 and EC IR 29/2009), for which the size of the investments - as well as its role as pre-requisite to some PCP functionalities - should be considered for addition to the list of main investments. Also, the ATM Master Plan reporting process refers to the project 'EETN Traffic area expansion', which concerns the upgrade of Tallinn aerodrome from Cat I to Cat II (schedule 2013-15). The project should be checked for inclusion in the list of main investments. Finally, the ATM Master Plan reporting process refers to 2 projects on the modernization of the (military) Amari airbase, including installation of VOR systems, CAT I with readiness to Cat II. new Meteo equipment and a new tower ATC systems. The project should be checked for inclusion in the list of main investments.
- 3.7.12 The schedule for project AMHS in the 2013 report (2014) is not consistent with what is reported in the ATM Master Plan reporting process namely 12/2015.
- 3.7.13 Estonia did not report any investment project at FAB level.

3.8 Finland (Finavia)

OVERVIEW

- 3.8.1 Finland has provided quantitative data with some explanations for CAPEX 2013. The information on the expected commissioning dates was not provided for all projects. It is noted that "WAM" and "Controller pilot Data-link" are delayed and "RNAV/DME" is postponed for the time being.
- 3.8.2 Finland has also updated its 2014 CAPEX planning, providing all the required information. New projects were included in the list (see details in section 3.8.8).
- 3.8.3 No additional information was provided through the charges reporting scheme in respect to the 2013 actual investments. It was mentioned that both depreciation and cost of capital have decreased in 2013 due to "*delayed investments*".¹⁰

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Finovio	2013 CAPEX (M€2009, real terms)							
Fillavia	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	11.1	2.9	-8.2	-73.9%				
MAIN CAPEX	6.7	2.1	-4.6	-69.1%				
% Main vs. Total	60.7%	71.9%		18.4%				
% Total CAPEX vs. Gate-to-Gate ANS costs	15.8%	6.5%		-58.9%				

Table 65: 2013 Finland ANSP CAPEX (Actual vs. Planned)

- 3.8.4 In 2013 Finavia has spent €8.2M (-73.9%) less than planned, of which €5.5M due to delays and postponements for several main projects (i.e. -2.2M for "Wide Area Multilateration (country wide)", -1.5M for "Controller pilot Data-link", -1.4M for "MSSR renewal in budget for ATM Systems- COOPANS" and -€900k for "RNAV/DME"). However, €400k was spent in excess for "Eurocat system upgrade" because of a revision in budget.
- 3.8.5 Finavia has included in the investment list four new projects, but only €900k was spent for two of them ("EFHK surface movement radar" and "Controller pilot Data-link").
- 3.8.6 However, an important decrease is noted for "other" CAPEX (-€3.5M or -81%). As a result, the actual percentage of main into total CAPEX is higher than planned (i.e. 71.9% in comparison to 60.7%).
- 3.8.7 The percentage of total CAPEX into gate-to-gate costs for Finavia has decreased by 58.9% (i.e. 6.5% actual vs. 15.8% planned). This is explained by "CAPEX Effect"⁶ (-73.9%) and (-36.5%) "Cost Effect"⁵.

Finavia Investments for year 2013											
	Reference to	Description (TOTAL	Amour expendit rea	nt of Cap tures (Me al terms)	oital 2009,		Lifecyc Ie		Date of e	entry into ation
Name of investment	MP (ESSIP objectives/ OI Steps/ Enablers)	explanation of the changes/ Other comments	CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	(Amort isation period in years)	route/ terminal ANS (%)	Planned in the PP	Actual
	Investments planned for 2013 (Revised PP for RP1)										
Eurocat system upgrade (incl. CCAMS & FPL2012)	AOM-0801, TS- 0102, CM-0801, CM-0202, IS- 0204	incl. Added contingency recources. Total cost is 16,6 Meur	107.9	0.1	0.5	0.4	730%	10	80%R- 20%T	Mar-12	Mar-13
Wide Area Multilateration (country wide)	n/a	Delayed due to system suppliers delays.	107.9	2.7	0.5	-2.2	-80%	15	100%R	2013(15)	n/a
RNAV/DME (country wide)	n/a	Postponed for the time being. Need for the investments will be reassessed.	107.9	0.9	0.0	-0.9	-100%	15	60%R- 40%T	Cancelled for the time being	n/a
Surveillance multitracker (ARTAS)	n/a	ok	107.9	0.1	0.2	0.0	33%	15	100%R	Dec-12	n/a
Controller pilot Datalink	n/a	Delayed. Agreement with communication serviceproviders under negotiations.	2.5	1.5	0.0	-1.5	-100%	10	80%R- 20%T	Mar-14	n/a
MSSR renewal	n/a	Postponed until 2015.	3.0	1.4	0.0	-1.4	-100%	15	100%T	Oct-14	n/a
Sub-total main CAPEX (1)			437.1	6.7	1.2	-5.5	-83%				
	New main p	rojects in 2013 (not in	cluded in t	he revised	IPP, if a	pplica	ble)				
EFHK surface movement radar			0.6		0.4	0.4		n/a	n/a	n/a	n/a
Controller pilot Datalink			3.6		0.5	0.5		n/a	n/a	n/a	n/a
EFHK/ACC VCS-upgrade			1.0		0.0	0.0		n/a	n/a	n/a	n/a
Helsinki ACC-project	-		2.7		0.0	0.0		n/a	n/a	n/a	n/a
Sub-total main CAPEX (2)	0		7.9		0.9	0.9					
Iotal main CAPEX (1)+(2)			445.0	6.7	2.1	-4.6					
2013) (3)	0		0.0	4.4	0.8	-3.5	-81%				
Total CAPEX (1)+(2)+(3)			445.0	11.1	2.9	-8.2	-74%				

Table 66: 2013 Finland ANSP Investments

2014 & RP1 PLANNING UPDATE

- 3.8.8 The 2014 planned CAPEX was updated and €3.3M are expected to be spent in addition to the plan due to amounts carried-over from previous years (+€2.8M) and also to three new projects added in 2014 (+€3M). However it is noted that this is partially offset by -€2.2M spent less for 2014 initially planned projects (i.e. "MSSR renewal", "Radio stations renewal" and "RNAV/DME").
- 3.8.9 It is noted that total CAPEX in 2014 is foreseen to be + 36.2% higher than planned whilst the deviation for main CAPEX will be + 116.1%.

Finavia – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	12.3	11.8	14.1	11.1	9.2	34.4
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	10.9	5.1	5.1	2.9	12.5	20.5
Deviation U-P	-1.4	-6.7	-9.0	-8.2	3.3	-13.9
Deviation (%) U/P	-11.4%	-56.9%	-63.9%	-73.9%	36.2%	-40.3%
MAIN Planned CAPEX (PP RP1)	12.3	10.6	7.0	6.7	3.1	16.8
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	10.9	5.1	4.2	2.1	6.7	12.9
Deviation U-P	-1.4	-5.6	-2.8	-4.6	3.6	-3.9
Deviation (%) U/P	-11.4%	-52.3%	-40.3%	-69.1%	116.1%	-23.2%

Table 67: RP1 2013 ANSP CAPEX Update

- 3.8.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Finavia is foreseen to be €13.9M (-40%) lower than planned. This is due to the significant decline in spending for the first two years (see details above). On the other hand for the main projects, only €3.9M (-23%) are foreseen to be spent less. This is caused by an important reduction in budget for "other" projects.
- 3.8.11 It is noted that for the period 2010-14 the total CAPEX is expected to increase on average by +3.6% (vs. -7% planned) but the average deviation (actual vs. plan) over the period shows a -34% decline on average.

- 3.8.12 The provided links to the ATM Master Plan are incomplete.
 - Project 'WAM' should be linked to Enabler CTE-S04a;
 - Project 'RNAV/DME' should be linked to ESSIP objective NAV03 on implementation of P-RNAV;
 - Project 'Controller Pilot Datalink' should be linked to ESSIP objective ITY-AGDL (EC IR 29/2009);
- 3.8.13 For the 2 last bullets, links are instead correctly reported in the ATM Master Plan Reporting process.
- 3.8.14 Only 3 projects from the 2013 report are also reported in the ATM Master Plan reporting process:
 - Wide Area Multilateration; with a difference in the reported planned completion date (2015 in the 2013 report and Dec. 2014 in the ATM Master Plan reporting process);
 - RNAV DME (country wide): reported as 'cancelled for the time being' in the 2013 report and indicated with a planned end date of Oct. 2016 in ATM Master Plan reporting process;
 - Helsinki ACC project, for which no end date is provided in 2013 report and the date of December 2014, is reported in ATM Master Plan reporting process.
- 3.8.15 Furthermore:
 - Implementation of Aeronautical Data Quality does not appear in the list in the revised NPP for RP1 but it is reported in the ATM Master Plan reporting process. This project should be listed as a significant one.
 - Project 'Avia College Upgrade', involving the upgrade/relocation of training facilities/systems in the period Dec. 2013 to Dec. 2014, is mentioned in ATM Master Plan reporting process. It is recommended to investigate the size of the project as it could be significant due to its possible cost impact.
- 3.8.16 Finally, there seem to be inconsistencies/duplications in the tables provided by Finland, i.e. in the table "Investments planned for 2013" the 'Controller Pilot Datalink' project is listed both in section "Investments planned for 2013 (Revised PP for RP1)" and in section "New main projects (not included in the revised PP, if applicable)".
- 3.8.17 Finland did not report any investment project at FAB level.

3.9 France (DSNA)

OVERVIEW

- 3.9.1 France planned CAPEX figures for 2013 are higher than reported for the Performance Plan (i.e. €192.1M new planning vs. €177.8M initial plan through PP for RP1) due to the carried-over projects from 2012 (i.e.€27.5M). For the purpose of this exercise the new planning was considered.
- 3.9.2 France has provided all quantitative data with detailed qualitative explanations, ensuring transparency with regard to the status, spent amounts for 2013, updated planning for 2014 and expected commissioning dates for each project. It gives a clear and precise picture of the situation.
- 3.9.3 Useful qualitative information was provided through the charges reporting scheme with regard to the changes in capital expenditure for 2013, with details for each main project.
- 3.9.4 "Globally, the forecast underinvestment by DSNA for year 2013 amounts to 79.2 Million Euro. This is mainly due to projects postponements due to the reduced financial strength of DSNA caused by the lack of traffic and relevant loss of revenues, but also to the lack of resources caused by staff costs containment measures."¹¹
- 3.9.5 Furthermore, DSNA has explained that "some expenses that were until mid-2010 recorded as CAPEX are now recorded as operating expenses. This change in accounting policy has led to a massive under-consumption of the investment budget and a correlated over-consumption in other operating expenses."¹²

DSNA	2013 CAPEX (M€2009, real terms)								
DSNA	Plan	Actual	A - P	A/P (%)					
TOTAL CAPEX	192.1	117.4	-74.7	-38.9%					
MAIN CAPEX	114.2	72.1	-42.1	-36.9%					
% Main vs. Total	59.4%	61.4%		3.3%					
% Total CAPEX vs. Gate-to-Gate ANS costs	15.6%	9.7%		-37.7%					

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Table 68: 2013 France ANSP CAPEX (Actual vs. Planned)

- 3.9.6 DSNA has spent €74.7M (-38.9%) less in 2013, of which €42.1M (-36.9%) due to the revision in budget for the main CAPEX and €32.6M for "other" CAPEX.
- 3.9.7 As regards the 2013 actual CAPEX, for three important "main projects" DSNA has spent carried-over amounts from 2012 but also partially from the planned budget for 2013, as follows:
 - For "4-Flight", DSNA has spent in 2013 €23.9M (real terms, 2009) (€11.4M carriedover from 2012 and €12.4M from 2013 planned budget);
 - For "COFLIGHT (new FDP system)", €21.4M were spent in 2013 (€9M carried-over from 2012 and €12.4M from 2013 planned budget);
 - For "ERATO" (conflict management tool), €9.4M were spent in 2013 (€1.9M carriedover from 2012 and €7.6M from 2013 planned budget).
- 3.9.8 However, for all these above mentioned projects DSNA has not spent the entire planned budget for 2013, the most important postponement being recorded for "4-Flight" (-€29.1M) due to technical issues (i.e. "VOPS definition phase took more time than expected due to required functionalities complexity").

- 3.9.9 Furthermore "Towers and approaches systems program" (€5.6M) was postponed from RP1 to RP2 ("After the system definition phase longer than expected, the final decision for purchasing systems will be taken by end of 2015") and "New airport Grand Ouest" (-€1.1M) was postponed "due to political reasons".
- 3.9.10 A significant decrease in spending is observed for "other" CAPEX (€32.6M) as "most of these investments have been frozen in 2013, due to a loss of revenue around 30 M€".
- 3.9.11 As a result, the actual percentage of main into total CAPEX is slightly higher than planned (i.e. 61.4% in comparison to 59.4%).
- 3.9.12 The percentage of total CAPEX into gate-to-gate costs for DSNA has decreased by 37.7% (i.e.9.7% actual vs. 15.6% planned). This is explained by "CAPEX Effect"⁶ (-38.9%) and (-1.8%) "Cost Effect"⁵.
- 3.9.13 Details are provided in the table below.

DSNA Investments for year 2013											
	Reference to European		TOTAL planned	Amount o	Amount of Capital expenditures (M€2009, real terms)		Lifecycle (Amortisa	Alloc. En-	Date of e oper	entry into ation	
Name of investment	ATM MP (ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	tion period in years)	route/ terminal ANS (%)	Planned in the PP	Actual
•		Main CAPEX from previous years carried ove		to 2013							
4-FLIGHT	AO-0302, AOM-0703, CM-0201, CM-0202, TS-0305, CM-0301		158.0	11.5	11.4	-0.1	-0.6%	4	95%	2016	see below
COFLIGHT (new FDP system)	AD-0704, AOM-0302, AOM-0401, AOM-0504, AOM-0701, AOM-0703, AOM-0801, AOM-0802, CM-0203, DCB-0205, IS-0101, IS-0102, TS- 0305	The investments posponed in 2012 on these projects have been realised, except of the tweats and approaches sustains program	42.0	9.0	9.0	0.0	-0.2%	4	80%	2013	see below
ERATO (conflict management tool)	CM-0201, CM-0202, CM-0203, CM 0301 (IP2)	wich has been delayed	23.0	1.8	1.9	0.0	1.5%	8	100%	2014	see below
Towers and Approaches systems Programs	AO-0301, AO-0302, AO-0402, AO- 0403, AO-0704, AOM-0703, AUO- 0701, IS-0401, TS-0305		17.0	3.4	0.3	-3.1	-91.1%	8	0%	n/a	see below
Sub-total main capex (1)			240.0	25.8	22.6	-3.1	-12.1%				
	•	Investments planned for 2013 (Rev	Investments planned for 2013 (Revised PP for RP1)								
4-FLIGHT	AD-0302, ADM-0703, CM-0201, CM-0202, TS-0305, CM-0301	VOPS definition phase took more time than expected due to required functionalities complexity	158.0	41.5	12.4	-29.1	-70.1%	4	95%	2016	from 2017 to 2020
COFLIGHT (new FDP system)	AO-0704, AOM-0302, AOM-0401, AOM-0504, AOM-0701, AOM-0703, AOM-0801, AOM-0802, CM-0203, DCB-0205, IS-0101, IS-0102, TS- 0305	, ,3, n/a S-		10.8	12.4	1.6	15.1%	4	80%	2013	from 2017 to 2020
ERATO (conflict management tool)	CM-0201, CM-0202, CM-0203, CM 0301 (IP2)	n/a	23.0	6.5	7.6	1.0	15.6%	8	100%	2014	from 2015 to 2016
MCO CAUTRA evolutions	AOM-0301, AOM-0401, AOM-0802, CM-0101, CM-0201, IS-0101	Some of these amounts shifted to OPS costs due to accounting rules.	30.0	9.5	6.2	-3.4	-35.2%	n/a	n/a	n/a	n/a
CNS Major programmes(network, DLS)	DL=AUO-0301,CSSIP=IS-0204	n/a	36.0	13.0	10.6	-2.4	-18.6%	n/a	n/a	n/a	from 2015 to 2018
New airport Grand Ouest	n/a	Investments have been delayed due to political reasons	14.0	1.4	0.3	-1.1	-80.1%	n/a	n/a	n/a	n/a
Towers and Approaches systems Programs	AO-0301, AO-0302, AO-0402, AO- 0403, AO-0704, AOM-0703, AUO- 0701, IS-0401, TS-0305	After the system definition phase longer than expected, the final decision for purchasing systems will be taken by end of 2015.	17.0	5.6	0.0	-5.6	-100.0%	n/a	n/a	n/a	from 2018 to 2021
Sub-total main capex (2)			320.0	88.4	49.4	-39.0	-44.1%				
Total main CAPEX (1)+(2)			560.0	114.2	72.1	-42.1	-36.9%				
Current systems modernization	AO-0302, AO-0402, TS-0102, TS- 0305, enabler ERAPP ATC128		46.0	16.1	9.7	-6.4	-39.6%				
Infrastructures modernization and renewals	AOM-0301	Most of these investment have been frozen in 2013, due to a loss of revenue around 30 M€	83.0	27.9	11.5	-16.3	-58.6%				
Maintenance and renewals of equipments	8,33= enabler CTE-C5		106.0	34.0	24.1	-9.9	-29.0%				
Other CAPEX (planned in the PP for 2013) (3)		235.0	77.9	45.3	-32.6	-41.8%				
Total capex (1)+(2)+(3)			555.0	192.1	117.4	-74.7	-38.9%				

Table 69: 2013 France ANSP Investments

- 3.9.14 DSNA has updated its 2014 planned CAPEX and it is understood that €32.8M are expected to be carried-over from previous years for the same main projects mentioned in 2013. However this amount is foreseen to be more than counter-balanced by a substantial decline for "4-Flight" (-€49.2M), "New airport Grand Ouest" (-€10.6M), "Towers and Approaches systems Programs" (-€6.4M) and "MCO CAUTRA evolutions" (-€3.5M).
- 3.9.15 Some extra-amounts are forecasted to be spent for "ERATO (conflict management tool)" (+€7.1M) due to "extra functionalities required by the operational staff". Also for "COFLIGHT (new FDP system)", which will enter into the maintenance phase by the end of 2014, €4.1M is required more as "related costs appear to be more important than expected".
- 3.9.16 No new projects were foreseen. As a result, overall, for 2014 DSNA is expecting to spend €34.7M less than planned.

DSNA – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	159.0	165.0	163.2	192.1	188.1	543.4
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	120.0	122.1	133.0	117.4	153.3	403.7
Deviation U-P	-39.0	-42.9	-30.2	-74.7	-34.7	-139.6
Deviation (%) U/P	-24.5%	-26.0%	-18.5%	-38.9%	-18.5%	-25.7%
MAIN Planned CAPEX (PP RP1)	49.0	51.0	89.4	114.2	119.5	323.1
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	34.0	45.2	69.7	72.1	95.0	236.8
Deviation U-P	-15.0	-5.8	-19.8	-42.1	-24.4	-86.3
Deviation (%) U/P	-30.6%	-11.4%	-22.1%	-36.9%	-20.5%	-26.7%

Table 70: RP1 I	France ANSP	CAPEX	Update
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- 3.9.17 After assessing the 2013 actual results and the 2014 planning update, the RP1 planned CAPEX for France ANSP amounts to €139.6M (25.7%) less than originally planned. This is due to important decrease in spending in 2012 and 2013 actual CAPEX but also to new strategy changes for 2014 (see above).
- 3.9.18 However, for the timeframe 2010-14 the actual total CAPEX is foreseen to increase by 6.3% on average and the actual main CAPEX by 29.3% due to the important budget revisions for both main and "other" CAPEX.
- 3.9.19 On the other hand, the average deviation for the main (actual vs. planned) total CAPEX is foreseen to be -24.3% in average over the period due to serious income problems (see above) which generated shrinking in the actual spent amount for investments.

- 3.9.20 There are seven projects in the 2013 report which belong to the set of projects that are part of the revised PP. All these projects are reported to contribute to the ATM MP and the links are provided to respective OIs/Enablers. No links are provided to any of the ESSIP Objectives. Three wrong links are provided to OIs which do not exist in the Master Plan portal DataSet08, respectively AO-0704, AOM-0302 and AO-0402. The link to AOM-0301 wrongly provided for the project 'Infrastructures Modernization and Renewals' is not relevant. In addition, there are three projects, 1) Current systems modernization 2) Infrastructures modernization and renewals and 3) Maintenance and renewals of equipment which were not part of the set of projects included in the revised PP, which have experienced a very low progress in 2013 and are planned for implementation during the year 2014 and beyond. All these three projects contribute to the ATM MP and correct links are provided to respective OIs/Enablers.
- 3.9.21 Ten projects are reported. Out of the seven projects belonging to the set of projects that are described in the revised PP, six are also reported through the ATM Master Plan reporting process, while the other three projects, which are not part of the revised PP, are not reported through the ATM Master Plan reporting process.
- 3.9.22 For two projects, the titles provided in the 2013 report and in the ATM Master Plan reporting process are not consistent which may indicate that there is not the same source of information within the organization for performance monitoring report and the ATM Master Plan reporting process for those projects. The description/explanation of changes is missing for three projects which are part of the revised PP i.e. 1) COFLIGHT (new FDP system) 2) ERATO (conflict management tool) and 3) CNS Major programs (network, DLS) for the year 2013. However, a detailed explanation is provided for all projects including the three which are not part of PP for the 2014 planning. However, it should be noted that the justification given for the significant delay of the implementation of the project COFLIGHT (new FDP system) is not clear.
- 3.9.23 There is consistency on the implementation schedule and progress provided in the 2013 report and in the ATM Master Plan reporting process for three projects. However, It is impossible to assess the consistency for the remaining three, respectively, 1) COFLIGHT (new FDP system), 2) ERATO (conflict management tool and 3) CNS Major programs (network, DLS) because whilst the progress is reported to some extent in the ATM Master Plan reporting process, it is missing in the 2013 report. Furthermore, the planned implementation schedule is missing for the MCO CAUTRA project belonging to the revised PP and for all three projects; 1) Current systems modernization 2) Infrastructures modernization and renewals and 3) Maintenance and renewals of equipment not included in the revised PP.
- 3.9.24 All the projects reported in the monitoring report have got a national scope and none of them has a FAB dimension. There are ten projects which are reported by France and other FABEC States as FAB Projects in their ATM Master Plan reporting process but none of these projects is part of the set of projects reported in the French 2013 report.

3.10 Germany (DFS)

OVERVIEW

- 3.10.1 Germany planned CAPEX figures for 2013 are higher than reported for the Performance Plan (i.e. 102.1M€₂₀₀₉ new planning vs. 83.9M€2009 initial plan through PP for RP1) due to the carried-over projects from 2012 (i.e.18.2M€₂₀₀₉). For the purpose of this exercise the new planning was considered. It is noted that DFS has also updated the planned amounts for CAPEX for 2014, correcting the initial forecast from the Performance Plan (+17.6M€₂₀₀₉ planned investments).
- 3.10.2 Germany has provided for the 2013 Monitoring exercise all quantitative data with detailed explanations with regard to the strategic decisions on the important growth in investment budget, but also for the status of the projects.
- 3.10.3 Additional information on the new managerial investment policy was provided in the Terminal Charging Reporting: "At the end of 2011, the DFS Board of Managing Directors (BMD) decided to replace the procedure of isolated investment planning with a combined planning of depreciation and investments. The BMD took into account on the one hand the immediate effect of depreciation on cost and on the other hand the risk of investment capping. The development of investment and thus of depreciation was estimated critically since the budgeted amounts for compulsory projects (due to legal provisions or operational constraints) exceeds the previous planning assumptions. The determination of a corridor for depreciation and the recursively derivate maximum amount of investment budget in combination with a prioritised project portfolio will in the midterm (RP2) lead to a more consistent cost performance. Until then (RP1), differences between planned and actual figures should be expected."¹
- 3.10.4 Furthermore, for the charges reporting scheme in respect of the 2013 monitoring, explanations are provided regarding the impact of the changes in actual investments to depreciation costs: "The increase from 67.0 m€ in the Performance Plan to 74.9 m€ is primarily the result of the iCAS programme, including the dedicated projects. Especially the projects iCAS system, iCAS upper airspace and iCAS lower airspace generate an increase of depreciation in 2013 of 4.5 m€. Furthermore the product management with 1.1 m€, the replacement of the voice switching system in Langen with 1.1 m€, the project PSS paperless strip system with 0.5 m€, the DFS Energy GmbH with 0.4 m€ and other projects are relevant for this development."¹
- 3.10.5 Additional similar explanations are provided for the changes in 2014 depreciation costs.
- 3.10.6 DFS has spent €18.5M more (+18%) in 2013, as a result of an increase in budget for the "main" CAPEX. These changes are due to:
 - +€50.8M spent more for "Other projects (included in the total sum of projects in the revised PP)(included in sub-total for main CAPEX 2;
 - +€8.5M for new "main" projects; but also
 - Other not-spent amounts (i.e. -€3.1M not spent for *iCAS* "*due to project acceleration* and results of contract negotiation"; -€4M not spent for "Rasum 8.33" due to "*delay in acquisition of properties and revised allocation of resources and* -€2M underspent for GBAS CAT I Frankfurt).

DFS	2013 CAPEX (M€2009, real terms)								
	Plan	Actual	A - P	A/P (%)					
TOTAL CAPEX	102.1	120.6	18.5	18.1%					
MAIN CAPEX	60.7	93.7	33.0	54.3%					
% Main vs Total	59.4%	77.7%		30.7%					
% Total CAPEX vs Gate-to-gate ANS costs	10.2%	12.8%		25.2%					

Table 71: 2013 Germany ANSP CAPEX (Actual vs. Planned)

- 3.10.7 Due to a restrictive budget for "other" investments, the actual percentage of main into total CAPEX is higher than planned (i.e. 77.7% in comparison to 59.4%).
- 3.10.8 The percentage of total CAPEX into gate-to-gate costs for DFS has increased by +25.1% (i.e. 12.8% actual vs. 10.2% planned). This is explained by "CAPEX Effect"⁶ (+18%) and (-5.7%) "Cost Effect"⁵.
- 3.10.9 Details for each project are provided in the table below.

DFS Investments for year 2013											
	Reference to	Descriptio n/	TOTAL	Amount of (M€	Capital expe	nditures			Alles 52	Date of e	entry into ation
Name of investment	European AI M MP (ESSIP objectives/ OI Steps/ Enablers)	explanatio n of the changes/ Other comments	planned CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	Lifecycle (Amortisatio n period in years)	Alloc. En- route/ terminal ANS (%)	Planned in the PP	Actual
	1	Main	CAPEX from	n previous y	ears carried	over to 20 [°]	13	,		1	
iCAS	CM-0202, CM-0203	n/a	n/a	9.4	0.0	-9.4	-100.0%			2017	
Rasum 8.33	CTE-C5	n/a	n/a	3.7	0.0	-3.7	-100.0%			2018 (IR) / 2020 (deployment)	
A-SMGCS	AOP04.2	n/a	n/a	4.4	0.0	-4.4	-100.0%			2019	
Remote TWR	SDM-0201	n/a	n/a	0.6	0.0	-0.6	-100.0%			2018	
ASVS		n/a	n/a	0.2	0.0	-0.2	-100.0%			2013	
Sub-total main CAPEX (1)				18.2	0.0	-18.2	-100.0%				
	100M20 (00M 0504	Inve	stments pla	anned for 20°	13 (Revised F	P for RP1)	• •	•		
iCAS	AOM 20 (AOM 0504, AOM-0801), ATC12 (CM-0202, CM- 0203), ATC15 (TS- 0305), ITY-AGDI	investment planning due to project acceleration	79.6	17.0	13.9	-3.1	-18.2%	3 - 8	100% R	2017	Phase I 2016 Phase II 2018/2022
Rasum 8.33	ITY-AGVCS2 (CT	nt of retrofitting of	35.8	9.5	5.5	-4.0	-42.3%	3 - 25	79% R / 21 %T	2018 (IR) / 2020 (deployment)	2014 - 2019
GBAS	AOM-0602	GBAS CAT I Frankfurt, Project start	10.0	2.0	0.0	-2.0	-100.0%	8	100% T	not certain	2014
A-SMGCS	AOP04.2	See Note 1 below	8.9	0.0	0.6	0.6		3 - 25	100% T	2019	2008 - 2018
Paperless strip system	DCB-0302; IS-0101; CM-0201	See Note 2 below	4.7	0.0	0.7	0.7		3 - 16.5	100% R	2017	2008 - 2018
Mode-S	ITY-SPI (CTE- S5,CTE-S9)	See Note 3 below	4.3	0.0	0.4	0.4		15	50% R / 50% T	2013	2013
Remote TWR	SDM-0201	The original project plan foresaw a earlier commissioni	1.8	0.5	0.0	-0.5	-100.0%	8 - 15	100% T	2018	Saarbrücken 2016, Erfurt 2016 and Dresden 2018
ASVS	AOP04.1	DFS Board of Managing Directors decided to abandon the	0.8	0.1	0.0	-0.1	-100.0%	0	100% T	2013	
Other projects (included in the total sum of projects in the revised PP)		e.g. technical centre on the campus in	-13.0	13.4	64.2	50.8	379.0%	0	0		
Sub-total main CAPEX (2)	•	- surran	132.9	42.5	85.2	42.8	100.7%				
	Net	w main proj	ects in 2013	3 (not include	ed in the revi	sed PP, if	applicable))			
DFS Energy		See Note 4 below	0.0	0.0	4.9	4.9		15 - 20	38% R / 13% T / 49%Other		2014
Other new main projects with investme in 2013 (not included in the revised PP	ents less than 1 M€)	C.g. ADQ (Aeronautica) I Data Quality), Overhaul	0.0	0.0	3.5	3.5					
Sub-total main CAPEX (3)			0.0	0.0	8.5	8.5					
Total main CAPEX (1)+(2)+(3)			0.0	60.7	93.7	33.0	54.3%				
Other CAPEX (planned in the PP for 2	2013) (4)		0.0	41.4	27.0	-14.5	-35.0%				
Total CAPEX (1)+(2)+(3)+(4)			0.0	102.1	120.6	18.5	18.1%				

Table 72: 2013 Germany ANSP Investments

<u>Note 1</u>: "A-SMGCS BBI had to be postponed due to serious resource problems. Additional requirements by Berlin Brandenburg-Airport as to the construction of the SMR tower and the involvement of an additional MLAT sensor to improve the coverage of the MLAT north-south connection increased the cost of the MLAT system as well as for SMR tower. Due to delays in the provision of the infrastructure SMR and MLAT, the MLAT acceptance test was performed end of 2012 instead of 2011. The cut over was performed in different stages."

<u>Note 2</u>: "The Capital planned Value of 35.000 Euro was from 2011. The Updated Plan for 2013 was 209.000 Euro. The really spend Value was 90.000 Euro for the PSS Client Hardware. The difference to the Actual Expenditure of 712.114 Euro results from the Capitalised own performances."

<u>Note 3</u>: "Actions planned had to be postponed due to deadline shifts caused at BBI airport. The radar sensor was meant to be used at the airport at the original opening date. As a result of postponements winter building operations had to be carried out which led to an increase in costs. The cut over of the radar sensor was in April 2013."

<u>Note 4</u>: "Since 1988 the power station continuous provides the DFS on the campus Langen and the Paul-Ehrlich- Institut (PEI) with electricity, alternative net electricity, steam, heat and cooling. As a matter of the age of the installation engineering and the need to cover the increased requirement of power on the campus Langen it is essential to reconstruct, modernize and expand the construction."

2014 & RP1 PLANNING UPDATE

- 3.10.10 It is noted that the 2014 planned CAPEX was updated and <u>+€26.3M</u> are expected to be spent in addition. This is the result of carried-overs from previous years (€9.3M, 2009 real terms), the project acceleration for iCAS (+€6.2M), a shift in planning from 2013 to 2014 for Rasum 8.33 (+€2.4M) and also the postponement from 2012 and 2013 for "Remote TWR" (+€1.6M).
- 3.10.11 It is noted that several <u>new "other" projects</u> were added in 2014:
 - €9.2M for the "reconstruction and modernization" of the "DFS power energy" station;
 - €1.9M for the *"fire safety engineering improvements"* in the "Overhaul academy";
 - €1.9M for "DFS-wide implementation of a collaboration infrastructure";
 - €1.5M for "ERNOCEN (Modernization of emergency radio for the business unit Center)";
 - €1.5M "New construction of SMR for 4. runway Frankfurt";
 - €1.4M for ADQ; and
 - €1.7M for "Other new main projects with investments less than 1 M€ in 2014 (not included in the revised PP)".

After assessing the 2013 results and the 2014 planning update, the RP1 updated planned CAPEX is +€39.8M (+14.2%) higher than originally planned. This is due to important changes in the investment policy for 2013 actual and 2014 planned CAPEX, which generated additional new projects (see above and Notes for Table 7).

DFS – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	96.5	79.6	85.6	102.1	91.5	279.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	78.9	102.3	89.3	120.6	109.1	319.0
Deviation A-P	-17.6	22.7	3.7	18.5	17.6	39.8
Deviation (%) A/P	-18.3%	28.5%	4.3%	18.1%	19.2%	14.2%
MAIN Planned CAPEX (PP RP1)	72.2	55.0	27.7	60.7	53.4	141.8
MAIN Actual CAPEX (2009-13 Actual) (2014P update)	42.5	63.3	11.8	93.7	72.2	177.7
Deviation A-P	-29.7	8.4	-15.8	33.0	18.7	35.9
Deviation (%) A/P	-41.1%	15.2%	-57.2%	54.3%	35.0%	25.3%

Table 73: RP1 Germany ANSP CAPEX Update

3.10.12 It is noted that for 2010-14 the actual total CAPEX is expected to increase by 8.5% on average (vs. -1.3% planned), whilst the actual main CAPEX is expected to increase by +14.1% (vs. -7.2% planned).

- 3.10.13 Eight projects reported belong to the set of projects that are part of the revised Performance Plan. All these projects contribute to one or several ATM Master Plan Ols/Enablers and/or ESSIP Objectives and the respective links are provided to almost all projects correctly. The only wrong link provided belongs to the project GBAS where the OI AOM0602 should be replaced with be the enabler CTE-N4.
- 3.10.14 In addition, six projects which were not part of the set of projects included in the revised Performance Plan are planned for implementation during 2014 and beyond. Only two of those projects, i.e. 1) New construction of SMR for 4 runways Frankfurt and 2) ADQ (Aeronautical Data Quality) contribute to ATM MP OIs/Enablers and/or ESSIP Objectives and correct links are provided for these two projects.
- 3.10.15 Out of the 14 projects reported, eight are also reported through the ATM Master Plan reporting process (iCAS, RASUM 8.33, A-SMGS, Paperless Strips System, Mode-S, ASVS, New construction of SMR for 4 runways Frankfurt and ADQ). For all eight, the scope and the objectives of each project are very well described and are consistent with the 2013 report. Also all eight projects which are part of the revised PP indicate that they all contribute directly to the ATM MP and/or ESSIP Objectives.
- 3.10.16 The actual date of entry into operation is reported for all projects but AVCS. Overall, there is consistency on the implementation schedule provided in the 2013 report and in the ATM Master Plan reporting process with the exception of the following: 1) Programme iCAS: In the 2013 report the implementation schedule is for phase one 2016 and for phase two 2018 2022, while in the ATM Master Plan reporting process it is 2009 2018. 2) ADQ (Aeronautical Data Quality): In the 2013 report the implementation schedule is 2015 while in the ATM Master Plan reporting process it is 2017. 3) RASUM: In the 2013 report the schedule is 2014-2019, while in the ATM Master Plan reporting process it is 2018. In addition, a comprehensive explanation is given for the reasons why some of the projects have not progressed in line with the preliminary schedule provided in the PP.
- 3.10.17 All the projects reported in the monitoring report have got a national scope and none of them has a FAB dimension. There are ten projects which are reported by Germany and other FABEC States as FAB Projects in their ATM Master Plan reporting process but none of these projects is part of the set of projects defined in the German 2013 report.

3.11 Greece (HCAA)

OVERVIEW

- 3.11.1 Greece has provided for 2013 CAPEX monitoring some quantitative data with no explanations. For the charges reporting, some information was provided on the expected commissioning dates for the main projects (see section 2).
- 3.11.2 The planning for 2014 was not updated, but in accordance to the charges reporting, no CAPEX are expected for this year (see details in section 3).
- 3.11.3 Some information was provided through the charges reporting scheme with regard to the entry into operation for some projects and to the impact on depreciation for 2012: "Despite the strict budget of the ANSP that did not allow the full implementation of the CAPEX as originally described in the NPP, the following systems have been put in operation in 2012 and depreciation costs are calculated accordingly: F/S Samos airport, upgrade of 3 Mini AFTN Centres, BBS and RMCDE upgrade" and for 2013: "The economic situation in Greece did not allow the implementation of major investments, however, smaller investments regarding systems both for en-route and terminal services have been put into operation."¹³
- 3.11.4 Also for 2014 some information was provided in the same reporting (see section 3).

	2013 CAPEX (M€2009, real terms)							
	Plan	Actual	A - P (M€)	A/P (%)				
TOTAL CAPEX	0.0	1.8	1.8					
MAIN CAPEX	0.0	1.8	1.8					
% Main vs. Total		100.0%						
% Total CAPEX vs. Gate-to-gate ANS costs	0.0%	1.3%						

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Table 74: 2013 Greece ANSP (CAPEX (Actual vs. Planned)
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- 3.11.5 No planning was available for 2013 in the Performance Plan for RP1.
- 3.11.6 In 2013 HCAA has spent €1.8M, of which €1.3M for "Procurement, installation & commissioning of 100 VHF radios 50w at various radio sites", €300k for "Procurement, installation & commissioning of a new UPS and a power supply automation for the PALLAS system (RDPS/FDPS)" and €200k for "HMI accessories for VCS". None of these projects were planned for this year. On the other hand, no amounts were spent for the originally planned 2013 projects nor for the carry-overs from last year (see the list of projects detailed in the table below).
- 3.11.7 The explanations provided for the charges reporting is: "Due to the general socioeconomic situation in Greece and the difficulty in drawing exact conclusions as to how the economy will move in the long term, HCAA has constraints in implementing the investment program included in the RP1 Performance Plan."¹⁴
- 3.11.8 HCAA has not reported any "other" CAPEX.
- 3.11.9 The percentage of total CAPEX into gate-to-gate costs for HCAA was in 2013 of 1.3%.

HCAA (Hellenic Civil Aviation Authority) in	vestments f	ior year 2	2013								
			Amount of Capital				Lifecy	,	Date of entry into		
	Reference	tion/	tion/		expenditures (M€2009,				oper	ation	
	_ to	explan	TOTAL	real terms)				cle	Alloc.		
Name of investment	European ATM MP (ESSIP objectives / OI Steps/ Enablers)	ation of the change s/ Other comme nts	planned CAPEX for the project (RP1)	2013 Planne d CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	(Amor tisatio n perio d in years)	route/ termina I ANS (%)	Planned in the PP	Actual
	Main CA	PEX from	n previou:	s years c	arried ov	ver to 2013					
Upgrade of PALLAS System - main FDPS/RDPS/ODS	n/a	n/a	8.1	0.0	0.0	0.0	n/a	n/a	n/a	2015	n/a
Athinai/Makedonia ACC main VCS/RCS	n/a	n/a	8.5	0.0	0.0	0.0	n/a	n/a	n/a	2015	n/a
Five (5) Airports VCS/RCSs	n/a	n/a	2.9	0.0	0.0	0.0	n/a	n/a	n/a	2015	n/a
Sub-total main capex (1)				0.0	0.0	0.0					
Main CAPEX originally planned for 2013 (PP for RP1)											
PATROCLOS Upgrade (FDPS)	n/a	n/a	2.3	0.0	0.0	0.0	n/a	n/a	n/a	2013	n/a
Thessaloniki/Makedonia International Airport SMR/ASMGCS	n/a	n/a	3.8	0.0	0.0	0.0	n/a	n/a	n/a	2013	n/a
Sub-total main capex (2)			6.1	0.0	0.0	0.0					
		New	2013 unp	lanned C	APEX						
Procurement, installation & commissioning of 100 VHF radios 50w at various radio sites	n/a	n/a	0.0		1.3	1.3	n/a	8	0% / 100%	n/a	n/a
Procurement, installation & commissioning of a new UPS and a power supply automation for the PALLAS system (RDPS/FDPS)	n/a	n/a	n/a		0.3	0.3	n/a	8	100% / 0%	n/a	n/a
HMI accessories for VCS	n/a	n/a	n/a	0.0	0.2	0.2		8	75% / 25%		
Sub-total main capex (3)			0.0	0.0	1.8	1.8					
Total main CAPEX (1)+(2)+(3)			6.1	0.0	1.8	1.8					
Other (4)			0.0	0.0	0.0	0.0					
Total capex (1)+(2)+(3)+(4)			6.1	0.0	1.8	1.8					

Table 75: 2013 Greece ANSP Investments

3.11.10 In addition, HCAA has provided through the charges reporting scheme the updated dates of entry into operation for the main CAPEX planned for RP1^{15,} as follows:

Investments	Years: 2012 – 2014						
Name of investment (as	Total	Amount o Expenditu	f Capital res	Date of entry into operation			
specified in Performance Flan)	Planned	Actual	Updated*	Planned	Actual	Updated	
Upgrade of PALLAS System – main FDPS/RDPS/ODS	5.250.000	-	9.913.800	2011–2014	-	2016	
PATROCLOS Upgrade (FDPS)	2.250.000	-	2.439.500	2009–2012	-	2014	
HACAS Hellenic AFTN/CIDIN AMHS	1.800.000	-	1.845.000	2011-2016	-	2015	
Athinai/Makedonia ACC main VCS/RCS	8.500.000	-	10.455.000	2011-2014	-	2016	
Five (5) Airports VCS/RCSs	2.400.000	-	3.567.000	2012-2014	-	2016	
Thessaloniki /Makedonia International Airport SMR/ASMGCS 40	3.800.000	-	3.902.162	2009–2012	-	2014	
Elementary Mode S radar SENSOR at Himittos	1.750.000	-	2.275.500	2012-2014	-	2016	

 Table 76: Date of entry into operation for 2012-2014 Investments

3.11.11 HCAA has not updated its 2014 planned CAPEX.

HCAA – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	0.0	10.7	8.2	0.0	0.0	8.2
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	17.1	1.3	1.0	1.8	0.0	2.8
Deviation U-P	17.1	-9.4	-7.2	1.8	0.0	-5.4
Deviation (%) U/P						-65.9%
MAIN Planned CAPEX (PP RP1)	0.0	10.7	8.2	0.0	0.0	8.2
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	17.1	1.3	1.0	1.8	0.0	2.8
Deviation U-P	17.1	-9.4	-7.2	1.8	0.0	-5.4
Deviation (%) U/P						-65.9%

Table 77: RP1 Greece ANSP CAPEX Update

- 3.11.12 After assessing 2013 results, the RP1 planned CAPEX for HCAA is foreseen to be €5.4M lower than planned. This is due to the significant decline in spending for 2012 (see details above).
- 3.11.13 However, 2014 actual CAPEX is not expected to be different next year, as Greece has mentioned in the charges reporting scheme that "*The economic situation in Greece led to the rescheduling of the investments and the postponement of their date of entry into operation. This is going to be reflected on the depreciation costs of 2014.*"¹⁶
- 3.11.14 Considering the differences and inconsistencies in reporting for the period 2010-14 and also due to the difficult economic situation in Greece, it is difficult to make a sound assessment for the trend of CAPEX.

- 3.11.15 None of the Investments planned by Greece for the year 2013 has been directly linked to the ATM Master Plan. However, the revised National Performance Plan for Greece is linking the Projects to the Operational Improvement steps and Enablers of the ATM Master Plan.
- 3.11.16 The 2013 investments which were postponed or delayed from previous years are the upgrade of the PALLAS System, which should be linked to the ATM Master Plan ESSIP Objective ITY-AGDL, the Athinai/Makedonia ACC main VCS/RCS and the Five (5) Airports VCS/RCSs, which should both be linked to the ATM Master Plan ESSIP Objective COM11.
- 3.11.17 The planned 2013 investments are the PATROCLOS Upgrade (FDPS) which should be linked to the ATM Master Plan ESSIP Objectives ATC17 and ITY-COTR and the Thessaloniki/Makedonia International Airport SMR/ASMGCS which should be linked to the ATM Master Plan ESSIP Objectives AOP 4.1 and AOP 4.2.
- 3.11.18 For the "main" investments in 2013 not included the revised Performance Plan, the Procurement and installation & commissioning of 100 VHF radios 50w at various radio sites should be linked to the ATM Master Plan ESSIP Objective ITY-AGVCS2. The Procurement, installation & commissioning of a new UPS and power supply automation for the PALLAS system (RDPS/FDPS) should also be linked to the ATM Master Plan ESSIP Objective ATC02.2 and the HMI accessories for VCS project should be linked to the ATM Master Plan ESSIP Objective COM11.

- 3.11.19 The projects 'Procurement, installation & commissioning of a new UPS and a power supply automation for the PALLAS system (RDPS/FDPS)' and 'HMI accessories for VCS' are not included in the ATM Master Plan reporting process.
- 3.11.20 The ATM Master Plan reporting process mentions 3 projects, e.g. the replacement of 6 DVOR3CVOR; 1 Mobile VOR and 9 DME at Greek Airports and sites, a replacement of 1 ILS/DEM at LGRP Airport and the procurement, installation and commissioning of a new Tower Simulator, which are not included in the 2013 report. It should be checked whether these projects should be added in the list for 'new main projects', given its potentiality significant cost impact.
- 3.11.21 None of the 2013 investments are in consistency with the ATM Master Plan reporting process, for their planned date of entry into operation, resulting in a deviation of up to three years. Furthermore, most of the projects seem to be duplicated for investment for the years 2013 and 2014. The Hellenic Civil Aviation Authority should specify if these projects are implemented during a 2 year period. It should also be clarified, if an installation and acceptance phase lasting more than 3 years, as reported in the ATM Master Plan reporting process, is realistic.
- 3.11.22 BLUE MED FAB pursues an ongoing Implementation Phase undertaken through a solid BLUE MED Implementation Programme, involving four European Countries (Cyprus, Greece, Italy and Malta). However, this Implementation Programme is currently not linked to the ATM Master Plan.
- 3.11.23 For Greece, none of the national projects is consistent and compliant with the eleven projects planned in the FAB BLUE MED Implementation Programme. There is also no consistency amongst FAB BLUE MED partners as far as the date of entry into operation of the projects defined in the FAB BLUE MED Implementation Programme is concerned.

3.12 Hungary (HungaroControl)

OVERVIEW

- 3.12.1 Hungary has provided all quantitative data with detailed explanations, ensuring transparency as regards to the status, spent amounts for 2013, updated planning for 2014 and expected commissioning dates for each project. The reporting gives a clear and precise picture of the situation.
- 3.12.2 However no additional information was provided through the charges reporting scheme as regards to investment. Hungary explains that actual depreciation costs for RP1 are expected to be consistent with the planned values, despite the budget less spent, and only capital costs will be lower than planned: *"There were investments planned to be activated in the coming years, but already generating CAPEX in 2013, which were shifted and didn't realize in 2013. This shift resulted in lower than planned employed capital."*¹⁷
- 3.12.3 It is noted that Hungary has received EU subsidies for investments, for a planned amount of €5M in RP1 and €9.9M for the 2010-14 period.
- 3.12.4 HungaroControl has spent €10.3M (-54.5%) less than planned in 2013 mainly due to a significant lower spending for the main investments (-€7.8M) and also to a shrinking in budget for "other" CAPEX (-€2.5M).

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

HungaraControl	2013 CAPEX (M€2009, real terms)							
Hungarocontrol	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	18.8	8.6	-10.3	-54.5%				
MAIN CAPEX	11.1	3.3	-7.8	-70.5%				
% Main vs. Total	58.9%	38.2%		-35.1%				
% Total CAPEX vs. Gate-to-Gate ANS costs	19.5%	10.0%		-48.9%				

Table 78: 2013 Hungary ANSP CAPEX (Actual vs. Planned)

3.12.5 For several main projects nothing was spent in 2013 due to *"change in the planned date of capitalization"* ("MATHIAS HW and SW upgrade"), *"change in the concept of technical implementation"* ("Terminal radar replacement") or *"developments were suspended"* ("FAB CE Static Scenario requirements").

HungaroControl Investments for year	r 2013											
	Reference to European ATM		TOTAL planned	Amount of Capital expenditures (M€2009, real terms)				Lifecyc le	Alloc. En-	Date of into op	ate of entry to operation	
Name of investment	MP (ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	sation period in years)	route/ termina I ANS (%)	Planne d in the PP	Actual	
		Investments planned for 2013 (Revi	sed PP for	RP1)								
MATHIAS HW and SW upgrade	IS0302	There was a change in the planned date of capitalisation, therefore the spendings in 2013 are lower.	15.8	1.5	0.0	-1.5	-100.0%	5_7	85.94%R- 14.06%T	2013	2014	
FAB CE Static Scenario requirements	AOM0203, AOM0402	Operational requirements did not lead to additional changes in infrastructure, developments were suspended.	3.0	2.0	0.0	-2.0	-100.0%	7	85.94%R- 14.06%T	2013	n/a	
CPDLC implementation	AUO 0301	There was a change in the planned date of capitalisation due to the longer than planned time of technical implementation and the difficulties in public procurement, so the implementation will end at the beginning of 2015 instead of the end of 2014. Because of this and the lower than forecasted price the expenditures planned for 2013 are lower than the blanned.	15.0	5.1	3.2	-1.9	-37.1%	7	85.94%R- 14.06%T	2014	2014	
Terminal radar replacement	Reg 1070/ 2009	Due to a change in the concept of technical implementation (reconstruction instead of replacement) and the time need of the related public procurement process, the planned entry into operation was shifted to 2015.	1.5	0.6	0.0	-0.6	-100.0%	15	100%T	2013	2015	
Airport CDM	AO-0501, AO- 0601,	There was some delay due to the time need of the negotiations with the airport. As a result, entry into operation is expected in early 2015.	1.0	0.8	0.0	-0.8	-100.0%	7	100%T	2013	2015	
VHF-UHF Navaids	n/a	There was a change in the planned date of capitalisation, therefore the spendings in 2013 are lower.	1.2	1.0	0.1	-0.9	-91.0%	15	100%R	2014	2015	
Sub-total main CAPEX (1)			37.6	11.1	3.3	-7.8	-70.5%					
Other (2) (planned in the PP for 2013)			0.0	7.7	5.3	-2.5	-31.6%					
Total CAPEX (1)+(2)			37.6	18.8	8.6	-10.3	-54.5%					

Table 79: 2013 Hungary ANSP Investments

- 3.12.6 The actual amount spent for 2013 (€3.2M) was mainly for "CPDLC implementation" though some "*longer than planned time of technical implementation and the difficulties in public procurement*" will cause a delay for the entry into operation to beginning of 2015.
- 3.12.7 The percentage of total CAPEX into gate-to-gate costs for Hungary ANSP has decreased by -48.9% (i.e. 10% actual vs. 19.5% planned). This is explained by "CAPEX Effect"⁶ (-54.4%) and (-10.9%) "Cost Effect"⁵.

- 3.12.8 2014 planned CAPEX was updated and €11.9M are expected to be spent in addition to the planned amounts mainly due to exceeding the budget for "other" CAPEX (+€11.2M). No information on this change was provided. Furthermore, the "MATIAS upgrade" (428 MHUF) and "A-CDM" (87.67 MHUF) planned initially for 2013 were carried-over to the planning of 2014 CAPEX.
- 3.12.9 For the same reasons as in 2013, €1.2M will be spent less for "CPDLC implementation".

HungaroControl – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	18.6	28.7	30.5	18.8	12.8	62.2
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	13.1	12.4	17.9	8.6	24.7	51.2
Deviation U-P	-5.4	-16.3	-12.6	-10.3	11.9	-11.0
Deviation (%) U/P	-29.4%	-56.7%	-41.4%	-54.5%	93.0%	-17.6%
MAIN Planned CAPEX (PP RP1)	9.5	20.9	22.1	11.1	5.2	38.3
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	3.2	12.2	17.9	3.3	5.8	27.0
Deviation U-P	-6.3	-8.6	-4.2	-7.8	0.7	-11.3
Deviation (%) U/P	-66.0%	-41.3%	-19.0%	-70.5%	13.2%	-29.6%

Table 80: RP1 Hungary ANSP CAPEX Update

- 3.12.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Hungary ANSP is €11.0M (17.6%) lower than originally planned. This is due to important budget revisions for 2012 and 2013.
- 3.12.11 On the other hand it is noted that for 2010-14 the actual total CAPEX is expected to increase by 17.2% on average though it was originally planned to decrease by 8.8% lower. The same trend is foreseen for the actual main CAPEX (i.e. +15.9% actual vs. 14.2% planned).
- 3.12.12 However, the average deviation actual vs. planned for both total and main CAPEX is foreseen to be negative (i.e. over the period -17.8% on average for total CAPEX and 36.7% for main CAPEX). For the first four years (2010-13) important savings were achieved, but 2014 is forecasted to break this trend.

- 3.12.13 The project list provided in the NPP does not cover the links to ESSIP Objectives, however those links, where applicable, are established through the 2013 report and ATM Master Plan reporting process. In general the links to the ATM Master Plan for the 2013 report consist of links to OI steps, enablers, IOP Regulations, ESSIP Objectives and IDP where applicable. 4 projects covered by the NPP correspond to the list of projects provided in ATM Master Plan reporting process (i.e. CPDLC implementation in MATHIAS linked to ITY-AGDL, replacement of VHF/UHF radios linked to ITY-AGVCS2, replacement of VHF/UHF NavAids linked to NAV10 and Airport CDM linked to AOP05 in the 2013 report).
- 3.12.14 The links presented are correct, however in case of links for the MATHIAS HW and SW upgrade all of them should be provided for applicable ESSIP Objectives (see the clarification in the note of the template saying: Where ESSIP Objective is applicable for the investments, the OI steps or Enablers should not be provided. Where there are no ESSIP Objectives applicable, OI steps or Enablers should be provided. It has to be noted that in ATM Master Plan reporting process Hungary has declared the ITY-COTR Objective (part of project MATHIAS HW and SW upgrade) as Late with the implementation date of 2015, however in the 2013 report the date is delayed to 2014 only. Additionally this investment was not further presented in the table for year 2014. With regard to the VHF-UHF radios and Navaids project link to NAV10 Objective is provided in the 2013 report, whereas the information in ATM Master Plan reporting process states that Hungary has No Plan to implement this Objective.
- 3.12.15 No investment related to ADQ implementation (ITY-ADQ) was provided in the NPP or the 2013 report, whereas this project will have potential network effect and is declared to be "Late" in ATM Master Plan reporting process with the implementation date of 2017.

3.13 Ireland (IAA)

OVERVIEW

- 3.13.1 Ireland has disclosed its 2013 CAPEX data with an important delay (on 19th June 2014). In addition the quality of data is very poor since only the total actual CAPEX were disclosed with no transparency on the investment policy.
- 3.13.2 The same mediocre information was disclosed for 2014 planning update, i.e. the total CAPEX (not provided initially for the RP1 PP) (see details in section 3).
- 3.13.3 No information has been provided through the charges reporting scheme with regard to the investments but some comments were made in reference to the decrease in depreciation costs for 2013 due to postponements for several investments: "Depreciation costs reduced by 10.4%, from €11,158,000 to €9,995,000. The IAA has a ten year technology plan and a capital budget is approved annually. Scheduling differences will arise with the implementation of some projects".
- 3.13.4 Consequently no sound assessment on the investment policy for Ireland is possible at this stage.

2013 ACTUAL VS. PLANNED CAPEX – RATIOS (%)

IAA Iroland	2013 CAPEX (M€2009, real terms)							
	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	10.8	2.6	-8.1	-75.4%				
MAIN CAPEX	10.8	2.6	-8.1	-75.4%				
% Main vs. Total	100.0%	100.0%		0.0%				
% Total CAPEX vs. Gate-to-gate ANS costs	8.8%	2.5%		-71.6%				

- 3.13.5 In 2013 IAA has spent €8.1M (-75.4%) less than planned, but no explanation was provided.
- 3.13.6 No carry-overs from 2012 or new projects were included in the list.
- 3.13.7 Since no amounts were spent for "other" CAPEX, the actual percentage of main into total CAPEX is 100%.
- 3.13.8 The percentage of total CAPEX into gate-to-gate costs for IAA has decreased by -71.6% (i.e. 2.5% actual vs. 8.8% planned). This is explained by "CAPEX Effect"⁶ (-75.4%) and (-13.6%) "Cost Effect"⁵.

IAA Ireland Investments for year 2013											
	Reference	Descriptio n/ planne explanatio d n of the CAPEX changes/ for the Other project comments (RP1)	TOTAL	Amount of Capital expenditures (M€2009, real terms)				Lifeeval	Alloc.	Date of entry into operation	
Name of investment	European ATM MP (ESSIP objectives / OI Steps/ Enablers)		2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	e (Amortis ation period in years)	En- route/ termi nal ANS (%)	Planne d in the PP	Actual	
	Investme	nts planned	l for 2013	(Revised	PP for RP1	I)					
NO PROJECT PROVIDED		n/a	0.0	10.8	2.6	-8.1	-75.4%	n/a	n/a	n/a	n/a
Sub-total main capex (1)			0.0	10.8	2.6	-8.1	-75.4%				
Other CAPEX (planned in the PP for 2013) (2)			0.0	0.0	0.0	0.0		n/a	n/a	n/a	n/a
Total capex (1)+(2)			0.0	10.8	2.6	-8.1	-75.4%				

Table 82: 2013 Ireland ANSP Investments

3.13.9 The planned 2014 CAPEX has been updated only in total and no details were provided with regard to the projects planned or carried-over from previous years. IAA has foreseen to spend €19.3M in 2014, of which €8.1M for carry-over projects and €11.2M for main investments.

IAA Ireland – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	23.2	18.7	11.2	10.8	19.1	41.1
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	15.6	5.8	5.8	2.6	19.3	27.8
Deviation U-P	-7.7	-12.9	-5.4	-8.1	0.2	-13.3
Deviation (%) U/P	-33.0%	-68.9%	-48.2%	-75.4%	1.1%	-32.4%
MAIN Planned CAPEX (PP RP1)	20.0	18.7	3.7	10.8	19.1	33.5
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	15.6	5.8	3.0	2.6	19.3	24.9
Deviation U-P	-4.5	-12.9	-0.7	-8.1	0.2	-8.6
Deviation (%) U/P	-22.4%	-69.0%	-19.6%	-75.4%	1.1%	-25.8%

Table 83: RP1 Ireland ANSP CAPEX Update

- 3.13.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for IAA is foreseen to be €13.3M (32.4%) lower than planned. This is due to a significant decline in spending for the first two years (see details above).
- 3.13.11 It is noted that for 2010-14 the total CAPEX is expected to increase by 5.5% (vs. -4.8% planned). However the average deviation between actual and planned CAPEX for the timeframe is expected to decrease by 44.9% on average.

- 3.13.12 No list of projects was provided in the 2013 report, only a reference to Annex 1 to the original National Performance Plan. In the latter, a number of projects are linked to Level 2 elements of the ATM Master Plan, but no description, scope or schedule for the projects was provided so it is not possible to assess whether those links are correct and justified.
- 3.13.13 Since no list of projects was provided it cannot be assessed whether the projects are consistent with other sources of information (i.e. the ATM Master Plan reporting process), or whether the projects are national or shared FAB projects.

3.14 Italy (ENAV)

OVERVIEW

- 3.14.1 Italy has submitted its 2013 CAPEX monitoring long after the deadline (i.e. on 16th June 2014) and has furthermore stated that "ENAV 2013 values are to be considered still an unofficial version waiting for the presentation to the Shareholders' meeting due at the end of the month". No other revisions were provided.
- 3.14.2 The planning for 2013 is incomplete and no qualitative information is available as regards to the status of the projects, the updated entries into operation etc. Moreover, the data for 2014 was not updated.
- 3.14.3 No information has been provided through the charges reporting scheme with regard to investments or the impact on depreciation.

	2013 CAPEX (M€2009, real terms)							
ENAV Italy	Plan	Actual	A - P (M€)	A/P (%)				
TOTAL CAPEX	123.6	131.4	7.8	6.3%				
MAIN CAPEX	82.2	92.7	10.5	12.8%				
% Main vs. Total	66.5%	70.6%		6.2%				
% Total CAPEX vs. Gate-to-gate ANS costs	17.0%	18.2%		7.3%				

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Table 84: 2013 Italy ANSP CAPEX (Actual vs. Planned)

- 3.14.4 For the monitoring of CAPEX in 2013, ENAV has disclosed partial preliminary figures. "Other" CAPEX are also preliminary as ENAV stated that "At the moment it is in place the analysis of the other projects category in order to verify if such projects are falling in the categories reported above."
- 3.14.5 In 2013 ENAV has spent €92.7M for projects carried-over from 2012 and no amounts for the 2013 main planned projects. From this €66.5M were spent for "4Flight -New ATM Platform" planned to be commissioned in 2021.
- 3.14.6 No additional qualitative information with regard to the status of the projects and none of the planned entry into operation were updated.
- 3.14.7 Assuming that this spending will remain unchanged, ENAV has spent €7.8M (+6.3%) more than originally planned for 2013.
- 3.14.8 The percentage of total CAPEX into gate-to-gate costs for ENAV was 7.3% higher than planned in 2013 (i.e. 18.2% actual vs. 17% planned). This is explained by "CAPEX Effect"⁶ (+6.3%) and (-0.9%) "Cost Effect"⁵.

ENAV Italy investments for year 2013											
Name of investment	Reference to European ATM MP	Description / explanation	on TOTAL planne d CAPEX s/ for the project ts (RP1)	Amount of Capital expenditures (M€2009, real terms)			Day A/B	Lifecycle (Amortis	Alloc. En-	Date of entry into operation	
	(ESSIP objectives/ OI Steps/ Enablers)	of the changes/ Other comments		2013 Planned CAPEX	2013 Actual CAPEX	Dev A- P	(%)	ation period in years)	terminal ANS (%)	Planned in the PP	Actual
	Main	CAPEX from	previous	s years car	ried over t	o 2013					
4Flight -New ATM Platform	ATC02.5, ATC02.6, ATC02.7, ATC15	n/a	71.7	26.1	66.5	40.3	154.4%	n/a	n/a	2021	n/a
Civil Infrastructures	n/a	n/a	64.7	20.2	10.5	-9.7	-47.9%	n/a	n/a	2013	n/a
Radio assistance modernization (Forli airport)	n/a	n/a	28.0	7.0	2.8	-4.1	-59.2%	n/a	n/a	n/a	n/a
Fixed Communic Network Modernization	COM09	n/a	27.6	11.6	3.6	-8.0	-69.1%	n/a	n/a	n/a	n/a
Operating System Automation	n/a	n/a	31.6	8.2	4.6	-3.6	-44.0%	n/a	n/a	n/a	n/a
National ADS-B	SUR05	n/a	22.2	2.2	4.8	2.5	113.6%	n/a	n/a	n/a	n/a
Sub-total main CAPEX (1)			245.8	75.3	92.7	17.5	23.2%				
	Mair	CAPEX orig	inally pla	nned for 2	013 (PP for	r RP1)		1		1	
Data Link 2000+ implem (phase 2)	ITY-AGDL	n/a	n/a	0.0	0.0	0.0		n/a	n/a	2013	n/a
AIR PLUS (AIXM Implementation)	AOM19, AOP	n/a	n/a	0.0	0.0	0.0		n/a	n/a	2013	n/a
Multilateration systems (Bergamo, Venezia, Bologna, Torino)	AOP04.1	n/a	n/a	0.0	0.0	0.0		n/a	n/a	2014	n/a
eATMS: Configuration systems and software generation	ATC02.02	n/a	n/a	0.0	0.0	0.0		n/a	n/a	2013	n/a
SATCAS functional adjustments	ATC07.1, ATC12, ITY AGDL, ATY- COTR,	n/a	n/a	0.0	0.0	0.0		n/a	n/a	2013	n/a
Airspace design system	n/a	n/a	n/a	7.0	0.0	-7.0		n/a	n/a	n/a	n/a
TOTEM self briefing	INF04	n/a	n/a	0.0	0.0	0.0		n/a	n/a	2013	n/a
Sub-total main CAPEX (2)			0.0	7.0	0.0	-7.0					
Total main CAPEX (1)+(2)			245.8	82.2	92.7	10.5	12.8%				
Other (3)			0.0	41.4	38.7	-2.8					
Total capex (1)+(2)+(3)+(4)			245.8	123.6	131.4	7.8	6.3%				

Table 85: 2013 Italy ANSP Investments

3.14.9 ENAV has not updated their 2014 planned CAPEX.

ENAV – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	186.7	127.8	129.5	123.6	105.4	358.5
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	162.9	110.9	71.8	131.4	105.4	308.6
Deviation U-P	-23.8	-16.9	-57.6	7.8	0.0	-49.9
Deviation (%) U/P	-12.8%	-13.2%	-44.5%	6.3%	0.0%	- 13.92%
MAIN Planned CAPEX (PP RP1)	114.0	88.1	86.7	82.2	66.6	235.4
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	112.2	64.5	71.8	92.7	66.6	231.2
Deviation U-P	-1.8	-23.6	-14.8	10.5	0.0	-4.3
Deviation (%) U/P	-1.5%	-26.8%	-17.1%	12.8%	0.0%	-1.8%

Table 86: RP1 Italy ANSP CAPEX Update

- 3.14.10 After assessing 2013 results, the RP1 CAPEX for ENAV is foreseen to be €49.9M (14%) lower than planned. This is due to a significant decline in spending for 2012 (see details above).
- 3.14.11 However, considering the incomplete submission for 2013 and the lack of information for 2014 it is difficult to make a sound assessment for the trend of CAPEX.

- 3.14.12 For Investments for the year 2013 which were postponed or delayed from previous years or are planned by Italy for the year 2013, only some of the projects have been correctly linked to the ATM Master Plan ESSIP objectives. However, the Performance Plan and the Addendum to the Performance Plan for Italy do sometimes provide the correct links to the ATM Master Plan. Italy should therefore strive for a better correlation of the information contained in the Plans and the information provided in the reporting processes.
- 3.14.13 The Civil Infrastructures project is not linked to the ATM Master Plan. In addition the Performance Plan for Italy and the Addendum to the Performance Plan for Italy do not precise the content of this project. Italy should provide more detailed information on its content as this projects represents 21% of the total yearly investments. It should also provide the link to the ATM Master Plan.
- 3.14.14 For Investments for new main projects in 2013 which are not included in the Performance Plan and in the Addendum to the Performance Plan, Italy should provide more detailed information on the "other projects" as these projects represent about 29% of the total yearly investments. These projects should also be linked to the ATM Master Plan, where possible.
- 3.14.15 Only three out of fifteen projects reported for investments in the year 2013 are in consistency with those reported through the ATM Master Plan reporting process. Italy should correlate the projects reported for investments in 2013 with those reported through the ATM Master Plan reporting process to achieve consistency. Furthermore, the links to the ATM Master Plan ESSIP objectives should be consistent.
- 3.14.16 Of all the projects planned for investment in the year 2013, only the Fixed Communication Network Modernization project's date of entry into operation is consistent with the planned implementation dates of the relevant ATM Master Plan ESSIP objectives. For all other projects, there is a deviation of sometimes three to four years. Italy should therefore strive to better align the planned dates of entry into operation for investments with those reported through the ATM Master Plan reporting process to achieve consistency.
- 3.14.17 BLUE MED FAB has an ongoing Implementation Phase undertaken through a solid BLUE MED Implementation Programme, involving four European Countries (Cyprus, Greece, Italy and Malta). However, the FAB BLUE MED Implementation Programme is currently not linked to the ATM Master Plan. For Italy, only four national projects are in consistency with the eleven projects planned in the FAB BLUE MED Implementation Programme. There is also no consistency amongst FAB BLUE MED partners as far as the date of entry into operation of the projects defined in the FAB BLUE MED Implementation Programme is concerned.

3.15 Latvia (LGS)

OVERVIEW

- 3.15.1 Latvia has provided some quantitative data with no explanations in its 2013 Monitoring Report. No information was provided on the expected commissioning dates for any of the projects. The only information available is that the ATM system upgrade has been commissioned in late 2013 (see details below in item 3).
- 3.15.2 Some information has been provided through the charges reporting scheme with regard to the decrease in depreciation costs for 2013 due to postponements for several investments¹⁸.
- 3.15.3 With regard to investment information for the charges reporting some figures were provided: "In FY 2012 the planned capital expenditure was 6,376,000 EUR, in FY 2013 the planned capital expenditure was 5,970,000 EUR. The actual spending for FY2012: 4,297,000 EUR, in FY 2013: 4,679,000 EUR. Updated FY2014 capital expenditure plan is 6,238,000 EUR." However, this data is in contradiction to the planned/actual amounts disclosed for the 2013 monitoring (see details below).

2013 ACTUAL VS. FLANNED CAFEX = RATIOS(78)	
	1

2012 ACTUAL VE DIANNED CADEY - DATION (%)

1.65	2013 CAPEX (M€2009, real terms)							
LGS	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	5.6	4.4	-1.1	-20.3%				
MAIN CAPEX	3.1	2.3	-0.8	-25.6%				
% Main vs. Total	55.1%	51.4%		-6.7%				
% Total CAPEX vs. Gate-to-gate ANS costs	23.8%	20.9%		-12.4%				

Table 87: 2013 Latvia ANSP CAPEX (Actual vs. Planned)

- 3.15.4 In 2013 LGS has spent €1.1M (-20.3%) less than planned, of which €1M due to "PBN Implementation" and €400k because of the merging of two projects ("FIS Implementation for RIGA FIR" with "Modernization of Automated ATC System (ATRACC)". However, €900k was spent in excess for "Modernization of VHF in Riga FIR", but no details were provided.
- 3.15.5 No carry-overs from 2012 or new projects were included in the list.
- 3.15.6 A slight decrease is noted for "other" CAPEX (-€400k or -15%). Overall, the actual percentage of main into total CAPEX is lower than planned (i.e. 51.4% in comparison to 55.1%).
- 3.15.7 The percentage of total CAPEX into gate-to-gate costs for LGS has decreased by -12.4% (i.e. 20.9% actual vs. 23.8% planned). This is explained by "CAPEX Effect"⁶ (-20.3%) and (-9%) "Cost Effect"⁵.

LGS Investments for year 2013											
Name of investment	Reference to European ATM MP (ESSIP	Description/ explanation of the changes/ Other comments	TOTAL planned CAPEX for the project (RP1)	Amount of Capital expenditures (M€2009, real terms)			Dev A/P	Lifecycle (Amortisa	Alloc. En-	Date of ope	entry into ration
	objectives/ Ol Steps/ Enablers)			2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	(%)	tion period in years)	route/ terminal ANS (%)	Planne d in the PP	Actual
		Investments plar	nned for 20	13 (Revised	PP for RP	1)					
Modemization of Automated ATC System (ATRACC)	L05-04, L07-01	n/a	5.4	0.2	0.5	0.3	198.3%	5	80%R- 20%T	2016	n/a
PBN Implementation	L02-07	n/a	4.1	1.2	0.2	-1.0	-82.9%	8	50%R- 50%T	2016	n/a
FIS Implementation for RIGA FIR	n/a	Included in investment position - Modernization of Automated ATC System (ATRACC)	2.1	0.7	0.0	-0.7	-100.0%	5	40%R- 60%T	n/a	n/a
Modernization of VHF in Riga FIR	n/a	n/a	2.7	0.4	1.3	0.9	206.0%	8	80%R- 20%T	2013	n/a
ANOF Plus project	L01-03	n/a	1.4	0.2	0.2	0.0	10.0%	5	80%R- 20%T	n/a	n/a
Transition from AIS to AIM	L01-03	n/a	1.6	0.4	0.0	-0.4	-100.0%	5	80%R- 20%T	n/a	n/a
Sub-total main CAPEX (1)			3.3	3.1	2.2	-0.8	-26.9%				
Other CAPEX (planned in the PP for 2013) (2)				2.5	2.1	-0.4	-15.1%				
Total CAPEX (1)+(2)			3.3	5.6	4.4	-1.2	-42.0%				

3.15.8 The planned 2014 CAPEX has been updated and €5.8M is expected to be spent but €400k more are foreseen to be transferred from the "other" CAPEX budget to the main CAPEX.

LGS – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	2.9	3.5	6.1	5.6	5.7	17.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	1.8	3.0	4.2	4.4	5.8	14.4
Deviation U-P	-1.0	-0.4	-1.9	-1.1	0.1	-2.9
Deviation (%) U/P	-36.4%	-12.7%	-30.9%	-20.3%	+2.5%	-16.5%
MAIN Planned CAPEX (PP RP1)	2.7	3.2	4.4	3.1	2.6	10.1
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	1.8	3.0	2.0	2.3	3.0	7.2
Deviation U-P	-0.8	-0.2	-2.5	-0.8	0.4	-2.8
Deviation (%) U/P	-31.7%	-7.6%	-55.8%	-25.6%	16.5%	-28.2%

Table 89: RP1 Latvia ANSP CAPEX Update

- 3.15.9 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for LGS is foreseen to be €2.9M (16.5%) lower than planned. This is due to a significant decline in spending for the first two years (see details above).
- 3.15.10 However, 2014 actual CAPEX is expected to be different as Latvia has mentioned in the charges reporting scheme that *"In Performance plan it was anticipated that depreciation costs will rise by 2.1% from 2014 to 2013.*"
- 3.15.11 In first 4 months of FY2014 the actual YoY increase is 5.9%, it is anticipated to increase even more, since ATM system upgrade (one of the biggest single CAPEX items) has been commissioned in late 2013. Capital expenditure is close to what has been forecasted for FY 2014."¹⁹

3.15.12 It is noted that for 2010-14 the total CAPEX is expected to increase by 33.7% (vs. 18.6% planned). However the deviation between actual and planned CAPEX for the timeframe is expected to decrease by 20.8% on average.

- 3.15.13 In general, links to ATM MP are given using 'Lines of Change', which do not exist any longer in the Master Plan (edition 2 of October 2012). They should be replaced with references to either ESSIP objectives or OI steps/enablers. Note that link to OI steps was provided for the projects in the revised NPP for RP1 for Latvia, of 09.01.2012, page 9 to 11)
- 3.15.14 Furthermore:
 - ATRACC should be linked to at least AOM-21 on Free Route, ITY-FMTP of fight message transfer protocol, ITY-COTR and ATC17 on ground-ground automated coordination processes, ITY-AGDL on air-ground Datalink.
 - PBN project should be linked to NAV03, NAV10 and ENV01.
 - A-SMGCS modernization (appearing in the 2012 and 2014 tables, but not in the 2013 one) should be linked to ESSIP objective AOP04.2.
- 3.15.15 For what concerns the ANOF Plus project, part of it refers to the transition from AFTN to AMHS and this should be linked to ESSIP objective COM10.
- 3.15.16 For 2013, the project 'ASMGCS modernization' is not included (it is for 2012 and 2014). The same project appears in the ATM Master Plan reporting process for 2013.
- 3.15.17 The other projects reported for 2013 are consistent in scope with what reported in the ATM Master Plan reporting process, but most of the time with different time schedules.
- 3.15.18 Additionally, the ATM Master Plan reporting process refers to the development of airport infrastructure in Riga. It should be checked whether this project should be added in the list for 'new main projects', given its potentiality significant cost impact.
- 3.15.19 ATRACC schedule is only roughly aligned to relevant individual ESSIP objectives planned implementation dates (AOM21 by 12/2015; ATC17 by 12/2018; ITY-FMTP by 12/2014; ITY-COTR by 02/2015; ITY-AGDL by 02/2015).
- 3.15.20 PBN schedule is in line with the progress of related ESSIP objectives (in particular NAV10, the latter to be implemented, on 12/2016).
- 3.15.21 FIS implementation is reported without schedule in the table with investments for 2013, while it is reported to be implemented in the period 2012-2014 in the ATM Master Plan reporting process.
- 3.15.22 Modernization of VHF radios is scheduled for 2013 in the 'investments' table for 2013, and in the period 2012-2014 in the ATM Master Plan reporting process.
- 3.15.23 ANOF Plus is reported without schedule. Albeit this project is not referred to in ATM Master Plan reporting process, it is linked inter alia to ESSIP objective COM10, which is scheduled for 12/2014 in the ATM Master Plan reporting process. Transition from AIS to AIM is reported without schedule in the table with investments for 2013, while it is due for 2016 in ATM Master Plan reporting process.
- 3.15.24 Latvia did not report any project at FAB level for the monitoring of 2013.

3.16 Lithuania (Oro Navigacija)

OVERVIEW

- 3.16.1 Lithuania has provided all quantitative data with detailed explanations, ensuring transparency with regard to the status, spent amounts for 2013 and updated planning for 2014 and expected commissioning dates for each project. It gives a clear and precise picture of the situation.
- 3.16.2 Additional useful information is also provided through the charges reporting scheme²⁰, explaining the impact of investments into depreciation costs: "The higher actual costs of depreciation were influenced by the upgrade of the main ATM system Eurocat. It was thought during the costs planning process for the RP1 that some investments into Eurocat will prolong the operating life of this system till the end of 2016. In reality, there were added some functions through 2011-2012 which gave better quality of services of this system, but operating life left the same until the end of 2013" and into capital costs "Some investments related with terminal services were finalized (2011-2012) what gave bigger proportion of costs of capital to the terminal services instead of enroute. Increase in depreciation costs also reduces the value of assets".

2013 ACTUAL VS. PLANNED CAPEX – RATIOS (%)

Oro Navigacija	2013 CAPEX (M€2009, real terms)							
Oro Navigacija	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	1.2	0.7	-0.5	-38.2%				
MAIN CAPEX	1.2	0.6	-0.6	-49.4%				
% Main vs. Total	100.0%	81.9%		-18.1%				
% Total CAPEX vs. Gate-to-gate ANS costs	5.4%	3.3%		-39.2%				

Table 90:	2013 Lithuania	ANSP CAPEX	(Actual vs F	Planned)
1 4010 001	EVIV Ennauma		(/ 101000 10 1	iainioa)

- 3.16.3 Oro Navigacija has spent €0.5M less (-38.2%) in 2013 due to several savings achieved for "Contingency measures" (€400k) "L-SWIM" (€200k) and "Safety nets" (€100k).
- 3.16.4 The actual amount spent for 2013 (€700k) is the result of (1) projects planned for 2013 (€400k); (2) one project postponed from 2012 (i.e. €200k, "Replacement of ATC system in Palanga") and (3) €100k spent for "other" projects.
- 3.16.5 It is noted that for the projects postponed from 2012 Oro Navigacija has not spent anything for "Automated Assistance to Controller for Seamless Coordination Transfer and Dialogue (SYSCO level1)" and for "MLAT implementation at Vilnius airport (ASMGCS level II enhancement)". However from the update planning for 2014, we conclude that these amounts are not expected to be spent in RP1.
- 3.16.6 The actual percentage of main into total CAPEX is 81.9% in comparison to the planned one (i.e. 100%), due to €100k additional "other" CAPEX in 2013.
- 3.16.7 The percentage of Total CAPEX into gate-to-gate costs for Lithuania ANSP has decreased by -39.2% (i.e. 3.3% actual vs. 5.4% planned). This is explained by "CAPEX Effect"⁶ (-38.2%) and (+1.7%) "Cost Effect"⁵.

Oro Navigacija investments for year 2013												
	Reference to European ATM MP		TOTAL planned CAPEX	Amount of Capital expenditures (M€2009, real terms)		tal 2009,		Lifecycle	Alloc. En-	Date of oper	Date of entry into operation	
Name of investment	(ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	for the project (M€2009) (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	(Amortisat ion period in years)	route/ terminal ANS (%)	Planned in the PP	Actual	
Main CAPEX from previous years carried over to 2013												
Replacement of ATC system in Palanga	n/a	see Note 1 below	0.1	0.0	0.2	0.2		7	terminal	2013	2013	
Automated Assistance to Controller for Seamless Coord, Transfer and Dialogue (SYSCO level1)	OI-CM-0201	see Note 2 below	0.3	0.0	0.0	0.0				2017		
MLAT implementation at Vilnius airport (ASMGCS level II enhancement)	OI-AO-0102	2012 MLAT has been implemented in Vilnius airport and 2013 A-SMGCS has been certified as level II	0.8	0.0	0.0	0.0				2012		
Sub-total main CAPEX (1)				0.0	0.2	0.2						
	1	Main CAPEX originally pla	nned for 2	2013 (PP fo	or RP1)		1	r				
Integrated briefing	OI-IS-0201, 0203	No investments in RP1, because it was made in 2011	0.1	0.0	0.0	0.0	-100.0%	4	en-route/ terminal	2016	2012 Q1	
Graphical visualisation tools	OI-IS-0203	No investments in RP1, because it was made in 2011	0.1	0.0	0.0	0.0	-100.0%	3	en-route/ terminal	2016	2012 Q1	
Safety nets Level II	OI-CM-0801	No planned investment by the time	0.1	0.1	0.0	-0.1	-100.0%			2015		
L-SWIM -implementation of enterprise data exchange network	N/A	see Note 3 below	0.8	0.2	0.0	-0.2	-100.0%	various	en-route/ terminal	2016	2012 Q1-Q4	
Contingency measures implementation	N/A	Tender for the Mobile ATC tower was fulfilled in 2013. The project was ended in 2014 Q2	0.9	0.8	0.4	-0.4	-53.0%	various	terminal	2013	2014 Q2	
En-route simulator modernization (Eurocat-X)	N/A	In 2012 was spent more, in 2013 less.	0.1	0.0	0.0	0.0	-74.0%	4	en-route	2014	2013 Q4	
Sub-total main CAPEX (2)			2.1	1.2	0.4	-0.8	-66.7%					
Total main CAPEX (1)+(2)			2.1	1.2	0.6	-0.6	-49.4%					
Other (3)			0.0	0.0	0.1	0.1						
Total CAPEX (1)+(2)+(3)			2.1	1.2	0.7	-0.5	-38.2%					

Table 91: 2013 Lithuania ANSP Investments

<u>Note 1</u>: "Overall amount, planned for this project, was not exceeded. There were delays due to tender procedures for the common project with Lithuania' Ministry of National Defence. Initially was planned in 2011-2012, but it started in 2012 and are finished in 2013"

<u>Note 2</u>: "As planned, the investments for 2012 were done. For 2014 - Postponed in range with changed IOC–FOC of the ATM Master Plan - no investment is planned for 2014. Functions will be implemented by 2017 in range with the new ATC system implementation. It will not affect the depreciation costs of 2014, because date of entry into operation was planned in 2015 Q1 (investments of 2014)"

<u>Note 3</u>: "Initial plan was to get all equipment at 2012 and to pay during 2012-2016. Due to the good standings in finance, all amounts were paid in 2012. No influence on depreciation."

2014 & RP1 PLANNING UPDATE

3.16.8 It is noted that the planned 2014 CAPEX was updated and €500k are expected to be spent in addition due to new projects included in the list for the year (i.e. "New administrative building and ACC" and "Contingency measures implementation"). However for several projects originally planned in 2014, the CAPEX is expected to be lower due to payments in advance (i.e. L-SWIM).

Oro Navigacija – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	3.8	4.9	2.5	1.2	1.5	5.2
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	5.0	2.6	3.5	0.7	2.0	6.2
Deviation U-P	1.2	-2.2	1.0	-0.5	0.5	1.0
Deviation (%) U/P	31.2%	-45.6%	38.2%	-38.2%	32.3%	19.03%
MAIN Planned CAPEX (PP RP1)	3.5	4.7	2.5	1.2	1.5	5.2
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	3.1	2.6	3.5	0.6	1.9	6.0
Deviation U-P	-0.4	-2.1	1.0	-0.6	0.4	0.7
Deviation (%) U/P	-11.8%	-45.4%	38.2%	-49.4%	23.8%	14.0%

Table 92: RP1 Lithuania ANSP CAPEX Update

- 3.16.9 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Oro Navigacija ANSP shows €1M in addition to the amount originally planned. This is due to more spending in 2012 but also to new planned projects for 2014 (see above).
- 3.16.10 It is noted that, for 2010-14, the actual total CAPEX is expected to decrease by 20.4%, as was planned. Nevertheless, the actual main CAPEX seems to decrease less than planned (i.e. -11.7% vs. 18.9%).
- 3.16.11 The average deviation actual vs. planned for 2010-14 total CAPEX is foreseen to increase by 3.6% on average over the period and to decrease for main CAPEX (-8.9% on average). This is due to amounts transferred from the main budget to the "other". It is assumed that changes in strategy have caused this trend.

- 3.16.12 The links with the ATM Master Plan are not always consistent or are missing from the 2013 report. Moreover, for those mentioned OI-steps/enablers which have links to the relevant ESSIP Objectives these are not mentioned in the respective table. In addition, there are no links to relevant ESSIP Objectives mentioned at all. However, in the Performance Plan Period 2012-2014 including the updated one, the ESSIP Objectives are mentioned.
- 3.16.13 For example, the project "Automated Assistance to Controller for Seamless Coordination, Transfer and Dialogue (SYSCO Level1)", there is a missing link with ESSIP Objective ITY-COTR.
- 3.16.14 Not all projects mentioned in the 2013 report are consistent and/or mentioned through the ATM Master Plan reporting process. The description/name of the regional projects as mentioned in the ATM Master Plan reporting process is too broad or vague to assess it properly.
- 3.16.15 The schedules and progress reported through the ATM Master Plan reporting process are not consistent with the dates as mentioned in the 2013 report.

3.17 Malta (MATS)

OVERVIEW

- 3.17.1 Malta has not provided any actual CAPEX figures in its 2013 Monitoring report but only for the charges reporting, the total for the projects and some information about the status of the projects.
- 3.17.2 Some updated information was also provided in regard to the entry into operation for the projects with minimal explanations for the delays.
- 3.17.3 However the delays reported for most of the projects do not explain the higher spending in 2013. It is assumed that the upwards revision of the total budget for some projects could have influenced this significant surplus (see below).
- 3.17.4 Some information on the impact of the changes of capital expenditures in depreciation and cost of capital was provided through the charges reporting.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

MATS (Malta Air Traffic Services Ltd)	2013 CAPEX (M€2009, real terms)						
	Plan	Actual	A - P (M€)	A/P (%)			
TOTAL CAPEX	2.4	8.0	5.6	237.2%			
	n/a						
		n	/a				
MAIN CAPEX % Main vs. Total		n	/a				

Table 93: 2013 Malta ANSP CAPEX (Actual vs. Planned)

- 3.17.5 In 2013 MATS has spent €5.6M (+237%) more than planned, but no assessments are possible since the higher spending is not transparently detailed.
- 3.17.6 From the charges reporting it is disclosed that main CAPEX refer to several originally planned projects like "Mode S radars", "ATM System upgrade", "VCS for ACC" and two new projects, i.e. "Technical Section facilities" and "NCSS".
- 3.17.7 The percentage of total CAPEX into gate-to-gate costs for MATS was in 2013 of 49% vs. 15.1% planned due to a significant increase in CAPEX (+237.2%) and a slight increase in gate-to-gate ANS costs (+3.8%).

MATS (Malta Air Traffic Services Ltd) investments for year 2013											
	Referenc e to Europea n ATM MP (ESSIP objective s/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	TOTAL planned CAPEX for the project (RP1)	Amount of Capital						Date of entry into operation	
				expenditures (M€2009,							
Name of investment				2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	Lifecycle (Amortis ation period in years)	Alloc. En route/ terminal ANS (%)	Planned in the PP	Actual
Main CAPEX from previous ye	ars carried	l over to 2013									
ATM System upgrade	n/a	delayed due to circumstances beyond MATS	7.4	n/a	n/a			n/a	n/a	2013	end 2014
Sub-total main capex (1)											
		Main CAPEX or	riginally p	planned fo	or 2013 (PP	for RF	P1)				
Mode S radar	n/a	delayed due to land alloc. and development permits	5.0	n/a	n/a			n/a	n/a	end 2012	2013/14
VCS	n/a	delayed	0.7	n/a	n/a			n/a	n/a	2013	end 2014
VOR station	n/a	n/a	0.3	n/a	n/a			n/a	n/a	2012	n/a
Sub-total main capex (2)											
New main projects in 2013 (not included in the revised PP, if applicable)											
Technical section facilities	n/a	delayed due to project extension	1.0	n/a	n/a			n/a	n/a	end 2012	end 2014
NCSS	n/a	n/a	0.9	n/a	n/a			n/a	n/a	end 2014	end 2014
Sub-total main capex (3)			5.9								
Total main CAPEX (1)+(2)+(3)			7.9								
Other (4)			n/a	n/a	n/a						
Total capex (1)+(2)+(3)+(4)			7.9	2.4	8.0	5.6	237.2%				

Table 94: 2013 Malta ANSP Investments

3.17.8 MATS has provided for the 2014 planned update for CAPEX only the total for the year and similarly to 2013 no detailed information is available. It is noted that exceeding the planned CAPEX budget is foreseen again in 2014 (i.e. +1.1M).

MATS – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	0.8	4.7	4.4	2.4	0.3	7.0
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	1.0	2.6	1.7	1.7 8.0		11.0
Deviation U-P	0.2	-2.1	-2.7	5.6	1.1	4.0
Deviation (%) U/P	29.3%	-44.9%	-62.1%	237.2%	410.6%	56.6%
MAIN Planned CAPEX (PP RP1)	0.6	4.3	4.4	2.4	0.3	7.0
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	0.7	2.4	1.7	8.0	1.4	11.0
Deviation U-P	0.1	-1.9	-2.7	5.6	1.1	4.0
Deviation (%) U/P	12.7%	-44.5%	-62.1%	236.0%	408.5%	56.4%

Table 95: RP1 Malta ANSP CAPEX update

3.17.9 After assessing 2013 results and the 2014 update, the RP1 planned CAPEX for MATS is foreseen to be +€4.0M (57%) higher than planned. This is due to the significant exceeding in the 2013 CAPEX budget, which is foreseen to continue for 2014 (see details above).

- 3.17.10 No list of projects was provided in the 2013 report, only a letter making reference to the outcome of an Assessment conducted by the NSA to the original National Performance Plan. In the latter, no project is linked to the elements of the ATM Master Plan, no description, scope or schedule for the projects was provided so it is not possible to assess whether those links are correct and justified.
- 3.17.11 Since no list of projects was provided it cannot be assessed whether the projects are consistent with other sources of information (i.e. the ATM Master Plan reporting process), or whether the projects are national or shared FAB projects.

3.18 MUAC

OVERVIEW

- 3.18.1 MUAC CAPEX data was received through the submission by both Belgium and The Netherlands, with a long delay, providing also details on the reasons for the non-spent planned amounts and the update for the entry into operation.
- 3.18.2 Some information was provided in the charges reporting scheme with regard to the decrease in depreciation costs for 2013 due to postponements for several investments²¹.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

MUAC	2013 CAPEX (M€2009, real terms)						
MUAC	Plan	Actual	A - P	A/P (%)			
TOTAL CAPEX	21.3	11.9	-9.4	-44.0%			
MAIN CAPEX	9.0	3.9	-5.1	-56.6%			
% Main vs. Total	42.3%	32.8%		-22.5%			
% Total CAPEX vs. Gate-to-gate ANS costs	15.3%	9.4%		-38.2%			

Table 96: 2013 MUAC CAPEX (Actual vs. Planned)

- 3.18.3 MUAC has spent €9.4M less than planned (-44%) in 2013, of which €2.6 because of "cost saving measure due to re-evaluation" for "New generation CWP", for "Voice systems" (€1M) and due to "budget realigned for delays and scope clarifications in the SESAR Deployment" for the "SESAR Compliant ATM (-€"1.2M). An important lower spending for "Other" CAPEX (-€5M) is noted.
- 3.18.4 Due to a high spending for "Infrastructure" projects (i.e. €5.8M), the actual percentage of main into total CAPEX is significantly lower than planned (i.e. 32.8% in comparison to 42.3%).
- 3.18.5 The percentage of total CAPEX into gate-to-gate costs for MUAC has decreased by 38.2% (i.e. 9.4% actual vs. 15.3% planned). This is explained by "CAPEX Effect"⁶ (-44%) and (-9.4%) "Cost Effect"⁵.
- 3.18.6 Details are provided in the table below.
| MUAC Investments for year 2013 | | | | | | | | | | | |
|--|---|--|--------------------------------------|--------------------------|---------------------------------------|----------------|----------------|--|--------------------------------------|------------------------------|--------|
| | Reference to | | TOTAL | Amou
expend
re | int of Cap
itures (Me
al terms) | oital
2009, | | Lifecycle | Alloc. | Date of entry into operation | |
| Name of investment | European ATM
MP (ESSIP
objectives/ Ol
Steps/ Enablers) | Description/ explanation of the
changes/ Other comments | CAPEX
for the
project
(RP1) | 2013
Planned
CAPEX | 2013
Actual
CAPEX | Dev A
P | Dev A/P
(%) | (Amortisa
tion
period in
years) | En-
route/
terminal
ANS (%) | Planned
in the
PP | Actual |
| | - | Investments planned for 2013 (Revise | ed PP for F | RP1) | | | | | | | |
| Voice systems | FABEC CONOPS | NVCS replacement delayed to 2014 with
new payment schedule but budget
unchanged, RDF delayed to 2014 but
budget unchanged | 13.3 | 3.6 | 2.5 | -1.0 | -28.2% | 15 | 100%R | 2014 | 2014 |
| New generation CWP (software development for the HMI, new console in OPS room and TTR) | Enabler | CWP software replacement replaced by
maintainability improvements (cost saving
measure due to re-evaluation) | 22.3 | 2.6 | 0.0 | -2.6 | -100.0% | 12 | 100%R | 2017 | 2017 |
| ATFCM / ASM Tools | AOM-0202, 0205,
0504, 0401, AUO-
0804, 0802, CM-
0102, 0101, DCB-
0102, 0203, 0204,
0205, 0207 | Costs re-assessments led to overall budget
reduction & progressive tool deployment
(e.g. LARA and CRM in 2012, TMS Level 1
in 2013, TMS level 2 in 2014). Delays in
SESAR Development phase generate
delays for LARA and TMS. | 8.1 | 1.6 | 1.4 | -0.3 | -15.7% | 12 | 100%R | 2012 | 2013 |
| SESAR Compliant ATM | IS-0302,
0303,0106, CM-
0401, 0402, is-
0301, 0701, 0702,
0704, 0707 | Budget realigned for delays and scope
clarifcations in the SESAR Deployment (cf
PCP proposal/6 May 2013) and allow for
VLDs as from 2017 (tbc SJU 2) | 10.5 | 1.1 | 0.0 | -1.1 | -100.0% | 12 | 100%R | 2018 | 2018 |
| Sub-total main capex (1) | | | 54.2 | 8.9 | 3.9 | -5.0 | -55.9% | | | | |
| | | | | | 1 | i | İ | i | 1 | | |
| Other CAPEX (planned in the PP for 2013) (2) | | | 0.0 | 7.0 | 2.2 | -4.8 | -68.9% | | | | |
| Infrastructure (3) | | | 0.0 | 5.1 | 5.8 | 0.8 | 14.9% | | | | |
| Total capex (1)+(2)+(3) (in M€) | | | 54.2 | 21.0 | 11.9 | -9.0 | -43.1% | | | | |

Table 97: 2013 MUAC Investments

3.18.7 The planned 2014 CAPEX was updated and €9M is expected not to be spent due to changes in strategy and reduction in budgets for the same projects as in 2013. No projects were carried-over from 2013 and no new projects were added.

MUAC – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	11.9	18.7	16.3	21.3	22.8	60.4
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	9.5	6.4	8.7	11.9	13.9	34.5
Deviation U-P	-2.4	-12.3	-7.6	-9.4	-9.0	-25.9
Deviation (%) U/P	-19.9%	-66.0%	-46.6%	-44.0%	-39.2%	-42.9%
MAIN Planned CAPEX (PP RP1)	7.8	11.5	5.6	9.0	15.3	29.9
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	5.6	3.6	1.8	3.9	11.3	17.0
Deviation U-P	-2.2	-7.9	-3.8	-5.1	-4.0	-12.9
Deviation (%) U/P	-27.9%	-69.1%	-67.8%	-55.6%	-26.3%	-43.2%

Table 98: RP1 MUAC CAPEX Update

- 3.18.8 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for MUAC is showing €25.9M less than the amount originally planned. This is due to an important decrease in spending for all the years (see above).
- 3.18.9 It is noted that for the period 2010-14 the actual total CAPEX is expected to be 9.9% higher on average whilst the actual main CAPEX is expected to be 19% higher.
- 3.18.10 On the other hand, the average deviation for the main (actual vs. planned) total CAPEX is foreseen to be -43% lower in average over the period, due to the overestimated planned levels and to the changes in the investment policy (see above).

- 3.18.11 There are four projects which belong to the set of projects of the revised Performance Plan.
- 3.18.12 Two of these projects, 1) ATFCM / ASM Tools and 2) SESAR Compliant ATM are reported to contribute to the ATM MP and the links are provided to specific OIs/Enablers. No links are provided to any of the ESSIP Objectives.
- 3.18.13 In addition, one new project is reported i.e. 'Infrastructure' which does not belong to the set of projects in the revised Performance Plan and which is not linked to any ATM MP OIs/Enablers and/or ESSIP Objectives.
- 3.18.14 The description/explanation of changes is provided for all four projects which are part of the revised Performance Plan in the 2013 report.
- 3.18.15 The actual date of entry into operation is provided for all of the projects in the 2013 report.
- 3.18.16 There are four important projects 1) TMS/iFMP 2) MARS-II 3) RDFS (Radio Direction Finder System) and 4) FDPS 2.0 which are reported in the ATM Master Plan reporting process but are not part of the set of the projects reported in the 2013 report.
- 3.18.17 It seems that all the projects reported in the 2013 report have no national scope and none of them has a FAB dimension.
- 3.18.18 There are ten projects which are reported by Maastricht and other FABEC States as FAB Projects in their ATM Master Plan reporting process but none of these projects is part of the set of projects reported in the Maastricht 2013 report.

3.19 The Netherlands (LVNL)

OVERVIEW

- 3.19.1 The Netherlands have provided their actual 2013 CAPEX but have not disclosed any details on the reasons for the non-spent planned amounts and no update on the entry into operation for any of the projects.
- 3.19.2 Some information was provided for the charges reporting scheme with regard to the decrease in depreciation costs for 2013 due to postponements for several investments²². In addition the future strategy in this area was explained: "*LVNL is on the eve of a major system replacement investment. A replacement of the current AAA-system is urgent. A final decision on this replacement will be taken in the last months of 2014 after extensive studies and Stakeholder Consultation Meetings. The Ministry of Infrastructure and Environment is involved in the studies and the Business Case as it provides guarantees for the loans by the Ministry of Finance.[...]On top of that a number of the currently used systems such as the VCS-system, are already completely written off and do not contribute to the annual cost base any more. Thus, a replacement will have an immediate and substantial effect on the annual cost base. This phenomenon will also hamper the achievement of the proposed CE target.²²³*

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)							
LVNL	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	33.8	11.0	-22.8	-67.5%				
MAIN CAPEX	28.2	5.3	-22.9	-81.2%				
% Main vs. Total	83.4%	48.3%		-42.1%				
% Total CAPEX vs. Gate-to-gate ANS costs	21.8%	7.0%		-68.0%				

Fable 99: 2013	Netherlands	ANSP	CAPEX	(Actual vs	. Planned)
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- 3.19.3 LVNL has spent €22.8M less than planned (-67.5%) in 2013, of which €19.2M because of the revision in budget for "Replacement AAA", "Fallback air-ground/ground-ground voice" (-€1.4M) and "Replacement VCS" (-€800k). No details were provided for these savings. A slight spending increase, not detailed, is noted for "other" CAPEX (+€100k).
- 3.19.4 Due to a higher spending for "other" projects than for the main ones (i.e. €5.7M for "other" and €5.3M for main), the actual percentage of main into total CAPEX is significantly lower than planned (i.e. 48.3% in comparison to 83.4%).
- 3.19.5 The percentage of Total CAPEX into gate-to-gate costs for LVNL has decreased by 68% (i.e. 7.0% actual vs. 21.8% planned). This is explained by "CAPEX Effect"⁶ (-67.5%) and (+1.5%) "Cost Effect"⁵.
- 3.19.6 Details are provided in the table below:

LVNL Investments for year 2013											
Name of investment	Reference to	Descriptio n/ explanatio n of the changes/ Other comments	TOTAL planned CAPEX for the project (RP1)	Amount of Capital expenditures (M€2009, real terms)				Lifecycl e	Alloc.	Date of entry into operation	
	European ATM MP (ESSIP objectives/ OI Steps/ Enablers)			2013 Planned CAPEX	2013 Actual CAPEX	Dev A- P	Dev A/P (%)	ation period in years)	en- route/ terminal ANS (%)	Planned in the PP	Actual
Investments planned for 2013 (Revised PP for RP1)											
Replacement VCS	AO-0603;DCB- 0205,0207	n/a	23.6	5.5	4.7	-0.8	-15.2%	n/a	54.5%R - 45.5%T	n/a	
Fallback air-ground/ground- ground voice	System requirements developed in FABEC cooperation	n/a	7.2	1.4	0.0	-1.4	-100.0%	n/a	100%R	2014	
Replacement AAA	AOM-0205, 0401, 0504, 0602, 0703, 0802; AUO-0301; DCB- 0101, 0201; TC- 0102,0305	n/a	75.0	19.9	0.6	-19.2	-96.8%	n/a	100%R	2017	
Primary radar coverage Polderbaan (18R/36L)	n/a	n/a	3.0	1.4	0.0	-1.4	-100.0%	n/a	100%T	2013	
Sub-total main CAPEX (1)			108.8	28.2	5.3	-22.9	-81.2%				
Other CAPEX (planned in the PP	for 2013) (2)		0.0	5.6	5.7	0.1	1.4%				
Total CAPEX (1)+(2)			108.8	33.8	11.0	-22.8	-67.5%				

Table 1	100:	2013	Netherlands	ANSP	Investments
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3.19.7 The planned 2014 CAPEX was updated and €27.2M is expected not to be spent due to changes in strategy and reduction in budgets for the same three projects as in 2013. No projects were carried-over from 2013 and no new projects were added.

LVNL – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	19.8	27.0	26.9	33.8	45.9	106.6
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	4.4	17.5	14.7	11.0	18.7	44.3
Deviation U-P	-15.4	-9.6	-12.3	-22.8	-27.2	-62.3
Deviation (%) U/P	-77.7%	-35.4%	-45.6%	-67.5%	-59.3%	-58.4%
MAIN Planned CAPEX (PP RP1)	19.8	27.0	20.4	28.2	40.2	88.8
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	4.4	17.5	14.7	5.3	6.5	26.4
Deviation U-P	-15.4	-9.6	-5.7	-22.9	-33.7	-62.3
Deviation (%) U/P	-77.9%	-35.4%	-28.1%	-81.2%	-83.9%	-70.2%

Table 101: RP1 Netherlands ANSP CAPEX Update
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- 3.19.8 After assessing 2013 results and 2014 planning update, the RP1 planned CAPEX for the Netherlands ANSP is showing €62.3M less than the amount originally planned. This is due to an important decrease in spending in 2012 and 2013 actual CAPEX but also to new strategy changes for 2014 (see above).
- 3.19.9 It is noted that for 2010-14 the actual total CAPEX is expected to increase by 43.5% on average whilst the actual main CAPEX is expected to increase by 10.4%.
- 3.19.10 On the other hand, the average deviation for the main (actual vs. planned) total CAPEX is foreseen to be -57.1% in average over the period due to the over-estimated planned levels and to the changes in the investment policy (see above).

- 3.19.11 There are five projects which belong to the set of projects of the revised PP.
- 3.19.12 Only two of these projects, 1) Replacement VCS and 2) Replacement AAA are reported to contribute to the ATM MP and the links are provided to specific OIs/Enablers. However, it should be noted that all three links provided for the project Replacement VCS are not correct.
- 3.19.13 No links are provided to any of the ESSIP Objectives.
- 3.19.14 In addition, two new projects 1) TAR IV and 2) Back up VCS are reported which do not belong to the set of projects in the revised PP. It seems that none of these projects contribute to any OIs/Enablers or ESSIP Objectives.
- 3.19.15 The description/explanation of changes is missing for all seven projects in the report and none of these reports are part of the ATM Master Plan reporting process.
- 3.19.16 All the projects reported in the monitoring report have a national scope and none of them has a FAB dimension.
- 3.19.17 There are ten projects which are reported by The Netherlands and other FABEC States as FAB Projects in their ATM Master Plan reporting process, but none of these projects is part of the set of projects reported in The Netherlands 2013 report.

3.20 Norway (Avinor)

OVERVIEW

- 3.20.1 In its 2013 report Norway has provided some quantitative data with no explanations. No information was provided on the expected commissioning dates for any of the projects. Similarly, the planning for 2014 was not updated.
- 3.20.2 Norway has also provided its actual CAPEX for 2012 (not reported for the previous year's exercise) but with no additional qualitative details.
- 3.20.3 Some information was provided through the charges reporting scheme with regard to the impact on depreciation and capital costs for RP1 (see details in item 3).

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Avinor	2013 CAPEX (M€2009, real terms)							
Aviiloi	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	12.1	12.6	0.5	3.8%				
MAIN CAPEX	12.1	12.6	0.5	3.8%				
% Main vs. Total	100.0%	100.0%		0.0%				
% Total CAPEX vs. Gate-to-gate ANS costs	6.7%	8.4%		25.2%				

Table 102: 2013 Norway ANSP CAPEX (Actual vs. Planned)

- 3.20.4 In 2013 Avinor has spent €500k (+3.8%) more than planned, of which +€400k for "ADS-B Ekofisk" and +€400k for "SNAP (Southern Norway Airspace Project)". However, -€400k was spent less for "ATM-Systems". No information was provided for these changes in budget.
- 3.20.5 No carried-over from 2012 or new projects were included in the list.
- 3.20.6 Avinor does not have "other" actual CAPEX.
- 3.20.7 The percentage of total CAPEX into gate-to-gate costs for Avinor has increased by +25.2% (i.e. 8.4% actual vs. 6.7% planned). This is explained by "CAPEX Effect"⁶ (+3.8%) and (-17.1%) "Cost Effect"⁵.

Avinor Investments for year 2013											
	Reference to	e Descripti A on/ explanat TOTAL	Amo expen r	ount of Capital ıditures (M€2009, real terms)			Lifecvcle	Alloc.	Date of entry into operation		
Name of investment	European ATM MP (ESSIP objectives / OI Steps/ Enablers)	ion of the changes/ Other commen ts	for the project (RP1)	2013 Planne d CAPEX	2013 Actual CAPEX	Dev A- P	Dev A/P (%)	(Amortis ation period in years)	route/ termina I ANS (%)	Planne d in the PP	Actual
Investments planned for 2013 (Revised PP for RP1)											
ADS-B Ekofisk	n/a	n/a	n/a	0.3	0.7	0.4	164.5%	n/a	n/a	2015	n/a
SNAP (Southern Norway Airspace Project)	AOM-0205, 0401, 0601,	n/a	n/a	1.4	1.8	0.4	28.0%	n/a	n/a	2015	n/a
BOAS (SUR and flight-plan for oceanic)	n/a	n/a	n/a	1.1	1.1	0.0	-0.2%	n/a	n/a	n/a	n/a
ATM-Systems	AOM-0205, 0401, 0504, CM-	n/a	n/a	9.4	9.0	-0.4	-3.8%	n/a	n/a	n/a	n/a
Sub-total main CAPEX (1)				12.1	12.6	0.5	3.8%				
Other CAPEX (planned in the PP for 2013) (2)				0.0	0.0	0.0					
Total CAPEX (1)+(2)				12.1	12.6	0.5	3.8%				

 Table 103: 2013 Norway ANSP Investments

- 3.20.8 Avinor has not updated its 2014 planned CAPEX, but has provided the actual spent amounts for 2012. It is noted that, from the CAPEX planned, €11.4M were not spent in 2012 due to shrinking in budget for all main projects (i.e. -€3.2M for "ATM Systems", €2.5M for "SNAP", -€1.9M for "BOAS" and -€600k for "ADS-B Ekofisk").
- 3.20.9 Additional qualitative information in order to explain this decrease in spending was provided for the charges reporting: "*The capital expenditure is below budget in 2012. This is due to a variety of factors, but most importantly lack of project resources. As a consequence, Avinor ANSP has been working to strengthen its project environment to improve project implementation and management.*²⁴

Avinor – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	10.0	13.9	21.8	12.1	15.4	49.3
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	6.6	8.4	10.4	12.6	15.4	38.4
Deviation U-P	-3.4	-5.5	-11.4	0.5	0.0	-10.9
Deviation (%) U/P	-34.3%	-39.3%	-52.1%	3.8%	0.0%	-22.1%
MAIN Planned CAPEX (PP RP1)	10.0	13.9	18.7	12.1	15.4	46.3
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	3.5	8.4	10.4	12.6	15.4	38.4
Deviation U-P	-6.5	-5.5	-8.3	0.5	0.0	-7.8
Deviation (%) U/P	-64.8%	-39.3%	-44.2%	3.8%	0.0%	-16.9%

Table 104: RP1 Norway ANSP CAPEX Update

- 3.20.10 After assessing 2013 results and the 2012 update, the RP1 planned CAPEX for Avinor is foreseen to be €10.9M (-22.1%) lower than planned. This is due to the significant decline in spending in 2012 (see details above).
- 3.20.11 However, the 2014 CAPEX is expected to be different as Norway has mentioned in the charges reporting scheme that *"The project activity is however increasing, mainly due to the strengthening of project and portfolio management, and the latest forecast for 2014 indicates an investment level of approximately MNOK 300."* (approximately €34M)²⁵.
- 3.20.12 It is noted that for 2010-14 the total CAPEX is expected to increase by 23.6% vs. 11.3% planned. However the average deviation for actual vs. planned total CAPEX for the timeframe is expected to be of -24.4%.

- 3.20.13 The list of investments for 2013 includes four projects. Of them:
- 3.20.14 'ADS-B Ekofisk' should be linked to the ATM Master Plan via reference to an ATM Master Plan enabler covering specifically this subject.
- 3.20.15 'SNAP' and 'ATM-Systems' are linked to the ATM Master Plan via reference to OI steps only. They should be linked to the corresponding ESSIP objectives (see ESSIP Plan ed. 2013, pages 24 to 30).
- 3.20.16 Furthermore, for 'ATM-Systems' the list of OI steps would be incomplete, as it is an enabler for the following other ESSIP objectives (not related to the OI Steps listed in the table) covering Safety Nets (ATC02.5/6/7), ground-ground coordinated automation processes (ITY-COTR and ATC17) and air-ground datalink (ITY-AGDL).
- 3.20.17 'BOAS' should be linked to the ATM Master Plan via an OI step.
- 3.20.18 The projects listed in the 2013 report are also reported in the ATM Master Plan reporting process. To note that 'ATM-Systems' is referred to in the ATM Master Plan reporting process as 'NATCON Roadmap', with a broader scope than what reported in the 'link to ATM Master Plan' and to what reported in the Norway's Revised NPP for RP1.
- 3.20.19 'SNAP' and 'ATM-Systems' are linked to the ATM Master Plan via reference to OI steps only. They should be linked to the corresponding ESSIP objectives. The following inconsistencies between the 2013 report and the ATM Master Plan reporting process in the provided dates of implementation were noted:
 - 'ADS-B Ekofisk' is also reported in the ATM Master Plan reporting process, but with a different end date (Nov. 2014).
 - 'SNAP' is reported with a planned deadline of 2015 in the 2013 report, while one of its components (implementation of APV procedures – NAV10) is due for completion by 12/2016 in the ATM Master Plan reporting process.
 - 'BOAS' has no associated start date in the 2013 report, while it is reported with a planned start of operations during 1st half 2014 in the ATM Master Plan reporting process.
 - 'ATM-System' has no associated start date in the 2013 report, while it is reported with delivery in 2015-2016 in the ATM Master Plan reporting process.
- 3.20.20 Norway did not report any investment project at FAB level for the 2013 report.

3.21 Poland (PANSA)

OVERVIEW

- 3.21.1 Poland has provided all quantitative data with detailed explanations, ensuring transparency in regard to the status, spent amounts for 2013 and updated planning for 2014.
- 3.21.2 However no information was provided on the reference to the European ATM Master Plan and also on the total CAPEX per project. Additionally, for several main projects the expected commissioning date was not provided.
- 3.21.3 Additional useful information is provided through the charges reporting explaining the impact of investments into depreciation costs: *"The new investment cycle cumulating with the commissioning of a new ATM system will lead to higher depreciation costs, with the annual depreciation costs systematically higher that in preceding years. Moreover, rebuilding of the ATM system will require the purchasing, upgrading or replacing of many devices²⁶."*

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

DANGA	2013 CAPEX (M€2009, real terms)							
FANSA	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	38.0	5.6	-32.4	-85.2%				
MAIN CAPEX	30.4	5.6	-24.8	-81.5%				
% Main vs. Total	80.1%	100.0%		24.9%				
% Total CAPEX vs. Gate-to-gate ANS costs	25.3%	4.5%		-82.1%				

- 3.21.4 PANSA has spent €32.4M less than planned in 2013 due to several delays (i.e. -€5.1M for "Radio location systems", -€4.1M for "Integrated Area Control Centre in Warsaw" etc.). It is also noted that €7.6M savings were achieved from "other" CAPEX where no actual amounts were reported.
- 3.21.5 However, most of the delays are caused by the public procurement law or other legal issues. The impact of these delays into the commissioning date cannot be assessed as no information was reported in this respect.
- 3.21.6 The actual spent amount for 2013 (€5.6M) relates to projects planned for 2013 in the Performance Plan for this year (see table below). It is noted that none of the amounts postponed from 2012 were spent in 2013, which resulted into additional €7M savings. However no information was provided in this respect and from the update planning for 2014 we conclude that these amounts are not expected to be spent in RP1.
- 3.21.7 It is noted that the actual percentage of main into total CAPEX is 100% in comparison to the planned one (i.e. 80.1%) (see details below).
- 3.21.8 The percentage of total CAPEX into gate-to-gate costs for Poland ANSP has decreased by -82.1% (i.e. 4.5% actual vs. 25.3% planned). This is explained by "CAPEX Effect"⁶ (-85.2%) and (-17.2%) "Cost Effect"⁵.

PANSA Investments for year 2013											
	Reference to European	Description/ pla		Amou expendi re	mount of Capital enditures (M€2009, real terms) Lifecycle		Lifecycle Alloc. En-		ntry into ation		
Name of investment	ATM MP (ESSIP objectives/ OI Steps/ Enablers)	explanation of the changes/ Other comments	for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	(%)	(Amortisat ion period in years)	terminal ANS (%)	Planned in the PP	Actual
		Main CAPEX from p	orevious y	ears carrie	d over to	2013					
Radio-communication centres	n/a	n/a	n/a	1.4	0.0	-1.4	-100.0%	15	75-100	2013/14	0
Radio navigation infrastructure (modernization of DVOR/DME)	n/a	n/a	n/a	2.2	0.0	-2.2	-100.0%	15	70-100	2012/13	0
ICT (information and communication technology) infrastructure	n/a	n/a	n/a	1.1	0.0	-1.1	-100.0%	8	86	n/a	0
Multilateration system	n/a	n/a	n/a	0.7	0.0	-0.7	-100.0%	5	100	n/a	0
ATM PEGASUS_21	n/a	n/a	n/a	1.6	0.0	-1.6	-100.0%	0	0	n/a	0
Sub-total main CAPEX (1)		•		7.0	0.0	-7.0	-100.0%				
		Main CAPEX origin	ally planr	ned for 201	3 (PP for	RP1)					
Radio location systems	n/a	Delay due to public procurement law	n/a	5.1	0.0	-5.1	-100.0%	15	100	n/a	n/a
Radio location facilities (ground station)	n/a	Delays mainly due to operational and technical issues and public procurement law	n/a	3.5	0.6	-3.0	-84.2%	15	75-100	2013/14	n/a
Integrated Area Control Centre in Warsaw	n/a	Delay due to legal land	n/a	4.2	0.1	-4.1	-98.5%	40	89	n/a	n/a
Modernization and development of the navigation infrastructure in FIR Warsaw (modernization 4 DME and 2 DVOR/DME; develop 9 DME and 5 DVOR/DME)	n/a	3 DME and 1 DVOR/DME facilities due to befinalised in 2014	n/a	2.0	2.0	0.0	-1.1%	15	70-100	2012/13	n/a
Modernization and development of ILS/DME investments	n/a	Difference between actual contract value and planned contract value	n/a	1.3	1.5	0.3	20.2%	20	50	n/a	n/a
Modernization of VCS in Poznań, Wrocław, Rzeszów, Gdańsk, Warszawa	n/a	Delay due to public procurement law	n/a	0.4	0.2	-0.2	-45.8%	12	81	n/a	n/a
TWR Modernization project in Krakow, Lodz, Poznan, Rzeszow (land purchase, construction and design)	n/a	Delay in TWR Krakow due to several	n/a	2.5	1.3	-1.2	-47.8%	40	71-95	n/a	n/a
Lodz, Poznan, Rzeszow (equipment purchase)		from investor involved	n/a	0.8		-0.8	-100.0%	15	71-95	n/a	n/a
Enterprise resource planning system	n/a	Initial phases of the investment are cost elements	n/a	2.5	0.0	-2.5	-100.0%	5	89	n/a	n/a
Transmitter and receiver system needed to complete implementation of 8.33 kHz channel separation above FL195	n/a	Potsponed until 2016 due to EC 1079/2012	n/a	1.1	0.0	-1.1	-100.0%	10	75	n/a	n/a
Sub-total main CAPEX (2)				23.4	5.6	-17.8	-75.9%				
Total main CAPEX (1)+(2)				30.4	5.6	-24.8	18.5%				
Other (3)				7.6	0.0	-7.6	-100.0%				
Total CAPEX (1)+(2)+(3)				38.0	5.6	-32.4	-85.2%				

Table 106: 2013 Poland ANSP Investments

2014 & RP1 PLANNING UPDATE

3.21.9 It is noted that planned 2014 CAPEX was updated. PANSA foresees to spend €24.3M less due to €17.8M spent less for "other" CAPEX and €4.6M for Radio location systems. No explanations were provided on these changes.

PANSA – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	25.1	31.9	31.3	38.0	32.5	101.8
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	17.3	13.0	10.9	5.6	8.3	24.8
Deviation U-P	-7.8	-18.9	-20.4	-32.4	-24.3	-77.0
Deviation (%) U/P	-31.0%	-59.4%	-65.1%	-85.2%	-74.5%	-75.6%
MAIN Planned CAPEX (PP RP1)	14.0	18.4	18.8	30.4	14.8	64.0
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	12.8	10.0	10.9	5.6	8.3	24.8
Deviation U-P	-1.1	-8.4	-7.9	-24.8	-6.5	-39.2
Deviation (%) U/P	-8.2%	-45.5%	-42.0%	-81.5%	-43.8%	-61.2%

Table 107: RP1 Poland ANSP CAPEX Update

- 3.21.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Poland ANSP is €77M lower than originally planned. This is due to an important decrease in spending in 2012 and 2013 actual CAPEX. Moreover in 2014 €24.3M spending less is expected.
- 3.21.11 It is noted that for 2010-14 the actual total CAPEX is expected to decrease by 16.8% on average though it was originally planned to increase (+6.7%). Additionally, the actual main CAPEX seems to decrease (i.e. -10.4%).
- 3.21.12 The average deviation actual vs. planned for both total and main CAPEX is foreseen to decrease (i.e. over the period -63% on average for total CAPEX and -44% for main CAPEX). It is assumed that these changes, as mentioned above, are due to public procurement law or other legal issues.

- 3.21.13 There are no links to the ATM Master Plan (ESSIP Objective/OI step/enabler) provided in the 2013 report or the adopted RP1 Performance Plan. However, in the ATM Master Plan reporting process, links to the ATM Master Plan are provided.
- 3.21.14 It seems that there is a consistency with the projects mentioned in the 2013 report and the ATM Master Plan reporting process. The investments projects are grouped in domains but the titles of the specific projects are not harmonized.
- 3.21.15 The schedules and progress reported in the ATM Master Plan reporting process is not consistent with the 2013 report.
- 3.21.16 The Baltic FAB is consistent in reporting in the ATM Master Plan reporting process. However, for the regional projects no links to ATM Master Plan are provided. The 2013 report does not mention any regional projects.

3.22 Portugal (NAV Portugal)

OVERVIEW

- 3.22.1 Portugal has provided all data with detailed explanations, ensuring transparency with regard to the status of the projects, the amounts spent for 2013, the updated planning for 2014 and the expected commissioning dates. The reporting gives a clear and precise picture of the situation.
- 3.22.2 Additional information was provided through the charges reporting scheme with regard to some projects, e.g. the delay for the entry into operation for the "North radar enhancements/ WAM Madeira" to 2015 was "Due to the delay on the contract signature for the new Lisbon ACC ATM system, interim projects have been launched (LISATM 9.1 and 9.2) to accommodate the deadlines of IR and ESSIP objectives."²⁷
- 3.22.3 The impact of changes in investments on lower depreciation costs for 2013 was also explained: *"due to reprogramming of investment projects, dictated by operating circumstances."*²⁸

NAV Portugal	2013 CAPEX (M€2009, real terms)							
NAV Fortugar	Plan	2013 CAPEX (M€2009, real tec Plan Actual A - P 17.3 5.8 -11.5 15.5 5.8 -9.7 89.6% 100.0%	A/P (%)					
TOTAL CAPEX	17.3	5.8	-11.5	-66.7%				
MAIN CAPEX	15.5	5.8	-9.7	-62.8%				
% Main vs. Total	89.6%	100.0%		11.6%				
% Total CAPEX vs. Gate-to-gate ANS costs	14.8%	5.2%*		-65.1%				

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

*Preliminary data (terminal ANS costs not available)

Table 108: 2013 Portugal ANSP CAPEX (Actual vs. Planned)

- 3.22.4 NAV Portugal has spent €11.5M (-66.7%) less than planned in 2013, mainly due to a significant lower spending of the main investments (-€9.7M) and also to a shrinking in budget for "other" CAPEX (-€1.8M).
- 3.22.5 The total actual amount spent for 2013 (€5.7M) was broken down for the en-route (€5.1M) and terminal activities (€600k). As for the en-route actual amount spent for 2013 it was mainly accounted to the "Buildings" (€1.6M), "Lisbon ATM System Development (LISATM L2K)" (€900k), "Communications enhancements"(€800k) and "DME's for PRNAV to TMA's"(€400k). It is noted that no amount was spent for the "iTEC-eFDP" (-€7.6M) as it has been *"postponed to start in 2016 and deployed in 2019/2020"*.
- 3.22.6 The additional explanation provided by NAV Portugal for the shrinking in budget in 2013 is that "the 2013 actual capital expenditure is lower than the planned budget. The major deviation reason is the delay on the contract signature for the new Lisbon ACC ATM system (pending of governmental approval): (a) Yearly small systems enhancements. (b) Due to the delay on the contract signature for the new Lisbon ACC ATM system, interim projects have been launched (LISATM 9.1 and 9.2) to accommodate the deadlines of IR and ESSIP objectives.²²⁹
- 3.22.7 The percentage of total CAPEX into gate-to-gate costs for Portugal ANSP has decreased by -65.1% (i.e. 5.2% actual vs. 14.8% planned). However, this change is preliminary as the terminal ANS costs are not available at this stage.

NAV Portugal Investments for y	/ear 2013			1			-	1			
Reference to European				Amou expendi re	Amount of Capital expenditures (M€2009, real terms)			Lifecycle	Alloc. En	Date of entry into operation	
Name of investment	ATM MP (ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments	CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	(Amortis ation period in years)	route/ terminal ANS (%)	Planned in the PP	Actual
Investments planned for 2013 (Revised PP for RP1)											
		The main project LISATM 9.0 includes APW,		1							
Lisbon ATM System Development (LISATM L2K)	ITY-AGDL	DLINK phase 1 and TWR/APP automatic coordination; FMTP (Developed during 2013 and deployed April 2014).	n/a	1.0	0.9	-0.1	-10.1%	8	100	2012(v8)& 2013(v9)	2012(v8) & 2014- 04 (v9)
TWR ATM	AUO-0301, TS-0102, 0305, IS- 0101, DCB-	TWRATM-Madeira 2.2 deployed in 2013.	n/a	0.4	0.4	0.0	-0.3%	6	75	2013 & 2014	2013 & 2014
SDT ATM	n/a	Yearly enhancement's deployment on the Systems Development and on the Pre On-Job training facilities.	n/a	0.2	0.4	0.1	60.9%	5	100	(a)	(a)
iTEC-eFDP	ATC02.5; 02.6; 02.7; 07.1; ATC12	Postponed to start in 2016 and deployed in 2019/2020.	n/a	7.6	0.0	-7.6	-100.0%	n/a	n/a	2015 & 2017	2019/ 2020
Other	0		n/a	0.0	0.0	0.0	-100.0%	n/a	n/a	n/a	
VGS (Data-link)	ITY-AGDL	see Note 1 below	n/a	0.1	0.1	0.1	56.3%	8	100	2012 (Mad)& 2013 (Lisboa)	2012 & 2013
Tape recorders	n/a	see Note 2 below	n/a	0.5	0.0	-0.5	-100.0%	n/a	n/a	2014	2015
Communications enhancements	n/a	Yearly small enhancements on the Lisbon FIR comunications systems.	n/a	0.1	0.8	0.7	1327.7%	8	100	(a)	(a)
vcs	n/a	The new Porto Airport TWR VCS entry into operations in 2012. The new Lisbon Airport TWR VCS is still planned as originally in the RP1 PP, i.e. to be deployed in 2015.	n/a	0.0	0.0	0.0	-100.0%	0	0	2015 (ALS)& 2012 (ASC)	2015(AL S) & 2012 (ASC)
Upgrade ATIS / Volmet	n/a	see Note 3 below	n/a	0.0	0.1	0.1		8	50	2012 & 2014	2012& 2014
Other	n/a	The CAPEX scope includes the replacement of aging equipment (e.g. multiplexers, a/g frequencies) for entry into service after 2014.	n/a	0.2	0.0	-0.2	-100.0%	n/a	n/a	n/a	n/a
Replacements of VORs, TACAN and DME's	AOM-0601, AOM-0602	The CAPEX was planned in the RP1 PP to be deployed in the RP2 period with minimum expenditures in the RP1 period ca. 96 k€.	n/a	0.1	0.0	-0.1	-100.0%	n/a	n/a	2013(14) &(15)	2013(14) &(15)
DME's for PRNAV to TMA's	NAV03	Faro TMA systems installed in 2013, the procedures are waiting publication on the AIP. The Porto TMA project planned to be started in the RP1 and completed in the RP2, has been re-planned to be started in the RP2.	n/a	0.4	0.4	0.0	-0.2%	6	60	2013	2013
North radar enhancements/ WAM Madeira	ITY-SPY	see Note 4 below	n/a	1.3	0.0	-1.3	-100.0%	n/a	n/a	2014 & 2015	2014 & 2015
Other	n/a	Includes investments on aging ATS installations ancillary systems (HVAC, Energy).	n/a	0.0	0.4	0.4		6	100	n/a	n/a
Buildings	n/a	Includes investments on aging ATS installations (ACC, TWRs & external stations).	n/a	0.7	1.6	0.9	132.7%	10	90	n/a	n/a
Sub-total main CAPEX (1)				12.6	5.1	-7.5	-59.4%				
Other CAPEX (planned in the PP	for 2013) (2)			1.8	0.0	-1.8	-100.0%				
Total CAPEX EN-ROUTE (1)+(2)				14.4	5.1	-9.3	-64.5%				
Total CAPEX Terminal (3)				2.9	0.6	-2.2	-77.7%				
TOTAL GENERAL CAPEX (1)+(2)	+(3)			17.3	5.8	-11.5	-66.7%				

Table 109: 2013 Portugal ANSP Investments

<u>Note 1</u>: "Installation of an air-ground Datalink (VDLM2) communications network in the Lisbon FIR. In 2012 were installed the Madeira and Lisboa stations, and in 2013 the Porto and Faro ones".

<u>Note 2</u>: "The "Voice Recorders" project will deploy the new legal recorders systems in the Lisbon ACC and the Lisbon FIR airports. The public tender to qualify suppliers for equipment becomes void, as result a new procurement will be launched at the beginning of 2014."

<u>Note 3</u>: "The project scope includes the upgrade of aging hardware of the Porto, Lisbon, Faro and Madeira TMAs ATIS, as well the deployment of the new meteorological interfaces with Porto, Lisbon, Faro and Madeira Airports and the separation of the arrivals and departure's messages on the Lisbon ATIS system. The project scope is being deployed in two phases: 2012 & 2014."

<u>Note 4</u>: "The previously individual projects to deploy Multilateration systems in North and Madeira areas have been joined, to exploit synergies, in a single project, now in tendering

phase. The CAPEX is linked with the SW FAB projects ref. "WP 6.4 CNS.4 SURVEILLANCE IP" and "WP 6.7 CNS.7 NEW SURVEILLANCE SENSORS SHARING".

2014 & RP1 PLANNING UPDATE

- 3.22.8 NAV Portugal 2014 planned CAPEX was updated and reduced by €10.7M due to the important reduction in budget for en-route main CAPEX (-€6.5M) and for the terminal (-€3.6M). No amounts are planned to be spent for "other" CAPEX in 2014. However, it is noted that €400K are planned for a new project in 2014 ("LISATM 9.1 and 9.2(b)").
- 3.22.9 Some additional explanations for the reduction in the 2014 budget have been provided, as follows: "The 2014 planning update refers the April situation in line with the RP2 PP date contents. The 2014 updated planned capital expenditure is lower than the planned budget. The major deviation reason is the delay on the contract signature for the new Lisbon ACC ATM system (pending of governmental approval)."³⁰

NAV Portugal – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	16.1	14.3	23.7	17.3	18.2	59.2
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	9.2	3.7	4.1	5.8	7.6	17.5
Deviation U-P	-7.0	-10.6	-19.6	-11.5	-10.7	-41.7
Deviation (%) U/P	-43.2%	-74.4%	-82.6%	-66.7%	-58.2%	-70.3%
MAIN Planned CAPEX (PP RP1)	14.5	13.0	18.0	15.5	17.3	50.8
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	7.8	2.8	2.8	5.8	7.6	16.2
Deviation U-P	-6.7	-10.2	-15.1	-9.7	-9.7	-34.5
Deviation (%) U/P	-46.4%	-78.3%	-84.2%	-62.8%	-56.0%	-68.1%

Table 110: RP1	Portugal ANSP	CAPEX Update
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- 3.22.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Portugal ANSP is -€41.7M (-70.5%) lower than originally planned. This is due to important budget revisions.
- 3.22.11 For the period 2010-14 the actual total CAPEX is expected to fall by -4.6% though it was originally planned to increase (+3.1%). The actual main CAPEX are expected to decrease by -0.6% though the planned trend was opposite (i.e. +4.5%).
- 3.22.12 The deviation actual vs. planned for both total and main CAPEX is foreseen to decrease (i.e. over the period -65.0% on average for total CAPEX and -65.5% for main CAPEX).

- 3.22.13 Portugal has provided a detailed list of projects for 2012, 2013 and 2014. In general the projects are properly described and linked to the European ATM Master Plan. However, there are some items that would require further clarification:
 - The description of the project 'TWR ATM' is inconsistent with the links to OI Steps provided. Portugal should ensure a clear link of this project with the relevant Master Plan Level 3 elements.
 - The project 'Communication Enhancements' which is supposed to cover 'yearly small enhancements' had an initial budget of 0,2M€ for the 2013-2014 period but has an actual expenditure of 0,9M€ in 2013 and 1,6M€ in 2014. This deviation should be explained.

- The project 'LISATM 9.1 and 9.2' introduced in the 2014 section is linked to ITY-COTR, FCM01 and FCM02, while the latter is not a valid Master Plan Level 3 element (probably it was meant FCM03). Also, according to the description provided, it would seem that the project should also be linked to ATC07.1 (AMAN) and AOP05 (CDM).
- 3.22.14 The list of projects in the monitoring report is consistent with other sources of information (i.e. ATM Master Plan reporting process). The schedule and progress of the projects that can be traced to other sources of information (i.e. ATM Master Plan reporting process) are consistent in both reports.
- 3.22.15 No project in the list is described as a shared FAB project, however from information provided in the Portuguese ATM Master Plan reporting process it seems that the iTECeFDP project is part of a larger initiative of which AENA is also part of. Only the project 'North radar enhancements/ WAM Madeira' is referenced to a work package of 'SW FAB projects'.

3.23 Romania (ROMATSA)

OVERVIEW

- 3.23.1 Romania has provided a revised planning for the CAPEX figures for 2013 (i.e. €34.3M new planning vs. €32.8M initial plan through PP for RP1) without providing the rationale behind this change. For the purpose of this exercise the new planning was considered.
- 3.23.2 Romania has provided all quantitative data but the rationale for the changes in the investment budget for several projects was not disclosed.
- 3.23.3 All the details about the future steps/status of the projects for the main investments were included as well as the expected commissioning dates for each project.
- 3.23.4 The planning for CAPEX 2014 was also updated, giving an insight to the foreseen investment policy and planned budget.
- 3.23.5 Similar information was disclosed through the charges reporting scheme.
- 3.23.6 Romania has also updated the information related to the links between the projects and the European ATM Master Plan.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

DOMATSA	2013 CAPEX (M€2009, real terms)							
RUMAISA	2013 CAPEX (M€2009, real Plan Actual A - P 34.3 8.8 -25.5 32.6 4.1 -28.5 95.2% 46.8% - 27.3% 6.0% -	A - P	A/P (%)					
TOTAL CAPEX	34.3	8.8	-25.5	-74.3%				
MAIN CAPEX	32.6	4.1	-28.5	-87.4%				
% Main vs. Total	95.2%	46.8%		-50.9%				
% Total CAPEX vs. Gate-to-Gate ANS costs	27.3%	6.0%		-78.1%				

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- 3.23.7 Having as a reference the new planned value for CAPEX 2013, ROMATSA has spent €25.5M (-74.3%) less than planned in 2013.
- 3.23.8 This is mainly due to significant lower spending for "ATM System ROMATSA 2015+" (-€22M). From the details provided it is understood that the total planned CAPEX for this project was revised downwards and €67.5M are now foreseen to be spent (vs. €78.5M initially planned). Additional lower spending amounts were recorded for "VCSS Replacement" (-€3.8M, no details provided) and "E-management" (-€2.5M) as a result of a revised total budget for this project from €4.1M to €3.4M.
- 3.23.9 The CAPEX carried-over from 2012 (€1.5M) was not entirely spent (-€200k) due to postponements for "Mode S radar installations" and for "A-SMGCS". From the 2012 postponed projects, €1.3M was spent for "Radio-navigation systems improvement".
- 3.23.10 It is noted that Romania ANSP has spent €3M more for "Other" CAPEX, and no information was provided for this additional amount. Therefore, the percentage of actual main into total CAPEX was 46.8% vs. 95.2% planned.
- 3.23.11 The percentage of total CAPEX into gate-to-gate costs for Romania ANSP has decreased by -78.1% (i.e. 6.0% actual vs. 27.3% planned). This is explained by "CAPEX Effect"⁶ (-74.3%) and (+17.4%) "Cost Effect"⁵. However this result is subject to change as Romania's terminal ANS costs are not available at this stage.

ROMATSA Investments for yea	r 2013										
			TOTAL planned CAPEX for the project (RP1)	Amount of Capital expenditures (M€2009, rea terms)		apital E2009, real		Lifecycle	Alloc. En	Date of entry into operation	
Name of investment	Reference to European ATM MP (ESSIP objectives/ OI Steps/ Enablers)	Description/ explanation of the changes/ Other comments		2013 Planne d CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	(Amortisat ion period in years)	t route/ terminal ANS (%)	Planned in the PP	Actual
	÷	Main CAPEX from previous years carried	over to 2	013							
Mode S radars installation	ESSIPITY-SPI'Note: 'Mnimum requirements to comply with the schedule of ITV-SPI objective were completed end 2012 with the installation of the first batch of Mode S sensors. The project continues up to 2016 with the Mode S upgrade of the existing radars.Enabler:CTE-S5	see Note 1 below	3.9	0.0	0.0	0.0		12	85%R- 15%T	2012	2015
A-SMGCS	ESSIP:AOP04.1, AOP04.2	Planned CAPEX for the project increased to 18,8MRON.	3.6	0.0	0.0	0.0		12	85%R- 15%T	2014	2014
Radio-navigation systems improvement	ESSIP: NAV03	see Note 2 below	2.2	1.5	1.3	-0.2	-10.5%	12	85%R- 15%T	2012	2014
Sub-total main capex (1)			9.8	1.5	1.3	-0.2	-10.5%				
		Main CAPEX originally planned for 2013	(PP for RF	P1)							
ATM System ROMATSA 2015+	ESSIP: AOM19 ATC07.1		67.5	24.8	2.8	-22.0	-88.7%	4	85%R- 15%T	2015	2015
Data Link CPDLC	ESSIP: ITY-AGDL	Actual total planned CAPEX for the project Data Link CPDLC = 3,3MRON from which 2,810MRON in 2014 and 0,446MRON in 2015	0.2	0.1	0.0	-0.1	-100.0%	12	100%R	2014	2015
VCSS Replacement	ESSIP: COM11		6.1	3.8	0.0	-3.8	-100.0%	12	100%R	2013	2014
E-management	n/a	Actual planned CAPEX for the project = 14,5MRON	3.4	2.5	0.0	-2.5	-100.0%	4	85%R- 15%T	2012	2014
Sub-total main capex (2)			77.3	31.2	2.8	-28.4	-91.0%				
Total main CAPEX (1)+(2)			87.1	32.6	4.1	-28.5	-87.4%				
Other (3) (M€2009, real terms)			0.0	1.6	4.7	3.0	185.0%				
Total capex (1)+(2)+(3)			87.1	34.3	8.8	-25.5	-74.3%				

Table 112: 2013 Romania ANSP Investments

<u>Note 1</u>: "The project has been split in two parts: first part which included Arad and Constanta locations has been completed in 2012; CAPEX in 2012 and previous years = 11,8 MRON; second part which includes Otopeni, Cluj and Bacau locations will be completed in 2015 - CAPEX in 2014 = 8,8MRON and 2015 = 22,9MRON."

<u>Note 2</u>: "The project has been split in three parts: STEP I - Total planned CAPEX for the project 174,3MRON; STEP II - Total planned CAPEX for the project 66,9MRON - Date of entry into operation 2018 (included in RP2 PP);STEP III - Total planned CAPEX for the project 44,6MRON - Date of entry into operation 2021 (included in RP2 PP). Actual total planned CAPEX for the project "ATM System ROMATSA 2015+" = 285,8MRON."

2014 & RP1 PLANNING UPDATE

3.23.12 The 2014 planned CAPEX was updated and an additional €12.2M is expected to be spent mainly due to a surplus in "other" CAPEX (+€18.9M). On the other hand €6.7M is foreseen to be spent less for "ATM System ROMATSA 2015 and for "Project ATCC". No additional comments were provided for these changes

ROMATSA – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	21.9	28.3	24.1	34.3	28.6	87.0
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	9.6	15.0	9.0	8.8	40.8	58.6
Deviation U-P	-12.3	-13.3	-15.1	-25.5	12.2	-28.4
Deviation (%) U/P	-56.1%	-47.0%	-62.8%	-74.3%	42.6%	-32.7%
MAIN Planned CAPEX (PP RP1)	20.4	26.8	21.4	32.6	25.8	79.8
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	5.4	14.1	2.4	4.1	19.2	25.8
Deviation U-P	-15.0	-12.7	-18.9	-28.5	-6.7	-54.1
Deviation (%) U/P	-73.5%	-47.3%	-88.5%	-87.4%	-25.8%	-67.7%

Table 113: RP	1 Romania	ANSP	CAPEX	Update
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- 3.23.13 After assessing 2013 results and the 2014 updated planning, the RP1 planned CAPEX for Romania is €28.4M lower than originally planned, due to the revisions for 2012 and 2013 budgets.
- 3.23.14 It is noted that for the period 2010-14, the actual total CAPEX is expected to increase by 43.5% though it was originally planned to increase by +6.9% only. However the average deviations of actual vs. planned total CAPEX for this timeframe is foreseen to be -39.3% over the period.
- 3.23.15 The trend foreseen for the actual main CAPEX for 2010-14 is also higher than the planning (i.e. +37.2% actual versus +6.1% planned), whilst the average deviation (actual vs. plan) for the period is expected to be -64.4%. This is explained by "CAPEX Effect"⁶ (-22.2%) and (-1.4%) "Cost Effect"⁵.

- 3.23.16 There is no detailed description of the projects/investments, just the title. In some cases the title gives a good hint of the project but in other cases is difficult to understand the scope of the project and therefore difficult to check the correctness of the referenced links to ESSIP objectives. A small description of the project, its scope and objectives is needed and would certainly contribute to improve the quality of the information provided.
- 3.23.17 In total there are 6 projects/investments proposed and they seem to be correctly linked to the ESSIP objectives.
- 3.23.18 The project/investment ATM System ROMATSA 2015 is linked to 8 ESSIP objectives, this seems to be correct but as mentioned above it depends on the scope of this project. Without a description is difficult to check.
- 3.23.19 For 2 projects/investments (Data Link CPDLC and VCSS replacement) there is no reference to any ESSIP objective, but they are provided through the ATM Master Plan reporting process.
- 3.23.20 "Data Link CPDLC" project should be linked to ITY AGDL.
- 3.23.21 "VCSS Replacement" project should be liked to COM 11.
- 3.23.22 All the projects/ investments except one (Radio Navigation Systems improvement) are mentioned in the ATM Master Plan reporting process. The dates are also aligned in both tables, except for the project "Mode S radars installation" that in the ATM Master Plan reporting process is planned for 2016 and in the investment table report is mentioned 2015 as date of entry into operation.
- 3.23.23 The dates indicated in the ATM Master Plan reporting process (ESSIP Objectives Implementation) are in accordance with the reported investment dates (actual), except for the following projects:
 - "VCSS Replacement". As mentioned above it should be linked to COM 11. In this case the date should be changed from 2013 to 2020 (date reported in the ATM Master Plan reporting process).
 - Radio Navigation systems improvement linked to NAV 03 that was completed in 2010 (the ATM Master Plan reporting process). The table indicates 2014 and should be changed.

3.24 Slovakia (LPS)

OVERVIEW

- 3.24.1 The Slovakia has provided quantitative data with detailed explanations, ensuring transparency as regards the status, spent amounts for 2013 and expected commissioning dates for each project. The reporting gives a clear and precise picture of the situation.
- 3.24.2 The planning for CAPEX 2014 was not updated.
- 3.24.3 Similar information was provided through the charges reporting scheme.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

	2013 CAPEX (M€2009, real terms)						
LF3 SK	Plan	Plan Actual		A/P (%)			
TOTAL CAPEX	8.0	6.2	-1.8	-22.2%			
MAIN CAPEX	5.1	2.2	-2.9	-56.7%			
% Main vs. Total	64.1%	35.7%		-44.3%			
% Total CAPEX vs. Gate-to-Gate ANS costs	14.9%	11.7%		-21.1%			

Table 114: 2013 Slovakia ANSP CAPEX (Actual vs. Planned)

- 3.24.4 LPS SR has spent €1.8M (-22.2%) less than planned mainly due to significant lower spending for main investments (-€2.9M) whilst a surplus in the budget for "other" CAPEX (+€1.1M) was recorded. Consequently, the actual percentage of main into total investments in 2013 is -44.3% lower than planned (i.e. 35.7% actual vs. 64.1% planned).
- 3.24.5 The amount carried-over from 2012 for the "Construction work in Mosnik" was still not spent in 2013 (-€1.4M) but a slight higher spending planned for 2013 was recorded for the same project (+400k). The details provided for this change was that the start of the construction was postponed to 2014 "due to problems with design works which are necessary to issue of the building permit".
- 3.24.6 Another important project for 2013 (€700k) was "MSSR Mosnik", the technology of radar antenna for the investment above mentioned, planned to be commissioned in 2015.
- 3.24.7 Two new projects were added in 2013 for a total amount of €500K (i.e. €300K for "Voice Communication Switch upgrade", and €200k for "HW and SW for AIM Service").
- 3.24.8 The percentage of total CAPEX into gate-to-gate costs for Slovak ANSP has decreased by -21.1% (i.e. 11.7% actual vs. 14.9% planned). This is explained by a "CAPEX Effect"⁶ -22.2% and "Cost Effect"⁵ -1.4% in 2013.

PS SR Investments for year 2013											
	Reference to European ATM MP	۰ ۲		Amo expendit	ount of Ca ures (M€2 terms)	pital 009, real		Lifecycle (Amortis	Alloc. En-	Date of e opera	ntry into ation
Name of investment	investment (ESSIP objectives/ OI Steps/ Enablers)		CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	Dev A/P (%)	ation period in years)	route/ terminal ANS (%)	Planned in the PP	Actual
		Main CAPEX from previous years carried	over to 20	13		•					
Construction Works Mosnik	n/a	see below	n/a	1.4	0.0	-1.4	-100.0%	n/a	100%R	2013	0
Sub-total main capex (1)			0.0	1.4	0.0	-1.4	-100.0%				
	1	Investments planned for 2013 (Revised I	PP for RP1)		1					
Construction Works Mosnik	n/a	In 2013 has been signed the contract for realization of high voltage connection. Date of entry into operation is 07/2014. The construction works on access road has been finished in 2013. Date of entry into the operation is 2014. The start of construction works on main building has been postponed to 2014, due to problems with desing works which are necessary to issue of the building permit. The building permit has been issued and validated in the end the end of 2013. Due to winter season the start of construction works start at 2014. Date of entry into the operation is 2015.	n/a	0.4	0.8	0.4	115.1%	n/a	100%R	2013	n/a
MSSR Mosnik	n/a	This investment represents the technology of radar	n/a	1.5	0.7	-0.8	-53.6%	n/a	100%R	2013	2015
Upgrade communication systems	n/a	n/a	n/a	0.2	0.0	-0.2	-100.0%	n/a	96%R- 4%T	2013	Dec-12
Upgrade E2000 System	n/a	n/a	n/a	1.6	0.2	-1.4	-85.9%	n/a	96%R- 4%T	2012	Nov-12
Sub-total main capex (2)			0.0	3.7	1.7	-1.9	-52.4%				
	1	New main projects in 2013 (not included in the rev	ised PP, if	applicable)		1					
Voice Communication Switch (upgrade)	n/a	Upgrade of the Voice Communication Systems (VCS) for the regional airports and VCS for new administrative and	0.0	0.0	0.3	0.3	-100.0%	0	0	2013	Dec-13
ATCO Consoles	n/a	n/a	0.0	0.1	0.0	-0.1	-100.0%	0	100%R	2013	Dec-12
HW and SW for AIM Service	n/a	The requests for realization of this investment in 2013 was revised due to actual needs. From this reason the costs in 2013 are significantly lower than was originally planned.	0.0	0.4	0.2	-0.3	-61.5%	0	100%R	2013	Dec-13
SW tool for safety management	n/a	The request for realization of this investment was canceled, while there was accepted decision about more cost effective solution. This mean development of new software by own capacities of LPS SR & p	0.0	0.1	0.0	-0.1	-100.0%	0	96%R- 4%T	2013	n/a
Sub-total main capex (3)			0.0	0.6	0.5	-0.2	-26.1%				
Total main CAPEX (1)+(2)+(3)			0.0	5.1	2.2	-2.9	-56.7%				
Other (4) (planned in the PP for 2013)			0.0	2.9	4.0	1.1	39.4%				
Total capex (1)+(2)+(3)+(4)			0.0	8.0	6.2	-1.8	-22.2%				

Table 115:	2013	Slovakia	ANSP	Investments
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3.24.9 The 2014 planned CAPEX was not updated.

LPS SR – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	7.4	10.1	37.2	8.0	6.2	51.4
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	5.6	5.8	31.0	6.2	6.2	43.4
Deviation U-P	-1.8	-4.3	-6.2	-1.8	0.0	-8.0
Deviation (%) U/P	-24.0%	-42.3%	-16.6%	-22.2%	0.0%	-15.5%
MAIN Planned CAPEX (PP RP1)	6.0	7.5	31.9	5.1	2.7	39.7
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	4.9	5.0	30.0	2.2	2.7	34.9
Deviation U-P	-1.1	-2.5	-1.9	-2.9	0.0	-4.8
Deviation (%) U/P	-18.0%	-34.0%	-6.0%	-56.7%	0.0%	-12.1%

Table 116: RP1	Slovakia ANSP	CAPEX Update
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3.24.10 After assessing 2013 results, the RP1 updated planned CAPEX for LPS SR is €8M lower than originally planned. This is due to important budget revisions mainly for 2012 (-€6.2M).

- 3.24.11 For the period 2010-14, the actual total CAPEX is expected to be 2.5% higher on average though it was originally planned to decrease by -4.3%. However the deviation for this period (actual vs. plan) leads in the end to an average of -21%.
- 3.24.12 The trend foreseen for the actual main CAPEX is in accordance with the planning (i.e. -14.3% actual versus -18.5%). However the deviation for this period (actual vs. plan) leads in the end to an average of -22.9%.

- 3.24.13 The main investment projects from the 2013 report and the NPP do not include any direct links to ATM Master Plan. However, on the basis of the description of investments in 3.4.1.4 of the revised performance plan and the ATM Master Plan reporting process the correlation between the investment projects and the ATM Master Plan can be established.
- 3.24.14 Three projects included in the ATM Master Plan reporting process are covered also by the 2013 report, i.e. MSSR Mosnik linked to ITY-SPI Objective in the ATM Master Plan reporting process, Upgrade E2000 system linked to ESSIP Objectives in ATM Master Plan reporting process (lack of specific enumeration of applicable objectives but from the description in the Revised NPP it can be assumed that at least the objectives ITY-SPI for Mode S and ADS-B implementation as well as ITY-AGDL for A/G Datalink should be covered) and HW and SW for AIM Service linked to ITY-ADQ Objective. The project on the upgrade of communication system is not linked to any ESSIP Objective in the State Monitoring Report 2013 but the description of the Revised NPP allows connecting it to COM11 on VoIP adaptation and COM09 on IPv6 protocol. Moreover, the ATM Master Plan reporting process also mentions the project linked to ITY-AGVCS2 which will start in 2014 but no information regarding 2014 investment projects was delivered by Slovakia. No information was provided in the NPP and the 2013 report with regards to the ITY-COTR Objective which in accordance with ATM Master Plan reporting process is reported to be late and implemented in 2016 which might have negative network impact. ITY-AGDL Objective is also reported by Slovakia as Late in ATM Master Plan reporting process with the implementation date of 2016 which may have impact on the implementation of investment Upgrade E2000 system.
- 3.24.15 MSSR Mosnik and Upgrade E2000 system are planned to enter into operation in 2013 and 2012 in accordance with the 2013 report, however the ATM Master Plan reporting process provides for further dates of implementation, namely 2014 and 2015. Therefore it is expected that those investment projects might be delayed in time and even postponed to RP2.

3.25 Slovenia (Slovenia Control)

OVERVIEW

- 3.25.1 Slovenia has provided quantitative data but no explanations in reference to the status, spent amounts for 2013 and expected commissioning dates for each project. The planning for CAPEX 2014 was also updated, giving an insight to the foreseen investment policy and planned budget.
- 3.25.2 Minimal additional information was disclosed through the charges reporting scheme: "The major investment in last few years is new ATC Center at Ljubljana Jože Pučnik Airport. The investment was planned to be concluded in 2012. Investment was postponed; ATCC became operational in March 2013. This results also in lower actual depreciation in 2012."³¹

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Slovenia Control	2013 CAPEX (M€2009, real terms)						
Siovenia Control	Plan	Actual	A - P	A/P (%)			
TOTAL CAPEX	3.8	2.1	-1.6	-43.4%			
MAIN CAPEX	2.9	2.1	-0.7	-26.0%			
% Main vs. Total	76.4%	100.0%		30.9%			
% Total CAPEX vs. Gate-to-Gate ANS costs	13.0%	7.3%		-43.4%			

Table 117: 2013 Slovenia ANSP CAPEX (Actual vs. Planned)

- 3.25.3 Slovenia Control has spent €1.6M (-43.4%) less than planned in 2013 mainly due to significant lower spending for "other" investments (-€900k) and also for the main CAPEX (-€700k). As a consequence of not spending any CAPEX for "other" projects, the actual percentage of main into total investments in 2013 is 100% (vs. 76.4% planned).
- 3.25.4 The carried-over CAPEX from 2012 (€1.3M, planned) was exceeded by €400k due to additional €800k spent for the "New ATCC technical systems" and +€100k for "New ATCC general equipment". On the other hand, €500k was not spent in 2013 for "New ATCC building".
- 3.25.5 Slovenia Control has not provided any comments on its changes in investment policy.
- 3.25.6 "Other equipment" was added in 2013 for a total amount of €300k, without providing any details for this additional investment.
- 3.25.7 The percentage of total CAPEX into gate-to-gate costs for Slovenia has decreased by 43.4% (i.e. 7.3% actual vs. 13.0% planned). This is explained by a "CAPEX Effect"⁶ (- 43.4%) and "Cost Effect"⁵ (-0.1%).

Slovenia Control Investments for year 2013											
	Reference to European	Descriptio n/	TOTAL	Amo expenditu	unt of Cap ires (M€20	ital 09, real		Lifecycle (Amortis ation period in years)	Alloc. En-	Date of entry into operation	
Name of investment	(ESSIP objectives/ OI Steps/ Enablers)	n of the changes/ Other comments	CAPEX for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A- P	Dev A/P (%)		route/ terminal ANS (%)	Planned in the PP	Actual
		Main CAP	EX from prev	vious years	carried o	ver to 20)13				
NEW ATCC building	COM-09, COM10, ITY-	n/a	14.4	0.8	0.3	-0.5	-57.2%	33	100%R	2013	n/a
New ATCC general equipment	0.0	n/a	0.9	0.0	0.1	0.1		10	100%R	2013	n/a
New ATCC technical systems	0.0	n/a	7.5	0.5	1.3	0.8	172.0%	7	100%R	2013	n/a
Sub-total main capex (1)			22.8	1.3	1.7	0.4	30.5%				
		Investm	ents planned	for 2013 (I	Revised PF	ofor RP1)				
FDPS Upgrade	L01_04, L02_04, L02_09,	n/a	0.6	0.1	0.2	0.1	97.1%	7	100%R	2017	n/a
Multilateration / ADS-B	L08_05, L09_01	n/a	3.2	0.7	0.0	-0.7	-100.0%	10	95%R- 5%T	2014/17	n/a
New VHF Station	n/a	n/a	2.4	0.7	0.0	-0.7	-100.0%	10	90%R- 10%T	2013	n/a
Sub-total main capex (2)			6.2	1.6	0.2	-1.4	-88.4%				
	New m	nain projects	in 2013 (not	included i	n the revis	ed PP, if	applicabl	e)		-	
Other equipment		n/a	0.0		0.3	0.3					n/a
Sub-total main capex (3)			0.0		0.3	0.3					
Total main CAPEX (1)+(2)+(3)			6.2	2.9	2.1	-0.7	-26.0%				
Other (4) (planned in the PP for	0.0		0.0	0.9	0.0	-0.9	-100.0%				
Total capex (1)+(2)+(3)+(4)			6.2	3.8	2.1	-1.6	-43.4%				

Table 118:	2013	Slovenia	ANSP	Investments
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3.25.8 It is noted that the planned 2014 CAPEX was updated and decreased by €400K mainly due to the absence of "other" CAPEX (-€300k). It is foreseen that an additional €1.1M will be spent for the "Project ATCC" carried-over from 2013. This surplus will be balanced by the savings forecasted to be achieved for "Data link /CPDLC" (€-400k) and for "Multilateration / ADS-B" (-€700k).

Slovenia Control – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	6.0	16.6	5.5	3.8	1.6	10.9
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	7.0	10.9	10.8	2.1	1.3	14.2
Deviation U-P	1.0	-5.7	5.3	-1.6	-0.3	3.3
Deviation (%) U/P	16.6%	-34.5%	96.7%	-43.4%	-20.7%	30.7%
MAIN Planned CAPEX (PP RP1)	1.4	8.8	5.0	2.9	1.3	9.2
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	1.4	5.9	8.0	2.1	1.3	11.4
Deviation U-P	0.0	-2.9	3.0	-0.7	0.0	2.2
Deviation (%) U/P	0.0%	-32.7%	60.8%	-26.0%	-2.1%	24.5%

Table 119: RP1 Slovenia ANSP CAPEX Update

- 3.25.9 After assessing 2013 results and the 2014 updated planning, the RP1 planned CAPEX is €3.3M higher than originally planned. This is due to the important surplus in the 2012 budget (+€5.3M).
- 3.25.10 For the period 2010-14 the actual total CAPEX is expected to be 34.2% lower, though it was originally planned to be 27.6% lower only. The average deviation (actual vs. planned) for 2010-14 is forecasted to increase by +3.0%.
- 3.25.11 The trend forecasted for the actual main CAPEX is close to the planning (i.e. -1.0% actual versus -0.5% planned).

- 3.25.12 There are no direct links to the ATM Master Plan (ESSIP Objective/OI step/enabler) provided in the 2013 report, however the links exist through a specific coding used by Slovenia and can be traced back in the revised performance plan. The links provided in the revised PP are in form of OI steps.
- 3.25.13 For the following investments the following ESSIP Objectives should be mentioned:
 - Datalink/CPDLC ESSIP Objective ITY-AGDL
 - FDPS upgrades ESSIP Objectives AOM20, ATC17 and ITY-COTR
 - Multilateration/ADS-B ESSIP Objective AOM20
 - Implementation PRNAV/DME ESSIP Objective NAV03
 - Changing location of RDR ESSIP Objective AOM20
- 3.25.14 It is not always clear from the overall description of the investments that the links to the ATM Master Plan have been applied correctly. Only 2 investments of the 2013 report, i.e. NEW ATCC (building, general equipment and technical systems) and Datalink (CDPCL) are mentioned in the ATM Master Plan reporting process. In addition, the investment "Implementation PRNAV/DME" as mentioned in the revised National Performance Plan Period 2012-2014 has not been included in the 2013 report.
- 3.25.15 The schedules and progress reported in the ATM Master Plan reporting process is not always consistent with the 2013 report. For example, the investment "New ATCC technical systems" reported in the 2013 report has a planned date of entry in operation of 2013 while in the ATM Master Plan reporting process another dates, i.e. 2014 for COM09, 10 and ITY-FMTP; 2015 for ITY-COTR, have been reported.

3.26 Spain (AENA)

OVERVIEW

- 3.26.1 Spain has provided all data with detailed explanations, ensuring transparency with regard to the status, spent amounts for 2013, updated planning for 2014 and expected commissioning dates for each project. The reporting gives a clear and precise picture of the situation.
- 3.26.2 Additional information was provided through the charges reporting scheme regarding investment: "In the year 2013, AENA-Air Navigation has carried out important efforts to achieve cost containment and efficiencies that have affected its investments as well. In this sense, the 2013 investment forecast data reported in the Spanish NPP amounted to 162M€, afterwards this quantity was reduced in the 2013 Air Navigation Annual Plan to 88,1M€, and finally the certified investment has been 52M€^{*32} (see details in section 2).
- 3.26.3 The impact of lower investments into depreciation costs for 2013 was also explained: *"Reduction of costs due to rationalization on Investments Plans, prioritizing actions such as constant improvement on safety, legal or regulatory requirements, obsolescence or improvement measures."*³³

AENA Spain	2013 CAPEX (M€2009, real terms)							
AENA Spain	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	81.8	47.6	-34.1	-41.7%				
MAIN CAPEX	14.7	5.5	-9.2	-62.7%				
% Main vs. Total	17.9%	11.5%		-36.1%				
% Total CAPEX vs. Gate-to-gate ANS costs	8.7%	5.5%*		-36.3%				

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

*Preliminary data (terminal ANS costs available only for 12 airports)

Table 120: 2013 Spain ANSP CAPEX (Actual vs. Planned)

3.26.4 AENA has provided an updated 2013 CAPEX planned amount (i.e. €81.8M) as the initial planned amount (i.e. €162M) was corrected due to the *"Air Navigation Annual Plan 2012"*.

AENA Spain Investments for year	2013										
	Reference to European ATM MP	Description/ explanation of the	TOTAL planned	Amo expendit	unt of Ca ures (M€2 terms)	pital 009, real		Lifecy cle (Amor tisatio	Alloc. En-	Date of entry into operation	
Name of investment	(ESSIP objectives/ OI Steps/ Enablers)	changes/ Other comments	for the project (RP1)	2013 Planned CAPEX	2013 Actual CAPEX	Dev A-P	(%)	n perio d in years)	route/ terminal ANS (%)	Planned in the PP	Actual
ITEC	AO-0503, 0504,	This investment has been re-planned to accomplish with the European regulation in terms of investment prioritization.	7.1	2.4	0.5	-1.9	-78.4%	12	n/a	2015	End RP2
Evol of CWP	n/a	This project is related to iTEC. The investment has been postponed to 2016 (together with the investments planned for 2014 and 2015)	4.0	2.3	0.6	-1.7	-72.1%	12	n/a	2015	Replanned to start in 2017 in link with iTEC
Air navigation aids	AO-0503, 0504, NAV06	Part of this investment has been postponed to 2014.	6.0	2.2	1.3	-0.9	-41.3%		n/a	2015	2015
VolP	COMd3	Re-adjustment of budget for RP1 and prioritisation of short-term investments.	15.2	4.6	1.2	-3.4	-73.4%	12	n/a	2015	2020
Evolution of REDAN	COM09, 10	As a consequence of an internal project evaluation during 2013, the investment has been postponed to 2014 onwards.	6.1	0.3	0.0	-0.3	-100.0%	12	n/a	2015	2017
Evolution of en-route and TMA SUR system	SUR02, 04, 05, SURd1	Re-adjustment of budget for RP1 and prioritization of short-term investments. Part of Mode-S deployment has been postponed to 2014.	10.4	2.9	1.8	-1.1	-37.9%	12	n/a	2014	Progressive implementa tion
Sub-total main capex (1)			48.8	14.7	5.5	-9.2	-62.7%				
Other CAPEX (planned in PP for 201	3) (2)	Several investments included in this group are necessary to achieve the projects identified as Main projects, but have not been included directly as a part of the investment of these projects.	218.1	67.1	42.2	-24.9	-37.1%				
Total general CAPEX (1) + (2)			266.9	81.8	47.6	-34.1	-41.7%				

Table 121: 2013 Spain ANSP Investments

- 3.26.5 For the assessment of the actual CAPEX in 2013 the updated planned value is considered.
- 3.26.6 AENA has spent €34.1M (-41.7%) less than planned in 2013 mainly due to a significant lower spending for the "other" investments (-€24.9M) and also to a shrinking in budget for main CAPEX (-€9.2M).
- 3.26.7 The actual amount spent for 2013 main CAPEX (€5.5M) was for:
 - 1. "Evolution of en-route and TMA SUR system" (€1.8M). However, due to the "readjustment of budget for RP1 and prioritization of short-term investments", €1.1M has been spent less for this project and a delay for the entry into operation is expected ("part of Mode-S deployment has been postponed to 2014");
 - VoIP (€1.2): It is again mentioned that the budget has been adjusted provided that the entry into operation is still aligned to the ESSIP objective COM11 (2020). The budget spent below plan for this project in 2013 is assumed to be spent in the following years as needed;
 - 3. "Air navigation aids" (€1.3M). AENA has mentioned that "*part of this investment has been postponed to 2014*".
- 3.26.8 The percentage of total CAPEX into gate-to-gate costs for Spain ANSP has decreased by 36.3% (i.e. 5.5% actual vs. 8.7% planned). However, this change is preliminary as the terminal ANS costs are not available at this stage. However CAPEX has decreased in 2013 by 41.7%.

3.26.9 AENA has not provided any planned 2014 CAPEX through the Spain RP1 PP. For this reporting AENA has provided as total planned CAPEX the amount of €148.2M, of which €79.3M is reported as "Subtraction of the value included in Air Navigation Annual Plan 2012". Therefore, the real updated planned CAPEX for is €68.9M.

An important amount planned for "other" projects is explained as "several investments included in this group are necessary to achieve the projects identified as Main projects, but have not been included directly as a part of the investment of these projects."

AENA Spain – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	142.4	150.3	143.6	81.8	148.2	373.6
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	156.2	126.9	77.2	47.6	68.9	193.7
Deviation U-P	13.9	-23.4	-66.4	-34.1	-79.3	-179.9
Deviation (%) U/P	9.7%	-15.6%	-46.3%	-41.7%	-53.5%	-48.1%
MAIN Planned CAPEX (PP RP1)	97.3	105.6	16.1	14.7	0	30.8
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	97.2	89.1	11.4	5.5	22.1	38.9
Deviation U-P	-0.2	-16.6	-4.7	-9.2	0.0	+8.1
Deviation (%) U/P	-0.2%	-15.7%	-29.4%	-62.7%	0.0%	-26.5%

Table 122: RP1 Spain ANSP CAPEX Update

- 3.26.10 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Spain ANSP is €179.9M (48.1%) lower than originally planned. This is due to important budget revisions for 2012 and 2013.
- 3.26.11 On the other hand it is noted that for 2010-14 the actual total CAPEX is expected to be -18.5% lower on average, though it was originally planned to slightly increase (+1%). The actual main CAPEX are expected to decrease by 31%.
- 3.26.12 However, the average deviation actual vs. planned for total CAPEX is foreseen to be negative (i.e. over the period 2010-14: -29.5% on average).

- 3.26.13 The investments listed in the 2013 report are linked to the European ATM Master Plan; the links seem correct and justified. However, around 80% of the total CAPEX is allocated to the entry 'Other CAPEX' which is described as being 'necessary to achieve the projects identified as main projects' but for which no further detail is provided. Also, for the 2014 planned CAPEX a new entry has been added named 'Additional SES projects' which is linked to a number of Master Plan Level 3 elements of which only one is related to SES Regulations (ITY-COTR) and which would seem better described as 'Additional SESAR projects'; however, no further description is provided for this new entry.
- 3.26.14 The list of projects in the 2013 report is consistent with other sources of information (i.e. ATM Master Plan reporting process) albeit with a different level of granularity which makes it difficult to fully assess the comprehensiveness and consistency of the list provided.
- 3.26.15 The schedule and progress of the projects that can be traced to other sources of information (i.e. ATM Master Plan reporting process) are consistent in both reports.
- 3.26.16 No project in the 2013 report is described as a shared FAB project.

3.27 Sweden (LFV)

OVERVIEW

- 3.27.1 Sweden has provided all quantitative data with detailed explanations for the status of the projects. Additional qualitative information from the Business Plan was also provided as regards the difficulties encountered due to legal aspects or resource prioritisations (e.g. for Data-link).
- 3.27.2 In addition, some information was provided for explaining the reductions in budget for "other" investments: "There are several reasons for that, the main one being we have had to review the plan due to new circumstances and need for cost savings compared to when the Performance Plan was decided."
- 3.27.3 Additional information was provided in the terminal Charges reporting in respect to the 2013 actual investments: *"some investments have been replaced with operating costs for services, like IT-systems*", and therefore depreciation is lower than forecasted but "other operating costs" is higher than planned.³⁴

LFV Sweden	2013 CAPEX (M€2009, real terms)							
	Plan	Actual	A - P	A/P (%)				
TOTAL CAPEX	12.5	8.0	-4.5	-36.1%				
MAIN CAPEX	5.7	4.2	-1.5	-26.6%				
% Main vs. Total	45.5%	52.3%		14.8%				
% Total CAPEX vs. Gate-to-gate ANS costs	7.1%	4.8%		-32.9%				

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Table 123: 2013 Sweden ANSP	CAPEX (Ad	ctual vs. Planned)
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- 3.27.4 LFV has spent €4.5M (-36.1%) less than planned in 2013, of which -€1.1M is due to strategy changes for COOPANS (i.e. one new member and "*a better picture of the activities/steps needed*").
- 3.27.5 An important decrease in spending is noted for "Surveillance upgrade program (SUPS)-WAM" (-€600k or -35.6%) and in "other" CAPEX (-€3M or -44%).
- 3.27.6 Important qualitative details have been provided in regard to the investment budget: "The actual investments in 2013 were below the RP1 plan, 88 million instead of 145 million in the Performance Plan (140 million in the Business Plan). One important reason for that that LFV has been restrictive in starting new investments and have looked deep into different alternatives due to the limitation in resources which is a consequence of saving costs. A few of the other investments have been delayed, the main ones are Legal Recordings, a difference of 10 million from planned and the Datalink and ADQ investments, with a total of approx. 6 million less than planned. Data-link much due to resource prioritized for the completion of LFV-ATN investment but also the problem to get access to the two only suppliers of this service, SITA and AIRINC. As this is an IR, these two companies have to cater for all deployment in whole European Union which has led to an over allocation of their resources. ADQ has suffered from unclear advice on how to implement the service and to interpret the requirements, other delaying factor is also the lack of own resources."
- 3.27.7 Due to a restrictive budget for "other" investments, the actual percentage of main into total CAPEX is higher than planned (i.e. 52% in comparison to 45%).
- 3.27.8 The percentage of Total CAPEX into gate-to-gate costs for LFV has decreased by -32.9% (i.e. 4.8% actual vs. 7.1% planned). This is explained by "CAPEX Effect"⁶ (-35.6%) and (-4.7%) "Cost Effect"⁵.

3.27.9 Details for each project are provided in the table below.

LFV Sweden in	vestments fo	r year 2013									
	Referenc e to		TOTA L	Amou exp (M€200	nt of C enditu 9, real	apital res terms)			Allee	Date o into o	of entry peration
Name of investment	n ATM Descri MP of the objective s/ Ol Steps/ Enablers)	Description/ explanation of the changes/ Other comments	planne d CAPE X for the projec t (RP1)	2013 Plann ed CAP EX	20 13 Ac tu al C AP EX	Dev A-P	Dev A/P (%)	Lifecycle (Amortisati on period in years)	en- route/ termin al ANS (%)	Plan ned in the PP	Actua I
		Investmer	nts planned	d for 2013	(Revis	ed PP for	RP1)		-	-	
Cooperation between ANS Providers (COOPANS)	n/a	The difference for COOPANS is mainly a result of one more member in COOPANS as well as that we now have a better picture of the activities/steps needed. The COOPANS members have made hard prioritizations of their system needs to keep investments low.	27.1	3.4	2.4	-1.1	- 31.5%	12 years	100 % en- route	n/a	2013 contin ously
Surveillance upgrade programme (SUPS)-WAM	n/a	The SUPS –WAM project suffers from delay. First one year of delay due to appeal of the procurement and now additional delay due to the LFV ATN project which should provide the WAN infrastructure for the SUPS project (also delayed due to appeal of the procurement). This has brought forward that all Com experts has to be prioritized for working in the LFV ATN project and the SUPS has to wait for resources and infrastructure to be in place.	6.2	1.5	1.0	-0.6	35.6%	15 years	100 % en- route	n/a	2013 contin ously
Remote Operated Towers (RTC)	n/a	RTC is slightly higher than planned, expected to be in full operation late 2014.	4.3	0.7	0.8	0.1	18.5%	10 years	75 % en- route/ 25 % termin al	2013	during 2014
Sub-total main CAPEX(1)			37.7	5.7	4.2	-1.5	- 26.6%				
Other CAPEX (planned in the PP for 2013) (2)			0.0	6.8	3.8	-3.0	- 44.0%				
Total capex (1)+(2)			37.7	12.5	8.0	-4.5	- 36.1%				

Table 124: 2013	Sweden ANSP	Investments
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2014 & RP1 PLANNING UPDATE

- 3.27.10 It is noted that for 2014 the planned CAPEX was updated and €1.4M are expected not to be spent though two new projects are now included in the list for the year (i.e. "Surveillance upgrade programme (SUPS)-WAM" and "Remote Operated Towers (RTC)"). However it is noted that for COOPANS the LFV main CAPEX in 2014 is expected to be lower than originally planned (i.e. €2.4M vs. €3.4M).
- 3.27.11 LFV explains this change in strategy as follows: "The business plan for 2014 also shows lower figures as we have had to review the plan due to new circumstances and need for cost savings. The latest forecasts from the System & Development department however indicate that actual expenditures during 2014 may be higher than plan due to increased costs in several major projects."

LFV Sweden – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	19.4	12.5	11.9	12.5	12.0	36.4
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	12.9	8.1	9.1	8.0	10.8	27.9
Deviation U-P	-6.5	-4.4	-2.8	-4.5	-1.2	-8.5
Deviation (%) U/P	-33.3%	-35.1%	-23.6%	-36.1%	-9.8%	-23.3%
MAIN Planned CAPEX (PP RP1)	19.2	12.5	5.6	5.7	3.4	14.7
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	12.9	8.1	6.3	4.2	4.2	14.6
Deviation U-P	-6.3	-4.4	0.7	-1.5	0.8	0.0
Deviation (%) U/P	-32.7%	-35.1%	12.0%	-26.6%	23.7%	-0.3%

Table 125: RP1 Sweden ANSP CAPEX Update

- 3.27.12 After assessing 2013 results and the 2014 planning update, the RP1 planned CAPEX for Sweden ANSP is expected to be -€8.5M lower than originally planned. This is due to important decrease in spending in 2012 and 2013 actual CAPEX but also to new strategy changes for 2014 (see above).
- 3.27.13 It is noted that for 2010-14 the actual total CAPEX is expected to be -4.4% lower on average than originally planned. The actual main CAPEX is -24.7% lower on average, due to the important budget revisions for "other" CAPEX.

- 3.27.14 No direct links to the ATM Master Plan were provided in the revised Performance Plan or in the 2013 report. The investment projects are divided into four sections: COOPANS (ATM systems), SUPS-WAM (CNS systems), RTC (Remote Tower Control)) and Other (VFH Radio, New Data Link, new communication network, ADQ). On the basis of the provided description some links to the ATM Master Plan can be established (e.g. SUPS-WAM is linked to the SPI IR therefore ITY-SPI is applicable, for ADQ ITY-ADQ will be the link with the ATM Master Plan).
- 3.27.15 Clear links to the ATM Master Plan either via an OI step or an ESSIP Objective were provided in the ATM Master Plan reporting process. The list of national projects in the 2013 report is consistent with the one reported through the ATM Master Plan reporting process. ITY-ADQ is planned to be implemented in 2017 in accordance with the ATM Master Plan reporting process, however note that Sweden made the following comment in the 2013 report: "ADQ has suffered from unclear advice on how to implement the service and to interpret the requirements, other delaying factor is also the lack of own resources."
- 3.27.16 ITY-AGDL is reported as Late with the implementation date of 2018 and Sweden has provided the following explanation in the 2013 report: "A few of the other investments have however been delayed, the main ones are Legal Recordings, a difference of 10 million from planned and the Datalink and ADQ investments, with a total of approx. 6 million less than planned. Datalink [delay is] much due to resource prioritized for the completion of LFV-ATN investment but also the problem to get access to the two only suppliers of this service, SITA and AIRINC. As this is a Implementing rule these two companies has to cater for all deployment in whole European union which has led to an over allocation of their resources". Note that the delay reported in the ATM Master Plan reporting process is created by the MIL stakeholder who planned such late implementation for the transport type State aircraft.

3.27.17 Other ESSIP Objectives with potential network effect are reported as Planned (ITY-SPI for 2019, ITY-COTR is Partly Completed and planned for full implementation in 2015, ITY-FMTP is planned for 2014). The COOPANS project reported in the 2013 report has a FAB scope. It is a joint procurement programme with other ANSPs (in the same FAB and outside DK-SE FAB) with the aim to reduce and share the investment cost in the ATM systems upgrade. Sweden provided more details relating to the difference in CAPEX between planned in NPP and actual spent: "*The difference for COOPANS is mainly a result of one more member in COOPANS as well as that we now have a better picture of the activities/steps needed. The COOPANS members have made hard prioritizations of their system needs to keep investments low*".

3.28 Switzerland (Skyguide)

OVERVIEW

- 3.28.1 Switzerland has provided its actual 2013 CAPEX and 2014 updated planning with minimal details on the reasons of the changes. The entry into operation for the projects was updated.
- 3.28.2 Switzerland has also updated its 2014 planned CAPEX.
- 3.28.3 The same information was disclosed through the charges reporting scheme but no additional qualitative explanations were provided.

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Skuquida	2013 CAPEX (M€2009, real terms)						
Skygulde	Plan	Actual	A - P	A/P (%)			
TOTAL CAPEX	36.9	38.6	1.7	4.6%			
MAIN CAPEX	5.2	6.7	1.5	28.4%			
% Main vs. Total	14.0%	17.2%		22.7%			
% Total CAPEX vs. Gate-to-gate ANS costs	23.8%	26.8%		12.4%			

Table 126: 2013 Switzerland ANSP CAPEX (Actual vs. Planned)

- 3.28.4 Skyguide has spent €1.7M (+4.6%) more than planned in 2013, of which +€1.5M for the "main" CAPEX. For "Enhanced Mode-S", a project postponed from 2012, €400k was spent in 2013. The planned budget for 2013 was exceeded by €2.5M for "Stripless environment" though it is understood to be "*rescheduled*" (the commissioning date is delayed by one year to 2015). For "LINK2K+/CPDLC" some *"costs shifts"* occurred and -€1.4M were not spent in 2013.
- 3.28.5 A slight spending increase, not detailed, is noted for "other" CAPEX (+€200k). As a result, the actual percentage of main into total CAPEX is higher than planned (i.e. 17.2% in comparison to 14%).
- 3.28.6 The percentage of total CAPEX into gate-to-gate costs has increased by +12.4% (i.e. 26.8% actual vs. 23.8% planned). This is explained by "CAPEX Effect"⁶ (+4.6%) and (-6.9%) "Cost Effect"⁵.
- 3.28.7 Details are provided in the table below.

Skyguide investments for y	<i>r</i> ear 2013										
	Reference to	Description/ explanation	TOTAL planned	Amo expendi	Amount of Capital expenditures (M€2009, real terms)			Lifecycle	Alloc. En- route/ terminal ANS (%)	Date of entry into operation	
Name of investment	(ESSIP objectives/ OI Steps/ Enablers)	of the changes/ Other comments	of the changes/ for the project comments (RP1) C/		2013 Actual CAPEX	Dev A- P	Dev A/P (%)	ation period in years)		Planned in the PP	Actual
	Μ	lain CAPEX fro	om previo	us years	carried o	ver to 201	13				
Enhanced Mode S		additional costs	0.8	0.0	0.4	0.4		n/a	n/a	2012	2013
Sub-total main capex (1)			0.8	0.0	0.4	0.4					
		nvestments p	lanned fo	r 2013 (R	evised Pl	P for RP1)				
Stripless environment	LoC#2, LoC#5, LoC#6	rescheduled	9.0	3.1	5.6	2.5	80.5%	n/a	n/a	2014	2015
LINK2K+/CPDLC	LoC#5	costs shift	4.8	2.1	0.6	-1.4	-69.1%	n/a	n/a	2014	2014
Sub-total main capex (2)			33.3	5.2	6.3	1.1	21.3%				
Total main CAPEX (1)+(2)			34.1	5.2	6.7	1.5	28.4%				
Other CAPEX (planned in the PP for 2013) (3)			99.2	31.7	32.0	0.2	0.8%				
Total capex (1)+(2)+(3)			33.3	36.9	38.6	1.7	4.6%				

Table 127: 2013 Switzerland ANSP Investments

3.28.8 "Stripless environment" and "Enhanced Mode S" are postponed to 2014 generating +€2.6M in addition to the planned CAPEX for this year. Furthermore it is foreseen to spend the entire planned budget for the "other" CAPEX (i.e. €38M).

Skyguide – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	23.5	38.2	35.8	36.9	38.2	110.9
TOTAL Updated CAPEX (2009-13 Actual) (2014P update)	22.4	25.2	32.7	38.6	41.3	112.7
Deviation U-P	-1.1	-12.9	-3.1	1.7	3.1	1.8
Deviation (%) U/P	-4.6%	-33.9%	-8.6%	4.6%	8.2%	1.6%
MAIN Planned CAPEX (PP RP1)	14.5	23.1	9.0	5.2	0.1	14.3
MAIN Updated CAPEX (2009-13 Actual) (2014P update)	16.7	19.0	7.1	6.7	3.4	17.2
Deviation U-P	2.2	-4.0	-1.9	1.5	3.3	2.9
Deviation (%) U/P	15.1%	-17.4%	-21.3%	28.4%	6253%	20.1%

Table 128: RP1 Switzerland ANSP CAPEX Update

- 3.28.9 After assessing 2013 results and the 2014 planning update, the RP1 total planned CAPEX for Switzerland ANSP shows a slight increase (i.e. +€1.8M in addition to the amount originally planned). The decrease in spending recorded in 2012 (-€3.1M) is counter-balanced by the surplus actual recorded in 2013 (€1.7) and foreseen for 2014 (€3.1M).
- 3.28.10 However, due to the revised planning for 2014 main CAPEX it is noted that the planned amount for RP1 (i.e. €14.3M) is foreseen to be exceeded by €2.9M.
- 3.28.11 It is noted that for 2010-14 the actual total CAPEX is expected to increase by+16.5% on average vs. 12.9% planned, whilst the actual main CAPEX is expected to be 32.9% lower (vs. -75.4% planned). This is due to the significant reduced budget endorsed for 2014 vs. 2010.

- 3.28.12 Three investment projects reported are not linked to any ATM Master Plan Ols/Enablers and/or ESSIP Objectives, but instead, to ATM Master Plan LoCs. The detailed description/explanation of changes is missing for all three projects. Two of these projects are reported through the ATM Master Plan reporting process, respectively 1) Link 2k+/CPDL and 2) Enhanced Mode S, while the project "Stripless environment" is not reported.
- 3.28.13 However, there are four important projects which are part of the ATM Master Plan reporting process i.e. 1) CHIPS 2) eTOD CH 3) VC Programme and 4) Datacom Rollout SGN but do not belong to the set of projects reported in 2013 report.
- 3.28.14 There is inconsistency regarding the implementation schedule related to two projects between the 2013 report and the ATM Master Plan reporting process. Both suffer from one year of implementation delay as compared to the initial planning in the Performance Plan: The actual date of entry into operation of the project LINK2K+/CPDLC is 2013, with a forecast of 2014 being nihil. The planned date of entry into operation of the project Enhanced Mode S is the year 2015.
- 3.28.15 All three projects reported in the performance monitoring report have a local scope and no FAB dimension. There are ten projects reported by Switzerland and other FABEC States as FAB Projects in their ATM Master Plan reporting process but none of these projects is part of the set of projects reported in the Swiss 2013 report.

3.29 United Kingdom (NATS)

OVERVIEW

- 3.29.1 UK has provided overall the quantitative data with detailed explanations, ensuring transparency as regards to the status, spent amounts for 2013 and updated planning for 2014, but no information was provided on the expected commissioning dates for each project. It is assumed that the original planning has not changed.
- 3.29.2 Additional useful qualitative information is provided also through the charges reporting scheme, explaining that investments "are presented on a financial year basis as NERL's Service and Investment Plans (SIP), are consulted on with customers on this basis". It is also mentioned that "there will be progressive implementation for the major programmes (from 2016-2023)".
- 3.29.3 Furthermore, as regard to the impact of investments into depreciation costs, it is expected these costs to be "£0.9m higher due to timing differences".

NATS	2013 CAPEX (M€2009, real terms)						
NAIS	Plan	Actual	A - P	A/P (%)			
TOTAL CAPEX	141.2	107.5	-33.7	-23.9%			
MAIN CAPEX	111.6	92.5	-19.1	-17.1%			
% Main vs. Total	79.0%	86.0%		+8.9%			
% Total CAPEX vs. Gate-to-Gate ANS costs	21.9%	19.3%		-12.0%			

2013 ACTUAL VS. PLANNED CAPEX - RATIOS (%)

Table 129: 2013 UK ANSP CAPEX (Actual vs. Planned)

- 3.29.4 UK has spent €33.7M (-23.9%) less than planned in 2013, of which €17.2M due to revised deployment strategy for the New Common Workstation. This project has merged with iTEC-FDP. However, the change in iTEC-FDP strategy has led to additional €3.9M savings.
- 3.29.5 Overall, the main CAPEX shows a €19.1M lower spending whereas for one of the projects (i.e. Centre Systems Software Development) the planned budget for this year was exceeded by €9.3M. The explanation provided was "additional spend on legacy systems and reflects additional customer requirements".
- 3.29.6 From the NERL Charges reporting³⁵ it is understood that £250k were spent for UK/Irish FAB, "*including High level sectors project*" (in addition to £326k already spent in 2012).
- 3.29.7 It is noted that savings were achieved also for "other" CAPEX (-€14.6M or -49%). As a result, the actual percentage of main into total CAPEX is higher than planned (i.e. 86% in comparison to 79%).
- 3.29.8 The percentage of total CAPEX into gate-to-gate costs for UK ANSP has decreased by -12% (i.e. 19.3% actual vs. 21.9% planned). This is explained by "CAPEX Effect"⁶ (-23.9%) and (-13.5%) "Cost Effect"⁵.

NATS UK Investments for year 2013											
	Reference to European ATM MP	Description/ explanation of the	TOTAL planned CAPEX	Am expend	ount of Ca ditures (M€ terms)	ipital 2009, real	Dev A/P	Lifecycle	Alloc. En-	Date of into ope	entry ration
Name of investment	(ESSIP objectives/ OI Steps/ Enablers)	changes/ Other comments	for the project (M€) (RP1)	for the project (M€) Planned (RP1) CAPEX	2013 Actual CAPEX	Dev A-P	(%)	ion period in years)	terminal ANS (%)	Planned in the PP	Actual
		Investments planned for	2013 (Re	vised PP f	or RP1)						
ITEC FDP	numerous	Revised spend in RP1 in line with revised deployment strategy	170.7	34.8	30.9	-3.9	-11.3%	n/a	n/a	2016-23	n/a
Centre Systems Software Development	AUO-0301, CM-0301	Additional spend on legacy systems and reflects additional customer requirements	114.5	30.7	40.0	9.3	30.3%	n/a	n/a	2016-23	n/a
CNS Infrastructure	n/a		102.2	24.6	17.9	-6.6	-27.0%	n/a	n/a	Continuous	n/a
New Common Workstation	IS-0102	Revised deployment strategy has led to NCW being delivered as part of iTEC FDP	79.7	17.4	0.0	-17.4	-100.0%	n/a	n/a	2016-23	n/a
Safety Nets and Airspace Efficiency	n/a		33.7	4.1	3.6	-0.4	-10.9%	n/a	n/a	2015/16	n/a
Total main CAPEX (1)			500.8	111.6	92.5	-19.1	-17.1%				
Other CAPEX (planned in the PP for 2013) (2)			133.6	29.7	15.1	-14.6	-49.2%				
Total capex (1)+(2)			634.4	141.2	107.5	-33.7	-23.9%				

Table 130: 2013 UK ANSP Investments

2014 & RP1 PLANNING UPDATE

3.29.9 The planned 2014 CAPEX was updated and savings are planned for an amount of €15.9M. The details provided for these savings are connected to the 2013 changes in strategy for the same projects (see details above).

NATS UK – RP1 CAPEX update (M€2009, real terms)	2010	2011	2012	2013	2014	RP1
TOTAL Planned CAPEX (PP RP1)	131.5	144.2	147.0	141.2	135.7	424.0
TOTAL Updated CAPEX (2009-13 Actual)(2014P update)	127.4	108.9	121.7	107.5	119.8	349.0
Deviation A-P	-4.1	-35.3	-25.3	-33.7	-15.9	-74.9
Deviation (%) A/P	-3.1%	-24.5%	-17.2%	-23.9%	-11.7%	-17.7%
MAIN Planned CAPEX (PP RP1)	68.9	75.5	116.8	111.6	107.6	335.9
MAIN Actual CAPEX (2009-13 Actual)(2014P update)	77.9	62.9	98.0	92.5	98.7	289.1
Deviation A-P	9.1	-12.6	-18.8	-19.1	-8.9	-46.8
Deviation (%) A/P	13.2%	-16.7%	-16.1%	-17.1%	-8.2%	-13.9%

Table 131: RP1 UK ANSP CAPEX Update

- 3.29.10 After assessing the 2013 results and the 2014 planning update, the RP1 planned CAPEX for NATS is €74.9M lower than originally planned. This is due to strategy changes for several projects (see details above).
- 3.29.11 It is noted that for 2010-14 the actual total CAPEX is expected to be lower (-16.1% on average) than planned.
CONSISTENCY WITH EUROPEAN ATM MASTER PLAN

- 3.29.12 The UK has provided a list of five main projects in the 2013 report. Two of them are linked to Level 2 elements of the Master Plan; the links seem appropriate and justified. However, some clarifications are needed for the other projects:
 - The 'iTEC-FDP' project is linked to 'numerous' elements of the Master Plan. These links could have been provided, especially the links to the Level 3 elements of the Master Plan which contain implementation actions;
 - The 'Safety Nets and Airspace Efficiency' project is not linked to any element of the Master Plan. Although no description of the project was provided the title suggests that some links could be made. In any case, a better description of the project is needed to understand its scope;
 - The 'CNS Infrastructure' project is not linked to any element of the Master Plan, however from the description provided in Annex V to the Performance Plan, it would seem that it should be linked to some Level 3 elements of the Master Plan, e.g. COM09 (IP data networks).
- 3.29.13 The list of projects in the 2013 report is mostly consistent with other sources of information (i.e. the ATM Master Plan reporting process), albeit with a different level of granularity. The schedule and progress of the projects that can be traced to other sources of information (i.e. the ATM Master Plan reporting process) are consistent in both reports. No project in the list is described as a shared FAB project, however from information provided in the ATM Master Plan reporting process, the iTEC-eFDP project is part of a larger initiative of which NATS is also part of.

Annex I: List of ESSIP objectives

This is a list of all ESSIP Objectives in the ESSIP Plan Edition 2013.

Objective Designator	Objective title
AOM13.1	Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) handling
AOM19	Implement Advanced Airspace Management
AOM20	Implement ATS Route Network (ARN) - Version 7
AOM21	Implementation of Free Route Airspace
AOP01.2	Implement airside capacity enhancement method and best practices based on EUROCONTROL capacity and efficiency implementation manual
AOP03	Improve runway safety by preventing runway incursions
AOP04.1	Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level I
AOP04.2	Implement Advanced Surface Movement Guidance and Control System (A-SMGCS) Level 2
AOP05	Implement airport Collaborative Decision Making (CDM)
ATC02.2	Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2
ATC02.5	Implement ground based safety nets - Area Proximity Warning - level 2
ATC02.6	Implement ground based safety nets - Minimum Safe Altitude Warning - level 2
ATC02.7	Implement ground based safety nets - Approach Path Monitor - level 2
ATC07.1	Implement arrival management tools
ATC12	Implement automated support for conflict detection and conformance monitoring
ATC15	Implement, in En-route operations, information exchange mechanisms, tools and procedures in support of Basic AMAN operations
ATC16	Implement ACAS II compliant with TCAS II change 7.1
ATC17	Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer
COM09	Migrate ground international or regional X.25 data networks or services to the Internet Protocol (IP)
COM10	Migrate from AFTN (Aeronautical Fixed Telecommunication Network) to AMHS (ATS Message Handling System)
COM11	Implementation of Voice over Internet Protocol (IP) in ATM
ENV01	Implement Continuous Descent Approach (CDA) techniques for environmental improvements
ENV02	Implement Collaborative Environmental Management (CEM) at Airports
FCM01	Implement enhanced tactical flow management services
FCM03	Implement collaborative flight planning
FCM04	Implementation of Short Term ATFCM Measures – Phase 1
FCM05	Implementation of interactive rolling NOP
INF04	Implement integrated briefing
ITY-ADQ	Ensure quality of aeronautical data and aeronautical information

ITY-AGDL	Initial ATC air-ground data link services above FL-285
ITY-AGVCS2	Implement air-ground voice channel spacing requirements below FL195
ITY-COTR	Implementation of ground-ground automated co-ordination processes
ITY-FMTP	Apply a common flight message transfer protocol (FMTP)
ITY-SPI	Surveillance performance and interoperability
NAV03	Implementation of Precision Area Navigation RNAV (P-RNAV)
NAV10	Implement Approach Procedures with Vertical Guidance (APV)
SAF10	Implement measures to reduce the risk to aircraft operations caused by airspace infringements
SAF11	Improve runway safety by preventing runway excursions
SRC-CHNG	Implementation of Safety Oversight of Changes to ATM by National Supervisory Authorities (NSA)
SRC-RLMK	Implement the EUROCONTROL Safety Regulatory Requirements (ESARRs)
SRC-SLRD	Safety Levels and Resolution of Deficiencies

Note: This list shows only the "Active" Objectives. In very few cases some States might have also referred to "Achieved" Objectives (Objectives for which 80% of the content has been finalised by 80% of the applicable national stakeholders), of which a full list is available in Annex D of the ESSIP Plan Edition 2013 (<u>http://www.eurocontrol.int/articles/essip-plan</u>).

Endnotes

- PRB Annual monitoring Report 2012, Volume 3, Report on Capital Expenditure, Edition 2.0 of 11 October 2013
 Tack No. 2.2.1.5 of Request for Services No. 1 signed on 2 May 2012 between the European
- ² Task No 2.3.1.5 of Request for Services No 1 signed on 2 May 2013 between the European Commission and EUROCONTROL
- ³ Implementing Regulation (EU) No 716/2014 of 27 June 2014, OJEU 28.5.2014, L190 p. 19
- ⁴ Austria en-route Charges Reporting Additional information 1 item m), page 6/13
- ⁵ "Cost Effect" = the average (%) for the deviations of gate-to-gate costs (in M2009, real terms) Actual (updated) vs. Planned for the timeframe.
- ⁶ "CAPEX Effect" = the average (%) for the deviations of CAPEX Actual (updated) vs. Planned for the timeframe
- ⁷ En-route charges Reporting RP1 Monitoring Year 2013- June 2014 (page 4&5/18)
- ⁸ En-route charges Reporting RP1 Monitoring Year 2013– June 2014 item m) and tables before (no page nb)
- ⁹ En-route charging zone: Czech Republic Additional information 1 item m), page 6/18
- ¹⁰ En-route charging Reporting RP1 Monitoring Year 2013 June 2014- page 7/23
- ¹¹ En-route Charges Reporting RP1 Monitoring Additional information 1 item m), page 10/19
- ¹² En-route Charges Reporting RP1 Monitoring Year 2013, item 1.2 "Other operating costs"
- ¹³ En-route charges Reporting RP1 Monitoring Years 2012 and 2013, page 4/11
- ¹⁴ En-route charges Reporting RP1 Additional information, item m), page 5/11.
- ¹⁵ En-route charges Reporting RP1 Additional information, item m), page 5/11
- ¹⁶ En-route Charges Reporting RP1 Monitoring- "Current forecast for Year 2014"- June 2014page 4-11
- ¹⁷ En-route charging Reporting RP1 Monitoring- Year 2013, page 7/16
- ¹⁸ En-route charges Reporting RP1 Monitoring Year 2013- June 2014 (page 4/12)
- ¹⁹ En-route Charges Reporting- RP1 Monitoring- Year 2014- page 5/12
- ²⁰ En-route charging zone: Lithuania- Additional information for year 2013, item 1.3.Depreciation (page 5/17)
- ²¹ En-route charges Reporting RP1 Monitoring Year 2013- June 2014 (page 9/24)
- ²² En-route charges Reporting RP1 Monitoring Year 2013- June 2014 (page 9/24
- En-route charges Reporting General information on the possible Cost efficiency performance in the Netherlands in the second Reference period (2015 – 2019) - item 3. "Investments"-page 1/24
- ²⁴ En-route charges Reporting Additional information 1 RP1 Monitoring Year 2012 page 4/15
- ²⁵ En-route charges Reporting Additional information 1 RP1 Monitoring June 2014 item m)page 6/15
- ²⁶ En-route charging zone : Poland Additional information for RP1, Item 1.3 Depreciation (page 21/27)
- ²⁷ En-route charging Reporting June 2014– RP1 Monitoring- item m) –page 8/23
- ²⁸ En-route charging Reporting June 2014– RP1 Monitoring –Year 2013, page 6/23
- ²⁹ 2013 Annual Monitoring Report- Year 2013
- ³⁰ 2013 Annual Monitoring Report Year 2014

- ³¹ En-route charges reporting RP1, item m), page 9/17
- ³² En-route charging Reporting June 2014– RP1 Monitoring- item m), page 15/28
- ³³ En-route charging Reporting June 2014– RP1 Monitoring –Year 2013, page 10/28
- ³⁴ Terminal ANS Charging zone- RP1 monitoring current forecasts for 2014
- ³⁵ UK en-route charging Reporting Additional information 3 Complementary information, item a)