Performance Review Body
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EUROCONTROL

PRB RP2 Annual Monitoring Report 2015

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CAPEX

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1. INTRODUCTION & CONTEXT

1.1. Context and purpose of the Volume 3 – CAPEX Report

1.1.1 One of the Commission's main priorities is to connect the technological pillar of the Single European Sky, SESAR, with the Performance Scheme. In its own words, "technology development and deployment should be performance-driven". In other terms, technology deployment should be decided if and only if such deployment brings validated and demonstrated performance gains at network or at least local level, and/or contributes to the defragmentation of service provision and economies of scale. To this effect, the Commission has to monitor the main ANSP investments, check whether they materialise according to budget and schedule, and assess their consistency with SESAR deliverables.

1.1.2 Member States' reporting obligations on investments are based on Article 18(4) of the Performance Regulation (EU) No 390/2013. During RP2, the assessment of ANSPs investment is carried out against the RP2 performance plans, adopted under the Performance Regulation where detailed requirements for the description of investments are provided in Article 11 (3)(c) and Annex II, Article 2.

1.1.3 The main purpose of this document is to deliver a "Capital expenditure report at Union and local levels including information on deferment of investments", covering the first year of RP2 (2015). CAPEX consists of depreciation and capital costs charged to users in accordance with the SES Charging Regulation (EU 391/2013). Facts and analysis can be found in chapters 3 to 12.

1.1.4 New developments in 2015 such as the start of SESAR Deployment and associated EU funding prompted additional review and analysis by the PRB. The PRB wished to conduct an in-depth review of the first year of operation of SESAR Deployment which is critical to future performance. The funding mechanisms risk increasing the complexity of deployment by allocating funds according with priorities other than those underlying the PCP. Moreover, the allocation cycles might not take into account the sector specificities of the multi-national, multi stakeholder approach fostered by the PCP. The PRB was unable to do so in time for publication in 2016 due to absence of, delayed or restricted access to the relevant information. A much more thorough review should be conducted in 2017.

1.1.5 As a first step in this review, this report highlights challenges arising from the SESAR Performance ambitions for 2035 and identifies a number of risks and opportunities associated with the third phase of the SES technological pillar - Deployment, and related EU funding. These are addressed in Chapter 2. Findings and Recommendations can be found in paragraph 2.4.

1.1.6 Finally, Annex 1 presents the PRB report on the application of IFRIC 12 of the International Accounting Standards to Air Traffic Management Services initiated at the request of Slovenia to the European Commission.

1.2. Approach, scope and methodology – Chapters 3-12

1.2.1 Reporting on CAPEX is based on the data and information provided by Member States through their annual monitoring reports, and validated with them through a formal process.

1.2.2 Member States were provided with pre-filled information on their investments based on the description from the last available RP2 Performance Plans (pre-filled templates provided to States on 29 March 2016). The pre-filled templates covered such aspects as the reference to the ATM Master Plan, common projects as per Article 15a of Regulation (EC) 550/2004 and benefits expected from ANSP investments in terms of performance across the fours key performance areas. In addition, questions relating to the link between RP1 and RP2 as well as to Connecting Europe Facility (CEF)/ Trans-European Transport Network (TEN-T) funding granted were added in order to broaden the scope of the annual analysis. These additional questions were not in the previous CAPEX Reports.

1.2.3 The economic part of the analysis performed for this report focuses on the factual information provided by the ANSPs in relation to the deferment of their main CAPEX investments, main reasons for the actual situation in 2015 and initial information on additional available funding (CEF/TEN-T) as reported by the ANSPs. The remaining analysis of the ANSPs investments focuses on the reported links with the ATM Master Plan and Pilot Common Project as per Regulation (EU) 716/2014. Links to the ATM Master Plan are presented in relation to the 4 Key Features of SESAR.

1.2.4 Whilst providing analysis at European, FAB and State levels, this report only addresses the CAPEX of the ANSPs 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 In the future, other categories of beneficiaries (e.g. users, military, airports) might have to be assessed as well from a performance contribution point of view.

Sources of information

- Annual Member States' Monitoring reports: Article 18.4 of (EU) No 390/2013 requires Member States to report by 1st June 2016 on the monitoring of their performance plans in the year 2015.

- ATM Master Plan reporting process for 2015: The ATM MP L3 2015 Implementation Report is the step following the annual process leading to the publication of the LSSIP documents. Together with the ATM MP L3 Implementation Plan, it constitutes the Level 3 of the European ATM Master Plan.

- SJU information on data link.

2. PRB analysis

2.1. Introduction

2.1.1 The PRB considers it is timely to highlight the risks and opportunities associated with the third phase of the SES technological pillar - Deployment - and associated EU funding committed in 2015, with a view to maximise its contributions to performance.

2.1.2 Commission Implementing Regulation (EU) 409/2013 sets the regulatory framework for deployment, Edition 2015 of the ATM Master plan has been approved and the SESAR Deployment Manager started its activities at the end of 2014.

2.2. Risks

2.2.1 With the information available the PRB was able to identify risks associated with SESAR deployment, which could also be turned into opportunities if managed appropriately.

<u>High expectations and political visibility</u>

2.2.2 SESAR deployment is critical to the success of SES and has been highly publicised. Some €2 B of CEF grants and € 500 M in financial instruments have been allocated or earmarked in support of SES implementation and SESAR deployment, which represents a significant part of the European Commission Investment Plan. Most of the planned financial support will be dedicated to SESAR deployment, which is therefore highly visible and politically sensitive.

2.2.1 Edition 2015 of the ATM Master Plan sets high expectations in terms of SESAR Performance ambitions for 2035. They are summarised in the slide below.

Figure 5 SESAR performance ambitions for 2035 (categorised by KPA)

Key performance area	SES High-Level Goals vs. 2005	Key performance indicator	SESAR ambition vs. baseline 2012	
			Absolute saving	Relative saving
Cost efficiency: ANS productivity	Reduce ATM services unit cost by 50% or more	• Gate-to-gate direct ANS cost per flight - Determined unit cost for en-route ANS* - Determined unit cost for terminal ANS*	EUR 290-380	30-40%
Operational efficiency	-	• Fuel burn per flight (tonne/flight) • Flight time per flight (min/flight)	4-8 min 0.25-0.5 tonne	3-6 % 5-10 %
Capacity	Enable 3-fold increase in ATM capacity	• Departure delay (min/dep) - En-route air traffic flow management delay* - Primary and reactionary delays all causes • Additional flights at congested airports (million) • Networkthroughput additional flights (million)	1-3 min 0.2-0.4 (million) 7.6-9.5 (million) Additional flights, not saving	10-30 % 5-10 %[1] 80-100 %[2]
Environment	Enable 10 % reduction in the effects flights have on the environment	• CO_2 emissions (tonne/flight) - Horizontal flight efficiency (actual trajectory)* - Vertical efficiency - Taxi-out phase	0.79-1.6 tonne	5-10 %
Safety	Improve safety by factor 10	• Accidents with ATM contribution	No increase in accidents	Improvement by a factor 3-4
Security	-	• ATM related security incidents resulting in traffic disruptions	No increase in incidents	

Metrics with monetary value in business view

* Targeted by the Performance Scheme

2.2.2 Pending a deeper analysis of the ATM Master Plan, the PRB wishes to make preliminary observations.

2.2.3 The main objective when SESAR was launched was to contribute to a 3-fold increase in capacity vs 2005 so as to avoid an anticipated gridlock of aviation. However, the economic

crisis in 2008-2009 had lasting effects and resulted in much slower and more volatile traffic growth than before. Flight numbers in 2016 are still below 2008 levels and the doubling of traffic expected by 2020 will not occur before 2035 even in the most favourable scenario[1]. This reduces the challenge on safety, capacity and environment, and increases it on cost-efficiency.

2.2.4 A large part of savings anticipated from SESAR deployment arises from gains in Environmental performance. While additional emissions attributable to ANS are in the order of 6% of aviation CO_2 emissions[2], the ambition level is set at 5-10% relative saving in aviation CO_2 emissions, which is near or beyond perfection.

2.2.5 Some of the SESAR performance ambitions may have to be reviewed accordingly.

2.2.6 There is a risk that performance ambitions raise expectations too high and justify expenditure that does not correspond to achievable benefits as required in Article 6(3) and 6(4) of Commission Implementing Regulation (EU) No 391/2013 and Annex 1 of Commission Delegated Regulation (EU) No 275/2014 updating Part VI of Annex I to Regulation (EU) No 1316/2013.

Under-spending in CAPEX and EU subsidies at the same time

2.2.7 CAPEX for ground infrastructure, which is funded from user charges, approximately amounts to 1 billion euro per annum in nominal terms. The planned CAPEX for RP2 is €4.6B_{2009}. A detailed analysis of planned and actual CAPEX can be found in next chapters.

2.2.8 Very significant under-spending in CAPEX is observed since the SES Performance Scheme started in 2012:

- -25% in average over RP1 (€759M below plans over 2012-14, see PRB Monitoring report 2014, Volume 3 - CAPEX). This under-investment occurred in a context where traffic was significantly lower than planned (-5% in 2012).
- -27% in average in 2015, with wide differences across States as can be seen in next chapters. This under-investment occurred in a context where traffic was above plans (+2%) and will continue to be so over RP2 even in the low growth scenario[3].

2.2.9 CAPEX under-delivery is reported as being motivated by delay in projects, complicated procurement procedures, tenders etc. It is not clear to which extent it results from over-estimated CAPEX requirements, savings in procurement, postponed or cancelled delivery of required investment, or a combination of those.

2.2.10 At the same time, some €2.5 B in EU financial incentives (grants and loans) are available and many ANSPs are spending significant effort to get access to these financial mechanisms for their projects.

2.2.11 A comprehensive review of funding requirements and channels appears to be needed.

Under-spending in CAPEX and ATSP gains/surplus and EU subsidies at the same time

2.2.12 A majority of States report both underspend in CAPEX and positive net gains and/or economic surplus (see Volume 1, sections 5.6, 5.7 and 5.11). Economic surplus includes net gains and cost of capital.

2.2.13 As shown in table below, CAPEX underspend in 2015 (total: €275M) could have been absorbed within the net gate-to-gate gain (total: €239M) in a minority of States and within the estimated gate-to-gate surplus (total: €541M) in a majority of States.

[1] The traffic multiplier from 2012 to 2035 is between 1.2 and 1.8 (low and high scenarios) according to latest long term forecasts. Constraints to Growth report, EUROCONTROL, 2013.

[3] See PRB Monitoring report Volume 1, figure 21.

Year 2015 - €2009 ('000)	CAPEX	En-route		Terminal		Gate to Gate			
	2015 CAPEX under-overspending	Net ATSP gain(+)/loss(-)	Estimated surplus (+/-)	Net ATSP gain(+)/loss(-)	Estimated surplus (+/-)	Net ATSP gain(+)/loss(-)	Estimated surplus (+/-)	Investment margin vs. Net gain	Investment margin vs. surplus
Austria (Austro Control)	-3.284	4.095	8.270	702	1.233	4.797	9.504	1.513	6.219
Belgium & Luxembourg (Belgocontrol)	-13.465	3.028	6.317	778	1.499	3.806	7.816	-9.658	-5.649
Bulgaria (BULATSA)	-4.018	-3.883	5.187	22	682	-3.861	5.870	-7.879	1.852
Croatia (Croatia Control)	-4.660	4.040	5.415	-34	50	4.006	5.464	-654	804
Cyprus (DCAC Cyprus)	-5.523	830	4.549	0	0	830	4.549	-4.694	-974
Czech Republic (ANS CR)	-11.830	4.097	11.456	-523	-523	3.574	10.932	-8.256	-898
Denmark (NAVIAIR)	-3.723	-353	2.901	-47	1.940	-400	4.841	-4.123	1.118
Estonia (EANS)	-559	2.006	3.307	181	381	2.187	3.689	1.628	3.129
Finland (Finavia)	-5.136	-1.197	414	735	1.221	-462	1.635	-5.598	-3.500
France (DSNA)	-16.061	59.497	88.544	-451	5.554	59.045	94.098	42.984	78.037
Germany (DFS)	-50.700	57.195	92.712	13.875	22.839	71.071	115.550	20.371	64.850
Greece (HCAA)	-15.807	4.387	4.830	-326	-326	4.061	4.504	-11.747	-11.304
Hungary (HungaroControl)	4.486	4.859	8.616	3.145	3.496	8.004	12.112	12.489	16.598
Ireland (IAA)	-3.436	13.263	19.757	2.223	5.078	15.486	24.835	12.050	21.400
Italy (ENAV)	-61.989	12.418	52.114	13.188	20.637	25.606	72.750	-36.383	10.761
Latvia (LGS)	-2.118	795	1.777	1.123	1.444	1.918	3.222	-201	1.103
Lithuania (Oro Navigacija)	-2.865	-207	420	-115	110	-322	529	-3.187	-2.336
Luxembourg (ANA LUX)	-762	555	555	-555	-218	-1	336	-763	-426
Malta (MATS)	492	4.895	5.684	198	415	5.093	6.099	5.584	6.590
Netherlands (LVNL)	-20.803	5.209	5.209	1.189	1.189	6.399	6.399	-14.405	-14.405
Norway (Avinor)	-13.280	-2.014	1.542	3.031	3.926	1.017	5.468	-12.263	-7.812
Poland (PANSA)	1.612	692	9.375	-443	1.064	249	10.439	1.861	12.051
Portugal (NAV Portugal)	1.576	2.644	5.087	-382	159	2.262	5.246	3.839	6.822
Romania (ROMATSA)	-19.733	1.121	9.771	-1.334	-860	-213	8.911	-19.947	-10.822
Slovakia (LPS)	-1.930	-790	1.632	44	141	-745	1.773	-2.676	-158
Slovenia (Slovenia Control)	-467	0	1.077	-77	-20	-77	1.057	-544	590
Spain (ENAIRE)	-14.980	5.953	42.209	-4.737	-1.179	1.216	41.030	-13.764	26.050
Sweden (LFV)	-1.295	7.431	11.461	7	253	7.437	11.714	6.143	10.419
Switzerland (Skyguide)	-3.539	2.833	4.332	1.841	2.779	4.674	7.110	1.135	3.571
United Kingdom (NATS)	7.107	12.678	53.678	0	0	12.678	53.678	19.785	60.785
TOTAL	**-266.694**	**206.076**	**468.198**	**33.259**	**72.964**	**239.335**	**541.161**	**-27.359**	**274.467**
MUAC	-8.278								
	-274.972								

Table 1: CAPEX and net gain/economic surplus

EU funding to be "returned" to users

2.2.14 In addition to funding from User charges, States can receive EU funding for SESAR deployment projects.

2.2.15 EU funding of ANSP investment projects is to be considered as "other revenue" (as referred to in Article 14(2) of Commission Implementing Regulation (EU) No 409/2013 as well as in Article 2(10) of Commission Implementing Regulation (EU) No 391/2013 and Annex VI, Table 2, paragraph 5.3 of the same Regulation) to be "returned" to airspace users.

2.2.16 Firstly, this results in EU subsidy to all users of European airspace without them having paid in the first place and contributed to the implementation of ground infrastructure. There is a question whether this makes sense from an EU policy point of view.

2.2.17 Secondly, this acts as a disincentive for ANSPs to seek EU funding. Some States are already negotiating this requirement with the Commission.

2.2.18 Thirdly, this creates a high risk of windfall profit by ANSPs if some funds are not returned, or late.

2.2.19 There is also a risk of multiple funding of the same project through e.g. RP1, RP2, CEF. This can happen where projects are postponed, cancelled, merged, reduced across time, yet funded under the performance plans and possibly also from CEF.

2.2.20 In accordance with Regulation (EU) No 391/2013 art. 6.3, "*Member States shall put in place comprehensive and transparent accounting practices to ensure that airspace users are not charged twice*". It is important that these practices were put in place beginning of RP2. The PRB has seen nearly no evidence of this requirement being fulfilled.

2.2.21 Comprehensive mechanisms are required for the review of compliance in the calculation of unit rates as stated in Article 17 of the Charging Regulation (391/2013). These mechanisms require access to information from SDM and INEA, which was not available to the PRB.

2.2.22 Currently project tracking and accounting is very difficult as the information is either missing or not reconcilable in one database.

2.2.23 Fourthly, reimbursement of funds received in RP2 will reduce ANSP cash flow in RP3 and has the potential to harm future investment. This will create an investment funding crunch in RP3 after a funding boom in RP2, or result in additional user charges in RP3, neither of which is desirable.

2.2.24 The PRB notes the absence of adequate guidance material to provide and exchange information as required in Article 15.2.f of Regulation (EC) No 550/2004 of the European Parliament and of the Council. As requested, the PRB will provide advice on the handling of deferred CAPEX and of INEA funding to the Commission.

2.2.25 The Deployment, Performance and Charging regulations, their interpretation and application should be reviewed as there appear to be fundamental issues at the moment.

2.2.26 The above-mentioned risks have increased the complexity of keeping the overview on EU funding, project delivery, performance benefits, depreciation and reimbursements. It was not possible for the PRB with the information made available during 2015 to assess in a comprehensive way the needed information in the monitoring report 2015.

Fragmented approach to technology deployment

2.2.27 The SESAR Deployment framework was established to support the timely and synchronised implementation of the needed improvements in the infrastructure. However, the PRB observes that the CEF funding requirements and allocation cycles bring additional complexity to performance driven deployment. The PRB suggests that improvements be initiated rapidly taking into account the following points:

- Funds being allocated according to criteria which are new for the sector
- Long allocation cycles not always synchronised with the Deployment Programme
- CEF General and cohesion fund categories of States
- National priorities over multi-national, multi-stakeholder approach and
- Competition with other transport modes.
- Some projects funded under the PCP (88% in first call, 60% in second call) involve just one stakeholder.

2.2.28 The PRB has identified the following risks:

- EU funding of bespoke projects tends to perpetuate silos across ANSPs and postpone the de-fragmentation of service provision and infrastructure;
- Prolonging interoperability and synchronisation issues arising from bespoke systems;
- Missing opportunities to rationalise and unbundle the infrastructure;
- Investment and running costs higher than necessary;
- Unexploited opportunity to research and deploy industry standard systems not only in Europe, but also in the global market.

2.2.29 The PRB observed that “the approach towards investments is, in general, fragmented and no synchronised approach to technology deployment exists among ANSPs”.

Need to align regulations with performance

2.2.30 The Performance, Charging and Deployment regulations should be aligned towards increased performance as the overarching SES goal.

- SES brings strong pressure on reducing costs and at the same time EU funds are made available to foster deployment, which is not necessarily consistent.
- Success in deployment is measured in terms of system implementation, not achieved performance.
- No formal commitment on additional performance is requested when funding is awarded.

- Performance targets had to be set for RP2 before Deployment projects were defined. No States have given details of their Master planning funding requirements and planned requests for funding through the RP2 planning submissions.
- Granting EU funding during a Reference Period may change the rules of the game while it is being played, which is contrary to economic regulation principles.

2.2.31 CEF funding is a key lever in EC's hands to unlock a step change in SES performance, which could become effective if certain conditions are met:

- Attribution of CEF funding could be conditional upon commitment to step change in performance in next performance plan, thereby securing performance improvements and adoption of future plans.
- Respecting standards should be a condition for CEF funding, which would then open the way to unbundling, changes in infrastructure ownership and operation.

PRB involvement in Deployment governance at policy level

2.2.32 Regulation (EU) 409/2013 foresees assistance by the PRB to the Commission in the Policy level of SESAR Deployment governance (art 8.3), in particular "*Monitoring the deployment of common projects and their contribution to achieving the European Union-wide performance targets"* (art 8.2h).

2.2.33 At the time of writing (end of 2016), nearly two years have passed since the start of SESAR deployment and slightly over 1 billion euro of CEF funds have been committed. In order to assess the impact properly the PRB should enhance its assistance to the Commission in the SESAR Deployment governance.

In particular appropriate working arrangements, including access to relevant data, could be put in place between the PRB, the SESAR Deployment Manager and INEA

2.3. PRB views on possible opportunities

2.3.1 The PRB considers that major opportunities arise from SESAR deployment and availability of EU funds.

Unbundling of ANS ground infrastructure

2.3.2 Unbundling of ANS ground infrastructure based on industry standards for ground systems would, in the PRB's view, open the way to a true SES:

- Breaking down infrastructure silos, enabling cooperation and possibly competition between ANS providers (e.g. virtual centers);
- enabling benefits from increased competition among manufacturers and stronger buyer power;
- leading to a reduction in infrastructure and maintenance costs, whilst allowing a step change in interoperability and upgradability;
- Fostering competitiveness of the European ANS infrastructure industry on the global market through availability of proven state-of-art interoperable technology;
- Fostering further industrial partnerships, beyond existing partnerships encouraged by cost risk sharing (e.g. COOPANS, ITEC).

2.3.3 Industry standards for ground ATM systems are a pre-requisite. These could be developed relatively quickly under the auspices of Eurocae, with technical assistance from EUROCONTROL, SJU, etc.

Ownership and accounting rules. Application of IFRIC 12

2.3.4 Reconsidering ownership and accounting rules applicable to ANS infrastructure subsidized by EU funds could be a way out of the major issues identified above. Application of IFRIC 12 to ANS ground infrastructure, considered as public infrastructure whose operation is delegated to infrastructure providers (under competition where possible) is worthwhile studying in detail.

2.3.5 The capital intensity of ANS is relatively low, typically one year of revenue, much less than airports for example. ANS assets in the SES area are in the order of €6B, of which approximately half corresponds to ground information systems. CEF funds made available for SESAR deployment (€3B) may be sufficient for the Commission or States to jointly own the SES information system infrastructure, which is one of the keys to future performance. Corresponding CAPEX (depreciation and capital costs) could then be taken out of the cost base as long as the infrastructure remains public, outside ANSP books.

2.4. Findings and recommendations

2.4.1 At the start of the Deployment phase a more focussed and dedicated approach needs to be adopted in order to avoid a sub-optimal implementation of the third phase of SESAR. Opportunities for a step change in performance need to be captured in order to avoid that the Deployment leads to delaying de-fragmentation and performance improvement and fostering unwanted behaviours and practices.

Findings

Finding 1: CAPEX underspend vs. Performance plans has been persistent since 2012 and reaches a level which is causing concern (-27% in 2015), driving calls from the industry for return of unspent capital.

CAPEX underspend in 2015 (total: €275M) could have been absorbed within the net gate-to-gate gain (total: €239M) in a minority of States and within the estimated gate-to-gate surplus (€541M) in a majority of States (19/30).

Finding 2 The complexity of CAPEX management is leading to unwanted behaviours within the community.

Finding 3: Fundamental issues have been identified in SESAR deployment, which require immediate action, including interpretation of EU legislation on "returning" funds to users, reporting and audit requirements, openness and transparency etc.

Finding 4: The complexity of the funding mechanism is leading to a loss of transparent assessment opportunities with regard to the performance contribution of the deployment phase of SESAR.

Finding 5: Standardisation will create the needed level playing field in the ATM infrastructure. Investment in research and deployment shall be prioritised to lead to this standardisation.

Finding 6: The governance of SESAR Deployment has been operating for two years. Regulation (EU) 409/2013 Art. 8 foresees an active role for the PRB. The PRB has so far not received the information it requires to conduct a meaningful review of SESAR deployment from performance and first principles points of view.

Recommendations

Recommendation 1 The PRB recommends to the Commission that the PRB continues to assists in the Policy level of SESAR deployment governance and gets access to the relevant information in accordance with Regulation (EU) 409/2013 Art. 8.

Recommendation 2 The PRB recommends that the Commission ensures that Member States put in place comprehensive and transparent accounting practices to ensure that airspace users are not charged twice, in accordance with

Regulation (EU) No 391/2013 art. 6.3.

Recommendation 3 The PRB recommends to the Commission that the interpretations of the Deployment, Performance and Charging regulations be clarified through guidance and advice to States as there would appear to be fundamental misinterpretations within the community as to what is required.

Recommendation 4 The PRB proposes that interim reporting requirements, guidance material and templates for CAPEX funding, CAPEX, depreciation, reimbursements and mapping with projects should be developed urgently under Commission authority with the involvement of the National Supervisory Authorities, followed up by legislative changes where necessary.

Recommendation 5 The PRB proposes that synergies between the performance framework and the SESAR deployment be better exploited where possible, to strengthen the momentum towards SES performance.

Recommendation 6 The PRB recommends to the Commission to study the mechanisms of applying IFRIC 12 to EU-funded ANS ground infrastructure, i.e. public infrastructure whose operation is delegated to infrastructure providers. It could constitute a medium-term solution, avoiding the need for complex reporting, monitoring and micro-management of CAPEX.

3. DETAILED EXAMINATION AT EUROPEAN UNION LEVEL

3.1. CAPEX Overview

Overall Investment data

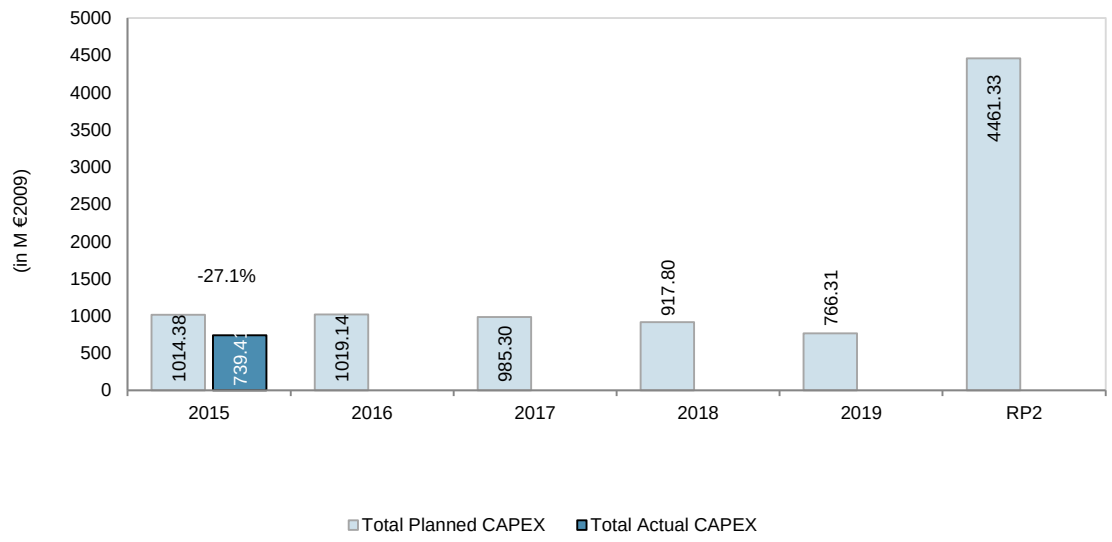
3.1.1 Considering the information disclosed by the Member States through the CAPEX part of their 2015 Monitoring reports, the local CAPEX spent by ANSPs at Union-wide level in 2015 was 739.41M€$_{2009}$, which is 27.1% lower than planned. Part of the total amount spent for investments in 2015 (i.e.13.22 M€$_{2009}$) comes from the unplanned projects of six ANSPs (Avinor, DCAC Cyprus, DFS, LVNL, PANSA and Slovenia Control).

3.1.2 A considerable part of CAPEX (288.19 M€$_{2009}$) planned as part of the RP2 PPs for 2015 has been cancelled or postponed.

2015 Difference Actual-Planned CAPEX at EU level

EU level (Million euro)	2015	2016	2017	2018	2019	RP2
Total Planned CAPEX	1014.38	1019.14	985.30	917.80	766.31	4461.33
Total Actual CAPEX	739.41					
Difference A-P in value	-274.97					
Difference A -P in %	**-27.1%**					

2015 Actual vs. Planned Total CAPEX at EU level



3.1.3 One task of the PRB is to monitor investments. There are two drivers for investments – obligation and/or tangible benefits that can be realised. Just monitoring CAPEX is of itself insufficient: it needs to be analysed in the context of all four KPAs.

One of the shortcomings of the system is that it is not systematically linked to the regulation of charges. This leads to an overly-bureaucratic system, which fails to deliver on policy intentions.

3.1.4 The main reasons provided by the ANSPs for underspending are the following:

(i) the complicated procedures of public procurement, the postponement in procurement, long procurement processes and complicated tender-offerings;

(ii) the delays : delays in the approval process, delays due to dependency on other projects, due to supplier constraints, to extreme weather conditions, due to

unexpected maintenance costs, delays in the system delivery, execution and payments;

(iii) merging of 2 projects;
(iv) co-funding;
(v) re-adjustment of budget;
(vi) prioritization between different investments.

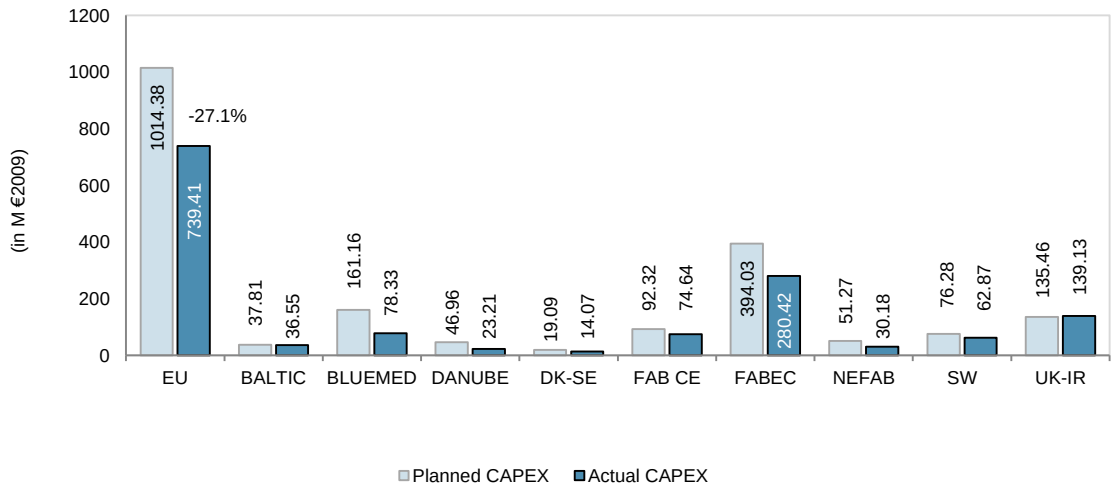
3.1.5 In their 2015 monitoring reports (CAPEX part), 5 ANSPs (DCAC Cyprus, ANA LUX, Skyguide, Finavia and IAA) did not provide any description of the current investment situation, nor any explanation on the delays.

3.1.6 The overall trend for all ANSPs for 2015 has been to revise downwards their investment budgets, but there are significant differences between FABs and ANSPs. FABEC had the highest unspent amount in absolute value: 113.61 M€$_{2009}$ less than planned for 2015. BLUE MED and DANUBE FABs spent the lowest amount in relative value: 49%. On the contrary, UK-IR spent more than planned: 3.67 M€$_{2009}$.

Difference Actual-Planned CAPEX at FAB level in 2015

FAB	Total 2015 Planned (M €2009)	Total 2015 Actual (M €2009)	Total A-P (M €2009)	A/P (in %)
BALTIC	37.81	36.55	-1.25	97%
BLUE MED	161.16	78.33	-82.83	49%
DANUBE	46.96	23.21	-23.75	49%
DK-SE	19.09	14.07	-5.02	74%
FAB CE	92.32	74.64	-17.69	81%
FABEC	394.03	280.42	-113.61	71%
NEFAB	51.27	30.18	-21.09	59%
SW	76.28	62.87	-13.40	82%
UK-IR	135.46	139.13	3.67	103%

2015 Planned vs. Actual total CAPEX at FAB level



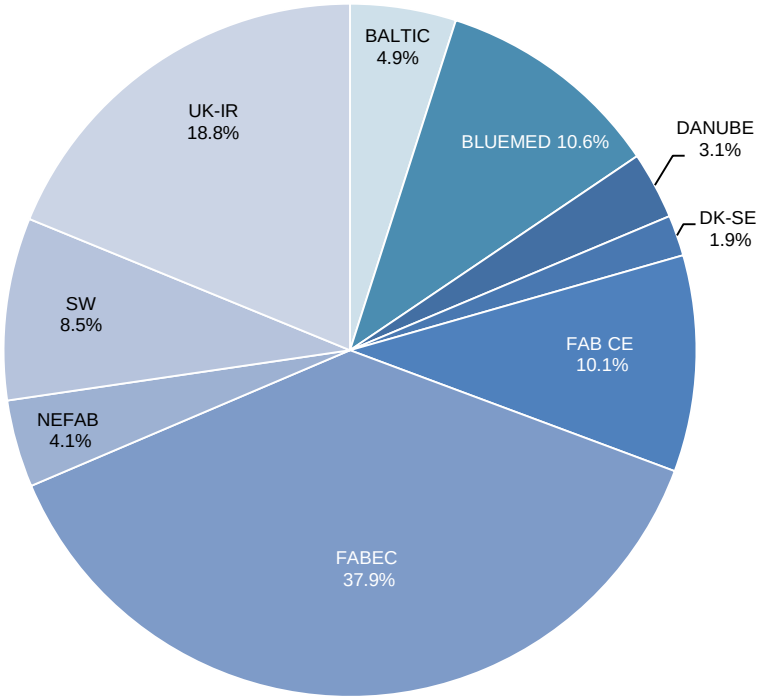
RP2 CAPEX under- / overspending per ANSP

3.1.7 Of all ANSPs, 5 spent more than originally planned for 2015 in their RP2 PPs with overspending ranging from +4.8% to +34.8%. All others underspent with an average underspending of -31.7%. The proportion of underspending varies significantly among ANSPs, ranging from -100% to -8.8%.

ANSPs	2015 under-/overspending (in %)	2015 under-/overspending (in M€$_{2009}$)
Ana Lux	-31.1%	-0.76
ANS Czech Republic	-39.8%	-11.83
Austro Control	-13.9%	-3.28
Avinor	-41.8%	-13.28
Belgocontrol	-72.6%	-13.46
BULATSA	-23.3%	-4.02
Croatia Control	-39.1%	-4.66
DCAC Cyprus	-89.3%	-5.52
DFS	-41.4%	-50.70
DSNA	-9.8%	-16.06
EANS	-13.8%	-0.56
ENAIRE	-21.9%	-14.98
ENAV	-45.0%	-61.99
Finavia	-51.7%	-5.14
HCAA Greece	-100.0%	-15.81
HungaroControl	26.6%	4.49
IAA	-25.1%	-3.44
LGS	-38.6%	-2.12
LFV	-12.1%	-1.29
LPS	-22.2%	-1.93
LVNL	-62.2%	-20.80
MUAC	-63.0%	-8.28
MATS	34.8%	0.49
NATS	5.8%	7.11
NAV Portugal	19.8%	1.58
NAVIAIR	-44.2%	-3.72
Oro Navigacija	-67.1%	-2.87
PANSA	4.8%	1.61
ROMATSA	-66.4%	-19.73
Skyguide	-8.8%	-3.54
Slovenia Control	-29.9%	-0.47

Total 2015 Actual CAPEX per FAB (in M€2009)

3.1.8 In terms of actual 2015 CAPEX, FABEC has the biggest share (37.9% of the total amount spent in 2015 by all FABs), with a spending of 280.42 M€$_{2009}$. FABs with the lowest share in the actual 2015 CAPEX are: DK-SE (1.9%), DANUBE (3.1%), NEFAB (4.1%) and BALTIC (4.9%).



2015 Actual CAPEX in the gate-to-gate ANSPs costs (€2009).

3.1.9 In 2015 the actual CAPEX represented 11.7% of the gate-to-gate ANSPs costs (€2009).

EU level	2015	2016	2017	2018	2019	RP2
Total Planned CAPEX (in M €2009)	1014.38	1019.14	985.30	917.80	766.31	4461.33
Total Planned Gate-to-Gate ANSP cost (in M €2009)	6634.16					
% of planned CAPEX into Gate-to-Gate cost	15.3%					
Total Actual CAPEX (in M €2009)	739.41					
Total Actual Gate-to-Gate ANSP cost (in M€2009)	6316.98					
% of actual CAPEX into Gate-to-Gate cost	11.7%					

3.2. CEF/TEN-T funding

ANSPs	Number of RP2 Main CAPEX investments for which CEF/TEN-T funding was granted	Total amount of CEF/TEN-T funding granted (as per grant agreement, in nominal M€)	Individual ANSPs share in the total amount granted (in%)	Name of investment
Austro Control	2	2.45	0.7%	1) DPS ATM Services 2) DPS AIM Services
Avinor	1	1.88	0.6%	1) FS 106 Natcon Target concept implementation
Belgocontrol	1	0.5	0.1%	1) Upgrade of the Belgocontrol WAN
Croatia Control	1	1.8	0.5%	1) ATM System Upgrade
DFS	2	10.69	3.2%	1) iCAS programme (iTEC Centre Automation System) 2) BaBola
DSNA	9	160.35	48.0%	1) 4-FLIGHT 2) Coflight 3) CSSIP 4) ERATO 5) SYSAT 6) PBN 7) FDS 8) NVCS (new Voice Communication System) 9) CDM / AMAN / DMAN / XMAN / collaborative NOP (Network Operation Planning)
ENAIRE	5	22.47	6.7%	1) SHORT TERM IMPROVEMENTS 2) REDAN – Data Network 3) PBN PLAN – Performance Navigation 4) PROJECT FACILITATORS 5) iTEC – Flight Data Processing
ENAV	Not reported	3.9	1.2%	*Not reported in the fact validation process*
Finavia	1*	0.0017		1) Controller pilot * for 2015 only
HCAA Greece	5	Not reported		1) Upgrade of RADAR and Flight Plans Data Processing System (RDPS/FDPS) - PALLAS 3G 2) Replacement of AFTN/CIDIN Centre in order to meet ICAO/AMHS requirements 3) Upgrade of Telecommunication Stations 4) Procurement installation and commissioning of MLT/WAM for en-route procedures in N.E Aegean Sea 5) Procurement of Hardware and Software system for designing PBN procedures
HungaroControl	1	1.37	0.4%	CPDLC
IAA	1	0*		1) FDP - Electronic Flight Progress Strip System * only for 2015
LFV	3	8.28	2.5%	1) COOPANS Upgrade 2) SUPS 3) RTC
LVNL	1	0		1) Replacement AAA (Proposal was submitted under CEF call 2015)
MUAC	2	5.04	1.5%	1) Voice Systems : New VCS System (N-VCS) 2) New Generation ATM: Radio Direction Finder System (RDFS)
NATS	5	111	33.2%	1) Airspace Development 2) LAMP 3) Centre Systems Software Development 4) CNS Infrastructure 5) iTEC FDP/NCW
NAV Portugal	1	0.33	0.1%	1) LISATM V9.2
NAVIAIR	2	Not reported		1) ATM 2) CNS
PANSA	1	3.3	1.0%	1) Pegasus ATM system and and supporting systems
Slovenia Control	1	0.85	0.3%	1) FDPS Upgrade
TOTAL	**45**	**334.21**		

3.2.1 As reported in the annual monitoring reports (CAPEX part), twenty European ANSPs received European funding for 45 of their Main CAPEX investments planned for RP2. They were in total granted with 334.21M€ of CEF and/or TEN-T funding. The details regarding the period of funding and the values provided varied significantly among the ANSPs. It has to be noted that in some cases the values were provided only for 2015, in some for other periods depending on the grant agreement. However, in most of the cases, the period for

which the funding was granted was not mentioned which puts a significant constraint on further analysis in this area.

3.2.2 DSNA reported having the highest amount among the EU ANSPs of the European funding granted as per grant agreement for 9 projects. This amount equals 160.35M€, representing 48% of the overall amount at EU level. It is followed by NATS with 111M€ (33.2% of total) and ENAIRE with 22.47M€ (6.7%).

3.2.3 More European funding was requested by the ANSPs through the INEA calls 2015, which is still pending of resolution, therefore in majority of the cases values for those grants were not included in the 2015 monitoring reports.

3.3. CAPEX – ATM MP/PCP information

3.3.1 In addition to the economic part of the CAPEX information, when developing their RP2 Performance Plans, ANSPs were asked to provide a description of their investments detailing their relevance in relation with the European ATM Master Plan and the common projects referred to in Article 15a(3) of Regulation (EC) No 550/2004. Taking into consideration the fact that the ATM Master Plan is a living document updated on average every 3 years and there are updates to the Level 3 (Implementation Objectives) introduced each year, information on the existing links to ATM MP should be updated by the ANSPs in their annual monitoring reports. However, it is noted that in the 2015 monitoring reports (CAPEX part) only 4 ANSPs provided minimal update of the information on links to ATM MP and only 1 ANSP updated the information on links to PCP. 6 ANSPs did not provide any links to the ATM Master Plan and the level of provided information remains insufficient for several others. It should be also noted that there is no harmonization among the ANSPs when it comes to the used links to the ATM MP. Many ANSPs use the Level 3 links, but very often ANSPs use only OI steps or enablers. In addition, it is unclear which Data Set of the ATM MP was used by the ANSPs when developing their RP2 Performance Plans in the part of investment information. Many of the enablers and OI steps provided in the 2015 monitoring reports did not exist anymore. Therefore, the analysis for this report was done as far as possible, but with many limitations caused by the unsatisfactory reporting of the ANSPs.

3.3.2 In cases where it was possible, the investments linked to the ATM MP were divided into 4 categories to show their belonging to the 4 SESAR Key Features: i) Optimised ATM Network Services, ii) Advanced Air Traffic Services, iii) High Performing Airports, iv) Enabling Aviation Infrastructure. The realisation of the SESAR Concept follows strategic orientations described by these 4 Key Features, which evolve through an ongoing Deployment and supporting R&D programme. Therefore, presentation of the ANSPs investments linked to the 4 SESAR Key Features shows how individual ANSPs implement the strategic elements of the SESAR Concept.

3.3.3 Out of the Main CAPEX investments actually executed in 2015 the following information relating to the links to ATM MP can be provided:

Number of 2015 Main CAPEX investments planned to be executed in 2015 at EU level					**255**
Number of 2015 Main CAPEX investments actually executed in 2015 at EU level					**222**
Number of 2015 Main CAPEX investments **linked** to ATM MP					**141**
EU level	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
	19	61	21	86	16
Total amount spent in 2015 for investments linked to ATM MP (in M€2009) at EU level					**419.00**
Number of 2015 Main CAPEX investments **not linked** to ATM MP					**81**
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)					**105.49**

3.3.4 Out of the 255 planned Main CAPEX investments, 222 were executed during 2015, including some additional unplanned investments. Hence, more than 85% of the plan was achieved.

3.3.5 "Enabling the Aviation Infrastructure" is the SESAR Key Feature at which the highest number of investments (86) contributed, followed by the "Advanced Air Traffic Services" with 61 investments, "High Performing Airports" with 21 investments and finally the "Optimised ATM Network Services" with 19 investments. Additionally, 16 investments were linked to the ATM MP, but the links could not be determined due to insufficient information provided by the States. On the other hand, 81 investments had no link to the ATM MP.

3.3.6 When it comes to the link between the ANSP's investments executed in 2015 and 6 ATM functionalities of the PCP the following information was obtained from the States:

Number of 2015 Main CAPEX investments **linked** to PCP					**78**
AF1	**AF2**	**AF3**	**AF4**	**AF5**	**AF6**
11	18	18	10	19	17
Total amount spent in 2015 for investments linked to PCP (in M€2009)					**342.92**
AF1	**AF2**	**AF3**	**AF4**	**AF5**	**AF6**
74.35	108.89	117.71	126.93	176.45	148.74

Explanatory note:

AF1 - Extended Arrival Management and Performance Based Navigation in the High Density Terminal Manoeuvring Areas

AF2 - Airport Integration and Throughput

AF3 - Flexible Airspace Management and Free Route

AF4 - Network Collaborative Management

AF5 - Initial System Wide Information Management

AF6 - Initial Trajectory Information Sharing

3.3.7 From the 222 Main CAPEX investments executed in 2015, 78 were linked to the PCP. Most of these investments contributed to the AF5: 19 investments. The same number of investments, 18, was linked to AF2, AF3, 17 investments were linked to AF6, while 11 investments were linked to AF1 and 10 to AF4. This ranking of the 6 ATM functionalities changes when the amount spent on the investments is analysed. The highest amount was spent on investments linked to AF5, 176.45 M€2009. The invested amount decreases for each of the AFs until 74.35 M€2009 for AF1.

Optimised ATM network services

3.3.8 An optimised ATM network must be robust and resilient to a whole range of disruptions. It relies on a dynamic, online, collaborative mechanism, allowing for a common updated, consistent and accurate plan that provides reference information to all ATM actors. This feature includes activities in the areas of advanced airspace management, advanced dynamic capacity balancing and optimised airspace user operations, as well as optimised network management through a fully integrated Network Operations Plan (NOP) and airport.

3.3.9 Following the ESSIP Report 2015[4], this key feature is progressing well. Enhanced tactical flow management has been successfully achieved in 2015. Traffic complexity assessment tools start being implemented and already one stakeholder (NATS) has already implemented this functionality. The implementation of the NOP tools is progressing satisfactorily. No risks of delay are detected so far, as all stakeholders report that this functionality will be implemented by the PCP Regulation deadline of end 2021. On the other hand, small delays of maximum one year are identified for the finalisation of short-term ATFCM measures implementation. Most of the implementers reported that a substantial number of elements are already in place. Furthermore, many Stakeholders outside of the applicability area (Austria, Belgium, Czech Republic and Croatia) have expressed an interest to implement this functionality, so the final scope of implementation will be larger than planned. This is a positive development from the Network perspective The area for improvement in this key

[4] http://www.eurocontrol.int/sites/default/files/content/documents/official-documents/reports/2015-masterplanlevel3-report.pdf

feature is the collaborative flight planning for which a number of stakeholders have reported delays in achieving full interoperability between the local airspace management tools and Network Manager Systems. However, these delays are still not that significant and they should not impact negatively any other crucial implementation objective or PCP functionality.

3.3.10 Based on the information gathered in the 2015 monitoring reports (CAPEX part) the distribution of investments per Major ATM Change in this Key Feature is as follows:

Major ATM Changes	Pre-SESAR	PCP	States investing in Major ATM Change in 2015
ATFCM	**ATFM slot exchange** • FCM03-Implement collaborative flight planning • FCM01-Enhanced tactical flow management **STAM** • FCM04-STAM Phase 1 (FCM04.1 in 2016)	**Automated support for traffic complexity assessment** • FCM06-Traffic complexity assessment • FCM08-Extended Flight Plan (NEW) **CTOT to TTA for ATFCM purposes** • FCM07-CTOT to TTA for ATFCM purposes (NEW) **Enhanced STAM** • FCM04.2-STAM Phase 2 (NEW)	**Romania** **Sweden** **Austria** **France** **Norway** **Spain** **UK**
NOP	**Basic network operations planning** • FCM05-Interactive Rolling NOP • FCM03-Implement collaborative flight planning	**Collaborative NOP** • FCM05-Interactive Rolling NOP	**Romania** **Slovenia** **France** **Netherlands** **Finland**
Free Route & Advanced FUA	**Civil/military airspace and aeronautical data coordination** • AOM19-ASM support tools (AOM19.1 in 2016)	**ASM and A-FUA** • AOM19.1-ASM support tools • AOM19.2-ASM Management of real time airspace data (NEW) • AOM19.3-Full rolling ASM/ATFCM process (NEW) **Free route** • AOM21.1-Direct Routing • AOM21.2-Free Route Airspace	**Italy** **Romania** **Slovenia** **Netherlands** **Norway** **Finland**

3.3.11 Few States from all FABs around Europe implemented elements contributing to the Major ATM Changes within the Optimised ATM network services SESAR Key Feature in 2015, except Baltic and DK-SE FABs.

3.3.12 Free Route & Advanced FUA is also included in the "Advanced air traffic services" SESAR Key Feature due to the PCP Implementation Objectives it covers.

Advanced air traffic services

3.3.13 The future European ATM system will be characterised by advanced service provision, underpinned by the automated tools to support controllers in routine tasks. This feature reflects the move towards automation with activities addressing enhanced arrivals and departures, separation management, enhanced air and ground safety nets and trajectory and performance-based free routing.

3.3.14 According to the ESSIP Report 2015, the implementation of Performance Based Navigation (PBN) shows good progress, although in some States (six States according to LSSIP 2015 data) the required National PBN Plans are not yet in place. The implementation of P-RNAV is steadily progressing, while the implementation of APV procedures is to a larger degree held back by the lack of an established PBN strategy in some States. The upcoming Implementing Regulation on PBN will however focus ANSP's and Airport Operator's effort to comply with the expected regulatory deadlines.

3.3.15 Within the en-route operational environment, there is substantial progress in the implementation of Free Routing within the set target dates. This is evidenced by initiatives taken at FAB level through common plans, taking advantage of the CEF funding opportunities. Some ANSPs intend to implement the Free Route service earlier than the regulatory date, thus skipping the interim Direct Routing step.

3.3.16 The Enhanced Arrival Sequencing domain shows a more worrying deployment status (deployment of the corresponding DP families within the SES area is the responsibility of SDM and details will be found in Deployment Programme 2016). Most notably, the Basic Arrival Management tools have only reached a completion rate of 50% in the ECAC area,

against planned completion of 80% by end 2015. This could be explained by the fact that some ANSPs have changed their plan lately and expect to directly implement the extended AMAN without going through the AMAN intermediate step, which deprives the users from the benefits of the Basic AMAN. The deployment of extended AMAN has been progressing very slowly up till now, both due to cross-boundary coordination needs and also investor's desire to position such service upgrades within the CEF funded projects.

3.3.17 Based on the information gathered in the 2015 monitoring reports (CAPEX part) the distribution of investments per Major ATM Change in this Key Feature is as follows:

Major ATM Changes	Pre-SESAR	PCP	States investing in Major ATM Change in 2015
Enhanced arrival sequencing	**Basic AMAN** • ATC07.1-AMAN	**AMAN extended to en-route airspace** • ATC15.1-Initial extension of AMAN to En-Route (ATC15 in ESSIP 2015) • ATC15.2-Extension of AMAN to En-route (NEW)	Italy, Romania, Czech Republic, Austria, Germany, France, Netherlands, Switzerland, Norway, Spain, Portugal, UK
PBN	**Introduction of PRNAV** • NAV03-RNAV-1 & RNP • NAV10-APV Procedures	**Enhanced TMA using RNP-based operations** • NAV03-RNAV-1 & RNP	Lithuania, Poland, Bulgaria, Austria, France, Netherlands, Norway, Finland, Latvia, Spain, Portugal, UK
Free Route		**Free route** • AOM21.1-Direct Routing • AOM21.2-Free Route Airspace • ATC12.1-MONA, TCT and MTCD	Poland, Italy, Romania, Czech Republic, Austria, Slovakia, Slovenia, Germany, France, Netherlands, Switzerland, Norway, Estonia, Finland, Spain, Portugal, UK
	Additional Objectives: • AOM13.1-Harmonise OAT and GAT handling • ATC02.8-APW L2 (NEW-INCLUS. ATC02.5) • ATC17-Electronic Dialog supporting COTR • ENV01-Continuous Descent Operations		Italy, Sweden, Czech Republic, Slovakia, Luxembourg, Norway, Estonia, Spain, Portugal

3.3.18 "Advanced air traffic services" SESAR Key Feature counts with the highest number of investments executed by many European States in 2015. Seventeen States spent money on investments contributing to Free Route, which registered substantial progress so far.

High-performing airport operations

3.3.19 The future European ATM system relies on the full integration of airports as nodes into the network. This implies enhanced airport operations, ensuring a seamless process through collaborative decision-making, in normal conditions, and through the further development of collaborative recovery procedures in adverse conditions. In this context, this feature addresses the enhancement of runway throughput, integrated surface management, airport safety nets and total airport management.

3.3.20 This key feature contains elements that are necessary to improve network performance and others that are more of local nature, focused on improving performance at the airport and providing better service to passengers and airlines.

3.3.21 One of the most important airport functionalities for the network performance is Airport CDM (implementation objective AOP05), which is a predecessor of AF2 of the PCP targeting 25 airports, but also a Master Plan Level 3 implementation objective for 46 ECAC airports. According to the ESSIP Report 2015, the progress of this functionality at is not optimal at ECAC level: at the end of 2015, only 18 ECAC airports were fully CDM compliant, with additional six that will be integrated into network by the end of 2016. The deployment of the corresponding PCP families within the SES area is the responsibility of SDM and details will be found in Deployment Programme 2016. At ECAC level, the implementation target of 80% of airports by end 2016 will not be met (currently at 38%). This may result in lost performance benefits at network level. The most challenging aspect of

implementation seems to be process of integration into network, as it requires data exchange with Network Manager Operational Centre (NMOC).

3.3.22 Advanced Surface Movement Guidance and Control System (A-SMGCS) is a very important airport improvement focused on improving airport performance (mainly safety and flight efficiency). ASMGCS Level 1 implementation sets the required foundation for further improvements (e.g. planning and routing functionalities). The deployment of the corresponding DP families within the SES area is the responsibility of SDM and details will be found in Deployment Programme 2016. Following the ESSIP Report 2015 and looking at ECAC level, the progress of this functionality is matter of serious concern: at the end of 2015, only 28 airports were fully equipped with A-SMGCS Level 1, whilst full implementation (47 airports) was targeted by end 2011. That means it is expected to have at least five years of delay comparing to originally planned date; this also means delayed benefits in improving the controller situation awareness and therefore safety and flight efficiency. The main issue is equipping the ground vehicles operating on the apron with vehicle transmitters. Because of this long delay, subsequent functionalities, like alerting or planning and routing functions, may be delayed. One reason to explain this slow implementation progress may be the investor's desire to position such costly service upgrades within the CEF funded projects.

3.3.23 The remaining five airports related implementation objectives are showing a good progress of implementation with no issue of concern identified in 2015.

3.3.24 Based on the information gathered in the 2015 monitoring reports (CAPEX part) the distribution of investments per Major ATM Change in this Key Feature is as follows:

Major ATM Changes	Pre-SESAR	PCP	States investing in Major ATM Change in 2015
Collaborative Airport	**Initial airport CDM** • AOP05-Airport CDM **Additional Objectives:** • ENV02-Collaborative Environmental Management	**Airport operations plan** • AOP11-Initial Airport Operations Plan	Czech Republic Austria Luxembourg France Latvia Spain
Surface management	**A-SMGCS L1 and L2** • AOP04.1-A-SMGCS L1 • AOP04.2-A-SMGCS L2 **Additional Objectives:** • SAF11-Prevent Runway Excursions • AOP03-Prevent Runway Incursions	**Automated assistance to controller for surface movement planning and routing** • AOP13-Automated Assistance to Controller for Surface Movement Planning and Routing (NEW) **Airport safety nets** • AOP12-Improve RWY safety with ATC clearance monitoring **DMAN synchronised with pre-departure sequencing** **DMAN integrating surface management constraints**	Poland Italy Czech Republic Austria Luxembourg Germany France Switzerland
Enhanced / Optimised operations in the vicinity of the runway	**Crosswind reduced separations for arrivals** **Operations in LVC** **Additional Objectives:** • ENV01-Continuous Descent Operations	**TBS for final approach** • AOP10-Time based separation	-
Remote Tower			-

3.3.25 Only few States spent money on investments linked to the Major ATM Changes under the "High-performing airport operations" SESAR Key Feature in 2015. This corroborates the ESSIP Report 2015 conclusion regarding Airport A-CDM and A-SMGCS Level 1 late implementation.

Enabling aviation infrastructure

3.3.26 The enhancements of the first three Features will be underpinned by a rationalised, advanced and integrated aviation infrastructure. It will rely on enhanced integration and interfacing between aircraft avionics and ground systems. Trajectory based operations will be the baseline for determining the configuration of communications, navigation and surveillance and support capabilities and services. The role of the human will be further considered in a

coordinated way for application across a globally interoperable ATM system. The continued integration of general aviation and rotorcraft and the introduction of remotely-piloted aircraft systems (RPAS) into the aviation system and ATM environment is a major activity in this feature.

3.3.27 This key feature faces five particular challenges:

- Transition to Voice over IP

The synchronised transition to VoIP is slow. The choice of technical equipment suitable for the ATM industry's requirements is still limited. The national plans indicate that there will be a large-scale VoIP deployment effort in 2019, meaning in theory an ECAC wide implementation completed in 2020. However at this time, such widespread and large-scale deployment within the remaining four years is considered as a high risk.

- Creating the technical foundation for the SWIM concepts

The reporting under the Pre-SWIM area indicates that the ANSPs have implemented or have short-term plans for implementation of the basic elements that enable the transition to a SWIM orientated information sharing concept. However, this year, the Master Plan Level 3 data collection does not provide sufficient granularity to fully understand whether the stakeholders have begun implementation of solutions that will enable the introduction of the future Service Orientated Architecture to the European ATM system. The new implementation objectives on SWIM that are introduced in the 2016 Plan will allow such data collection. There is some confidence that the co-founding processes for AF5 implementation will trigger the stakeholders' reflections on the strategic reorientation of the communication architecture which is now clearly needed.

- VDL2 Datalink/ELSA Study

VDL 2 Datalink implementation is a critical issue for investors and a legal challenge which must be resolved. In this context, the strategic view of this report presents some of the implementation issues and lessons learned collected through stakeholder consultation (need for synchronised air-ground deployment, stronger Programme management, lack of governance, etc.). In addition, these lessons learned shall be complemented with the conclusions coming out of the ELSA study (published in July 2016). The ELSA study recommendations should be adopted and implemented at appropriate level.

It should be noted that adequate Air/Ground data communications are essential to support trajectory based operations as foreseen in the SESAR Concept and in the Master Plan. Close collaboration with all ATM stakeholders, standardisation organisations, ICAO and other ATM modernisation programmes such as the U.S. NextGen programme is necessary and should be reinforced.

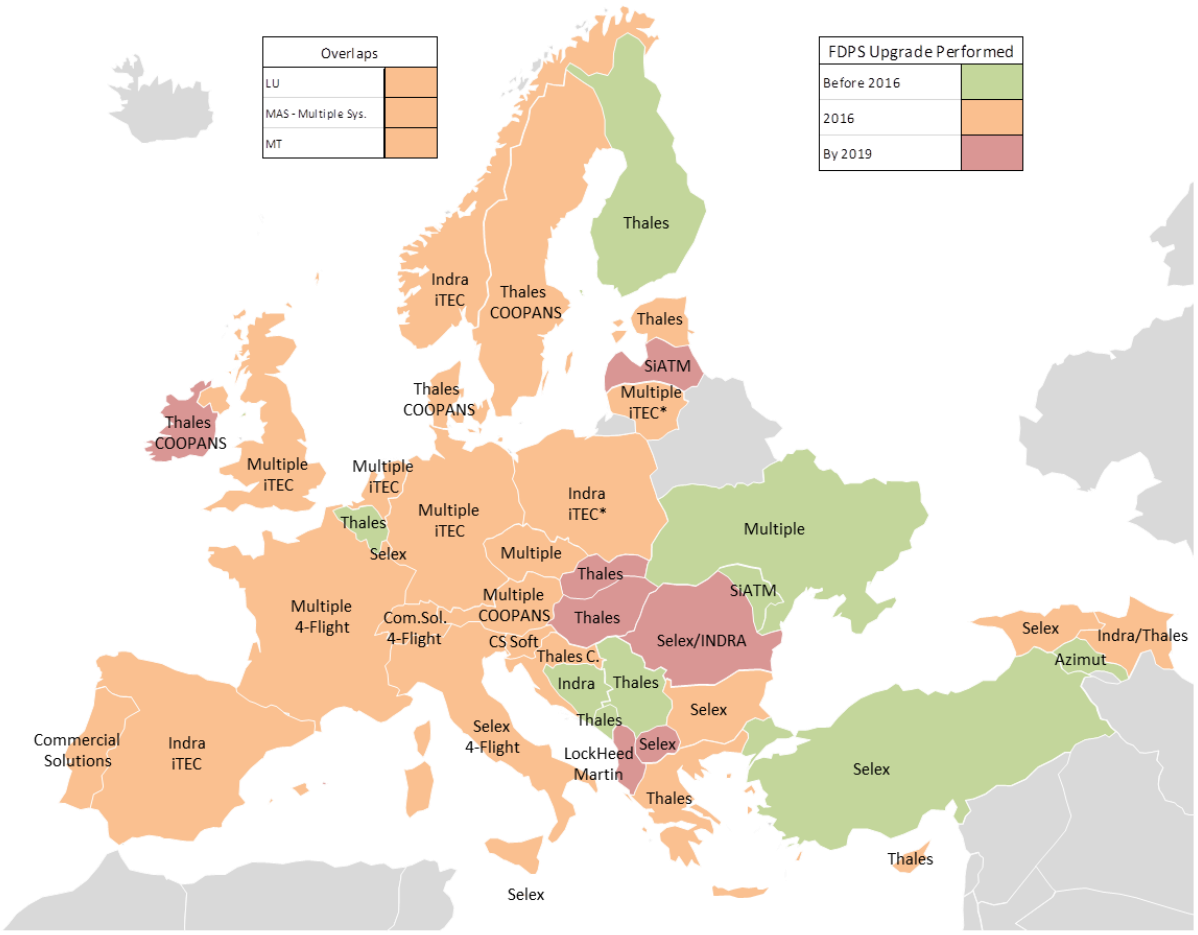
- Lack of a clear European deployment strategy for surveillance infrastructure

The Master Plan Level 3 data indicates that the performance requirements for the surveillance function (SPI, ACID) will evolve in the coming five to ten years. The exact characteristics of the ground based infrastructure constituents are not yet known. The choice of ADS-B based solutions for continental surveillance is limited and major parts of the surveillance infrastructure that will deliver the expected level of performance will probably be based on less cost-efficient Wide Area Multilateration deployments in combination with classical radar infrastructure.

- Need for ANSP collaboration to achieve interoperability

A strong trend is that ANSPs work together through industrial partnerships to evolve and harmonise ATM systems to meet the future requirements for advanced functions, as set forth in the PCP Regulation. The main ANSP collaborations are the COOPANS alliance (5 ANSPs), the iTEC alliance (5 ANSPs) and the Coflight/4 Flight alliance (3 ANSPs), and those ANSP alliances are closely integrated with the relevant technology providers, Thales, Indra and Thales/Selex ES (now Leonardo) respectively. It should be noted that there is no correlation between these partnerships and the FAB geographical areas.

3.3.28 Furthermore, in most of the ECAC States ANSPs report major technology upgrade plans to support future operations and meet regulatory requirements. By 2019, all ECAC States will have upgraded their ATM systems, as highlighted in the map below:



3.3.29 The adoption of the Deployment Programme and its EU funding opportunities certainly contribute to these increased activities on technology deployment.

3.3.30 On this background, there is now a very important window of opportunity for ANSPs to enhance their collaboration with a view to securing and achieving full interoperability in line with Master Plan Level 1 vision.

3.3.31 Based on the information gathered in the 2015 monitoring reports (CAPEX part) the distribution of investments per Major ATM Change in this Key Feature is as follows:

Major ATM Changes	Pre-SESAR	PCP	States investing in Major ATM Change in 2015
Pre-SWIM & SWIM	**IP network** • ITY-FMTP-FMTP over IPv6 **B2B services** • FCM05-Rolling NOP **Information reference and exchange models** • INF07-eTOD • ITY-ADQ-Aeronautical Data Quality	**Common Infrastructure Components: SWIM registry, PKI** • INF08.1-iSWIM (NEW) **SWIM technical infrastructure and profiles** • INF08.1-iSWIM (NEW) **Aeronautical information exchange** • INF08.1-iSWIM (NEW) **Meteorological information exchange** • INF08.1-iSWIM (NEW) **Cooperative network information exchange** • INF08.1-iSWIM (NEW) **Flight information exchange** • INF08.2-SWIM Blue TI (NEW) **Initial trajectory information sharing (i4D)** • INF08.1-iSWIM (NEW) • INF08.2-SWIM Blue TI (NEW) **Additional objectives:** • COM12-Future PENS (NEW)	Poland Italy Romania Sweden Czech Republic Austria Luxembourg Germany France Norway Spain UK
Data Link	**A/G datalink** • ITY-AGDL-A/G Data-link		Italy, Austria, Norway, Bulgaria, Germany, Estonia, Romania, France, Finland, Sweden, Netherlands, Spain, C. Republic, Switzerland, UK
ADS-B & Surveillance	**ADS-B, WAM** • ITY-ACID-Aircraft Identification • ITY-SPI-Surveillance performance and interoperability **GNSS, GBAS, SBAS**		Italy, Austria, Germany, Bulgaria, Croatia, Norway, Romania, Slovakia, Finland, Sweden, Luxembourg, Spain, C. Republic, Belgium, Portugal
	Additional Objectives: • COM10-Basic and enhanced AMHS • COM11-Voice over IP • ITY-AGVCS2-8,33KHz below FL195		Poland, Austria, Norway, Italy, Slovakia, Estonia, Bulgaria, Luxembourg, Spain, Romania, Belgium, Portugal, Sweden, Germany, UK, C. Republic, France

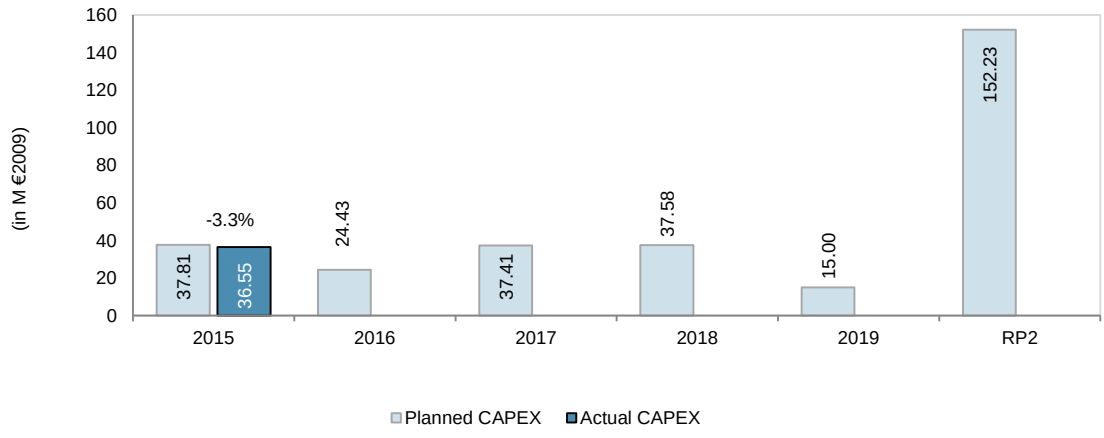
3.3.32 Most of the investments executed in 2015 are contributing to the Major ATM Changes within the "Enabling aviation infrastructure" SESAR Key Feature. Despite the fact that many States invest to implement these Major ATM Changes, some processes are still low, such as the VoIP transition or the surveillance functions.

4. BALTIC FAB

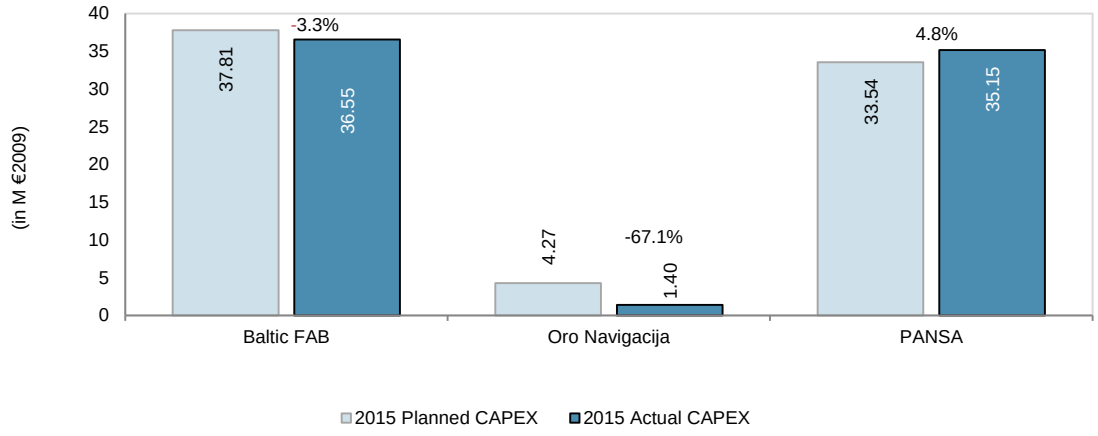
4.1. FAB level

Overall Investment data						
BALTIC - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**37.81**	24.43	37.41	37.58	15.00	152.23
% of Oro Navigacija Total Planned CAPEX in BALTIC	11.3%	31.4%	15.7%	0.9%	8.4%	12.7%
% of PANSA Total Planned CAPEX in BALTIC	88.7%	68.6%	84.3%	99.1%	91.6%	87.3%
BALTIC - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**36.55**					
% of Oro Navigacija Total Actual CAPEX in BALTIC FAB	3.8%					
% of PANSA Total Actual CAPEX in BALTIC FAB	96.2%					
BALTIC - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	162.37					
Total Actual Real gate-to-gate ANSP costs	159.85					
% of Planned CAPEX into Real gate-to-gate ANSP costs	23.3%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	22.9%					
BALTIC - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-1.25**					
Total CAPEX (in %, for M €2009)	-3.3%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**3.30**					

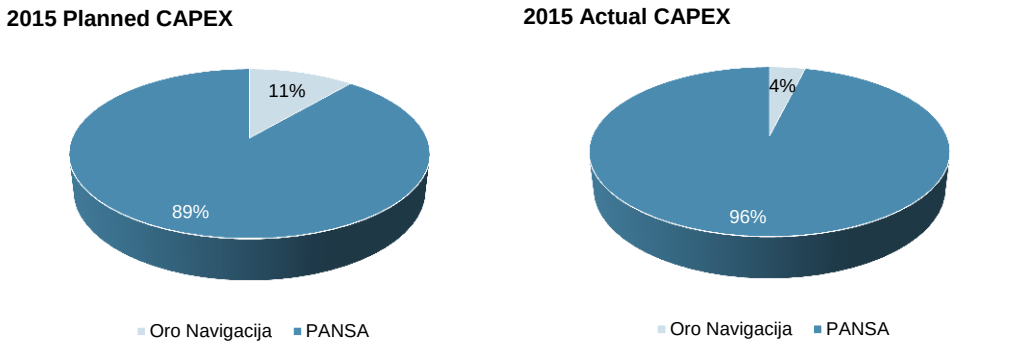
Total Planned vs. Total Actual CAPEX for BALTIC FAB for 2015 in RP2



Total Planned vs Total Actual CAPEX for BALTIC FAB and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in BALTIC FAB



Investment Analysis and Information reported

4.1.1 In 2015, the BALTIC FAB ANSPs collectively spent 3.3% less CAPEX than originally planned. This situation at FAB level results from the combination of Oro Navigacija spending 2.87 M€$_{2009}$ less than planned together with PANSA spending 1.61 M€$_{2009}$ more than planned.

4.1.2 The main reasons for Oro Navigacija underspending are mainly caused by the complicated procedures of public procurement and PANSA spent significantly more in unplanned investments. From the total amount spent in 2015 by the BALTIC FAB, Oro Navigacija spent 4% (i.e. 1.40 M€$_{2009}$ and PANSA 96% (i.e. 35.15 M€$_{2009}$).

4.1.3 Over the 2015 period, the actual CAPEX of the BALTIC FAB expressed in % of the real gate-to-gate ANSP costs reached 22.9%.

4.1.4 Out of the Main CAPEX investments for RP2, it was reported that Oro Navigacija received no CEF / TEN-T funding and PANSA was granted with CEF funding for one investment with total of 3,30 M€ as per grant agreement.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**13**
Oro Navigacija	4
PANSA	9

Number of 2015 Main CAPEX investments actually executed in 2015	**16**
Oro Navigacija	2
PANSA	14

Out of the Main CAPEX investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP					**11**
Oro Navigacija					1
PANSA					10
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
Oro Navigacija		1			
PANSA		4		2	5
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**16.69**
Oro Navigacija					0.11
PANSA					16.58

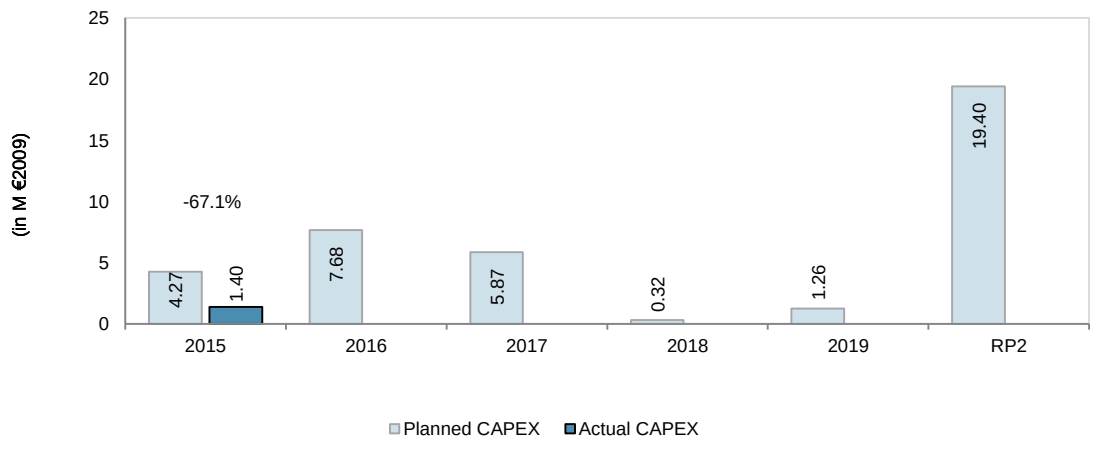
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**5**
Oro Navigacija	1
PANSA	4
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**15.16**
Oro Navigacija	0.60
PANSA	14.56

Number of 2015 Main CAPEX investments **linked** to PCP	**0**
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

4.2. LITHUANIA (ORO NAVIGACIJA)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MLTL)	4.82	8.86	6.95	0.39	1.56	22.58
Main CAPEX (in nominal MLTL)	4.24	8.71	6.42	0.06	1.25	20.68
Inflation%	1.7%	2.2%	2.5%	2.2%	2.2%	
Inflation index (100 in 2009)	112.9	115.4	118.4	121.0	123.7	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**4.27**	7.68	5.87	0.32	1.26	19.40
Main CAPEX (in M €2009)	3.75	7.55	5.43	0.05	1.01	17.79
% Main into Total CAPEX	87.9%	98.3%	92.4%	15.5%	80.3%	91.7%
Real gate-to-gate ANSP costs (in M €2009)	23.15	22.64	22.71	23.05	23.13	114.68
% of CAPEX into Real gate-to-gate ANSP costs	18.4%	33.9%	25.9%	1.4%	5.4%	16.9%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MLTL)	1.54					
Main CAPEX (in nominal MLTL)	0.78					
Inflation%	-0.7%					
Inflation index (100 in 2009)	109.5					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**1.40**					
Main CAPEX (in M €2009)	0.71					
% Main into Total CAPEX	50.8%					
Real gate-to-gate ANSP costs (in M €2009)	23.55					
% of CAPEX into Real gate-to-gate ANSP costs	6.0%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MLTL)	-3.28					
Total CAPEX (in M €2009)	-2.87					
Total CAPEX (in %, for M €2009)	**-67.1%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

4.2.1 In 2015 there were 2 Main investments for which money was spent by Oro Navigacija. There were 4 investments foreseen for 2015 in the RP2 PP, but 2 were not executed. There were no unplanned investments. No investments were linked to CAPEX projects from RP1.

4.2.2 Oro Navigacija spent 2.87 M€$_{2009}$ (or 67.1%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 6%.

4.2.3 The change of investment in 2015 is due to the following:

- For the investment for 'ACC and administration' the project is late. It may be finished just at the end of 2017.
- The project for 'DME implementation in Vilnius' is ongoing. It is foreseen to finish earlier in 2016 with lower investment amount.

4.2.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	4
Number of 2015 Main CAPEX investments actually executed in 2015	2

Out of the Main CAPEX investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**1**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
DME implementation in Vilnius	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
-	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0.11**

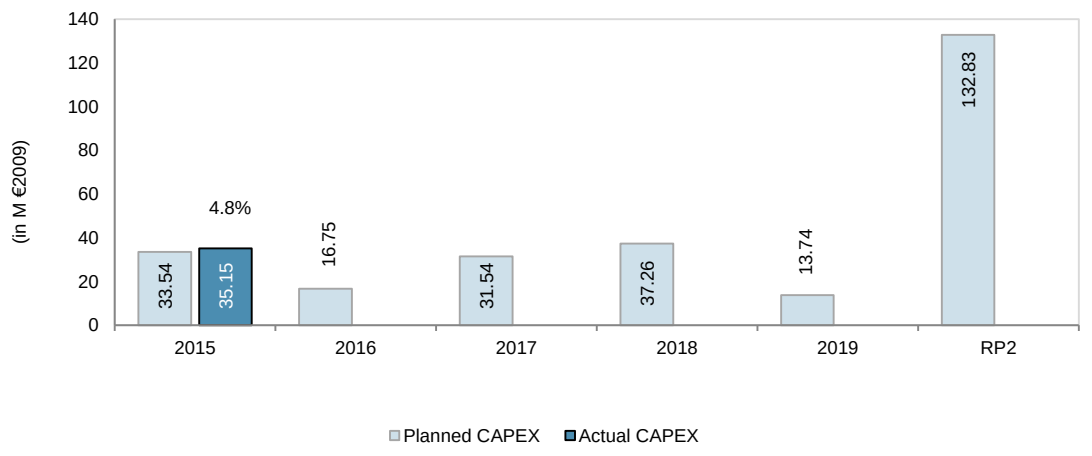
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**1**
ACC and administration building	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0.60**
Number of 2015 Main CAPEX investments **linked** to PCP	**0**
-	
Total amount spent in 2015 for investments linked to PCP (in M€2009)	0

Note: Lithuania provided slight modification of the RP2 PP data to the information on links to ATM MP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps and enablers).

4.3. POLAND (PANSA)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MPLN)	168.00	86.00	166.00	201.00	76.00	697.00
Main CAPEX (in nominal MPLN)	161.47	76.76	156.91	191.87	70.52	657.53
Inflation%	2.4%	2.5%	2.5%	2.5%	2.5%	
Inflation index (100 in 2009)	115.9	118.7	121.7	124.8	127.9	
Exchange rate 2009	4.32	4.32	4.32	4.32	4.32	
Total CAPEX (in M €2009)	**33.54**	16.75	31.54	37.26	13.74	132.83
Main CAPEX (in M €2009)	32.23	14.95	29.81	35.57	12.75	125.32
% Main into Total CAPEX	96.1%	89.3%	94.5%	95.5%	92.8%	94.3%
Real gate-to-gate ANSP costs (in M €2009)	139.22	141.85	144.07	144.00	144.06	713.19
% of CAPEX into Real gate-to-gate ANSP costs	24.1%	11.8%	21.9%	25.9%	9.5%	18.6%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MPLN)	168.50					
Main CAPEX (in nominal MPLN)	122.54					
Inflation%	-0.7%					
Inflation index (100 in 2009)	110.9					
Exchange rate 2009	4.32					
Total CAPEX (in M €2009)	**35.15**					
Main CAPEX (in M €2009)	25.56					
% Main into Total CAPEX	72.7%					
Real gate-to-gate ANSP costs (in M €2009)	136.30					
% of CAPEX into Real gate-to-gate ANSP costs	25.8%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MPLN)	0.50					
Total CAPEX (in M €2009)	1.61					
Total CAPEX (in %, for M €2009)	**4.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	3.30					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

4.3.1 In 2015 there were 14 Main investments for which money was spent by the ANSP. There were 9 investments foreseen for 2015 in the RP2 PP, but 1 was not executed and 1 unforeseen for 2015 was executed. There were 5 unplanned investments. Ten of the executed investments were linked to CAPEX projects from RP1.

4.3.2 PANSA spent 1.61 M€$_{2009}$ (or 4.8%) more Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 25.8%.

4.3.3 The lower investment amounts are due to several reasons, but mainly to:

- Delays caused by the public procurement ('Radio location system', 'Towers');
- Lower expenditures than planned, investments were cheaper than assumed ('Ground stations', 'DVOR/DME Infrastructure', ATM Systems inspection aircraft);

4.3.4 Exceptionally a higher investment amount is taken for 'ATC training and contingency infrastructure' and the unplanned investment 'Pegasus ATM system and supporting systems'.

4.3.5 PANSA spent 7.74 M€$_{2009}$ in unplanned investments.

4.3.6 CEF funding was granted only for 1 investment (Pegasus) in the amount of 3.30 M€ as per grant agreement.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	9
Number of 2015 Main CAPEX investments actually executed in 2015	14

Out of the Main CAPEX investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**10**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
DVOR/DME Infrastructure DVOR/DME Infrastructure (unplanned) Towers Pegasus ATM system and supporting systems	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Pegasus ATM system and supporting systems AIM - Aeronautical Information Management	
Other features	
Radio location system Ground stations Ground stations (unplanned) ILS/DME Infrastructure ILS/DME Infrastructure (unplanned)	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**16.58**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**4**
ATC training and contingency infrastructure ATM Systems inspection aircraft Towers (unplanned) Pegasus ATM system and supporting systems (unplanned)	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**14.56**

Number of 2015 Main CAPEX investments **linked** to PCP	**0**
-	
Total amount spent in 2015 for investments linked to PCP (in M€2009)	0

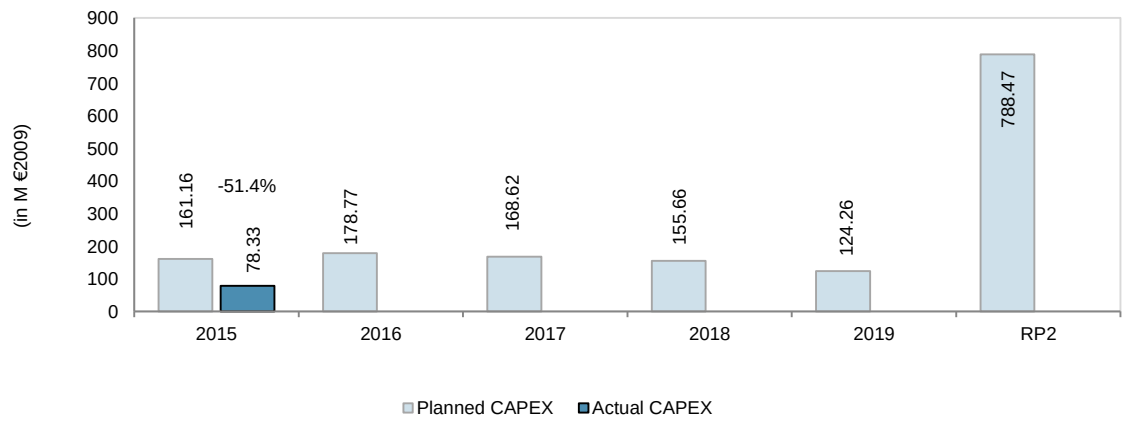
Note: Poland did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as OI steps and enablers from ATM MP data set which was available at the time of the development of the RP2 PP.

5. BLUE MED FAB

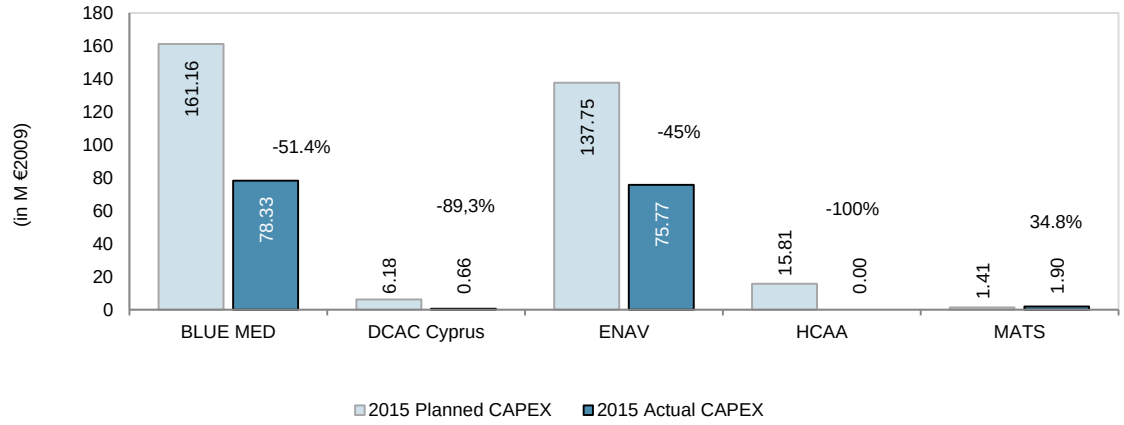
5.1. FAB level

Overall Investment data						
BLUE MED - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**161.16**	178.77	168.62	155.66	124.26	788.47
% of DCAC Cyprus Total Planned CAPEX in BLUE MED	3.8%	1.9%	1.2%	0.0%	0.0%	1.5%
% of ENAV Total Planned CAPEX in BLUE MED	85.5%	79.1%	79.1%	79.4%	81.4%	80.9%
% of HCAA Total Planned CAPEX in BLUE MED	9.8%	14.9%	14.7%	16.6%	17.7%	14.6%
% of MATS Total Planned CAPEX in BLUE MED	0.9%	4.1%	4.9%	3.9%	0.8%	3.1%
BLUE MED - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**78.33**					
% of DCAC Cyprus Total Actual CAPEX in BLUE MED	0.8%					
% of ENAV Total Actual CAPEX in BLUE MED	96.7%					
% of HCAA Total Actual CAPEX in BLUE MED	0.0%					
% of MATS Total Actual CAPEX in BLUE MED	2.4%					
BLUE MED - Real gate-to-gate ANSP costs (M €2009)	2015	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	793.19					
Total Actual Real gate-to-gate ANSP costs	761.62					
% of Planned CAPEX into Real gate-to-gate ANSP costs	20.3%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	10.3%					
BLUE MED - Actuals vs Planned	2015	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-82.83**					
Total CAPEX (in %, for M €2009)	-51.4%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**3.90**					

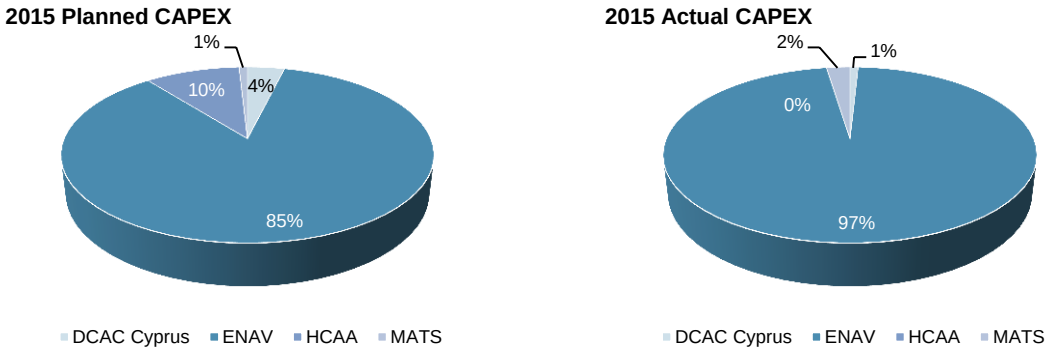
Total Planned vs. Total Actual CAPEX for BLUEMED FAB for 2015 in RP2



Total Planned vs Total Actual CAPEX for BLUEMED FAB and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in BLUEMED FAB



Investment Analysis and Information reported

5.1.1 In 2015, the BLUEMED ANSPs collectively spent 51.4% less CAPEX than originally planned. This situation at FAB level results from the combination of 3 ANSPs spending less than planned: DCAC Cyprus (-89.3%), HCAA Greece (-100%) and ENAV (-45%), and 1 ANSP spending more than planned: MATS (34.8%).

5.1.2 The main reasons for the ANSPs over/underspending are not clearly given. Information has been provided on a small number of projects and was limited to mentioning merging of 2 projects (Greece), postponement in procurement (MATS) and co-funding by INEA in the CEF call 2015 (Italy). From the total amount spent in 2015 by BLUE MED, DCAC Cyprus spent 1% (i.e. 0.66 M€$_{2009}$), HCAA 0%, ENAV 97% (75.77 M€$_{2009}$) and MATS spent 2% (i.e. 1.9 M€$_{2009}$).

5.1.3 Over the 2015 period, the actual CAPEX of the BLUE MED FAB expressed in % of the real gate-to-gate ANSP costs reached 10.28%.

5.1.4 Two out of the four ANSPs informed on CEF funding: HCAA for 5 projects, but with no information on the amount granted and ENAV provided the value of cofounding based on the actual eligible costs declared for CEF 2014 call in year 2015 of 3.90 M€ as per grant agreement.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**63**
DCAC Cyprus	5
ENAV	23
HCAA	15

MATS	20
Number of 2015 Main CAPEX investments actually executed in 2015	**35**
DCAC Cyprus	2
ENAV	16
HCAA	0
MATS	17

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP					**15**
DCAC Cyprus					0
ENAV					14
HCAA					0
MATS					1
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
DCAC Cyprus					
ENAV	1	4	3	8	
HCAA					
MATS					1
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**20.45**
DCAC Cyprus					-
ENAV					20.44
HCAA					-
MATS					0.01

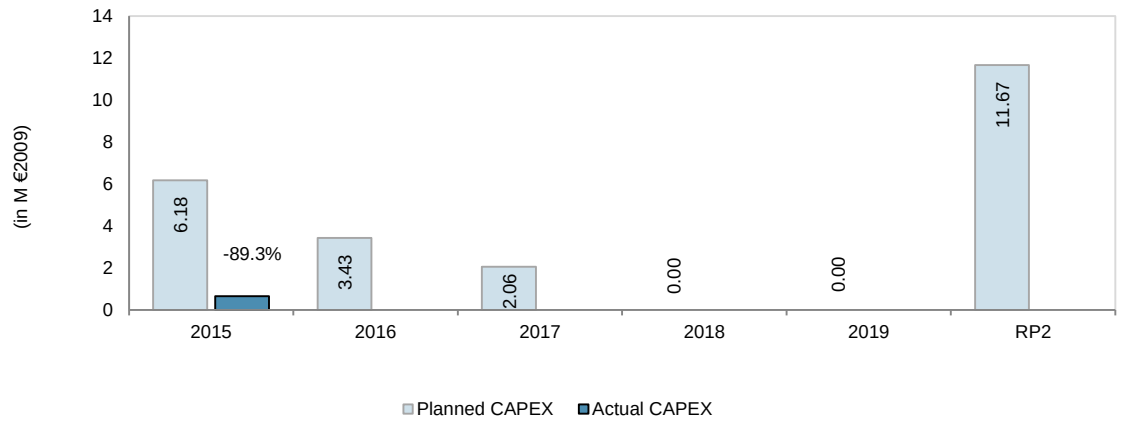
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**20**
DCAC Cyprus	2
ENAV	2
HCAA	-
MATS	16
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**3.81**
DCAC Cyprus	0.56
ENAV	1.53
HCAA	-
MATS	1.72

Number of 2015 Main CAPEX investments **linked** to PCP	**11**
DCAC Cyprus	-
ENAV	11
HCAA	-
MATS	-
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**15.86**
DCAC Cyprus	-
ENAV	15.86
HCAA	-
MATS	-

5.2. Cyprus (DCAC Cyprus)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	6.98	3.94	2.40	0.00	0.00	13.32
Main CAPEX (in nominal M€)	6.98	3.94	2.40	0.00	0.00	13.32
Inflation%	1.6%	1.7%	1.7%	1.8%	2.0%	
Inflation index (100 in 2009)	112.9	114.8	116.8	118.9	121.3	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**6.18**	3.43	2.06	0.00	0.00	11.67
Main CAPEX (in M €2009)	6.18	3.43	2.06	0.00	0.00	11.67
% Main into Total CAPEX	100.0%	100.0%	100.0%	-	-	100.0%
Real gate-to-gate ANSP costs (in M €2009)	37.65	37.64	38.70	39.13	39.49	192.61
% of CAPEX into Real gate-to-gate ANSP costs	16.4%	9.1%	5.3%	0.0%	0.0%	6.1%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	0.71					
Main CAPEX (in nominal M€)	0.04					
Inflation%	-1.5%					
Inflation index (100 in 2009)	107.8					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**0.66**					
Main CAPEX (in M €2009)	0.04					
% Main into Total CAPEX	5.7%					
Real gate-to-gate ANSP costs (in M €2009)	38.01					
% of CAPEX into Real gate-to-gate ANSP costs	1.7%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-6.27					
Total CAPEX (in M €2009)	-5.52					
Total CAPEX (in %, for M €2009)	**-89.3%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

5.2.1 In 2015 there were 2 Main investments for which money was spent by DCAC Cyprus. There were 5 investments foreseen for 2015 in the RP2 PP, but 4 were not executed. There was 1 unplanned investment. No investments were linked to CAPEX projects from RP1.

5.2.2 DCAC Cyprus spent 5.52 M€$_{2009}$ (or 89.3%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 1,7%.

5.2.3 In the 2015 monitoring report (CAPEX part), DCAC Cyprus has provided no information on the non-investment of the 5 main planned figures.

5.2.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	5
Number of 2015 Main CAPEX investments actually executed in 2015	2

Out of the investments actually executed in 2015, the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**0**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
-	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
-	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
AMHS DIRECTION FINDER system at Larnaca and Paphos Airports	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0.56**

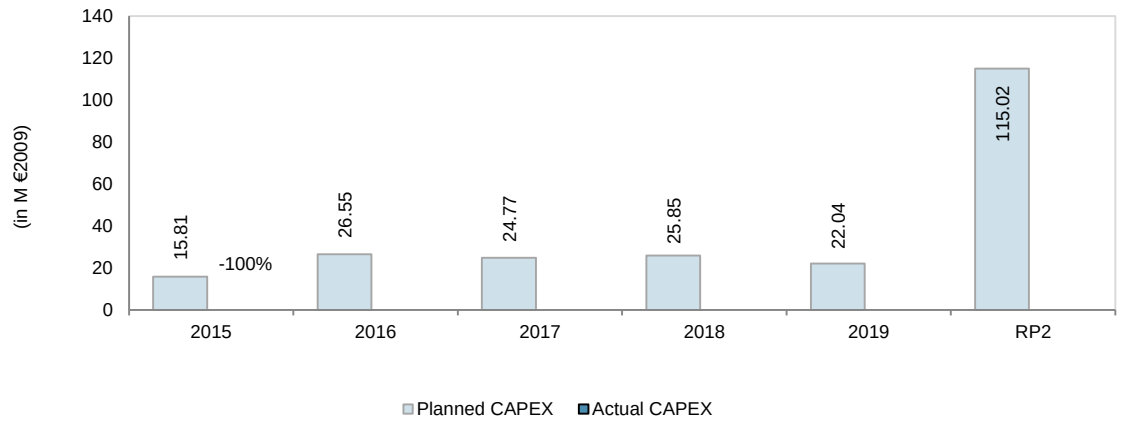
Number of 2015 Main CAPEX investments **linked** to PCP	**0**
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

Note: Cyprus did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. None of the investments are linked to ATM MP.

5.3. Greece (HCAA)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	17.06	28.96	27.36	28.90	25.03	127.32
Main CAPEX (in nominal M€)	17.06	28.96	27.36	28.90	25.03	127.32
Inflation%	0.3%	1.1%	1.2%	1.3%	1.6%	
Inflation index (100 in 2009)	107.9	109.1	110.4	111.8	113.6	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**15.81**	26.55	24.77	25.85	22.04	115.02
Main CAPEX (in M €2009)	15.81	26.55	24.77	25.85	22.04	115.02
% Main into Total CAPEX	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Real gate-to-gate ANSP costs (in M €2009)	136.43	137.91	140.47	139.70	145.90	700.41
% of CAPEX into Real gate-to-gate ANSP costs	11.6%	19.3%	17.6%	18.5%	15.1%	16.4%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	0.00					
Main CAPEX (in nominal M€)	0.00					
Inflation%	-1.1%					
Inflation index (100 in 2009)	105.4					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**0.00**					
Main CAPEX (in M €2009)	0.00					
% Main into Total CAPEX	-					
Real gate-to-gate ANSP costs (in M €2009)	137.81					
% of CAPEX into Real gate-to-gate ANSP costs	0.0%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-17.06					
Total CAPEX (in M €2009)	-15.81					
Total CAPEX (in %, for M €2009)	**-100.0%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**Not reported**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

5.3.1 In 2015 there were no investments executed in the portfolio of HCAA Greece. No 'Other' investments were reported and no link to RP1 investments was made.

5.3.2 HCAA Greece spent 15.81 M€$_{2009}$ (or 100%) less total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 0.0%.

5.3.3 In the 2015 monitoring report (CAPEX part), HCAA Greece has provided information on the changes in the planning for 1 of the projects planned for 2015: 'Replacement of the main VCS/RCS system of Athinai and Makedonia ACCs, which is going to be merged with 'Procurement installation and commissioning of a new SDPS, FDPS& ODS (PALLAS)', project planned for 2018-2019 in 1 procurement.

5.3.4 It was reported that for 5 of the RP2 main CAPEX investments CEF/TEN-T funding was granted, but no details on the amount as per grant agreement was reported.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	15
Number of 2015 Main CAPEX investments actually executed in 2015	0

Out of the investments actually executed in 2015, the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**0**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
-	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

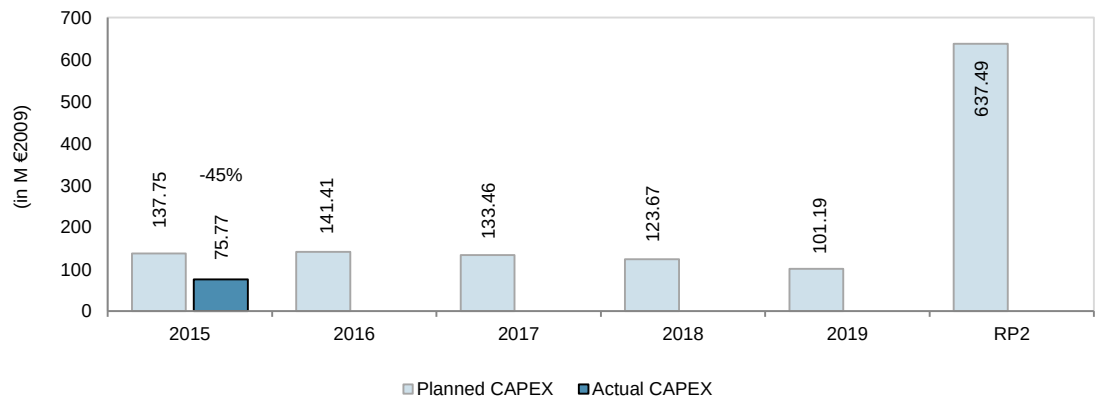
Number of 2015 Main CAPEX investments **linked** to PCP	**0**
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

Note: Greece executed no investment during 2015. On the other hand, it did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided as ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

5.4. Italy (ENAV)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	152.62	158.40	151.44	142.44	118.41	723.30
Main CAPEX (in nominal M€)	41.63	75.40	75.71	60.16	40.32	293.22
Inflation%	1.0%	1.1%	1.3%	1.5%	1.6%	
Inflation index (100 in 2009)	110.8	112.0	113.5	115.2	117.0	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**137.75**	141.41	133.46	123.67	101.19	637.49
Main CAPEX (in M €2009)	37.57	67.31	66.72	52.23	34.46	258.30
% Main into Total CAPEX	27.3%	47.6%	50.0%	42.2%	34.1%	40.5%
Real gate-to-gate ANSP costs (in M €2009)	602.27	611.85	617.74	606.36	592.74	3030.97
% of CAPEX into Real gate-to-gate ANSP costs	22.9%	23.1%	21.6%	20.4%	17.1%	21.0%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	83.17					
Main CAPEX (in nominal M€)	24.12					
Inflation%	0.1%					
Inflation index (100 in 2009)	109.8					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**75.77**					
Main CAPEX (in M €2009)	21.97					
% Main into Total CAPEX	29.0%					
Real gate-to-gate ANSP costs (in M €2009)	568.95					
% of CAPEX into Real gate-to-gate ANSP costs	13.3%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-69.46					
Total CAPEX (in M €2009)	-61.99					
Total CAPEX (in %, for M €2009)	**-45.0%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**3.90**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

5.4.1 In 2015 there were 16 Main investments for which money was spent by ENAV. There were 23 investments foreseen for 2015 in the RP2 PP, but 7 were not executed. There were no unplanned investments. No investments were linked to CAPEX projects from RP1.

5.4.2 ENAV spent 61.99 M€$_{2009}$ (or 45%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 13.3%.

5.4.3 The overall explanation for the underspending was that the eligible part of the planned projects had been submitted for co-funding to INEA in the CEF call 2015. Granting was pending to INEA decision expected by end of June 2016.

5.4.4 ENAV reported that for the CEF 2014 Call in year 2015 they were granted with 3.90M € as per grant agreement (50% of the eligible cost).

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	23
Number of 2015 Main CAPEX investments actually executed in 2015	16

Out of the investments actually executed in 2015, the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**14**
Optimised ATM Network Services	
Coflight	
Advanced Air Traffic Services	
4Flight Coflight Datalink 2000+ implementation (phase 2) Deconflicting Tools	
High Performing Airports	
ASMGCS Level 2 Multilateration System (Venezia) New SMR and new data fusion system at Milano Linate	
Enabling the Aviation Infrastructure	
ADS-B completion Accesso WEB alle informazioni aeronautiche (Self Briefing) Datalink 2000+ implementation (phase 2) ENET ENET Completion Ground-ground and air-ground phone communication adaptation to VoIP NOAS (New Operational Area System) TBT 8.33 KH completion below FL195	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**20.44**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
AIDA New TWR system architecture	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**1.53**

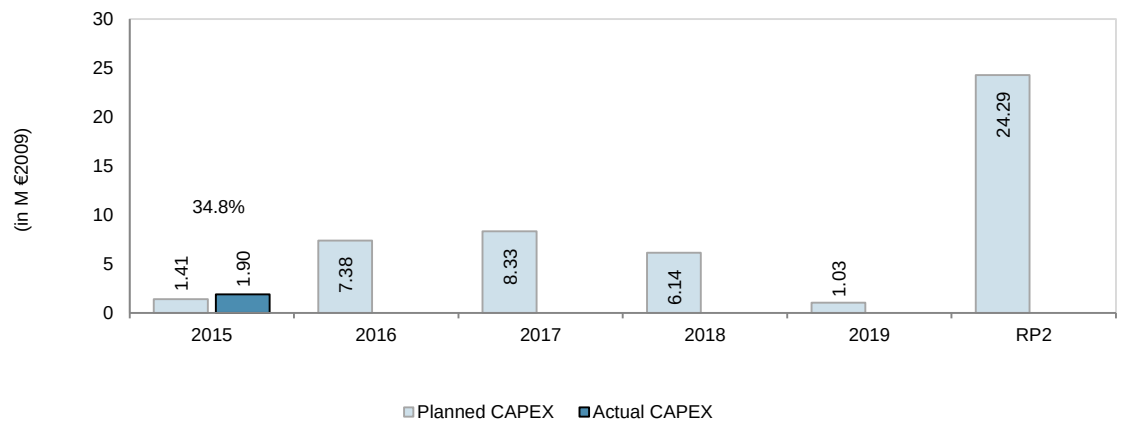
Number of 2015 Main CAPEX investments **linked** to PCP	**11**
4Flight	AF1, AF3, AF5, AF6
Accesso WEB alle informazioni aeronautiche (Self Briefing)	AF5
ASMGCS Level 2	AF2
Coflight	AF3
Datalink 2000+ implementation (phase 2)	AF6
Deconflicting Tools	AF3
ENET	AF5
ENET Completion	AF5
Multilateration System (Venezia)	AF2
New SMR and new data fusion system at Milano Linate	AF2
New TWR system architecture	AF2
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**15.86**

Note: Italy did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided as ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

5.5. Malta (MATS)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	1.58	8.42	9.65	7.24	1.23	28.12
Main CAPEX (in nominal M€)	1.58	8.42	9.65	7.24	1.23	28.12
Inflation%	1.7%	1.8%	1.7%	1.7%	1.7%	
Inflation index (100 in 2009)	111.9	114.0	115.9	117.9	119.9	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**1.41**	7.38	8.33	6.14	1.03	24.29
Main CAPEX (in M €2009)	1.41	7.38	8.33	6.14	1.03	24.29
% Main into Total CAPEX	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Real gate-to-gate ANSP costs (in M €2009)	16.85	18.31	19.91	20.37	21.07	96.51
% of CAPEX into Real gate-to-gate ANSP costs	8.4%	40.3%	41.8%	30.2%	4.9%	25.2%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	2.12					
Main CAPEX (in nominal M€)	1.92					
Inflation%	1.2%					
Inflation index (100 in 2009)	111.2					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**1.90**					
Main CAPEX (in M €2009)	1.73					
% Main into Total CAPEX	90.8%					
Real gate-to-gate ANSP costs (in M €2009)	16.85					
% of CAPEX into Real gate-to-gate ANSP costs	11.3%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	0.54					
Total CAPEX (in M €2009)	0.49					
Total CAPEX (in %, for M €2009)	**34.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

5.5.1 In 2015 there were 17 Main investments for which money was spent by MATS. There were 20 investments foreseen for 2015 in the RP2 PP, but 4 were not executed and 1 unforeseen for 2015 was executed. There were no unplanned investments. No investments were linked to CAPEX projects from RP1.

5.5.2 MATS spent 0.49 M€$_{2009}$ (or 34.8%) more Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 11,3%.

5.5.3 In the 2015 monitoring report (CAPEX part), MATS has provided information on the status of almost all projects, without explanation, other than postponement, of the change between the actual figures versus the planned.

5.5.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

5.5.5 One unplanned investment was reported, without naming and describing the project, nor the amount spent in 2015.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	20
Number of 2015 Main CAPEX investments actually executed in 2015	17

Out of the investments actually executed in 2015, the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**1**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
-	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
-	
Other features	
OLDI recording	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0.01**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**16**
Microwave Comms link FPL2012 Translator DME PBN Tool Radar Performance Tools TAR MSSR antenna Enroute PSR + WCL IT Hardware & Software Upgrades A/C ops room / equip room Replacement of vehicles NCSS - Ground Movement Redesign of Tower backup power system DER - UPS room air conditioning New PABX MNET PCs - new and replacement	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**1.72**

Number of 2015 Main CAPEX investments **linked** to PCP	**0**
-	-
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

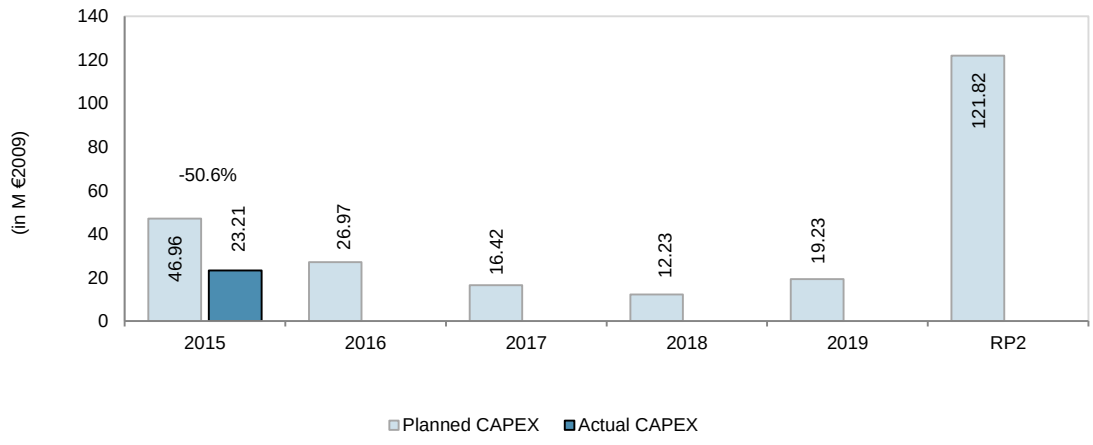
Note: Malta did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Link to ATM MP was provided for one of the executed investments in 2015 (OLDI recording), but with no detail on the ESSIP objective, OI Step or Enabler and only mentioning “ATM system”.

6. DANUBE FAB

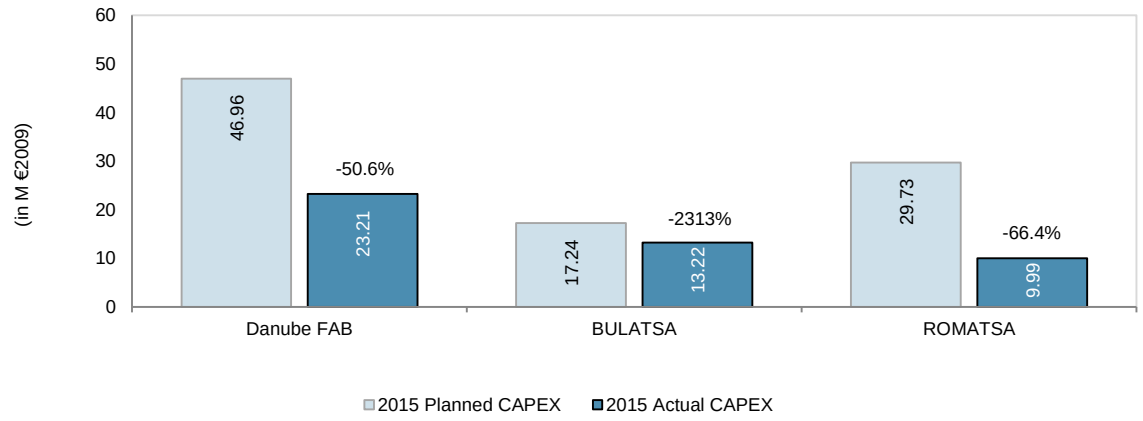
6.1. FAB level

Overall Investment data						
DANUBE - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**46.96**	26.97	16.42	12.23	19.23	121.82
% of BULATSA Total Planned CAPEX in DANUBE FAB	36.7%	33.2%	13.6%	17.9%	49.2%	32.9%
% of ROMATSA Total Planned CAPEX in DANUBE FAB	63.3%	66.8%	86.4%	82.1%	50.8%	67.1%
DANUBE - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**23.21**					
% of BULATSA Total Actual CAPEX in DANUBE FAB	57.0%					
% of ROMATSA Total Actual CAPEX in DANUBE FAB	43.0%					
DANUBE - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	207.80					
Total Actual Real gate-to-gate ANSP costs	218.62					
% of Planned CAPEX into Real gate-to-gate ANSP costs	22.6%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	10.6%					
DANUBE - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-23.75**					
Total CAPEX (in %, for M €2009)	-50.6%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

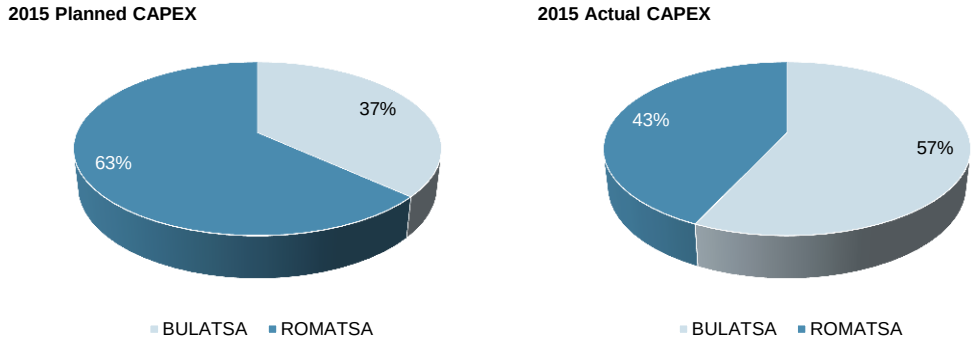
Total Planned vs. Total Actual CAPEX for DANUBE FAB for 2015 in RP2



Total Planned vs Total Actual CAPEX for DANUBE FAB and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in DANUBE FAB



Investment Analysis and Information reported

6.1.1 In 2015, the DANUBE FAB ANSPs collectively spent 50.6% less CAPEX than originally planned. This situation at FAB level results from the combination of BULATSA spending 4.02 M€$_{2009}$ less than planned together with ROMATSA spending 19.73 M€$_{2009}$ less than planned.

6.1.2 The main reasons for BULATSA underspending are linked to longer than expected procurement procedures and ROMATSA underspending to projects' delay. From the total amount spent in 2015 by the DANUBE FAB, BULATSA spent 57.0% (i.e. 13.22 M€$_{2009}$) and ROMATSA 43.0% (i.e. 9.99 M€$_{2009}$).

6.1.3 Over the 2015 period, the actual CAPEX of the DANUBE FAB expressed in % of the real gate-to-gate ANSP costs reached 10.6%.

6.1.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted for any of the ANSPs in DANUBE FAB.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**13**
BULATSA	7
ROMATSA	6
Number of 2015 Main CAPEX investments actually executed in 2015	**11**
BULATSA	7
ROMATSA	4

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP					**11**
BULATSA					7
ROMATSA					4
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
BULATSA		1		6	
ROMATSA	1	1		3	1
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**13.86**
BULATSA					10.27
ROMATSA					3.60

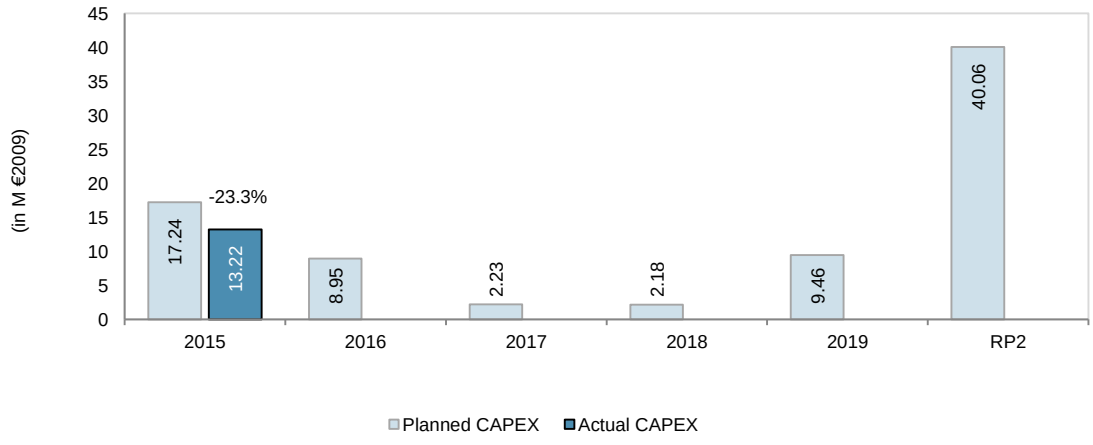
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

Number of 2015 Main CAPEX investments **linked** to PCP	**3**
BULATSA	2
ROMATSA	1
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**3.62**
BULATSA	2.59
ROMATSA	1.04

6.2. Bulgaria (BULATSA)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MBGN)	37.10	19.62	5.00	5.00	22.11	88.83
Main CAPEX (in nominal MBGN)	30.62	14.62	0.00	0.00	17.11	62.35
Inflation%	0.9%	1.8%	2.2%	2.2%	2.2%	
Inflation index (100 in 2009)	110.1	112.1	114.5	117.0	119.6	
Exchange rate 2009	1.96	1.96	1.96	1.96	1.96	
Total CAPEX (in M €2009)	**17.24**	8.95	2.23	2.18	9.46	40.06
Main CAPEX (in M €2009)	14.22	6.67	0.00	0.00	7.32	28.21
% Main into Total CAPEX	82.5%	74.5%	0.0%	0.0%	77.4%	70.4%
Real gate-to-gate ANSP costs (in M €2009)	77.28	78.48	78.96	78.56	77.84	391.13
% of CAPEX into Real gate-to-gate ANSP costs	22.3%	11.4%	2.8%	2.8%	12.1%	10.2%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MBGN)	27.54					
Main CAPEX (in nominal MBGN)	21.39					
Inflation%	-1.1%					
Inflation index (100 in 2009)	106.6					
Exchange rate 2009	1.96					
Total CAPEX (in M €2009)	**13.22**					
Main CAPEX (in M €2009)	10.27					
% Main into Total CAPEX	77.7%					
Real gate-to-gate ANSP costs (in M €2009)	84.16					
% of CAPEX into Real gate-to-gate ANSP costs	15.7%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MBGN)	-9.56					
Total CAPEX (in M €2009)	-4.02					
Total CAPEX (in %, for M €2009)	**-23.3%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

6.2.1 In 2015 there were 7 Main investments for which money was spent by BULATSA. They were all initially planned in the RP2 PP and no unplanned investments were done. Five investments were linked to CAPEX projects from RP1.

6.2.2 BULATSA spent 4.02 M€$_{2009}$ (or 23.3%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 15.7%.

6.2.3 In the 2015 monitoring report (CAPEX part), BULATSA presents significant improvement in the CAPEX completion rate, as all major investment projects envisaged for the year are going forward. Some deviations from 2015 planned amounts can be identified due to the procurement procedures taking more time than expected.

6.2.4 BULATSA has re-evaluated the investment program due to the unforeseen circumstances in FIR Simferopol and FIR Dnipropetrovsk, in terms of accelerating the investments' schedule and earlier acquisition of assets planned initially for RP3. An updated proposal has been presented to PRB for review.

6.2.5 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	7
Number of 2015 Main CAPEX investments actually executed in 2015	7

Out of the investments actually executed in 2015, the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**7**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
VOR – DME upgrade	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
New PSRs and SSRs (en-route and TMA) WAM and ADS-B Modernisation of the A/G radio communication equipment SATCAS upgrade Communication infrastructure for A/G Data Link Services New VCS system	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**10.27**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
-	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

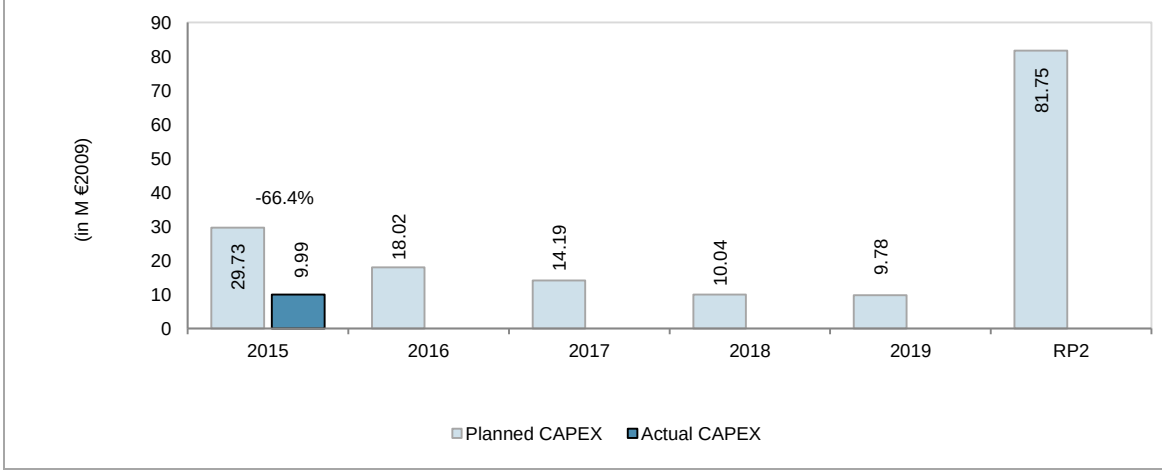
Number of 2015 Main CAPEX investments **linked** to PCP	**2**
SATCAS upgrade	AF6
Communication infrastructure for A/G Data Link Services	AF6
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**2.59**

Note: Bulgaria did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps and enablers) from ATM MP data set which was available at the time of the development of the RP2 PP.

6.3. Romania (ROMATSA)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MRON)	159.73	99.73	80.73	58.73	58.73	457.66
Main CAPEX (in nominal MRON)	108.34	35.23	38.35	15.16	0.00	197.08
Inflation%	3.1%	3.0%	2.8%	2.8%	2.7%	
Inflation index (100 in 2009)	126.9	130.7	134.4	138.2	141.9	
Exchange rate 2009	4.23	4.23	4.23	4.23	4.23	
Total CAPEX (in M €2009)	**29.73**	18.02	14.19	10.04	9.78	81.75
Main CAPEX (in M €2009)	20.16	6.37	6.74	2.59	0.00	35.86
% Main into Total CAPEX	67.8%	35.3%	47.5%	25.8%	0.0%	43.9%
Real gate-to-gate ANSP costs (in M €2009)	130.53	129.61	128.93	128.40	128.05	645.50
% of CAPEX into Real gate-to-gate ANSP costs	22.8%	13.9%	11.0%	7.8%	7.6%	12.7%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MRON)	51.17					
Main CAPEX (in nominal MRON)	18.41					
Inflation%	-0.4%					
Inflation index (100 in 2009)	121.0					
Exchange rate 2009	4.23					
Total CAPEX (in M €2009)	**9.99**					
Main CAPEX (in M €2009)	3.60					
% Main into Total CAPEX	36.0%					
Real gate-to-gate ANSP costs (in M €2009)	134.46					
% of CAPEX into Real gate-to-gate ANSP costs	7.4%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MRON)	-108.56					
Total CAPEX (in M €2009)	-19.73					
Total CAPEX (in %, for M €2009)	**-66.4%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

6.3.1 In 2015 there were 4 Main investments for which money was spent by ROMATSA. There were 6 investments foreseen for 2015 in the RP2 PP, but 3 were not executed and 1 unforeseen for 2015 was executed. There were no unplanned investments. None of the investments were linked to CAPEX projects from RP1.

6.3.2 ROMATSA spent 19.73 M€$_{2009}$ (or 66.4%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 7.4%.

6.3.3 As explained by ROMATSA in the 2015 monitoring report (CAPEX part), the significant lower investments in 2015 are caused by delays in the projects. Most of the investments have been postponed by one or two years.

6.3.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	6
Number of 2015 Main CAPEX investments actually executed in 2015	4

Out of the investments actually executed in 2015, the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**4**
Optimised ATM Network Services	
ATM System ROMATSA 2015+ (STEP 1)	
Advanced Air Traffic Services	
ATM System ROMATSA 2015+ (STEP 1)	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
ATM System ROMATSA 2015+ (STEP 1) VCSS Systems (CNS 03 - 10-13) MSSR Mode S radar (CNS05-2,3,4)	
Other features	
DVOR Systems (CNS 04 - 27-30)	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**3.60**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
-	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

Number of 2015 Main CAPEX investments **linked** to PCP	**1**
ATM System ROMATSA 2015+ (STEP 1)	AF3
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**1.04**

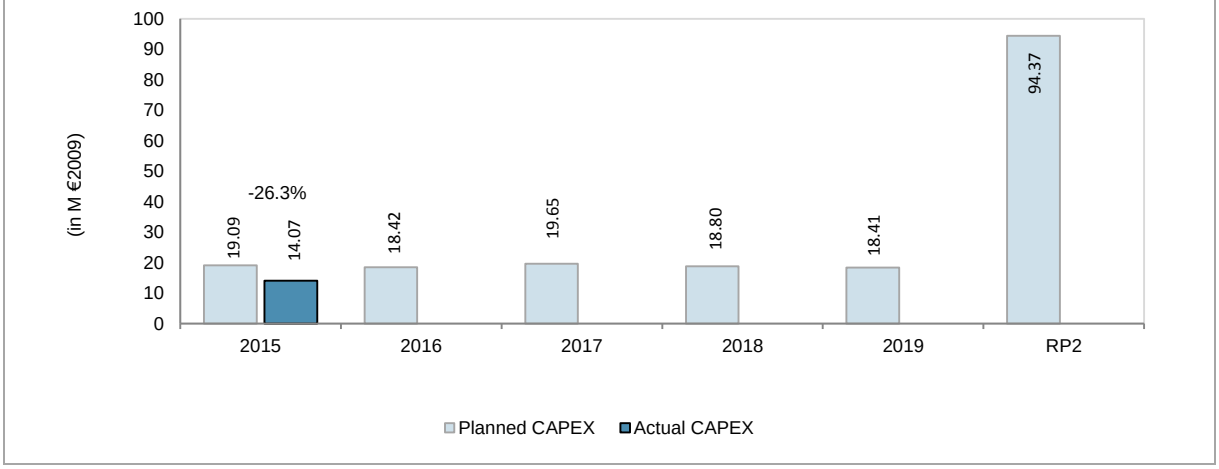
Note: Romania did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps and enablers) from ATM MP data set which was available at the time of the development of the RP2 PP.

7. DK-SE FAB

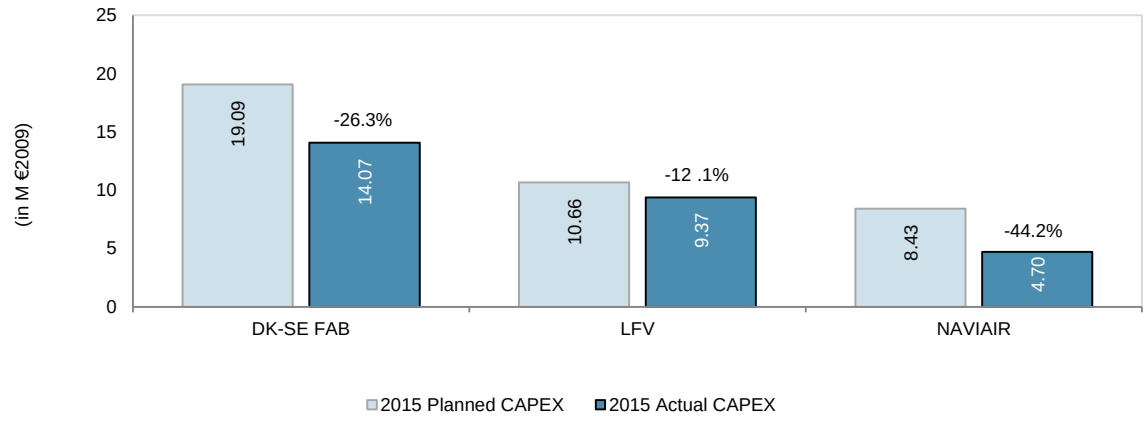
7.1. FAB level

Overall Investment data						
DK-SE - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**19.09**	18.42	19.65	18.80	18.41	94.37
% of LFV Total Planned CAPEX in DK-SE FAB	55.9%	56.5%	51.9%	53.2%	53.3%	54.1%
% of NAVIAIR Total Planned CAPEX in DK-SE FAB	44.1%	43.5%	48.1%	46.8%	46.7%	45.9%
DK-SE - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**14.07**					
% of LFV Total Actual CAPEX in DK-SE FAB	66.6%					
% of NAVIAIR Total Actual CAPEX in DK-SE FAB	33.4%					
DK-SE - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	251.21					
Total Actual Real gate-to-gate ANSP costs	292.92					
% of Planned CAPEX into Real gate-to-gate ANSP costs	7.6%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	4.8%					
DK-SE - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-5.02**					
Total CAPEX (in %, for M €2009)	-26.3%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**8.28**					

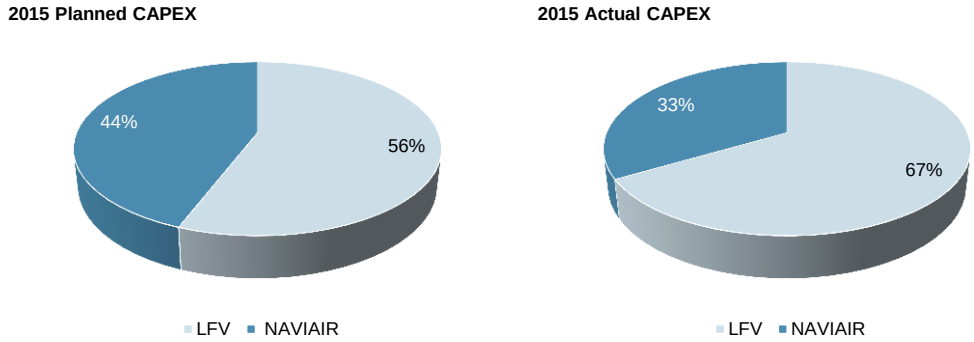
Total Planned vs. Total Actual CAPEX for DK-SE FAB for 2015 in RP2



Total Planned vs Total Actual CAPEX for DK-SE FAB and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in DK-SE FAB



Investment Analysis and Information reported

7.1.1 In 2015, the DK-SE FAB ANSPs collectively spent 26.3% less CAPEX than originally planned. This situation at FAB level results from the combination of LFV spending 1.29 M€$_{2009}$ less than planned and NAVIAIR spending 3.72 M€$_{2009}$ less than planned.

7.1.2 The main reasons for LFV underspending are linked to projects delay, long procurement processes, investments dependency on other projects and also due to supplier's late delivery. On the other hand, NAVIAIR underspending is mainly caused by the postponement of ATM related investments, shifts and delays in CNS investments due to complications in tender-offerings, delays in regulatory approval for groundwater cooling and less required investments than planned for building renovation. From the total amount spent in 2015 by the DK-SE FAB, LFV spent 66.6% (i.e. 9.37 M€$_{2009}$) and NAVIAIR 33.4% (i.e. 4.70 M€$_{2009}$).

7.1.3 Over the 2015 period, the actual CAPEX of the DK-SE FAB expressed in % of the real gate-to-gate ANSP costs reached 4.8%.

7.1.4 Both LFV and NAVIAIR were granted European funding for the Main CAPEX projects. LFV received CEF/TEN-T funding in an amount of 8.28M€ for 3 investments. NAVIAIR was granted CEF funding for the ATM and CNS related investments, but the amount has not been reported.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**9**
LFV	6
NAVIAIR	3
Number of 2015 Main CAPEX investments actually executed in 2015	**10**
LFV	7
NAVIAIR	3

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments linked to ATM MP					**5**
LFV					5
NAVIAIR					0
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
LFV	1	1		5	
NAVIAIR					
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**3.25**
LFV					3.25
NAVIAIR					0

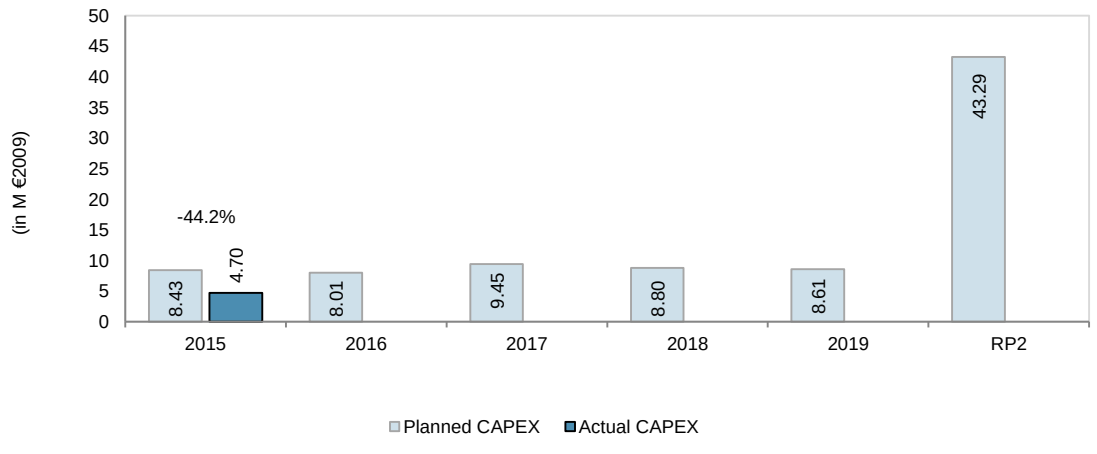
Number of 2015 Main CAPEX investments not linked to ATM MP	**5**
LFV	2
NAVIAIR	3
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**5.76**
LFV	1.06
NAVIAIR	4.70

Number of 2015 Main CAPEX investments linked to PCP	**4**
LFV	2
NAVIAIR	2
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**4.52**
LFV	1.92
NAVIAIR	2.60

7.2. Denmark (NAVIAIR)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MDKK)	70.00	68.00	82.00	78.00	78.00	376.00
Main CAPEX (in nominal MDKK)	70.00	68.00	82.00	78.00	78.00	376.00
Inflation%	1.8%	2.2%	2.2%	2.2%	2.2%	
Inflation index (100 in 2009)	111.6	114.1	116.6	119.1	121.8	
Exchange rate 2009	7.44	7.44	7.44	7.44	7.44	
Total CAPEX (in M €2009)	**8.43**	8.01	9.45	8.80	8.61	43.29
Main CAPEX (in M €2009)	8.43	8.01	9.45	8.80	8.61	43.29
% Main into Total CAPEX	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Real gate-to-gate ANSP costs (in M €2009)	93.95	91.06	90.63	90.56	89.06	455.26
% of CAPEX into Real gate-to-gate ANSP costs	9.0%	8.8%	10.4%	9.7%	9.7%	9.5%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MDKK)	38.00					
Main CAPEX (in nominal MDKK)	38.00					
Inflation%	0.2%					
Inflation index (100 in 2009)	108.6					
Exchange rate 2009	7.44					
Total CAPEX (in M €2009)	**4.70**					
Main CAPEX (in M €2009)	4.70					
% Main into Total CAPEX	100.0%					
Real gate-to-gate ANSP costs (in M €2009)	96.68					
% of CAPEX into Real gate-to-gate ANSP costs	4.9%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MDKK)	-32.00					
Total CAPEX (in M €2009)	-3.72					
Total CAPEX (in %, for M €2009)	**-44.2%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**Not reported**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

7.2.1 In 2015 there were 3 Main investments for which money was spent by NAVIAIR. All were initially planned in the RP2 PP and no unplanned investments were done. No investment was linked to CAPEX projects from RP1.

7.2.2 NAVIAIR spent 3.72 M€$_{2009}$ (or 44.2%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 4.9%.

7.2.3 As explained by NAVIAIR in the 2015 monitoring report (CAPEX part), the actual investment was approximately half of the planned one due to several causes.

- ATM investments - postponement of certain investments, mostly COOPANS (both at NAVIAIR's and Suppliers request). Reclassified activity from CAPEX to cost.
- CNS investments - shifts in investments from earlier years (WAM), delays due to complications in tender-offerings, cancellation of radar-upgrades due to price offering (too high).
- Other investments - delays in regulatory approval for groundwater cooling and less required investments than planned for building renovation.

7.2.4 NAVIAIR reported to have been granted with CEF funding for the ATM and CNS related investments, however the total amount as per grant agreement was not provided. According to the details provided by NAVIAIR in the Route charges document - additional information, the received EU-funding has lowered the depreciations for the year 2015. Consequently NAVIAIR will return an amount to the users by reducing the 2017 unit rate.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	3
Number of 2015 Main CAPEX investments actually executed in 2015	3

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**0**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
-	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
-	
Other features	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**3**
ATM CNS Other	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**4.70**

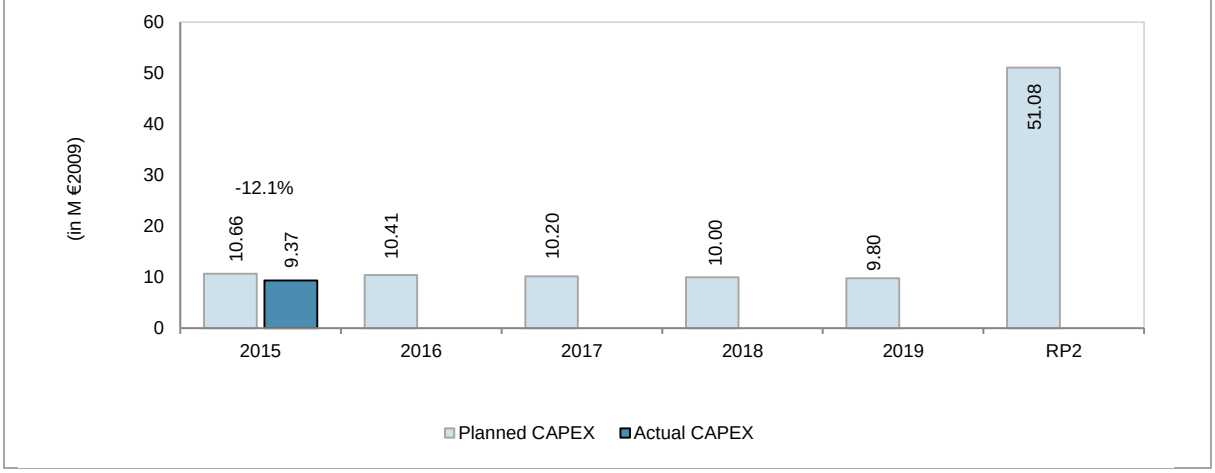
Number of 2015 Main CAPEX investments **linked** to PCP	**2**
ATM CNS	No specific information on links to PCP provided
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**2.60**

Note: Denmark did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were not provided. No update of the information on links to PCP was provided and the current text for 2015 investment mentions the total amount planned to be spent over RP2 for each investment.

7.3. Sweden (LFV)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MSEK)	120.00	120.00	120.00	120.00	120.00	600.00
Main CAPEX (in nominal MSEK)	110.00	101.00	66.00	60.00	55.00	392.00
Inflation%	1.6%	2.4%	2.1%	2.0%	2.0%	
Inflation index (100 in 2009)	106.1	108.6	110.9	113.1	115.4	
Exchange rate 2009	10.61	10.61	10.61	10.61	10.61	
Total CAPEX (in M €2009)	**10.66**	10.41	10.20	10.00	9.80	51.08
Main CAPEX (in M €2009)	9.78	8.77	5.61	5.00	4.49	33.65
% Main into Total CAPEX	91.7%	84.2%	55.0%	50.0%	45.8%	65.9%
Real gate-to-gate ANSP costs (in M €2009)	157.26	154.39	150.31	146.55	142.77	751.28
% of CAPEX into Real gate-to-gate ANSP costs	6.8%	6.7%	6.8%	6.8%	6.9%	6.8%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MSEK)	104.28					
Main CAPEX (in nominal MSEK)	47.88					
Inflation%	0.7%					
Inflation index (100 in 2009)	104.9					
Exchange rate 2009	10.61					
Total CAPEX (in M €2009)	**9.37**					
Main CAPEX (in M €2009)	4.30					
% Main into Total CAPEX	45.9%					
Real gate-to-gate ANSP costs (in M €2009)	196.24					
% of CAPEX into Real gate-to-gate ANSP costs	4.8%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MSEK)	-15.72					
Total CAPEX (in M €2009)	-1.29					
Total CAPEX (in %, for M €2009)	**-12.1%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**8.28**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

7.3.1 In 2015 there were 7 Main investments for which money was spent by LFV. There were 6 investments foreseen for 2015 in the RP2 PP and 1 unforeseen for 2015 was executed. There were no unplanned investments. Five of the investments were linked to CAPEX projects from RP1.

7.3.2 LFV spent 1.29 M€$_{2009}$ (or 12.1%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 4.8%.

7.3.3 As explained by LFV in the 2015 monitoring report (CAPEX part), the investment figures are slightly lower than the planned ones. This is mainly caused by internal causes, such as delays in the start of the projects, procurement process or dependency on other projects, but also due to the delayed delivery on supplier's side.

7.3.4 LFV reported being granted with CEF/TEN-T funding in the amount of 8.28M€ disbursed for 3 investments. COOPANS Upgrade and RTC investments received CEF funding through INEA Call 2014. COOPANS Upgrade was granted funding with maximum of 2.91M€ for period of 2014-2017. Prefinancing of 0.82M€ was disbursed during 2015 - of that was 0.55M€ taken into result and the rest is still resting on LFV balance. RTC was granted funding with maximum of 4.24M€ for period of 2014-2017. Prefinancing of 0.88M€ was disbursed during 2015. SUPS project was granted funding of 3.21M€ from Ten-T 2014. The total amount was disbursed during 2014 and a total of 2.1M€ was transferred to other partners and 1.13M€ is currently in the LFV balance sheet and has not been taken in to result.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	6
Number of 2015 Main CAPEX investments actually executed in 2015	7

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**5**
Optimised ATM Network Services	
COOPANS Upgrade	
Advanced Air Traffic Services	
COOPANS Upgrade	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
COOPANS Upgrade SUPS PSR/SSR Mode S TMA SA VHF ADQ	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**3.25**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
Contingency RTC	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**1.06**

Number of 2015 Main CAPEX investments **linked** to PCP	**2**
COOPANS Upgrade	AF1, AF2, AF3, AF4, AF5. AF6
ADQ	AF4
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**1.92**

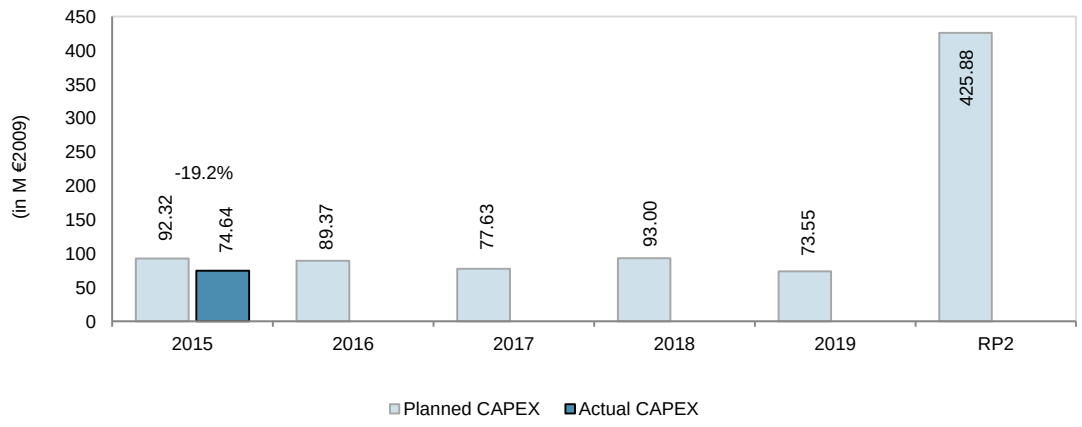
Note: Sweden did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided as ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

8. FAB CE

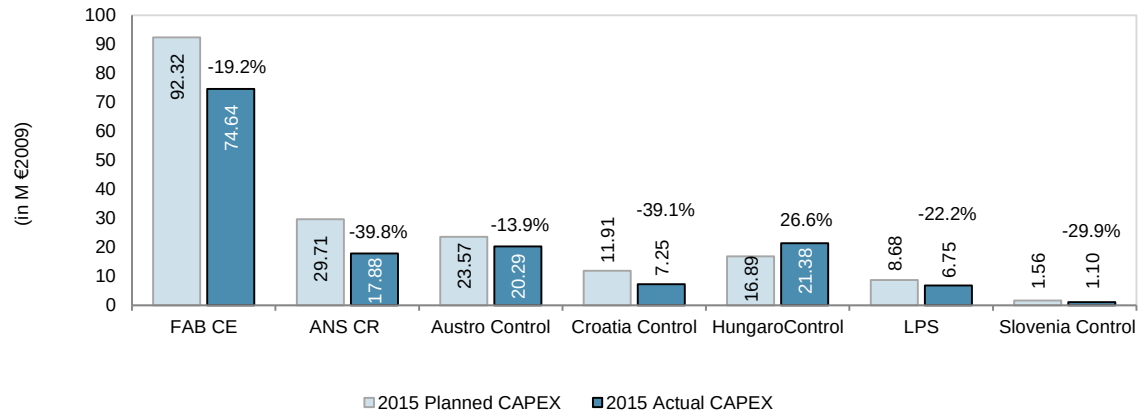
8.1. FAB level

Overall Investment data						
FAB CE - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**92.32**	89.37	77.63	93.00	73.55	425.88
% of ANS CR Total Planned CAPEX in FAB CE	32.2%	33.8%	21.3%	21.5%	14.4%	25.1%
% of Austro Control Total Planned CAPEX in FAB CE	25.5%	26.8%	38.7%	34.2%	41.5%	32.8%
% of Croatia Control Total Planned CAPEX in FAB CE	12.9%	11.8%	13.1%	9.7%	10.8%	11.6%
% of HungaroControl Total Planned CAPEX in FAB CE	18.3%	16.7%	7.1%	15.6%	17.7%	15.2%
% of LPS Total Planned CAPEX in FAB CE	9.4%	9.3%	18.5%	15.6%	11.3%	12.7%
% of Slovenia Control Total Planned CAPEX in FAB CE	1.7%	1.6%	1.3%	3.3%	4.3%	2.4%
FAB CE - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**74.64**					
% of ANS CR Total Actual CAPEX in FAB CE	24.0%					
% of Austro Control Total Actual CAPEX in FAB CE	27.2%					
% of Croatia Control Total Actual CAPEX in FAB CE	9.7%					
% of HungaroControl Total Actual CAPEX in FAB CE	28.6%					
% of LPS Total Actual CAPEX in FAB CE	9.0%					
% of Slovenia Control Total Actual CAPEX in FAB CE	1.5%					
FAB CE - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	532.85					
Total Actual Real gate-to-gate ANSP costs	509.34					
% of Planned CAPEX into Real gate-to-gate ANSP costs	17.3%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	14.7%					
FAB CE - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-17.69**					
Total CAPEX (in %, for M €2009)	-19.2%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**6.47**					

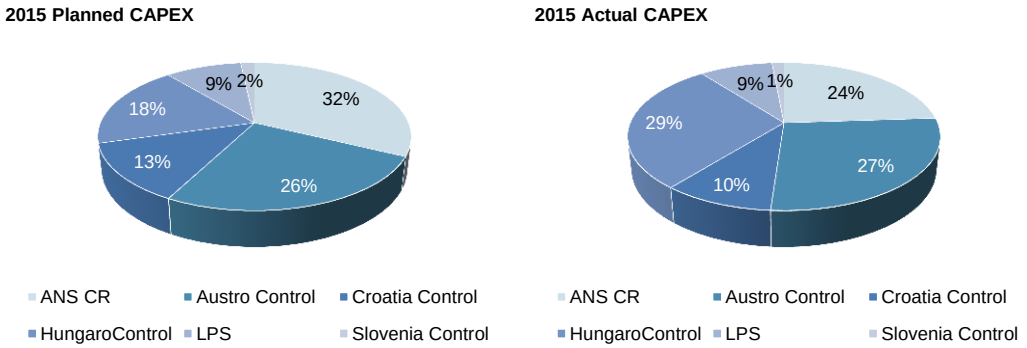
Total Planned vs. Total Actual CAPEX for FAB CE for 2015 in RP2



Total Planned vs Total Actual CAPEX for FAB CE and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in FAB CE



Investment Analysis and Information reported

8.1.1 In 2015, the FAB CE ANSPs collectively spent 19.2% less CAPEX than originally planned. This situation at FAB level results from the combination of all ANSPs underspending, except HungaroControl which overspent. ANS CR spent 11.83 M€$_{2009}$ less than planned, Austro Control 3.28 M€$_{2009}$ less, Croatia Control 4.66 M€$_{2009}$ less, LPS 1.93 M€$_{2009}$ less and Slovenia Control 0.47 M€$_{2009}$ less, while Hungary spent 4.49 M€$_{2009}$ more than planned.

8.1.2 The main reasons for lower figures in the actual investments are the delays and modifications in the projects. ANS CR investments suffered delays due to dependency on other projects, repeated procurement process, supplier constraints and modifications in project scope, leading to lower actual amount. Austria Control had lower actual investment amount mainly due to the damage caused by extreme weather conditions, which requested unforeseen time and resources. Croatia Control invested less than planned because of the projects' complexity and long procurement process. LPS and Slovenia Control registered slightly lower investment amount mainly caused by modifications in projects' scope and dependency on other projects. Higher amounts were registered for some particular investments by ANS CR, Austria Control, Croatia Control and HungaroControl, as they spent CAPEX planned for 2014 in 2015. Due to this latter cause and also due to extended project scope and underestimated costs, HungaroControl spent more than planned in 2015.

8.1.3 From the total amount spent in 2015 by the FAB CE, ANS CR spent 24.0% (i.e. 17.88 M€$_{2009}$), Austria Control 27.2% (i.e. 17.88 M€$_{2009}$), Croatia Control 9.7% (i.e. 7.25 M€$_{2009}$), HungaroControl 28.6% (i.e. 21.38 M€$_{2009}$), LPS 9.0% (i.e. 6.75 M€$_{2009}$) and Slovenia Control 1.5% (i.e. 1.10 M€$_{2009}$).

8.1.4 Over the 2015 period, the actual CAPEX of the FAB CE expressed in % of the real gate-to-gate ANSP costs reached 14.7%.

8.1.5 The total amount coming from European funding at the FAB level was 6.47M€ as per grant agreements. Austro Control received CEF funding for 2 investments, while Croatia Control, HungaroControl and Slovenia Control for 1 investment each.

ATM MP / PCP Information	
Number of 2015 Main CAPEX investments planned to be executed in 2015	**37**
ANS CR	11
Austro Control	5
Croatia Control	7
HungaroControl	4
LPS	7
Slovenia Control	3
Number of 2015 Main CAPEX investments actually executed in 2015	**32**
ANS CR	9
Austro Control	5
Croatia Control	7
HungaroControl	4
LPS	5
Slovenia Control	2

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments linked to ATM MP					**20**
ANS CR					7
Austro Control					5
Croatia Control					1
HungaroControl					-
LPS					5
Slovenia Control					2
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
ANS CR		2	2	7	
Austro Control	1	3	1	2	1
Croatia Control				1	
HungaroControl					
LPS		2		4	
Slovenia Control	2	2		2	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**32.37**
ANS CR					11.07
Austro Control					16.97
Croatia Control					1.12
HungaroControl					-
LPS					2.38
Slovenia Control					0.83

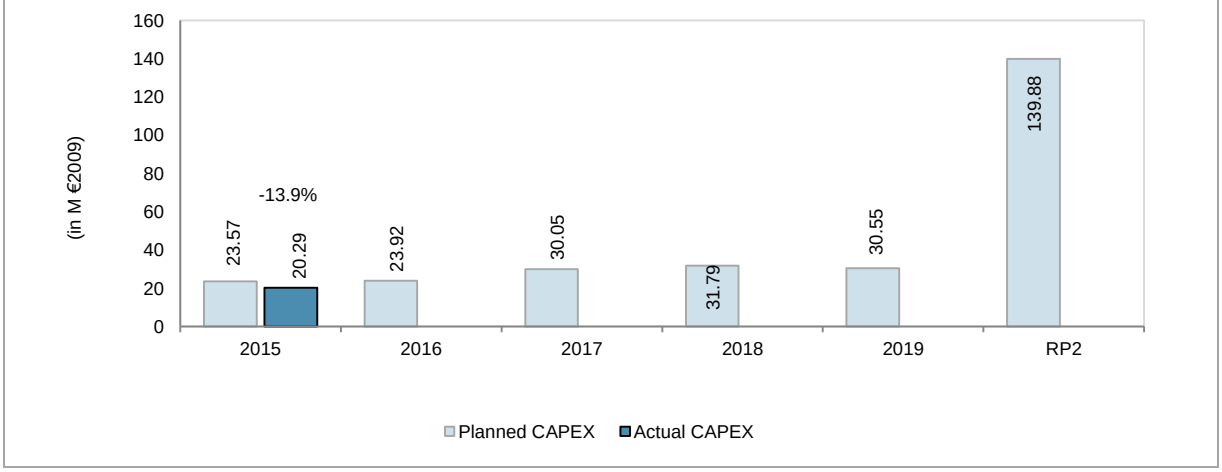
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**12**
ANS CR	2
Austro Control	-
Croatia Control	6
HungaroControl	4
LPS	-
Slovenia Control	-
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**23.03**
ANS CR	5.04
Austro Control	-
Croatia Control	4.05
HungaroControl	13.94
LPS	-
Slovenia Control	-

Number of 2015 Main CAPEX investments **linked** to PCP	**17**
ANS CR	4
Austro Control	4
Croatia Control	6
HungaroControl	1
LPS	-
Slovenia Control	2
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**30.76**
ANS CR	7.88
Austro Control	13.41
Croatia Control	5.04
HungaroControl	3.60
LPS	-
Slovenia Control	0.83

8.2. Austria (Austro Control)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	26.91	27.77	35.49	38.17	37.30	165.64
Main CAPEX (in nominal M€)	23.12	20.68	30.49	33.37	33.26	140.92
Inflation%	1.7%	1.7%	1.7%	1.7%	1.7%	
Inflation index (100 in 2009)	114.2	116.1	118.1	120.1	122.1	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**23.57**	23.92	30.05	31.79	30.55	139.88
Main CAPEX (in M €2009)	20.25	17.81	25.83	27.79	27.23	118.92
% Main into Total CAPEX	85.9%	74.5%	85.9%	87.4%	89.2%	85.0%
Real gate-to-gate ANSP costs (in M €2009)	170.50	173.10	179.32	180.29	174.97	878.19
% of CAPEX into Real gate-to-gate ANSP costs	13.8%	13.8%	16.8%	17.6%	17.5%	15.9%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	22.96					
Main CAPEX (in nominal M€)	19.20					
Inflation%	0.8%					
Inflation index (100 in 2009)	113.1					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**20.29**					
Main CAPEX (in M €2009)	16.97					
% Main into Total CAPEX	83.6%					
Real gate-to-gate ANSP costs (in M €2009)	162.43					
% of CAPEX into Real gate-to-gate ANSP costs	12.5%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-3.95					
Total CAPEX (in M €2009)	-3.28					
Total CAPEX (in %, for M €2009)	**-13.9%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**2.45**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

8.2.1 In 2015 there were 5 Main investments for which money was spent by Austro Control. All were initially planned in the RP2 PP and no unplanned investments were done. None of investments were financially linked to CAPEX projects from RP1, but the NAV and SUR services projects were linked to the date of operation of the En-Route and Landing Navigation in RP1 and Surveillance Services in RP1, respectively.

8.2.2 Austro Control spent 3.28 M€$_{2009}$ (or 13.9%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 12.5%.

8.2.3 As explained by Austro Control in the 2015 monitoring report (CAPEX part), some of the investments suffered delays due to external causes, such as the damage caused by weather conditions at Koralpe, the procurement process, but also due to internal time and resources shortages caused by unforeseen activities.

8.2.4 Two investments were granted with CEF funding in the amount of 2.45 M€. The amount corresponds to the funding granted for DPS ATM Services project to be spent in 2015-2016 and for AIM Services project in 2015.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	5
Number of 2015 Main CAPEX investments actually executed in 2015	5

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**5**
Optimised ATM Network Services	
DPS ATM/AIM/MET Services	
Advanced Air Traffic Services	
NAV Services SUR Services DPS ATM/AIM/MET Services	
High Performing Airports	
DPS ATM/AIM/MET Services	
Enabling the Aviation Infrastructure	
COM Services DPS ATM/AIM/MET Services	
Other features	
Building & Facility Management	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**16.97**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
-	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

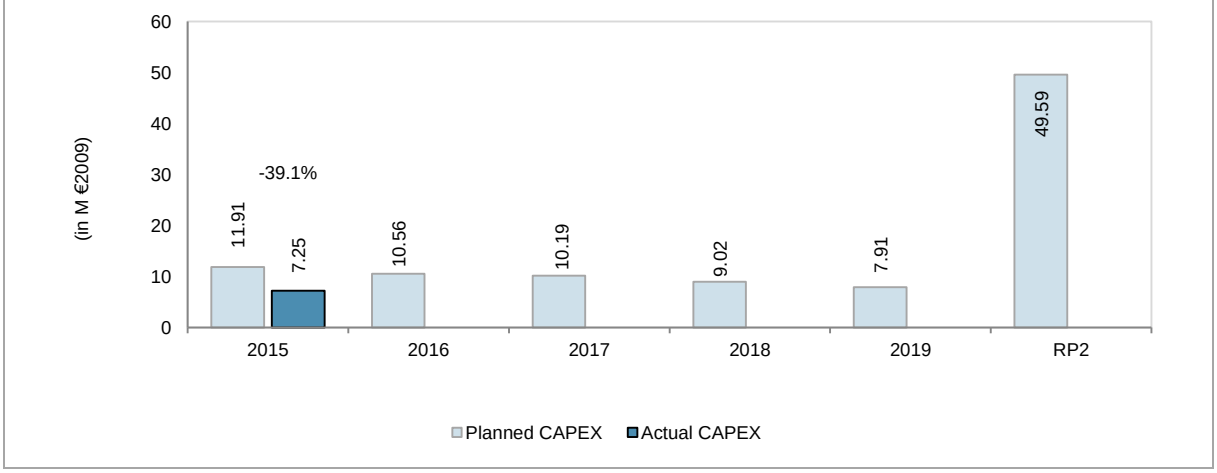
Number of 2015 Main CAPEX investments **linked** to PCP	**4**
COM Services NAV Services SUR Services DPS ATM/AIM/MET Services	No specific information on links to PCP provided
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**13.41**

Note: Austria did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as Operational Packages, Sub-operational packages and ESSIP Objectives (also some OI steps and enablers) from ATM MP data set which was available at the time of the development of the RP2 PP. No update of the links to PCP was provided and current text for almost all of the investments mentions "Yes, Work in progress".

8.3. Croatia (Croatia Control)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MHRK)	95.44	85.56	83.72	76.02	68.32	409.06
Main CAPEX (in nominal MHRK)	75.78	69.29	67.47	63.27	56.57	332.38
Inflation%	0.2%	1.0%	1.5%	2.5%	2.5%	
Inflation index (100 in 2009)	109.2	110.4	112.0	114.8	117.7	
Exchange rate 2009	7.34	7.34	7.34	7.34	7.34	
Total CAPEX (in M €2009)	**11.91**	10.56	10.19	9.02	7.91	49.59
Main CAPEX (in M €2009)	9.45	8.56	8.21	7.51	6.55	40.28
% Main into Total CAPEX	79.4%	81.0%	80.6%	83.2%	82.8%	81.2%
Real gate-to-gate ANSP costs (in M €2009)	81.42	82.65	81.70	79.25	75.69	400.70
% of CAPEX into Real gate-to-gate ANSP costs	14.6%	12.8%	12.5%	11.4%	10.5%	12.4%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MHRK)	58.12					
Main CAPEX (in nominal MHRK)	41.46					
Inflation%	-0.3%					
Inflation index (100 in 2009)	109.3					
Exchange rate 2009	7.34					
Total CAPEX (in M €2009)	**7.25**					
Main CAPEX (in M €2009)	5.17					
% Main into Total CAPEX	71.3%					
Real gate-to-gate ANSP costs (in M €2009)	78.53					
% of CAPEX into Real gate-to-gate ANSP costs	9.2%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MHRK)	-37.32					
Total CAPEX (in M €2009)	-4.66					
Total CAPEX (in %, for M €2009)	**-39.1%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**1.80**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

8.3.1 In 2015 there were 7 Main investments for which money was spent by Croatia Control. All were initially planned in the RP2 PP and no unplanned investments were done. No investments were linked to CAPEX projects from RP1, as Croatia did not participate in RP1.

8.3.2 Croatia Control spent 4.66 M€$_{2009}$ (or 39.1%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 9.2%.

8.3.3 According to Croatia Control's justification in the 2015 monitoring report (CAPEX part), the lower amount of investment is caused by the delays in the planned investments. The tender process is again one of the main delay causes, but also the DATA-COM Systems Modernization Project complexity and the underestimated difficulty in moving equipment and employees out of the workspace. On the other hand, LPS overspent in 2015 due to manufacturer delays in completing the new AWOS systems; which was planned for 2014.

8.3.4 One Main CAPEX project, namely the ATM System Upgrade was granted with CEF funding in the amount of 1,8M€ as per grant agreement (at the time of the reporting this is the estimated contribution of the overall project 2014-EU-TM-0376-M).

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	7
Number of 2015 Main CAPEX investments actually executed in 2015	7

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**1**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
-	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Ground-based Surveillance Systems Upgrade	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**1.12**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**6**
DATA-COM Systems Modernization Project VOICE-COM Systems Modernization and Replacement Project NAV Systems Modernization and Replacement Project AWOS/MET Systems Modernization and Replacement Project ATM System Upgrade Reconstruction of Old Buildings	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**4.05**

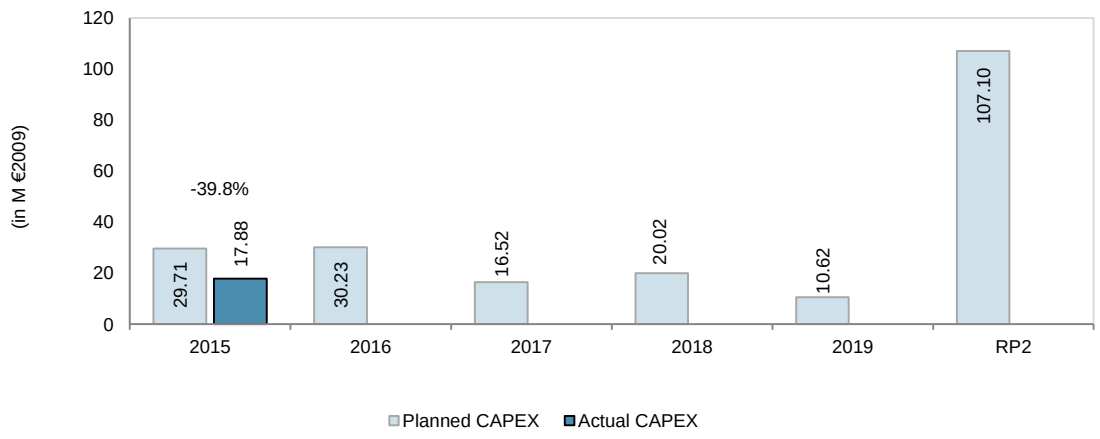
Number of 2015 Main CAPEX investments **linked** to PCP	**6**
DATA-COM Systems Modernization Project VOICE-COM Systems Modernization and Replacement Project NAV Systems Modernization and Replacement Project Ground-based Surveillance Systems Upgrade AWOS/MET Systems Modernization and Replacement Project ATM System Upgrade	No specific information on links to PCP provided
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**5.04**

Note: Croatia did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Link to ATM MP ESSIP Objective was provided only for 1 investment. For the remaining investments no information on links to ATM MP was available. No update of the links to PCP was provided and current text for all investments mentions "Yes, Common projects are currently under preparation".

8.4. Czech Republic (ANS CR)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MCZK)	874.90	908.00	506.30	625.60	338.60	3253.40
Main CAPEX (in nominal MCZK)	818.20	846.40	450.60	556.00	286.60	2957.80
Inflation%	1.9%	2.0%	2.0%	2.0%	2.0%	
Inflation index (100 in 2009)	111.5	113.7	116.0	118.3	120.7	
Exchange rate 2009	26.41	26.41	26.41	26.41	26.41	
Total CAPEX (in M €2009)	**29.71**	30.23	16.52	20.02	10.62	107.10
Main CAPEX (in M €2009)	27.78	28.18	14.71	17.79	8.99	97.45
% Main into Total CAPEX	93.5%	93.2%	89.0%	88.9%	84.6%	91.0%
Real gate-to-gate ANSP costs (in M €2009)	108.89	109.69	109.40	108.97	106.49	543.43
% of CAPEX into Real gate-to-gate ANSP costs	27.3%	27.6%	15.1%	18.4%	10.0%	19.7%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MCZK)	517.20					
Main CAPEX (in nominal MCZK)	466.20					
Inflation%	0.3%					
Inflation index (100 in 2009)	109.5					
Exchange rate 2009	26.41					
Total CAPEX (in M €2009)	**17.88**					
Main CAPEX (in M €2009)	16.11					
% Main into Total CAPEX	90.1%					
Real gate-to-gate ANSP costs (in M €2009)	104.25					
% of CAPEX into Real gate-to-gate ANSP costs	17.1%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MCZK)	-357.70					
Total CAPEX (in M €2009)	-11.83					
Total CAPEX (in %, for M €2009)	**-39.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

8.4.1 In 2015 there were 9 Main investments for which money was spent by ANS CR. There were 11 investments foreseen for 2015 in the RP2 PP, but 2 were not executed. There were no unplanned investments. Six of these 9 investments were linked to CAPEX projects from RP1.

8.4.2 ANS CR spent 11.83 M€$_{2009}$ (or 39.8%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 17.1%.

8.4.3 As explained by ANS CR in the 2015 monitoring report (CAPEX part) some of the investments planned for 2015 have been postponed or changed due to modifications in the projects. The lower investment amount is mainly caused by delays in the projects due to:

- Dependency and coordination with other projects, such as the high link between the Surveillance Fallback Radar data processing project and the outputs from the FAB CE TEC-SubC, which are not available yet, and the Integrated Tower Working Position (upgrade ASMGCS) which has been aligned with SESAR2020 Deployment;
- Repeated procurement process for the AIM and SMR systems;
- Constraints on the suppliers' side in the case of RNAV systems and the implementation and development of AMHS
- Savings achieved when replacing the VCS at the regional airports and also during the transformation of the AIS to AIM;

8.4.4 The ATM simulators have been developed under the DPS – Data processing and presentation project, which caused differences between the planned and actual values of both investments.

8.4.5 The buildings' related investment values are significantly higher because part of the CAPEX originally planned for 2014 has been spent during 2015.

8.4.6 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	11
Number of 2015 Main CAPEX investments actually executed in 2015	9

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**7**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
DPS – Data processing and presentation DPP - TWR	
High Performing Airports	
DPS – Data processing and presentation DPP - TWR	

Enabling the Aviation Infrastructure	
SUR – Surveillance DPS – Data processing and presentation COM – Communication RCOM – Radio communication systems MOS – Monitoring and control AIM – Aeronautical information management DPP - TWR	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**11.07**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
SIMU – ATM simulators Buildings	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**5.04**

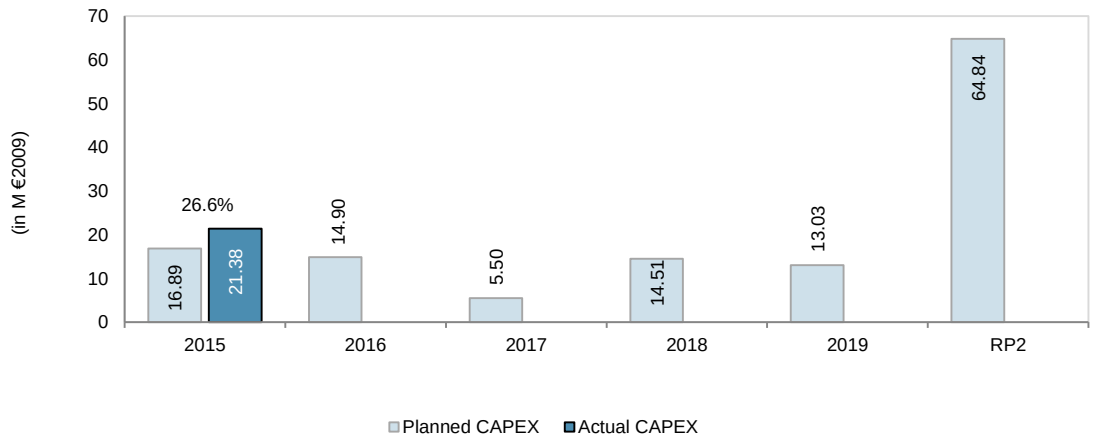
Number of 2015 Main CAPEX investments **linked** to PCP	**4**
DPS – Data processing and presentation	AF2, AF5, AF6
COM - Communication	AF5,AF6
AIM – Aeronautical information management	AF5
DPP - TWR	AF2, AF4
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**7.88**

Note: Czech Republic did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps and enablers) from ATM MP data set which was available at the time of the development of the RP2 PP.

8.5. Hungary (HungaroControl)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MHUF)	5635.00	5119.00	1948.00	5290.00	4894.00	22886.00
Main CAPEX (in nominal MHUF)	2842.00	3616.00	885.00	4427.00	4131.00	15901.00
Inflation%	1.8%	3.0%	3.0%	3.0%	3.0%	
Inflation index (100 in 2009)	119.3	122.8	126.5	130.3	134.2	
Exchange rate 2009	279.70	279.70	279.70	279.70	279.70	
Total CAPEX (in M €2009)	**16.89**	14.90	5.50	14.51	13.03	64.84
Main CAPEX (in M €2009)	8.52	10.52	2.50	12.14	11.00	44.69
% Main into Total CAPEX	50.4%	70.6%	45.4%	83.7%	84.4%	68.9%
Real gate-to-gate ANSP costs (in M €2009)	94.03	94.65	93.90	93.80	93.13	469.51
% of CAPEX into Real gate-to-gate ANSP costs	18.0%	15.7%	5.9%	15.5%	14.0%	13.8%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MHUF)	7013.68					
Main CAPEX (in nominal MHUF)	4572.76					
Inflation%	0.1%					
Inflation index (100 in 2009)	117.3					
Exchange rate 2009	279.70					
Total CAPEX (in M €2009)	**21.38**					
Main CAPEX (in M €2009)	13.94					
% Main into Total CAPEX	65.2%					
Real gate-to-gate ANSP costs (in M €2009)	87.28					
% of CAPEX into Real gate-to-gate ANSP costs	24.5%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MHUF)	1378.68					
Total CAPEX (in M €2009)	4.49					
Total CAPEX (in %, for M €2009)	**26.6%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**1.37**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

8.5.1 In 2015 there were 4 Main investments for which money was spent by HungaroControl. There were 4 investments foreseen for 2015 in the RP2 PP, but 1 was not executed and 1 unforeseen for 2015 was executed. There were no unplanned investments. Only one of the executed investments was linked to CAPEX projects from RP1.

8.5.2 HungaroControl spent 4.49 M€$_{2009}$ (or 26.6%) more Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 24.5%.

8.5.3 As explained by HungaroControl in the 2015 monitoring report (CAPEX part), some of the planned investments requested higher amounts and some have been delayed. The investment planned for A-SMGS in 2014 was capitalized in 2015, which leaded to an increase in the 2015 investment, and the amount planned for ANS I renovation was higher due to enlarged scope and underestimated costs. On the other hand, the replacement of MET system at Budapest airport and the implementation of VoIP in ATM were delayed due to the slow procurement process and changes in the technological concept, respectively. The CPDLCC project was closed in 2015.

8.5.4 One Main CAPEX project, namely the CPDLC was granted with TEN-T funding in the amount of 1.37M€ as per grant agreement.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	4
Number of 2015 Main CAPEX investments actually executed in 2015	4

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**0**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
-	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
-	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	0

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**4**
CPDLC ANS I renovation A-SMGCS Replacement of the meteorological system at Budapest Airport	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**13.94**

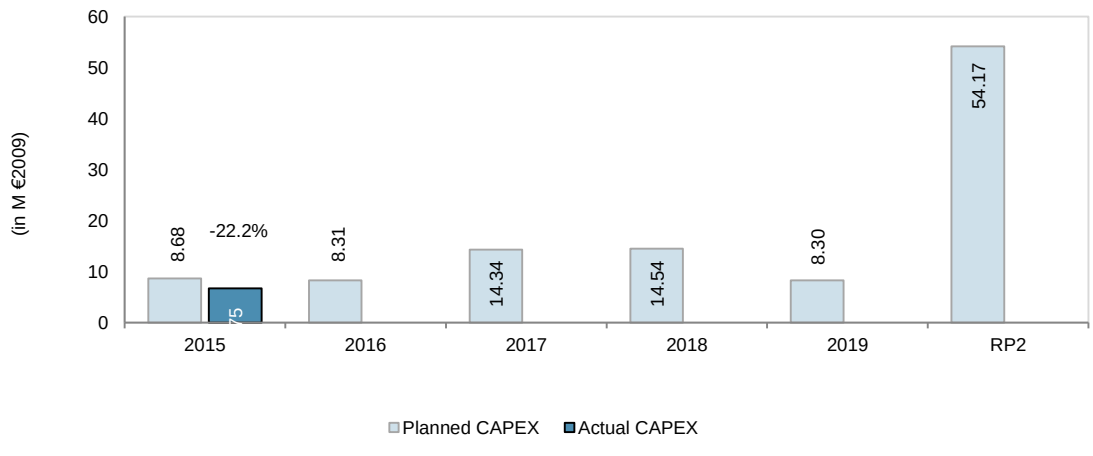
Number of 2015 Main CAPEX investments **linked** to PCP	**1**
A-SMGCS	AF2, AF3
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**3.60**

Note: Hungary did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. No links to ATM MP ESSIP Objective were provided. No update of the links to PCP was provided.

8.6. Slovakia (LPS)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	9.57	9.29	16.30	16.83	9.80	61.81
Main CAPEX (in nominal M€)	4.02	6.22	14.17	14.93	7.58	46.92
Inflation%	0.04%	1.4%	1.7%	1.8%	2.0%	
Inflation index (100 in 2009)	110.3	111.8	113.7	115.7	118.1	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**8.68**	8.31	14.34	14.54	8.30	54.17
Main CAPEX (in M €2009)	3.64	5.56	12.46	12.90	6.42	40.98
% Main into Total CAPEX	41.9%	66.9%	86.9%	88.7%	77.3%	75.6%
Real gate-to-gate ANSP costs (in M €2009)	49.76	51.32	51.46	53.35	53.21	259.09
% of CAPEX into Real gate-to-gate ANSP costs	17.4%	16.2%	27.9%	27.3%	15.6%	20.9%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	7.42					
Main CAPEX (in nominal M€)	2.62					
Inflation%	-0.3%					
Inflation index (100 in 2009)	109.9					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**6.75**					
Main CAPEX (in M €2009)	2.38					
% Main into Total CAPEX	35.3%					
Real gate-to-gate ANSP costs (in M €2009)	48.30					
% of CAPEX into Real gate-to-gate ANSP costs	14.0%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-2.15					
Total CAPEX (in M €2009)	-1.93					
Total CAPEX (in %, for M €2009)	**-22.2%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

8.6.1 In 2015 there were 5 Main investments for which money was spent by LPS. There were 7 investments foreseen for 2015 in the RP2 PP, but 2 were not executed. There were no unplanned investments. Three investments were linked to CAPEX projects from RP1.

8.6.2 LPS spent 1.93 M€$_{2009}$ (or 22.2%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 14.0%.

8.6.3 According to the information provided by LPS for the 2015 monitoring report (CAPEX part), the planned figures are aligned with the actual ones, most of the projects being completed in 2015, except the SACON Network Upgrade which is going to be concluded in 2016. Two of the planned investments were delayed due to changes in the project scope and dependency on other projects, Hardware Upgrade of the Main ATM System and Implementation of VoIP projects respectively. These delays together with the 2 investments planned but not executed, Software Upgrade of the Main ATM System - AGDL and COTR project and Navigation Systems Upgrade project, leaded to lower actual figures.

8.6.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	7
Number of 2015 Main CAPEX investments actually executed in 2015	5

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**5**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
Hardware Upgrade of the Main ATM System Voice Communication System - Implementation of VoIP	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Surveillance Sensors Radiocommunication Equipment Upgrade Voice Communication System - Implementation of VoIP SACON Network Upgrade	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**2.38**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

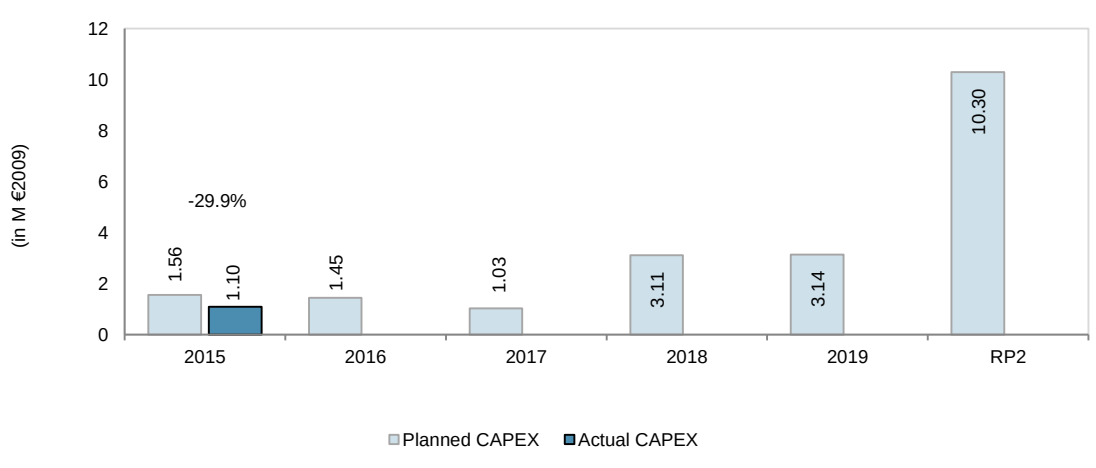
Number of 2015 Main CAPEX investments **linked** to PCP	0
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

Note: Slovak Republic did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly in form of ESSIP Objectives (also some OI steps and Enablers) from ATM MP data set which was available at the time of the development of the RP2 PP.

8.7. Slovenia (Slovenia Control)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	1.75	1.66	1.20	3.70	3.80	12.11
Main CAPEX (in nominal M€)	1.45	1.25	1.00	3.00	3.00	9.70
Inflation%	1.6%	2.1%	1.9%	2.0%	2.0%	
Inflation index (100 in 2009)	111.9	114.3	116.5	118.8	121.2	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**1.56**	1.45	1.03	3.11	3.14	10.30
Main CAPEX (in M €2009)	1.30	1.09	0.86	2.53	2.48	8.25
% Main into Total CAPEX	82.9%	75.3%	83.3%	81.1%	78.9%	80.1%
Real gate-to-gate ANSP costs (in M €2009)	28.25	28.45	28.35	28.17	28.06	141.28
% of CAPEX into Real gate-to-gate ANSP costs	5.5%	5.1%	3.6%	11.1%	11.2%	7.3%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	1.19					
Main CAPEX (in nominal M€)	0.60					
Inflation%	-0.8%					
Inflation index (100 in 2009)	108.4					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**1.10**					
Main CAPEX (in M €2009)	0.55					
% Main into Total CAPEX	50.6%					
Real gate-to-gate ANSP costs (in M €2009)	28.53					
% of CAPEX into Real gate-to-gate ANSP costs	3.8%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-0.56					
Total CAPEX (in M €2009)	-0.47					
Total CAPEX (in %, for M €2009)	**-29.9%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.85**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

8.7.1 In 2015 there were 2 Main investments for which money was spent by Slovenia Control. There were 3 investments foreseen for 2015 in the RP2 PP, but 2 were not executed. There was 1 unplanned investment. No investments were linked to CAPEX projects from RP1.

8.7.2 Slovenia Control spent 0.47 M€$_{2009}$ (or 29.9%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 3.8%.

8.7.3 In the 2015 monitoring report (CAPEX part), Slovenia Control reported that 2 of the 3 initially planned investments for 2015 were postponed to 2016, causing a decrease in the total actual CAPEX. The executed investments implied additional cost due to scope extension in the context of system-related project with MUAC (ATM Data as a Service - ADaaS). Additionally, the unplanned investment covered the purchase of the RDPS source code allowing own RDP system development together with FDPS development.

8.7.4 One Main CAPEX project, namely FDPS Upgrade was granted with 0.85M€ (50% of eligible cost) CEF funding for the ATM data as a service (ADaaS) that will last until end of 2017.

8.7.5 The issue of the application of IFRIC 12 to Slovenia Control asset financing in its annual accounts is being debated between the PRB and the Slovenian Court of Auditors, following a request addressed by Slovenia to the European Commission. The PRB report on the application of IFRIC 12 of the International Accounting Standards to Air Traffic Management Services and in particular to Slovenia Control can be found at Annex 1.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	3
Number of 2015 Main CAPEX investments actually executed in 2015	2

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**2**
Optimised ATM Network Services	
FDPS Upgrade Purchase of RDPS source code (unplanned)	
Advanced Air Traffic Services	
FDPS Upgrade Purchase of RDPS source code (unplanned)	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
FDPS Upgrade Purchase of RDPS source code (unplanned)	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0.83**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
-	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	0

Number of 2015 Main CAPEX investments **linked** to PCP	**2**
FDPS Upgrade Purchase of RDPS source code (unplanned)	No specific information on links to PCP provided
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0.83**

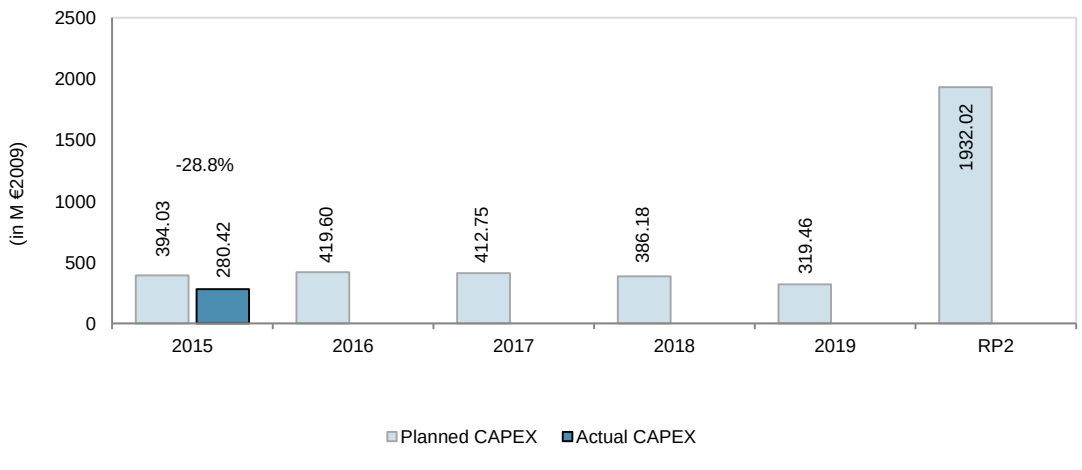
Note: Slovenia did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly in form of OI steps from ATM MP data set which was available at the time of the development of the RP2 PP. No update of the links to PCP was provided and the current text for 2015 investments mentions "Yes, Common projects: IDP WP 1.1.: AFP messages, IDP WP 1.2.: STAM tools" and "yes" for unplanned investment.

9. FABEC

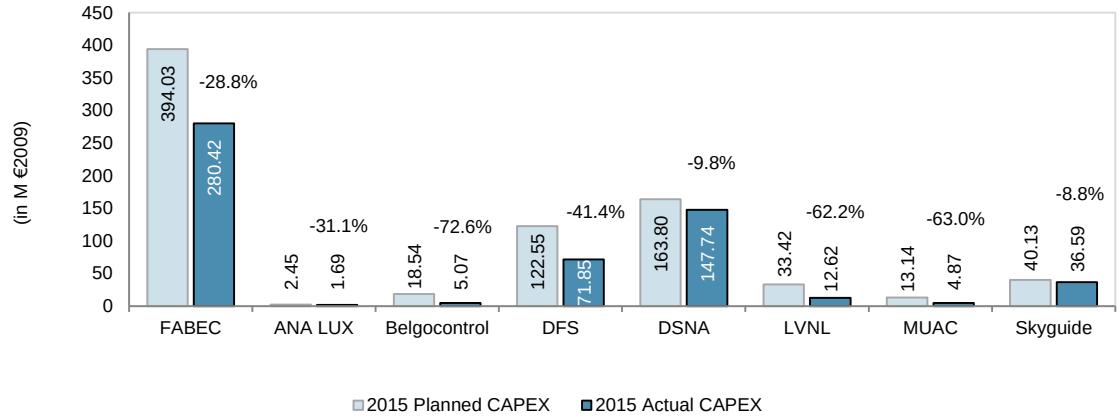
9.1. FAB level

Overall Investment data						
FABEC - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**394.03**	419.60	412.75	386.18	319.46	1932.02
% of ANA LUX Total Planned CAPEX in FABEC	0.6%	0.9%	0.0%	0.0%	0.0%	0.3%
% of Belgocontrol Total Planned CAPEX in FABEC	4.7%	4.7%	2.8%	3.5%	4.4%	4.0%
% of DFS Total Planned CAPEX in FABEC	31.1%	28.9%	31.5%	33.9%	32.5%	31.5%
% of DSNA Total Planned CAPEX in FABEC	41.6%	42.4%	45.0%	43.8%	43.3%	43.2%
% of LVNL Total Planned CAPEX in FABEC	8.5%	10.1%	7.8%	4.9%	3.2%	7.1%
% of MUAC Total Planned CAPEX in FABEC	3.3%	3.4%	3.3%	3.6%	4.3%	3.5%
% of Skyguide Total Planned CAPEX in FABEC	10.2%	9.6%	9.7%	10.2%	12.3%	10.3%
FABEC - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**280.42**					
% of ANA LUX Total Actual CAPEX in FABEC	0.6%					
% of Belgocontrol Total Actual CAPEX in FABEC	1.8%					
% of DFS Total Actual CAPEX in FABEC	25.6%					
% of DSNA Total Actual CAPEX in FABEC	52.7%					
% of LVNL Total Actual CAPEX in FABEC	4.5%					
% of MUAC Total Actual CAPEX in FABEC	1.7%					
% of Skyguide Control Total Actual CAPEX in FABEC	13.0%					
FABEC - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	2888.33					
Total Actual Real gate-to-gate ANSP costs	2748.56					
% of Planned CAPEX into Real gate-to-gate ANSP costs	13.6%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	10.2%					
FABEC - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-113.61**					
Total CAPEX (in %, for M €2009)	-28.8%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**176.58**					

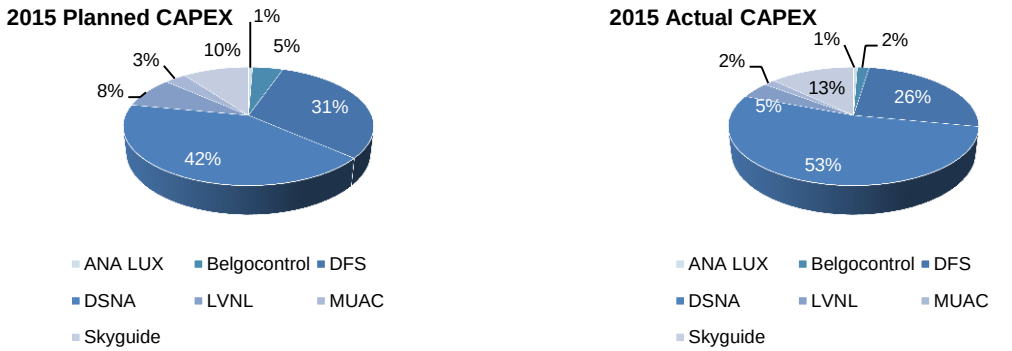
Total Planned vs. Total Actual CAPEX for FABEC for 2015 in RP2



Total Planned vs Total Actual CAPEX for FABEC and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in FABEC



Investment Analysis and Information reported

9.1.1 In 2015, the FABEC ANSPs collectively spent 28.8% less CAPEX than originally planned. This situation at FAB level results from the combination of ANA LUX spending 0.76 M€$_{2009}$ less than planned together with Belgocontrol spending 13.46 M€$_{2009}$ less, DFS 50.70 M€$_{2009}$ less, DSNA 16.06 M€$_{2009}$ less, LVNL 20.80 M€$_{2009}$ less, MUAC 8.28 M€$_{2009}$ less and Skyguide 3.54 M€$_{2009}$ less than planned.

9.1.2 The main reasons for the overall lower actual investment are the delays in the project execution. Belgocontrol's investment plans were impacted by unexpected maintenance costs caused by a power outage which stopped the ATM services and destroyed some equipment. DFS spent less than planned due to delays caused by changes in the projects and their framework, related procurement processes and permits, among others. DSNA spent less than planned mainly due to the postponement of civil engineering projects. MUAC planned investments were impacted by delays in the system delivery, execution and payment. ANA LUX and Skyguide did not provide details on the differences between planned and actual figures. From the total amount spent in 2015 by FABEC, ANA LUX spent 0.6% (i.e. 1.69 M€$_{2009}$), Belgocontrol 1.8%, DFS (i.e. 5.07 M€$_{2009}$), DFS 25.6% (i.e. 71.85 M€$_{2009}$), DSNA 52.7 (i.e. 147.74 M€$_{2009}$), LVNL 4.5% (i.e. 12.62 M€$_{2009}$), MUAC 1.7% (i.e. 4.87 M€$_{2009}$) and Skyguide 13.0% (i.e. 36.59 M€$_{2009}$).

9.1.3 Over the 2015 period, the actual CAPEX of the FABEC expressed in % of the real gate-to-gate ANSP costs reached 10.2%.

9.1.4 The total amount coming from European funding at the FAB level was 176.58M€. Belgocontrol was granted with 0.5M€ CEF funding. DFS was granted with 10.69M€ CEF / TEN-T funding as per grant agreement for 2 investments, DSNA was granted with CEF / TEN-T funding for 9 investments in the amount of 160.35M€ and MUAC was granted with

5,04M€CEF funding for 2 investments. ANA LUX, LVNL and Skyguide reported no CEF/TENT-T funding for the investments granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**66**
ANA LUX	4
Belgocontrol	12
DFS	17
DSNA	14
LVNL	5
MUAC	5
Skyguide	9
Number of 2015 Main CAPEX investments actually executed in 2015	**65**
ANA LUX	4
Belgocontrol	8
DFS	19
DSNA	14
LVNL	5
MUAC	8
Skyguide	7

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP					**40**
ANA LUX					4
Belgocontrol					6
DFS					7
DSNA					14
LVNL					3
MUAC					-
Skyguide					6
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
ANA LUX		1	1	3	
Belgocontrol	1	1		3	1
DFS		3	1	4	1
DSNA	4	10	8	10	
LVNL	1	2		2	1
MUAC					
Skyguide		2	2	1	2
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**178.92**
ANA LUX					1.69
Belgocontrol					2.50
DFS					34.36
DSNA					122.47
LVNL					6.99
MUAC					-
Skyguide					10.92

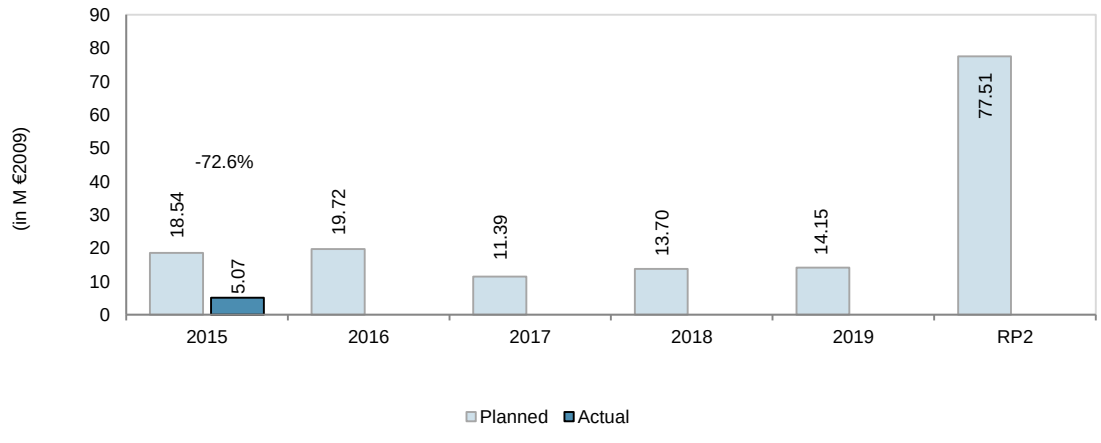
Number of 2015 Main CAPEX investments not linked to ATM MP	**25**
ANA LUX	-
Belgocontrol	2
DFS	12
DSNA	-
LVNL	2
MUAC	8
Skyguide	1
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**23.34**
ANA LUX	-
Belgocontrol	0.47
DFS	16.04
DSNA	-
LVNL	0.58
MUAC	4.62
Skyguide	1.63

Number of 2015 Main CAPEX investments linked to PCP	**24**
ANA LUX	-
Belgocontrol	1
DFS	6
DSNA	14
LVNL	1
MUAC	1
Skyguide	1
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**159.01**
ANA LUX	-
Belgocontrol	1.18
DFS	32.66
DSNA	122.47
LVNL	2.54
MUAC	0.01
Skyguide	0.16

9.2. Belgium (Belgocontrol)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	20.69	22.27	13.04	15.89	16.64	88.54
Main CAPEX (in nominal M€)	16.05	19.31	9.98	11.46	10.18	66.98
Inflation%	1.1%	1.2%	1.3%	1.4%	1.4%	
Inflation index (100 in 2009)	111.6	112.9	114.4	116.0	117.6	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**18.54**	19.72	11.39	13.70	14.15	77.51
Main CAPEX (in M €2009)	14.37	17.10	8.72	9.88	8.66	58.74
% Main into Total CAPEX	77.5%	86.7%	76.6%	72.1%	61.2%	75.8%
Real gate-to-gate ANSP costs (in M €2009)	140.88	143.77	145.98	145.93	145.16	721.72
% of CAPEX into Real gate-to-gate ANSP costs	13.2%	13.7%	7.8%	9.4%	9.8%	10.7%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	5.63					
Main CAPEX (in nominal M€)	3.29					
Inflation%	0.6%					
Inflation index (100 in 2009)	111.1					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**5.07**					
Main CAPEX (in M €2009)	2.97					
% Main into Total CAPEX	58.4%					
Real gate-to-gate ANSP costs (in M €2009)	132.76					
% of CAPEX into Real gate-to-gate ANSP costs	3.8%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-15.06					
Total CAPEX (in M €2009)	-13.46					
Total CAPEX (in %, for M €2009)	**-72.6%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.50**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

9.2.1 In 2015 there were 8 Main investments for which money was spent by Belgocontrol. There were 12 investments foreseen for 2015 in the RP2 PP, but 4 were not executed. There were no unplanned investments. Five investments were linked to CAPEX projects from RP1.

9.2.2 Belgocontrol spent 13.46 M€$_{2009}$ (or 72.6%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 3.8%.

9.2.3 As explained by Belgocontrol in the 2015 monitoring report (CAPEX part), the investment plans have been impacted by unexpected maintenance costs. A power outage stopped the ATM services for several hours and some equipment was destroyed during this event. Consequently, part of the planned CAPEX was redirected to maintenance (in the operating ones) costs for the replacement of the devices. Moreover, several assessments and studies were done in order to avoid such incidents in the future. These expenditures do not appear in the CAPEX as unplanned investments. The main impact on the CAPEX was the fact that manpower planned for the projects had to contribute to these studies in the second half of 2015.

9.2.4 Belgocontrol was granted with 0.5M€ of CEF funding for their investment projects, however it has to be noted that "division of investments in the Performance Plan do not correspond exactly of the cutting of the projects funded by CEF grants and therefore direct comparison is consequently impossible."

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	12
Number of 2015 Main CAPEX investments actually executed in 2015	8

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**6**
Optimised ATM Network Services	
ILS 05R - 23L at Liège Airport	
Advanced Air Traffic Services	
ATM automation system: permanent evolution	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Approach radars Brussels, Ostend and Charleroi Upgrade Approach Radar Liège Airport Renewal of part of the air-ground-air radio infrastructure	
Other features	
VOR/DME	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**2.50**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
Simulator Hardware Telecommunications and IT infrastructure	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0.47**

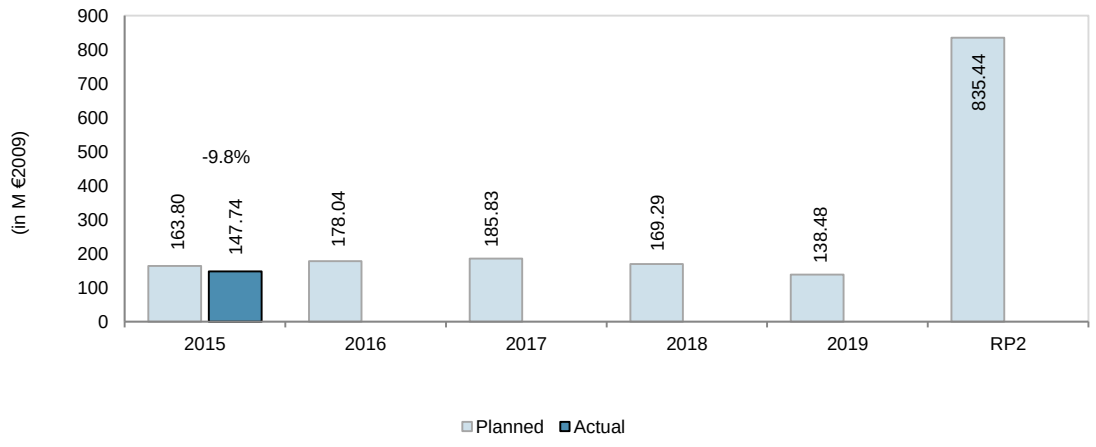
Number of 2015 Main CAPEX investments **linked** to PCP	**1**
ATM automation system: permanent evolution	No specific information on links to PCP provided
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**1.18**

Note: Belgium did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps and enablers) from ATM MP data set which was available at the time of the development of the RP2 PP.

9.3. France (DSNA)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	177.27	194.27	204.99	189.05	156.89	922.46
Main CAPEX (in nominal M€)	128.31	132.56	140.31	131.99	109.88	643.05
Inflation%	0.1%	0.8%	1.1%	1.2%	1.5%	
Inflation index (100 in 2009)	108.2	109.1	110.3	111.7	113.3	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**163.80**	178.04	185.83	169.29	138.48	835.44
Main CAPEX (in M €2009)	118.57	121.48	127.20	118.19	96.99	582.43
% Main into Total CAPEX	72.4%	68.2%	68.4%	69.8%	70.0%	69.7%
Real gate-to-gate ANSP costs (in M €2009)	1253.11	1247.96	1265.15	1257.22	1240.87	6264.30
% of CAPEX into Real gate-to-gate ANSP costs	13.1%	14.3%	14.7%	13.5%	11.2%	13.3%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	159.87					
Main CAPEX (in nominal M€)	132.52					
Inflation%	0.1%					
Inflation index (100 in 2009)	108.2					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**147.74**					
Main CAPEX (in M €2009)	122.47					
% Main into Total CAPEX	82.9%					
Real gate-to-gate ANSP costs (in M €2009)	1199.19					
% of CAPEX into Real gate-to-gate ANSP costs	12.3%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-17.40					
Total CAPEX (in M €2009)	-16.06					
Total CAPEX (in %, for M €2009)	**-9.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**160.35**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

9.3.1 In 2015 there were 14 Main investments for which money was spent by DSNA. All were initially planned in the RP2 PP and no unplanned investments were done. None of the investments was linked to RP1 CAPEX projects.

9.3.2 DSNA spent 16.06 M€$_{2009}$ (or 9.8%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 12.3%.

9.3.3 The actual main CAPEX for DSNA is in line with the planned amount. The slight differences have been caused by the postponement of SYSAT implementation at some minor airports and the replanning of Coflight and NVCS (new Voice Communication System) projects.

9.3.4 As detailed by DSNA in the 2015 monitoring report (CAPEX part), the 9.8% difference between the actual and planned total CAPEX is due to "Sub-total other Capex" which consists of: real estate, civil engineering, and maintaining structures in operational condition. This difference is mainly caused by the postponement of some civil engineering projects (i.e. Orly tower) and due to the fact that the local equipment or building maintenance activities under 10.000€ (other CAPEX) are considered as operational expenditure, according to national accounting rules.

9.3.5 Out of the Main CAPEX projects 9 investments received CEF/TEN-T funding in the amount of 160.35M€ as per grant agreements. 4-FLIGHT, Coflight, CSSIP, ERATO, SYSAT, PBN, FDS, NVCS (new Voice Communication System) and CDM / AMAN / DMAN / XMAN / collaborative NOP (Network Operation Planning) project were granted with funding under CEF, TEN-T or both CEF and TEN-T programmes.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	14
Number of 2015 Main CAPEX investments actually executed in 2015	14

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**14**
Optimised ATM Network Services	
4-FLIGHT Coflight SYSAT CDM / AMAN / DMAN / XMAN / collaborative NOP (Network Operation Planning)	
Advanced Air Traffic Services	
4-FLIGHT Coflight ERATO EVOL CAUTRA DataLink SYSAT PBN CDM / AMAN / DMAN / XMAN / collaborative NOP (Network Operation Planning) AIS Airspace projects MCO et Evol NAV / COM / ATM	

High Performing Airports	
CSSIP	
EVOL CAUTRA DataLink	
SYSAT	
FDS	
A-SMGCS	
CDM / AMAN / DMAN / XMAN / collaborative NOP (Network Operation Planning)	
AIS	
MCO et Evol NAV / COM / ATM	
Enabling the Aviation Infrastructure	
4-FLIGHT	
Coflight	
CSSIP	
ERATO	
EVOL CAUTRA DataLink	
FDS	
NVCS (new Voice Communication System)	
AIS	
Airspace projects	
MCO et Evol NAV / COM / ATM	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**122.47**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
-	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

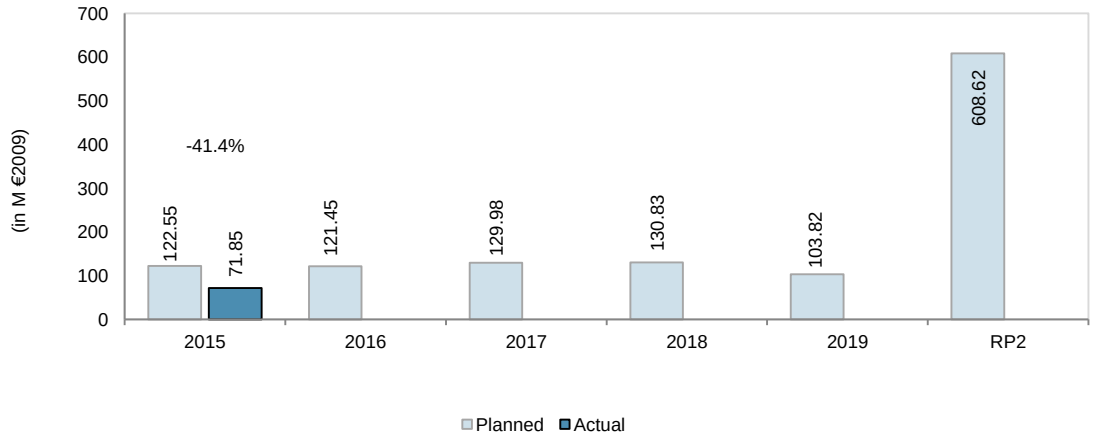
Number of 2015 Main CAPEX investments **linked** to PCP	**14**
4-FLIGHT	AF4, AF5, AF6
Coflight	AF3, AF4, AF6
CSSIP	AF4, AF6
ERATO	AF3
EVOL CAUTRA DataLink	AF6
SYSAT	AF1, AF2
PBN	AF1
FDS	AF2
NVCS (new Voice Communication System)	AF3
A-SMGCS	AF2
CDM / AMAN / DMAN / XMAN / collaborative NOP (Network Operation Planning)	AF1, AF2, AF4
AIS	AF5
Airspace projects	AF3
MCO et Evol NAV / COM / ATM	AF1, AF5, AF6
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**122.47**

Note: France did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided as ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

9.4. Germany (DFS)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	134.72	135.65	147.64	151.15	121.97	691.14
Main CAPEX (in nominal M€)	105.67	109.70	106.88	84.53	60.59	467.36
Inflation%	1.4%	1.6%	1.7%	1.7%	1.7%	
Inflation index (100 in 2009)	109.9	111.7	113.6	115.5	117.5	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**122.55**	121.45	129.98	130.83	103.82	608.62
Main CAPEX (in M €2009)	96.12	98.21	94.09	73.17	51.57	413.16
% Main into Total CAPEX	78.4%	80.9%	72.4%	55.9%	49.7%	67.9%
Real gate-to-gate ANSP costs (in M €2009)	1022.73	951.46	926.84	902.85	879.47	4683.36
% of CAPEX into Real gate-to-gate ANSP costs	12.0%	12.8%	14.0%	14.5%	11.8%	13.0%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	691.14
Total CAPEX (in nominal M€)	78.01					
Main CAPEX (in nominal M€)	53.97					
Inflation%	0.1%					
Inflation index (100 in 2009)	108.6					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**71.85**					
Main CAPEX (in M €2009)	49.71					
% Main into Total CAPEX	69.2%					
Real gate-to-gate ANSP costs (in M €2009)	961.50					
% of CAPEX into Real gate-to-gate ANSP costs	7.5%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-56.72					
Total CAPEX (in M €2009)	-50.70					
Total CAPEX (in %, for M €2009)	**-41.4%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**10.69**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

9.4.1 In 2015 there were 19 Main investments for which money was spent by DFS. There were 17 investments foreseen for 2015 in the RP2 PP, but 1 was not executed and 1 unforeseen for 2015 was executed. There were 2 unplanned investments. Thirteen investments were linked to CAPEX projects from RP1.

9.4.2 DFS spent 50.70 M€$_{2009}$ (or 41.4%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 7.5%.

9.4.3 DFS provided details regarding the changes in the planned investments in the 2015 monitoring report (CAPEX part). According to their report, the lower investment amount is mainly due to delays caused by changes in the projects and their framework, related procurement processes and permits, among others. The late systems delivery or the lack of resources from suppliers' side also caused delays to the planned investments, reducing the amount of the investment. Despite the lower overall figure, the actual investment was higher in some cases due to additional acquired systems, such as LAN components at Langen or radio/surveillance sensors at Munich Airport.

9.4.4 DFS was granted with CEF/TEN-T funding for 2 Main CAPEX investments in the amount of 10.69M€. The iCAS programme (iTEC Centre Automation System) was granted with TEN-T funding for 2012-2015. It has to be noted that "the Final Financial Report concerning this Action is not available at this stage. The balance payment from INEA in that context is expected for 2017. At the moment, there is only a rough estimation available regarding the amount of the final payment (3M€)." BaBola was granted with CEF funding for 2014-2020 for Düsseldorf only. "The first payment in that context has been received in 2016. At the moment, there is no clear picture available regarding next dates/ amounts of payments."

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	17
Number of 2015 Main CAPEX investments actually executed in 2015	19

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**7**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
iCAS programme (iTEC Centre Automation System) VAFORIT Remote Tower Control (RTC)	
High Performing Airports	
A-SMGCS	
Enabling the Aviation Infrastructure	
iCAS programme (iTEC Centre Automation System) RASUM 8.33 (Radio Site Upgrade and Modernisation) MaRS VAFORIT	
Other features	
General overhaul of the gas turbines	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**34.36**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**12**
Programme P2 ILS (Instrument Landing System) Digital networks En-route navigation BaBola Technical centre on the campus in Langen Value added network services in data communication Control centre simulators Transmitters, receivers, antennas Intercom system 2 (GS2) Overhaul academy Sum of other unplanned investments with capex less than 1 M€ in RP2	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**16.04**

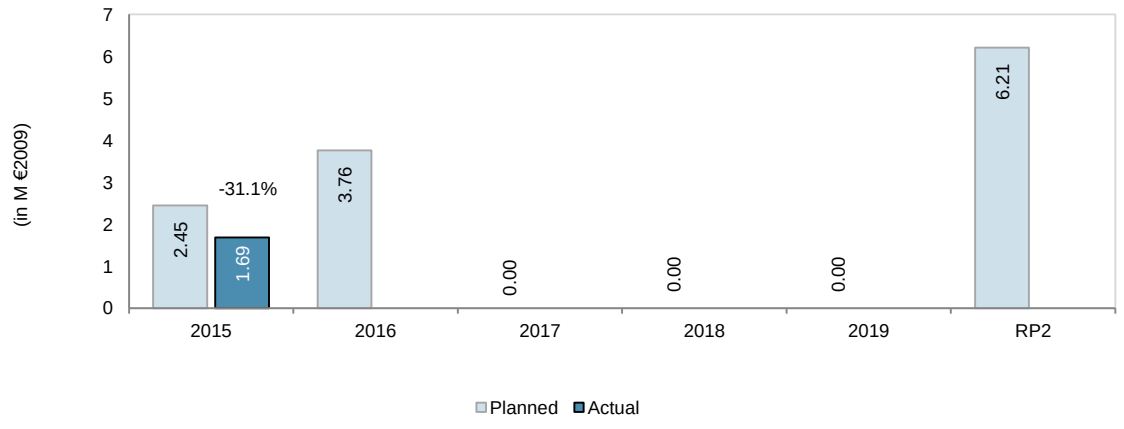
Number of 2015 Main CAPEX investments **linked** to PCP	**6**
iCAS programme (iTEC Centre Automation System)	AF6
Digital networks	AF5
BaBola	AF2
VAFORIT	AF6
Value added network services in data communication	AF5
A-SMGCS	AF2
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**32.66**

Note: Germany did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps) from ATM MP data set which was available at the time of the development of the RP2 PP.

9.5. Luxembourg (ANA Lux)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	2.76	4.34	0.00	0.00	0.00	7.10
Main CAPEX (in nominal M€)	2.76	4.34	0.00	0.00	0.00	7.10
Inflation%	1.7%	2.2%	2.5%	2.2%	2.2%	
Inflation index (100 in 2009)	112.9	115.4	118.4	121.0	123.7	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**2.45**	3.76	0.00	0.00	0.00	6.21
Main CAPEX (in M €2009)	2.45	3.76	0.00	0.00	0.00	6.21
% Main into Total CAPEX	100.0%	100.0%	-	-	-	100.0%
Real gate-to-gate ANSP costs (in M €2009)	14.72	15.54	15.66	15.76	15.72	77.40
% of CAPEX into Real gate-to-gate ANSP costs	16.6%	24.2%	0.0%	0.0%	0.0%	8.0%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	1.90					
Main CAPEX (in nominal M€)	1.90					
Inflation%	0.1%					
Inflation index (100 in 2009)	112.5					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**1.69**					
Main CAPEX (in M €2009)	1.69					
% Main into Total CAPEX	100.0%					
Real gate-to-gate ANSP costs (in M €2009)	15.59					
% of CAPEX into Real gate-to-gate ANSP costs	10.8%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-0.87					
Total CAPEX (in M €2009)	-0.76					
Total CAPEX (in %, for M €2009)	**-31.1%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

9.5.1 In 2015 there were 4 Main investments for which money was spent by ANA LUX. All these investments were initially planned in the RP2 PP. There were no unplanned investments. None of the investments were linked to CAPEX projects from RP1.

9.5.2 ANA LUX spent 0.76 M€$_{2009}$ (or 31.1%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 10.8%.

9.5.3 ANA LUX did not provide any detail in the 2015 monitoring report, CAPEX part, regarding the difference between the actual and planned values. However, significant higher investment was reported for the ATC systems project, while lower values were reported for the Surveillance and navigation systems and the METEO systems. On overall, the investment amount is slightly lower than planned one.

9.5.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	4
Number of 2015 Main CAPEX investments actually executed in 2015	4

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**4**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
ATC systems	
High Performing Airports	
ATC systems	
Enabling the Aviation Infrastructure	
Communication Surveillance and navigation systems METEO Systems	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**1.69**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
-	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0**

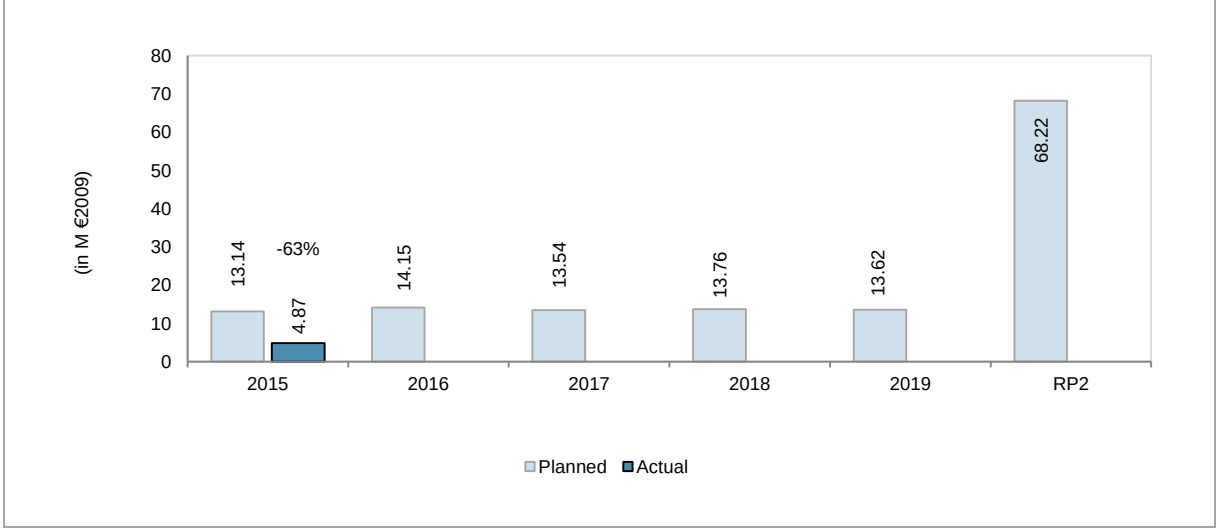
Number of 2015 Main CAPEX investments **linked** to PCP	**0**
-	
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

Note: Luxembourg did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided as ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

9.6. MUAC

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	14.54	15.85	15.38	15.87	15.94	77.57
Main CAPEX (in nominal M€)	12.69	14.70	14.68	15.19	15.28	72.53
Inflation%	1.0%	1.2%	1.4%	1.5%	1.5%	
Inflation index (100 in 2009)	110.6	112.0	113.6	115.3	117.0	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**13.14**	14.15	13.54	13.76	13.62	68.22
Main CAPEX (in M €2009)	11.47	13.12	12.92	13.17	13.05	63.75
% Main into Total CAPEX	87.3%	92.7%	95.5%	95.7%	95.8%	93.4%
Real gate-to-gate ANSP costs (in M €2009)	133.85	133.51	135.91	138.10	139.79	681.16
% of CAPEX into Real gate-to-gate ANSP costs	9.8%	10.6%	10.0%	10.0%	9.7%	10.0%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	5.34					
Main CAPEX (in nominal M€)	5.07					
Inflation%	0.2%					
Inflation index (100 in 2009)	109.7					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**4.87**					
Main CAPEX (in M €2009)	4.62					
% Main into Total CAPEX	94.9%					
Real gate-to-gate ANSP costs (in M €2009)	123.58					
% of CAPEX into Real gate-to-gate ANSP costs	3.9%					
Actuals vs Planned in absolute value & percentage	**2015**					
Total CAPEX (in nominal M€)	-9.20					
Total CAPEX (in M €2009)	-8.28					
Total CAPEX (in %, for M €2009)	**-63.0%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**5.04**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

9.6.1 In 2015 there were 8 Main investments for which money was spent by MUAC. There were 5 investments foreseen for 2015 in the RP2 PP, but 1 was not executed and 4 not foreseen for 2015 were executed. No unplanned investments were done. Five investments were linked to CAPEX projects from RP1.

9.6.2 MUAC spent 8.28 M€$_{2009}$ (or 63%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 3.9%.

9.6.3 As explained by MUAC in the 2015 monitoring report (CAPEX part), the causes for the reduction of planned investments include delays in the system delivery, execution and payment. In particular, the SESAR Compliant ATM related investment has been delayed due to the non-delivery of SESAR tools. On the other hand, MUAC spent some money on investments that initially had no planned amount. This is the case for the Antenna Towers, which started in 2014 and was shifted to 2015, Rationalisation of the IT infrastructure, FDFS convergence and UFS Implementation.

9.6.4 Two Main CAPEX investments, namely the New VCS System (N-VCS), which is under common procurement with DSNA, and the Radio Direction Finder System (RDFS) in the context of the New Generation ATM were granted with CEF/TEN-T funding in the amount of 5,04M€ as per grant agreement.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	5
Number of 2015 Main CAPEX investments actually executed in 2015	8

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**0**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
-	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
-	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**8**
Voice Systems : New VCS System (N-VCS) Voice Systems : Antenna Towers New Generation ATM: Radio Direction Finder System (RDFS) New Generation ATM: Rationalisation of the IT infrastructure New Generation ATM: FDPS convergence New Generation ATM: UFS Implementation ATFCM/ASM Building and Infrastructure	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**4.62**

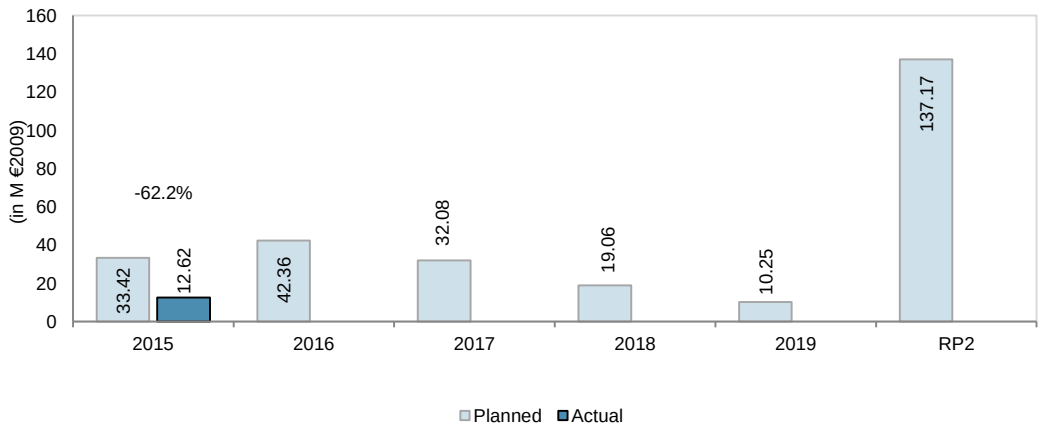
Number of 2015 Main CAPEX investments **linked** to PCP	**1**
ATFCM/ASM	AF3, AF4
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0.01**

Note: MUAC did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. None of the investments executed by MUAC in 2015 is linked to the ATM MP.

9.7. Netherlands (LVNL)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	36.97	47.43	36.45	21.97	12.00	154.82
Main CAPEX (in nominal M€)	30.13	45.06	35.34	21.34	3.53	135.41
Inflation%	1.0%	1.2%	1.4%	1.5%	1.5%	
Inflation index (100 in 2009)	110.6	112.0	113.6	115.3	117.0	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**33.42**	42.36	32.08	19.06	10.25	137.17
Main CAPEX (in M €2009)	27.24	40.24	31.11	18.51	3.02	120.12
% Main into Total CAPEX	81.5%	95.0%	97.0%	97.1%	29.4%	87.6%
Real gate-to-gate ANSP costs (in M €2009)	170.08	165.65	166.63	170.24	171.37	843.97
% of CAPEX into Real gate-to-gate ANSP costs	19.7%	25.6%	19.3%	11.2%	6.0%	16.3%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	13.85					
Main CAPEX (in nominal M€)	7.70					
Inflation%	0.2%					
Inflation index (100 in 2009)	109.7					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**12.62**					
Main CAPEX (in M €2009)	7.02					
% Main into Total CAPEX	55.6%					
Real gate-to-gate ANSP costs (in M €2009)	165.39					
% of CAPEX into Real gate-to-gate ANSP costs	7.6%					
Actuals vs Planned in absolute value & percentage	**2015**					
Total CAPEX (in nominal M€)	-23.12					
Total CAPEX (in M €2009)	-20.80					
Total CAPEX (in %, for M €2009)	**-62.2%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

9.7.1 In 2015 there were 5 Main investments for which money was spent by LVNL. There were 5 investments foreseen for 2015 in the RP2 PP, but 1 of them was not executed. There was 1 unplanned executed investment. Three investments were linked to CAPEX projects from RP1.

9.7.2 LVNL spent 20.80 M€$_{2009}$ (or 62.2%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 7.6%.

9.7.3 Investments done by LNVL in the 2015 are significantly lower than the planned ones. According to the details provided by the ANSP in 2015 monitoring report (CAPEX part), this difference is mainly due to project rescheduling, Replacement AAA having the highest impact, and postponement of activities, such as maintenance.

9.7.4 At the time of reporting no CEF / TEN-T funding was granted. However, a proposal was submitted under CEF call 2015 for the Replacement AAA project, but the result was yet unknown.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	5
Number of 2015 Main CAPEX investments actually executed in 2015	5

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**3**
Optimised ATM Network Services	
Replacement AAA	
Advanced Air Traffic Services	
Replacement AAA Replacement TAR4	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Replacement AAA Replacement TAR4	
Other features	
Last resort Air-Ground, Ground-Ground Voice Communication	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**6.99**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
Maintenance investments Maintenance investments (unplanned)	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0.58**

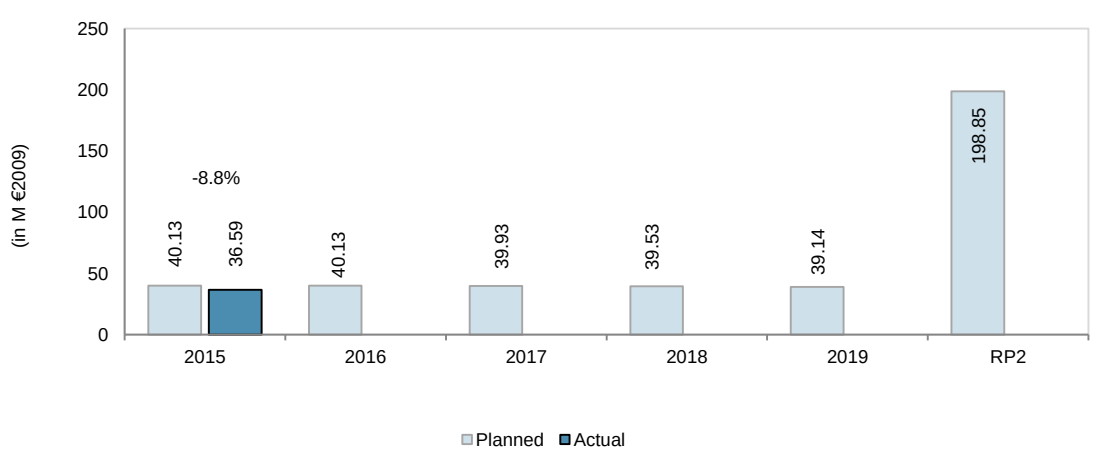
Number of 2015 Main CAPEX investments **linked** to PCP	**1**
Replacement AAA	AF1, AF5, AF6
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**2.54**

Note: The Netherlands did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps) from ATM MP data set which was available at the time of the development of the RP2 PP.

9.8. Switzerland (Skyguide)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MCHF)	60.00	60.00	60.00	60.00	60.00	300.00
Main CAPEX (in nominal MCHF)	23.41	23.30	16.87	12.46	11.83	87.87
Inflation%	-1.0%	0.0%	0.5%	1.0%	1.0%	
Inflation index (100 in 2009)	99.1	99.1	99.6	100.6	101.6	
Exchange rate 2009	1.51	1.51	1.51	1.51	1.51	
Total CAPEX (in M €2009)	**40.13**	40.13	39.93	39.53	39.14	198.85
Main CAPEX (in M €2009)	15.65	15.58	11.22	8.21	7.72	58.39
% Main into Total CAPEX	39.0%	38.8%	28.1%	20.8%	19.7%	29.4%
Real gate-to-gate ANSP costs (in M €2009)	152.97	146.65	147.56	146.14	146.29	739.61
% of CAPEX into Real gate-to-gate ANSP costs	26.2%	27.4%	27.1%	27.1%	26.8%	26.9%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MCHF)	54.82					
Main CAPEX (in nominal MCHF)	18.80					
Inflation%	-0.8%					
Inflation index (100 in 2009)	99.3					
Exchange rate 2009	1.51					
Total CAPEX (in M €2009)	**36.59**					
Main CAPEX (in M €2009)	12.55					
% Main into Total CAPEX	34.3%					
Real gate-to-gate ANSP costs (in M €2009)	150.54					
% of CAPEX into Real gate-to-gate ANSP costs	24.3%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MCHF)	-5.18					
Total CAPEX (in M €2009)	-3.54					
Total CAPEX (in %, for M €2009)	**-8.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

9.8.1 In 2015 there were 7 Main investments for which money was spent by Skyguide. There were 9 investments foreseen for 2015 in the RP2 PP, but 2 were not executed. No unplanned investments were done. No investment was linked to CAPEX projects from RP1.

9.8.2 Skyguide spent 3.54 M€$_{2009}$ (or 8.8%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 24.3%.

9.8.3 No specific details were provided by Skyguide in the 2015 monitoring report (CAPEX part) regarding the changes between the actual and planned investment figures. The small reduction in the total amount is balanced between the investment that requested more and the ones that requested less money. It also has to be noted that two planned investments were not executed, namely the FDP GVA ACC & TWR and the AMAN for GVA.

9.8.4 On the other hand, Skyguide explains that the CAPEX list provided in the 2015 monitoring report discloses all LSSIP, PCP and FABEC related initiatives, and 10 biggest changes out of which the stakeholders have been consulted on April 16 2014. Virtual Center 1, the highest investment in 2015, encompassed Datalink (CPDLC), Enhanced mode S, Stripless, Combined operations at low traffic conditions (cop@ltc). Positive ROI was achieved for VC1 mainly due to delay savings, but also throughout operational savings. VC1 is a pre-requisite to achieve local delay targets.

9.8.5 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	9
Number of 2015 Main CAPEX investments actually executed in 2015	7

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**6**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
Virtual Center 1 XMAN FABEC	
High Performing Airports	
PSR Replacement SAMAX	
Enabling the Aviation Infrastructure	
Virtual Center 1	
Other features	
Smart Radio Flex Secto CH VISTA/EMTEL	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**10.92**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**1**
NETWORK Evolutions	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**1.63**

Number of 2015 Main CAPEX investments **linked** to PCP	**1**
XMAN FABEC	No specific information on links to PCP provided
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0.16**

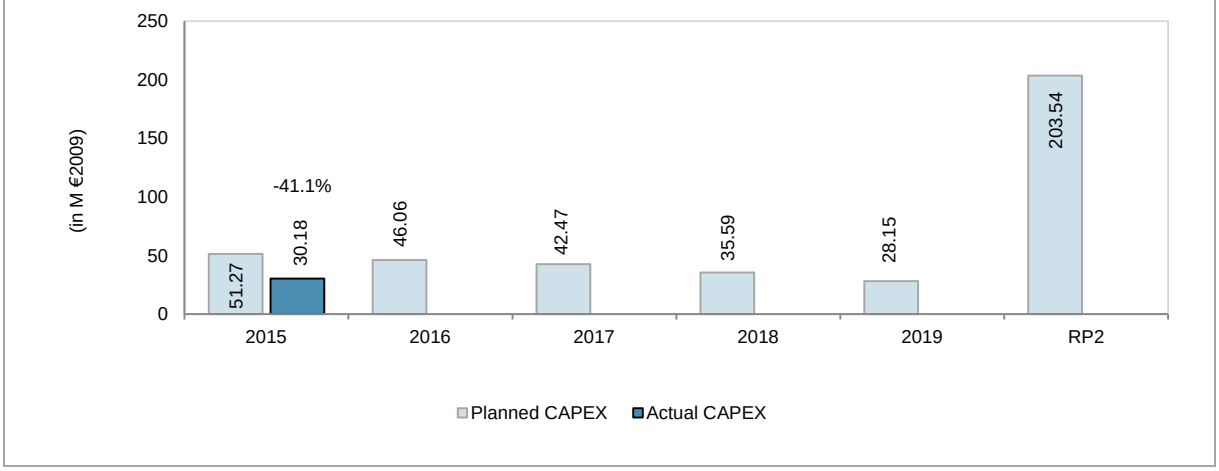
Note: Switzerland did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps and enablers) from ATM MP data set which was available at the time of the development of the RP2 PP.

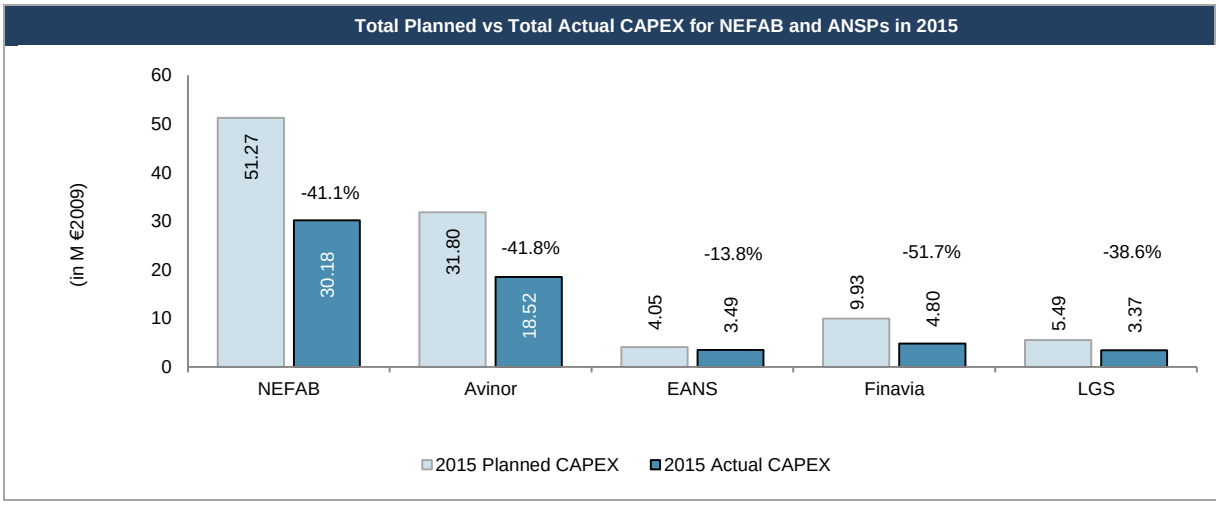
10. NEFAB

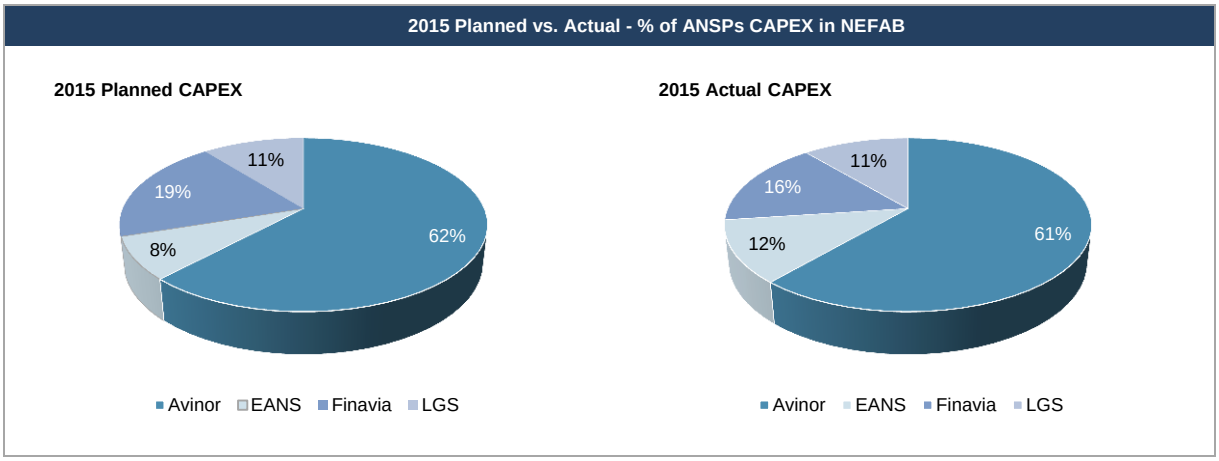
10.1. FAB level

Overall Investment data						
NEFAB - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**51.27**	46.06	42.47	35.59	28.15	203.54
% of Avinor Total Planned CAPEX in NEFAB	62.0%	50.3%	55.9%	53.4%	52.5%	55.3%
% of EANS Total Planned CAPEX in NEFAB	7.9%	4.7%	4.0%	4.9%	5.5%	5.5%
% of Finavia Total Planned CAPEX in NEFAB	19.4%	32.7%	27.2%	26.3%	18.6%	25.1%
% of LGS Total Planned CAPEX in NEFAB	10.7%	12.3%	12.9%	15.4%	23.5%	14.1%
NEFAB - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**30.18**					
% of Avinor Total Actual CAPEX in NEFAB	61.4%					
% of EANS Total Actual CAPEX in NEFAB	11.6%					
% of Finavia Total Actual CAPEX in NEFAB	15.9%					
% of LGS Total Actual CAPEX in NEFAB	11.2%					
NEFAB - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	232.65					
Total Actual Real gate-to-gate ANSP costs	221.01					
% of Planned CAPEX into Real gate-to-gate ANSP costs	22.0%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	13.7%					
NEFAB - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-21.09**					
Total CAPEX (in %, for M €2009)	-41.1%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**1.88**					

Total Planned vs. Total Actual CAPEX for NEFAB for 2015 in RP2







Investment Analysis and Information reported

10.1.1 In 2015, the NEFAB ANSPs collectively spent 41.1% less CAPEX than originally planned. This situation at FAB level results from the combination of Avinor spending 13.28 M€$_{2009}$ less than planned together with EANS spending 0.56 M€$_{2009}$ less and Finavia spending 5.14 M€$_{2009}$ less and Latvia 2.12 M€$_{2009}$ less than planned.

10.1.2 The main reasons for Avinor's underspending are mainly caused by a change of scope and a slower start of the new ATM system investment; for EANS it was caused by the re-adjustment of budget due to mere postponement of the projects; Finavia provided no detailed information for the changes to the planned figures; for LGS the much lower investment amount was caused by a delay.

10.1.3 From the total amount spent in 2015 by NEFAB, Avinor spent 61.4% (i.e. 18.52 M€$_{2009}$), EANS spent 11.6% (i.e. 3.49 M€$_{2009}$), Finavia spent 15.9% (i.e. 4.8 M€$_{2009}$) and LGS spent 11.2% (i.e. 3.37 M€$_{2009}$).

10.1.4 Over the 2015 period, the actual CAPEX of the NEFAB expressed in % of the real gate-to-gate ANSP costs reached 13.7%.

10.1.5 Avinor received CEF funding for 1 investment and Finavia for 2 investments; EANS and LGS reported no CEF/TENT-T funding for the investments granted. The total amount of the CEF funding granted in the NEFAB equals to 1.88M€. It has to be noted that the value reported by Finland only compromised funding granted in 2015.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**27**
Avinor	13
EANS	6
Finavia	5
LGS	3
Number of 2015 Main CAPEX investments actually executed in 2015	**26**
Avinor	14
EANS	4
Finavia	5
LGS	3

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP					**18**
Avinor					9
EANS					2
Finavia					5
LGS					2
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
Avinor	4	6	1	7	1
EANS		1		2	
Finavia	1	2		2	1
LGS		1	1		
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**19.75**
Avinor					13.51
EANS					2.59
Finavia					3.35
LGS					0.29

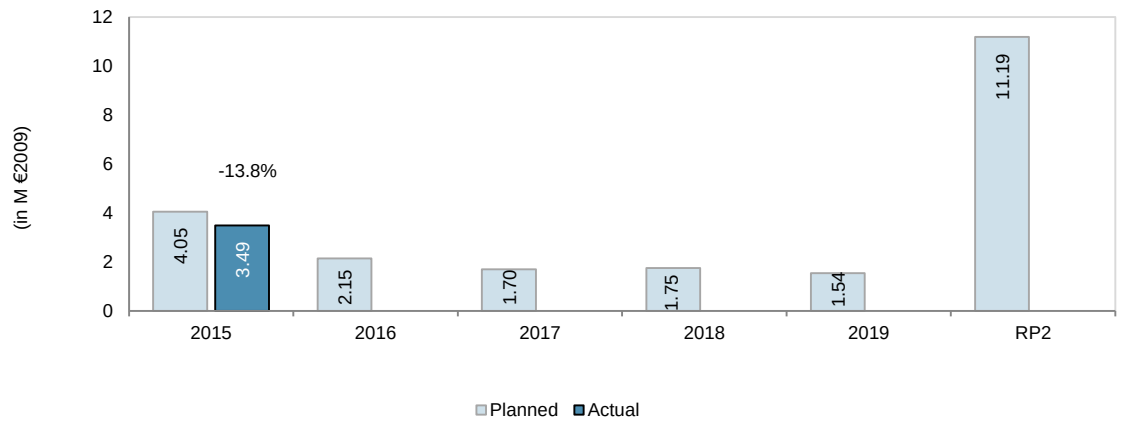
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**8**
Avinor	5
EANS	2
Finavia	--
LGS	1
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**6.13**
Avinor	5.00
EANS	0.90
Finavia	-
LGS	0.23

Number of 2015 Main CAPEX investments **linked** to PCP	**4**
Avinor	1
EANS	2
Finavia	1
LGS	-
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**4.94**
Avinor	0.62
EANS	3.04
Finavia	1.27
LGS	-

10.2. Estonia (EANS)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	4.99	2.73	2.22	2.36	2.15	14.44
Main CAPEX (in nominal M€)	4.99	2.73	2.22	2.36	2.15	14.44
Inflation%	3.0%	3.1%	3.0%	3.0%	3.0%	
Inflation index (100 in 2009)	123.3	127.1	130.9	134.8	138.9	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**4.05**	2.15	1.70	1.75	1.54	11.19
Main CAPEX (in M €2009)	4.05	2.15	1.70	1.75	1.54	11.19
% Main into Total CAPEX	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Real gate-to-gate ANSP costs (in M €2009)	15.77	16.61	17.12	17.37	17.61	84.47
% of CAPEX into Real gate-to-gate ANSP costs	25.7%	12.9%	9.9%	10.1%	8.8%	13.2%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	4.09					
Main CAPEX (in nominal M€)	4.09					
Inflation%	0.1%					
Inflation index (100 in 2009)	117.1					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**3.49**					
Main CAPEX (in M €2009)	3.49					
% Main into Total CAPEX	100.0%					
Real gate-to-gate ANSP costs (in M €2009)	14.26					
% of CAPEX into Real gate-to-gate ANSP costs	24.5%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-0.90					
Total CAPEX (in M €2009)	-0.56					
Total CAPEX (in %, for M €2009)	**-13.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

10.2.1 In 2015 there were 4 Main investments for which money was spent by EANS. There were 6 investments foreseen for 2015 in the RP2 PP, but 2 were not executed. There were no unplanned investments. None of the investments were linked to CAPEX projects from RP1.

10.2.2 EANS spent 0.56 M€$_{2009}$ (or 13.8%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 24.5%.

10.2.3 The lower investment amounts are mainly caused by the re-adjustment of budget due to mere postponement of the projects.

10.2.4 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	6
Number of 2015 Main CAPEX investments actually executed in 2015	4

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**2**
Optimised ATM Network Services	
Advanced Air Traffic Services	
Data processing	
High Performing Airports	
Enabling the Aviation Infrastructure	
Communication Data processing	
Other features	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**2.59**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
Surveillance Infrastructure	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0.90**

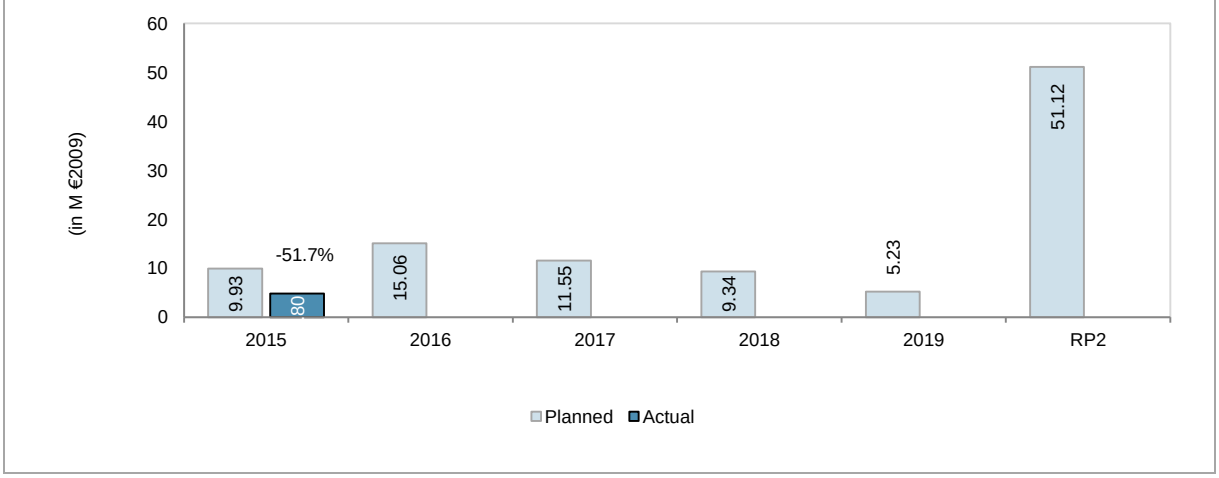
Number of 2015 Main CAPEX investments **linked** to PCP	**2**
Surveillance Data processing	No specific information on links to PCP provided
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**3.04**

Note: Estonia did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided in form of ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

10.3. Finland (Finavia)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	11.37	17.53	13.70	11.30	6.45	60.35
Main CAPEX (in nominal M€)	7.25	11.28	9.80	8.20	4.45	40.98
Inflation%	1.5%	1.7%	1.9%	2.0%	2.0%	
Inflation index (100 in 2009)	114.4	116.4	118.6	121.0	123.4	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**9.93**	15.06	11.55	9.34	5.23	51.12
Main CAPEX (in M €2009)	6.34	9.69	8.26	6.78	3.61	34.68
% Main into Total CAPEX	63.8%	64.3%	71.5%	72.6%	69.0%	67.8%
Real gate-to-gate ANSP costs (in M €2009)	45.97	45.75	45.39	44.83	44.19	226.12
% of CAPEX into Real gate-to-gate ANSP costs	21.6%	32.9%	25.5%	20.8%	11.8%	22.6%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	5.37					
Main CAPEX (in nominal M€)	3.75					
Inflation%	-0.2%					
Inflation index (100 in 2009)	111.9					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**4.80**					
Main CAPEX (in M €2009)	3.35					
% Main into Total CAPEX	69.8%					
Real gate-to-gate ANSP costs (in M €2009)	46.23					
% of CAPEX into Real gate-to-gate ANSP costs	10.4%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-6.00					
Total CAPEX (in M €2009)	-5.14					
Total CAPEX (in %, for M €2009)	**-51.7%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement for 2015 only)**					
CEF / TEN-T funding (in nominal M €)	**0.0017**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

10.3.1 In 2015 there were 5 Main investments for which money was spent by EANS. There were 5 investments foreseen for 2015 in the RP2 PP, but 1 was not executed and 1 unforeseen for 2015 was executed. There was 1 unplanned investment, 'Data Processing', for which no amount was reported. None of the investments were linked to CAPEX projects from RP1.

10.3.2 Finavia 5.14 M€$_{2009}$ (or 51.7%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 10.4%.

10.3.3 Finland reported that only one Main CAPEX investment was granted with CEF funding which for 2015 amounts to 1725€.

10.3.4 Finavia also stated that all information is based on Finavia ANS's draft investment budget for years 2015-2019 (updated in October 2014). Total CAPEX row includes all ANS investments, also those not made for en-route service nor Helsinki-Vantaa TN service. After this update, depreciations in en-route or Helsinki-Vantaa TNC cost base are not updated. Depreciations are based on investment plans in spring 2014.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	5
Number of 2015 Main CAPEX investments actually executed in 2015	5

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**5**
Optimised ATM Network Services	
FRA implementation + LARA tool	
Advanced Air Traffic Services	
ILS / DME FRA implementation + LARA tool	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Controller pilot Datalink WAM / ADS-B	
Other features	
ANS LAN Cyber-security upgrades	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**3.35**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**0**
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	0

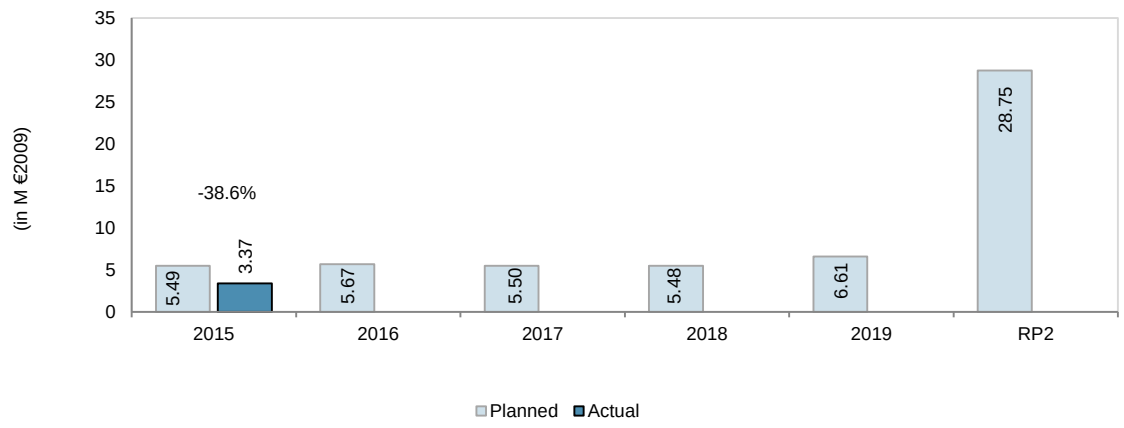
Number of 2015 Main CAPEX investments **linked** to PCP	**1**
FRA implementation + LARA tool	AF3
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**1.27**

Note: Finland did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided in form of ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

10.4. Latvia (LGS)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	6.02	6.37	6.31	6.43	7.94	33.07
Main CAPEX (in nominal M€)	1.40	2.27	1.24	1.23	2.51	8.65
Inflation%	2.5%	2.3%	2.3%	2.3%	2.3%	
Inflation index (100 in 2009)	109.7	112.2	114.8	117.4	120.1	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**5.49**	5.67	5.50	5.48	6.61	28.75
Main CAPEX (in M €2009)	1.28	2.02	1.08	1.05	2.09	7.52
% Main into Total CAPEX	23.3%	35.6%	19.6%	19.2%	31.6%	26.1%
Real gate-to-gate ANSP costs (in M €2009)	23.60	23.52	23.81	24.13	24.42	119.48
% of CAPEX into Real gate-to-gate ANSP costs	23.3%	24.1%	23.1%	22.7%	27.1%	24.1%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	3.59					
Main CAPEX (in nominal M€)	0.55					
Inflation%	0.2%					
Inflation index (100 in 2009)	106.4					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**3.37**					
Main CAPEX (in M €2009)	0.52					
% Main into Total CAPEX	15.4%					
Real gate-to-gate ANSP costs (in M €2009)	21.91					
% of CAPEX into Real gate-to-gate ANSP costs	15.4%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-2.43					
Total CAPEX (in M €2009)	-2.12					
Total CAPEX (in %, for M €2009)	**-38.6%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

10.4.1 In 2015 there were 3 Main investments for which money was spent by LGS. They were all initially planned in the RP2 PP and there were no unplanned investments. None of the investments were linked to CAPEX projects from RP1.

10.4.2 LGS spent 2.12 M€$_{2009}$ (or 38.6%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 15.4%.

10.4.3 In the 2015 monitoring report (CAPEX part), LGS has provided detailed information for the changes to the planned figures for 2 projects:

- The much lower investment amount for the PBN implementation project was due to the fact that different options were analysed and that caused a delay in choosing a contractor. 2015 CAPEX relates to a project that already started in RP1 and was planned to end in early 2015. A new contract was planned immediately, however delayed and signed in early 2016.
- The overspending for 'Communication General' was mainly due to an implementation of an additional air-ground channel.

10.4.4 The 2 other Main investments remained on the level of the planned amount.

10.4.5 It was reported that for the Main CAPEX investments no amount for CEF / TEN-T funding was granted.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	3
Number of 2015 Main CAPEX investments actually executed in 2015	3

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**2**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
PBN implementation project	
High Performing Airports	
A-SMGCS modernization	
Enabling the Aviation Infrastructure	
-	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**0.29**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**1**
Communication General	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0.23**

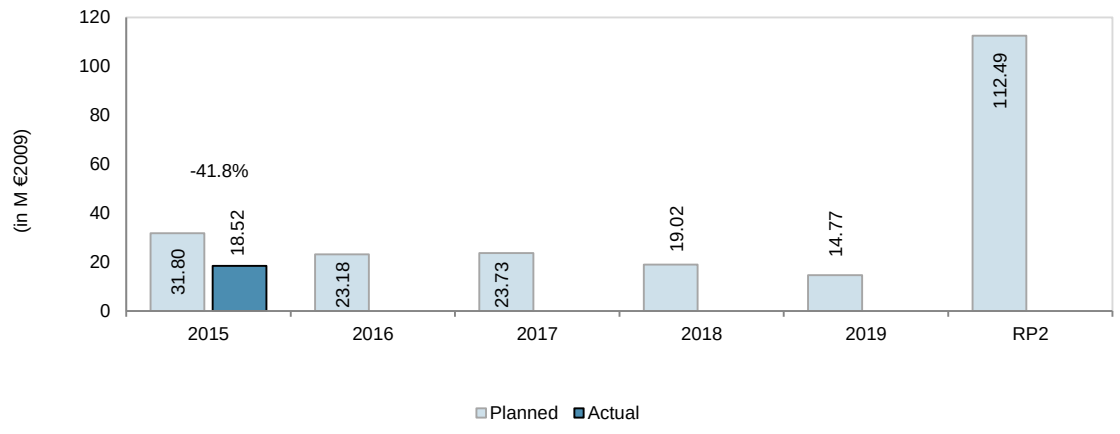
Number of 2015 Main CAPEX investments **linked** to PCP	**0**
-	
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

Note: Latvia did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided in form of ESSIP Objectives and enablers from ATM MP data set which was available at the time of the development of the RP2 PP.

10.5. Norway (Avinor)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M NOK)	304.04	225.36	235.55	193.55	154.05	1112.55
Main CAPEX (in nominal M NOK)	304.04	225.36	235.55	193.55	154.05	1112.55
Inflation%	1.6%	1.7%	2.1%	2.5%	2.5%	
Inflation index (100 in 2009)	109.5	111.4	113.7	116.6	119.5	
Exchange rate 2009	8.73	8.73	8.73	8.73	8.73	
Total CAPEX (in M €2009)	**31.80**	23.18	23.73	19.02	14.77	112.49
Main CAPEX (in M €2009)	31.80	23.18	23.73	19.02	14.77	112.49
% Main into Total CAPEX	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Real gate-to-gate ANSP costs (in M €2009)	147.32	146.90	145.90	143.83	141.28	725.22
% of CAPEX into Real gate-to-gate ANSP costs	21.6%	15.8%	16.3%	13.2%	10.5%	15.5%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M NOK)	177.07					
Main CAPEX (in nominal M NOK)	144.16					
Inflation%	2.0%					
Inflation index (100 in 2009)	109.5					
Exchange rate 2009	8.73					
Total CAPEX (in M €2009)	**18.52**					
Main CAPEX (in M €2009)	15.08					
% Main into Total CAPEX	81.4%					
Real gate-to-gate ANSP costs (in M €2009)	138.60					
% of CAPEX into Real gate-to-gate ANSP costs	13.4%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M NOK)	-126.97					
Total CAPEX (in M €2009)	-13.28					
Total CAPEX (in %, for M €2009)	**-41.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**1.88**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

10.5.1 In 2015 there were 14 Main investments for which money was spent by Avinor. They were all initially planned in the RP2 PP and there was 1 unplanned investment. None of the investments were linked to CAPEX projects from RP1.

10.5.2 Avinor spent 13.28 M€$_{2009}$ (or 41.8%) less Total CAPEX than initially planned for 2015. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 13.4%.

10.5.3 In the 2015 monitoring report (CAPEX part), Avinor has provided detailed information about the changes to the planned figures for only 1 project (FS 108 New ATM infrastructure), explaining the important decrease in investment :

10.5.4 The CAPEX for 2015 is below plan, mainly due to a change of scope and a slower start of the new ATM system investment. The updated project estimates are higher than reported in the PP and the project timeline has also changed (the project will take longer time to finalize).

10.5.5 Avinor reported having received an amount of 1,88M€ of CEF funding for 1 investment, namely 'FS 106 Natcon Target concept implementation'.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	13
Number of 2015 Main CAPEX investments actually executed in 2015	14

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**9**
Optimised ATM Network Services	
FS 212 BOAS FS 106 Natcon Target concept implementation FS 108 New ATM infrastructure FS 100 ATM-Systems General	
Advanced Air Traffic Services	
FS 212 BOAS FS 106 Natcon Target concept implementation FS 108 New ATM infrastructure FS 100 ATM-Systems General FS 300 Navigation General FS 400 Communication General	
High Performing Airports	
FS 100 ATM-Systems General	
Enabling the Aviation Infrastructure	
FS 212 BOAS FS 106 Natcon Target concept implementation FS 201 Haukåsen Radar-Upgrade FS 204 Norwegian Wide Area Multilateration (NORWAM) FS 200 Surveillance General FS 100 ATM-Systems General FS 400 Communication General	
Other features	
FS 100 ATM-Systems General	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**13.51**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**5**
FS 702 New Operational Concept FS 500 MET General FS 701 Mobility General FS 700 Buildings General Remote towers	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**5.00**

Number of 2015 Main CAPEX investments **linked** to PCP	**1**
FS 100 ATM-Systems General	AF2, AF3, AF4, AF5, AF6
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0.62**

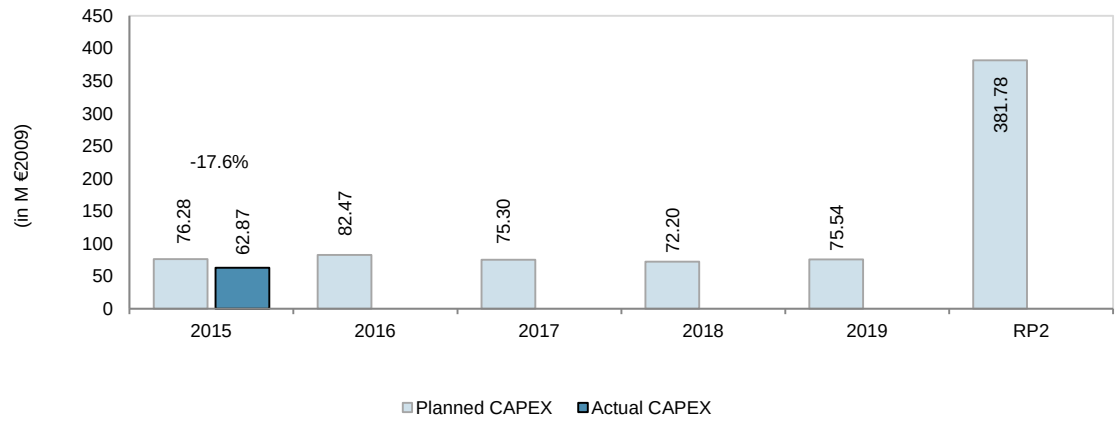
Note: Norway did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly in form of ESSIP Objectives from ATM MP data set which was available at the time of the development of the RP2 PP.

11. SW

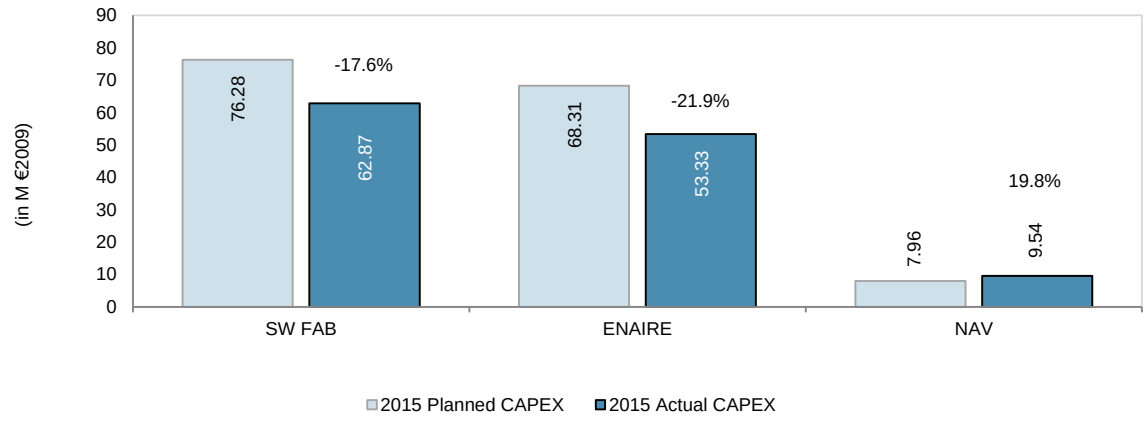
11.1. FAB level

Overall Investment data						
SW - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**76.28**	82.47	75.30	72.20	75.54	381.78
% of ENAIRE Total Planned CAPEX in SW FAB	89.6%	82.1%	88.5%	91.6%	86.6%	87.5%
% of NAV Total Planned CAPEX in SW FAB	10.4%	17.9%	11.5%	8.4%	13.4%	12.5%
SW - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**62.87**					
% of ENAIRE Total Actual CAPEX in SW FAB	84.8%					
% of NAV Total Actual CAPEX in SW FAB	15.2%					
SW - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	731.62					
Total Actual Real gate-to-gate ANSP costs	729.75					
% of Planned CAPEX into Real gate-to-gate ANSP costs	10.4%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	8.6%					
SW - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**-13.40**					
Total CAPEX (in %, for M €2009)	-17.6%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**22.80**					

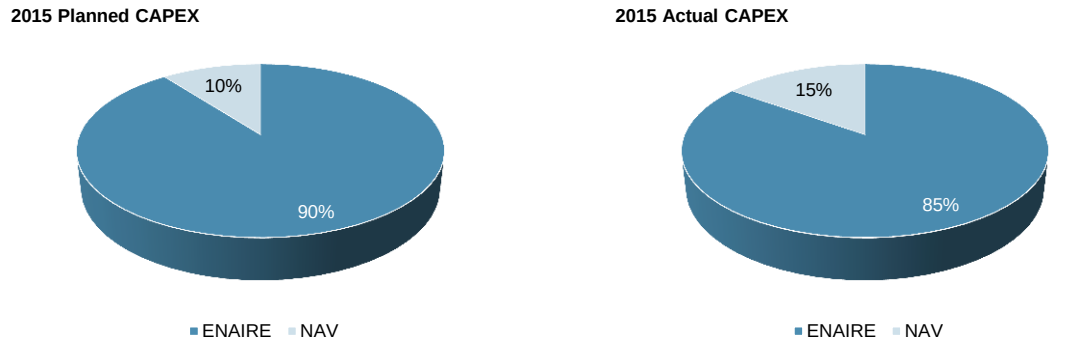
Total Planned vs. Total Actual CAPEX for SW FAB for 2015 in RP2



Total Planned vs Total Actual CAPEX for SW FAB and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in SW FAB



Investment Analysis and Information reported

11.1.1 In 2015, the SW FAB ANSPs collectively spent 17.6% less CAPEX than originally planned. This situation at FAB level results from the combination of ENAIRE spending 14.98 M€$_{2009}$ less than planned together with NAV spending 1.58 M€$_{2009}$ more than planned.

11.1.2 The main reasons for ENAIRE's underspending are mainly caused by re-adjustment of budget due to new date, postponement and prioritization of small investments and for NAV there is overall a slight decrease in Main Investments noted, but the increase of Other investments is however explicit.

11.1.3 From the total amount spent in 2015 by the SW FAB, ENAIRE spent 89.6% (i.e. 53.33 M€$_{2009}$) and NAV 10.4% (i.e. 9.53 M€$_{2009}$).

11.1.4 Over the 2015 period, the actual CAPEX of the SW FAB expressed in % of the real gate-to-gate ANSP costs reached 8.6%.

11.1.5 The total amount of the CEF funding granted for the SW FAB reaches 22.80M€, including ENAIRE funding for four Main CAPEX investments and NAV Portugal funding for one Main CAPEX investment.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**17**
ENAIRE	10
NAV Portugal	7
Number of 2015 Main CAPEX investments actually executed in 2015	**18**
ENAIRE	11
NAV Portugal	7

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP					**15**
ENAIRE					9
NAV Portugal					6
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
ENAIRE	1	3	1	7	
NAV Portugal		3		3	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**18.80**
ENAIRE					12.78
NAV Portugal					6.02

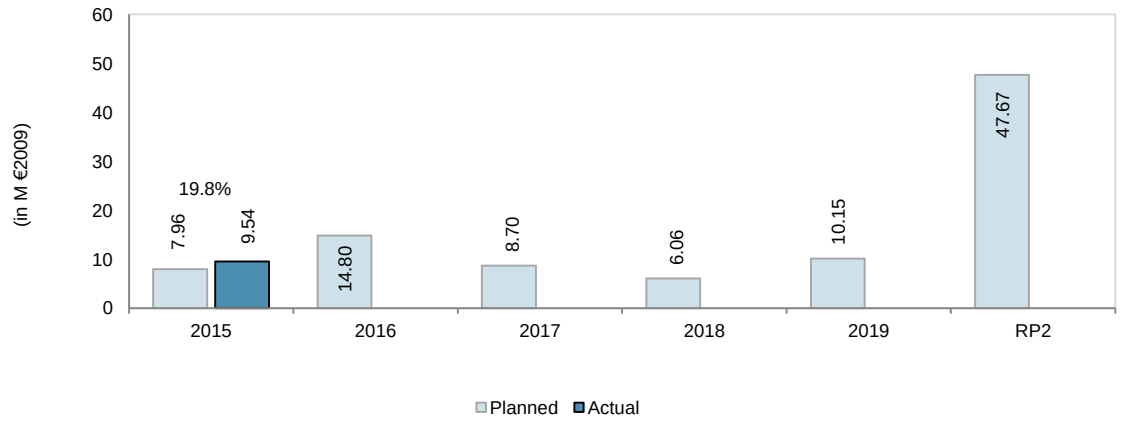
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**3**
ENAIRE	2
NAV Portugal	1
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**22.76**
ENAIRE	21.51
NAV Portugal	1.26

Number of 2015 Main CAPEX investments **linked** to PCP	**10**
ENAIRE	6
NAV Portugal	4
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**11.34**
ENAIRE	7.39
NAV Portugal	3.95

11.2. Portugal (NAV Portugal)

Overall Investment data						
Data from RP2 national performance plan	2015P	2016P	2017P	2018P	2019P	RP2P
Total CAPEX (in nominal M€)	8.80	16.60	9.90	7.00	11.90	54.20
Main CAPEX (in nominal M€)	8.70	16.30	9.90	7.00	11.80	53.70
Inflation%	1.2%	1.5%	1.5%	1.5%	1.5%	
Inflation index (100 in 2009)	110.5	112.2	113.8	115.5	117.3	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**7.96**	14.80	8.70	6.06	10.15	47.67
Main CAPEX (in M €2009)	7.87	14.53	8.70	6.06	10.06	47.23
% Main into Total CAPEX	98.9%	98.2%	100.0%	100.0%	99.2%	99.1%
Real gate-to-gate ANSP costs (in M €2009)	109.43	114.93	117.33	118.78	121.25	581.70
% of CAPEX into Real gate-to-gate ANSP costs	7.3%	12.9%	7.4%	5.1%	8.4%	8.2%
Actual data from Reporting Tables	2015A	2016A	2017A	2018A	2019A	RP2A
Total CAPEX (in nominal M€)	10.38					
Main CAPEX (in nominal M€)	7.91					
Inflation%	0.5%					
Inflation index (100 in 2009)	108.7					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**9.54**					
Main CAPEX (in M €2009)	7.27					
% Main into Total CAPEX	76.2%					
Real gate-to-gate ANSP costs (in M €2009)	111.31					
% of CAPEX into Real gate-to-gate ANSP costs	8.6%					
Actuals vs Planned in absolute value & percentage	2015	2016	2017	2018	2019	RP2
Total CAPEX (in nominal M€)	1.58					
Total CAPEX (in M €2009)	1.58					
Total CAPEX (in %, for M €2009)	**19.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**0.33**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

11.2.1 In 2015 there were 7 Main investments for which money was spent by NAV Portugal. There were 7 investments foreseen for 2015 in the RP2 PP, but 1 was not executed and 1 unforeseen for 2015 was executed. There were no unplanned investments. Only 1 investment was linked to CAPEX projects from RP1.

11.2.2 NAV Portugal spent 1.58 M€$_{2009}$ (or 19.8%) more Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 8.6%.

11.2.3 The provided detailed information for the changes to the planned figures concern:

- LISATM V9.2 (investment amount for 2015 was almost doubled): A project delivered initially planned to occur in 2015, was split into individual 2015 and 2016 FOC phases. The split considered the development progress and the ATCO training needs.
- NORMAW - Norte e Madeira WAM: The project contract awarded price was lower than the initial budget.
- Lisbon Terminal approach Radar replacement (no actual investment in 2015): The planned FOC date was changed to 2018, due to the completion of another surveillance project, the Lisbon Airport WAM expansion. The outcome of this project relieved the urgency of the replacement of the aging Lisbon terminal approach radar.

11.2.4 NAV Portugal was granted with CEF / TEN-T funding for 1 investment. namely ‘ LISATM V9.2, in the amount of 0.33M€ as per grant agreement.

11.2.5 NAV Portugal stated that some investments have a different amortisation period, given their nature and lifecycle. Several CAPEX have progressive implementation, as the new Lisbon ACC ATM versions, radars in each location, as well on the buildings and electromechanical systems.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	7
Number of 2015 Main CAPEX investments actually executed in 2015	7

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**6**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
LISATM V9.2 Lisbon ACC New System Navigation systems	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Communication systems NORMAW - Norte e Madeira WAM SSR Mode S	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**6.02**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**1**
Buildings and electromechanical systems	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**1.26**

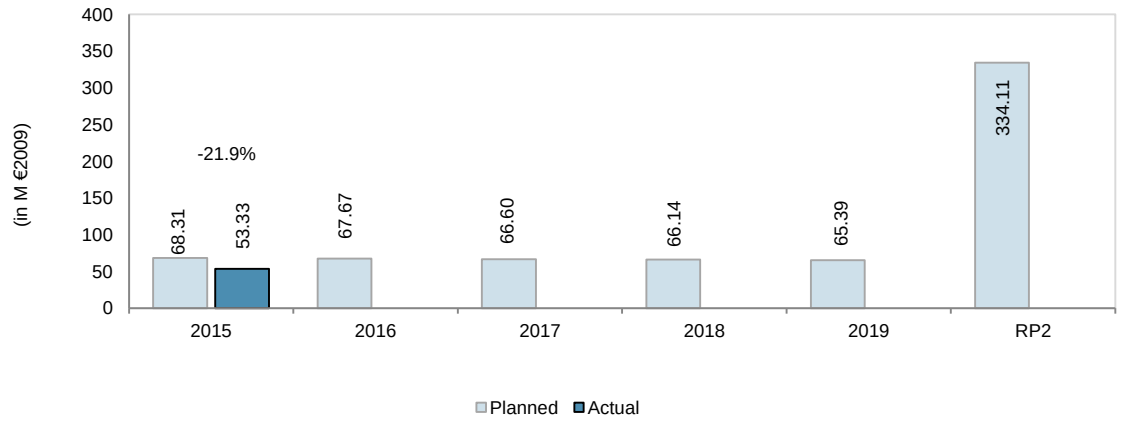
Number of 2015 Main CAPEX investments **linked** to PCP	**4**
LISATM V9.2	AF1. AF2
Lisbon ACC New System	AF3
Communication systems	AF5. AF6
Navigation systems	AF3
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**3.95**

Note: Portugal did not provide any modification of the RP2 PP data related to links to ATM MP and PCP. Links to ATM MP were provided mainly as ESSIP Objectives (also some OI steps and enablers) from ATM MP data set which was available at the time of the development of the RP2 PP.

11.3. Spain (ENAIRE)

Overall Investment data						
Data from RP2 national performance plan	2015P	2016P	2017P	2018P	2019P	RP2P
Total CAPEX (in nominal M€)	75.53	75.49	75.08	75.32	75.24	376.65
Main CAPEX (in nominal M€)	49.76	49.79	49.60	49.97	50.05	249.16
Inflation%	0.8%	0.9%	1.0%	1.0%	1.1%	
Inflation index (100 in 2009)	110.6	111.6	112.7	113.9	115.1	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**68.31**	67.67	66.60	66.14	65.39	334.11
Main CAPEX (in M €2009)	45.00	44.63	44.01	43.88	43.49	221.01
% Main into Total CAPEX	65.9%	66.0%	66.1%	66.3%	66.5%	66.1%
Real gate-to-gate ANSP costs (in M €2009)	622.20	615.94	607.15	601.16	594.12	3040.57
% of CAPEX into Real gate-to-gate ANSP costs	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Actual data from Reporting Tables	2015A	2016A	2017A	2018A	2019A	RP2A
Total CAPEX (in nominal M€)	57.85					
Main CAPEX (in nominal M€)	37.19					
Inflation%	-0.6%					
Inflation index (100 in 2009)	108.5					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**53.33**					
Main CAPEX (in M €2009)	34.29					
% Main into Total CAPEX	64.3%					
Real gate-to-gate ANSP costs (in M €2009)	618.43					
% of CAPEX into Real gate-to-gate ANSP costs	8.6%					
Actuals vs Planned in absolute value & percentage	2015	2016	2017	2018	2019	RP2
Total CAPEX (in nominal M€)	-17.68					
Total CAPEX (in M €2009)	-14.98					
Total CAPEX (in %, for M €2009)	**-21.9%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**22.47 out of which 6.32 in 2015**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

11.3.1 In 2015 there were 11 Main investments for which money was spent by ENAIRE. There were 10 investments foreseen for 2015 in the RP2 PP and 1 unforeseen for 2015 was executed. There were no unplanned investments. All investments were linked to CAPEX projects from RP1.

11.3.2 ENAIRE spent 14.98 M€$_{2009}$ (or 21.9%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost is 8.6%.

11.3.3 The lower investment amounts are mainly caused by the re-adjustment of budget due to:

- New date of entry into operation;
- Postponement from 2014;
- Re-adjustment of final investment;
- Planification with no impact in date of entry into operation;
- Planification, postponed to next years. and prioritization of short-term investments

11.3.4 ENAIRE received CEF/TEN-T funding for 4 Main CAPEX investments, namely 'Short Term Improvements'. 'REDAN – Data Network'. 'PBN PLAN – Performance Navigation' and 'Project Facilitators'. The amount granted in total is 22.47M€ and for 2015 only it equals to 6.32 M€.

11.3.5 ENAIRE stated that in global terms, contribution of CAPEX to the European ATM Master Plan deployment corresponds to a 66.2% of the total investment planned for RP2.This contribution is dedicated to the projects defined in order to address the implementation of Master Plan / ESSIP / IDP objectives, as well as to the enabling activities which support / facilitate the accomplishment of these projects.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	10
Number of 2015 Main CAPEX investments actually executed in 2015	11

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**9**
Optimised ATM Network Services	
iTEC – Flight Data Processing	
Advanced Air Traffic Services	
SHORT TERM IMPROVEMENTS SAFETY NETS – STCA. APW. MSAW PBN PLAN – Performance Navigation	
High Performing Airports	
SHORT TERM IMPROVEMENTS	
Enabling the Aviation Infrastructure	
SHORT TERM IMPROVEMENTS SURVEILLANCE EVOLUTION – Mode-S. ADS-B REDAN – Data Network 833 – Communication Channels COMETA – Voice over Internet Protocol iTEC – Flight Data Processing ICARO – Aeronautical information	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**12.78**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
CWP – Controller Working Position PROJECT FACILITATORS	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**21.51**

Number of 2015 Main CAPEX investments **linked** to PCP	**6**
REDAN – Data Network	AF5
PBN PLAN – Performance Navigation	No specific information on links to PCP provided
SHORT TERM IMPROVEMENTS	
SAFETY NETS – STCA. APW. MSAW	
CWP – Controller Working Position	
ICARO – Aeronautical information	
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**7.39**

Note: Spain partially updated the links to ATM MP and PCP. The links were provided as ESSIP Objectives from ATM MP data set available at the time of the development of the RP2 PP. These links have been maintained and only one link was added to an investment that initially had no link.

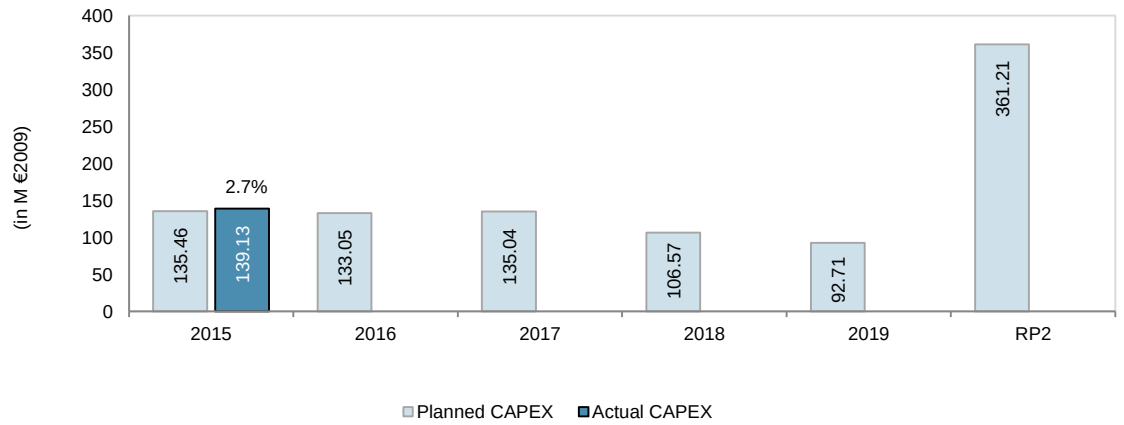
Additionally, Spain provided details on the improvements achieved through the investments, but no specific information was provided on the links with the PCP ATM functionalities.

12. UK-IR

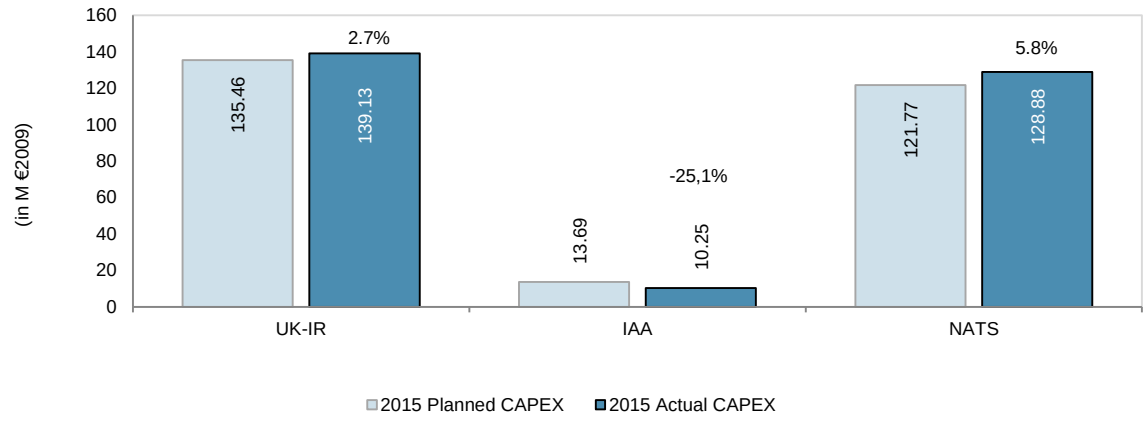
12.1. FAB level

Overall Investment data						
UK-IR - Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in M €2009)	**135.46**	133.05	135.04	106.57	92.71	361.21
% of IAA Total Planned CAPEX in UK-IR FAB	10.1%	12.9%	27.8%	18.5%	16.4%	28.6%
% of NATS Total Planned CAPEX in UK-IR FAB	89.9%	87.1%	72.2%	81.5%	83.6%	138.3%
UK-IR - Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in M €2009)	**139.13**					
% of IAA Total Actual CAPEX in UK-IR FAB	7.4%					
% of NATS Total Actual CAPEX in UK-IR FAB	92.6%					
UK-IR - Real gate-to-gate ANSP costs (in M €2009)	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total Planned Real gate-to-gate ANSP costs	834.14					
Total Actual Real gate-to-gate ANSP costs	675.32					
% of Planned CAPEX into Real gate-to-gate ANSP costs	16.2%					
% of Actual CAPEX into Real gate-to-gate ANSP costs	20.6%					
UK-IR - Actuals vs Planned	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in M €2009)	**3.67**					
Total CAPEX (in %, for M €2009)	2.7%					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**111.00**					

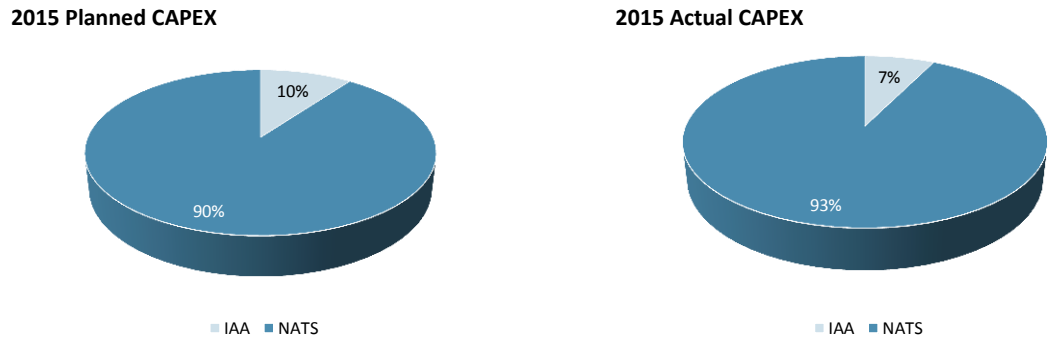
Total Planned vs. Total Actual CAPEX for UK-IR FAB for 2015 in RP2



Total Planned vs Total Actual CAPEX for UK-IR FAB and ANSPs in 2015



2015 Planned vs. Actual - % of ANSPs CAPEX in UK-IR FAB



Investment Analysis and Information reported

12.1.1 In 2015, the UK-IR FAB ANSPs collectively spent 2.7% more CAPEX than originally planned. This situation at FAB level results from the combination of IAA spending 3.44 M€$_{2009}$ less than planned together with NATS spending 7.11 M€$_{2009}$ more than planned.

12.1.2 IAA did not give explicitly an explanation for the underspending, whereas NATS provided information on the changes to the planned figures for all of the investments: overall a slight increase in Main Investments is noted, the increase of 'Other' investments is pronounced.

12.1.3 From the total amount spent in 2015 by the UK-IR FAB. IAA spent 7.4% (i.e. 10.25 M€$_{2009}$) and NATS 92.6% (i.e. 128.88 M€$_{2009}$).

12.1.4 Over the 2015 period, the actual CAPEX of the UK-IR FAB expressed in % of the real gate-to-gate ANSP costs reached 20.6%.

12.1.5 In IAA for 1 investment CEF / TEN-T funding was planned, but no amount was granted in 2015 and NATS received CEF / TEN-T funding for 5 investments done in 2015.

12.1.6 The total amount of the CEF funding in the UK-IR FAB reaches 111.00 M€$_{2009}$ as per grant agreements, corresponding to the amount granted to NATS Main CAPEX investments.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	**10**
IAA	4
NATS	6
Number of 2015 Main CAPEX investments actually executed in 2015	**9**
IAA	3
NATS	6

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP					**6**
IAA					1
NATS					5
ANSP	Optimised ATM Network Services	Advanced Air Traffic Services	High Performing Airports	Enabling the Aviation Infrastructure	Other features
IAA					1
NATS	1	5		2	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)					**114.91**
IAA					2.64
NATS					112.27

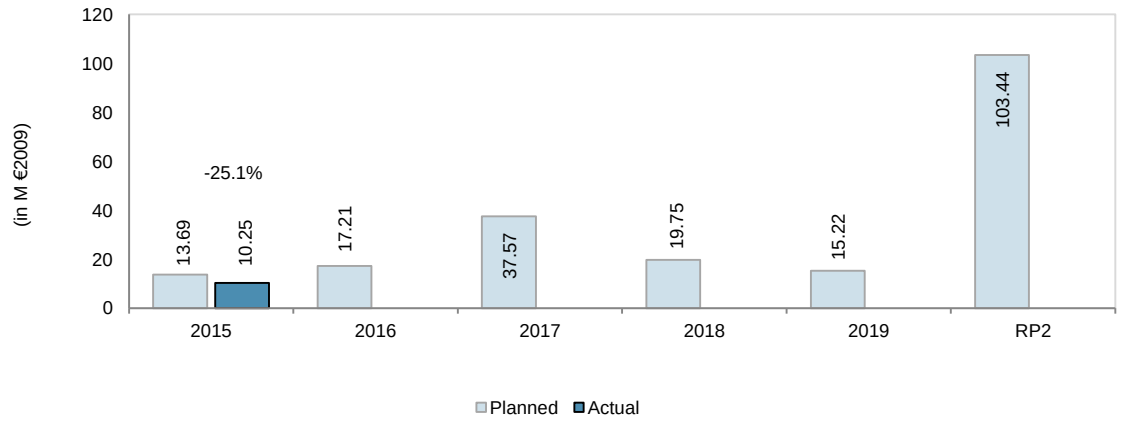
Number of 2015 Main CAPEX investments **not linked** to ATM MP	**3**
IAA	2
NATS	1
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**5.49**
IAA	5.11
NATS	0.39

Number of 2015 Main CAPEX investments **linked** to PCP	**5**
IAA	-
NATS	5
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**112.27**
IAA	-
NATS	112.27

12.2. Ireland (IAA)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal M€)	14.20	18.06	39.99	21.38	16.75	110.38
Main CAPEX (in nominal M€)	8.06	11.46	37.59	20.95	15.76	93.82
Inflation%	1.1%	1.2%	1.4%	1.7%	1.7%	
Inflation index (100 in 2009)	103.7	105.0	106.4	108.2	110.1	
Exchange rate 2009	1.00	1.00	1.00	1.00	1.00	
Total CAPEX (in M €2009)	**13.69**	17.21	37.57	19.75	15.22	103.44
Main CAPEX (in M €2009)	7.77	10.92	35.32	19.36	14.31	87.67
% Main into Total CAPEX	56.8%	63.4%	94.0%	98.0%	94.1%	84.8%
Real gate-to-gate ANSP costs (in M €2009)	117.96	119.37	121.77	124.36	124.38	607.84
% of CAPEX into Real gate-to-gate ANSP costs	11.6%	14.4%	30.9%	15.9%	12.2%	17.0%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal M€)	10.49					
Main CAPEX (in nominal M€)	7.93					
Inflation%	0.0%					
Inflation index (100 in 2009)	102.3					
Exchange rate 2009	1.00					
Total CAPEX (in M €2009)	**10.25**					
Main CAPEX (in M €2009)	7.75					
% Main into Total CAPEX	75.6%					
Real gate-to-gate ANSP costs (in M €2009)	107.08					
% of CAPEX into Real gate-to-gate ANSP costs	9.6%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal M€)	-3.71					
Total CAPEX (in M €2009)	-3.44					
Total CAPEX (in %, for M €2009)	**-25.1%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement. for 2015 only)**					
CEF / TEN-T funding (in nominal M €)	**0.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

12.2.1 In 2015 there were 3 Main investments for which money was spent by IAA. There were 4 investments foreseen for 2015 in the RP2 PP, but 2 were not executed and 1 unforeseen for 2015 was executed. There were no unplanned investments. No investments were linked to CAPEX projects from RP1.

12.2.2 IAA spent 3.44 M€$_{2009}$ (or 25.1%) less Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 9.6%.

12.2.3 IAA stated that "in the Performance Plan, the values represent planned and actual capitalisation of Fixed Assets as they are brought into operational use. The values are consistent with the audited accounts of the regulated entities." In the 2015 monitoring report (CAPEX part). IAA has provided no further information about the changes to the planned figures.

12.2.4 It was reported that for one Main CAPEX investment, namely FDP - Electronic Flight Progress Strip System CEF funding is planned, but no amount was granted in 2015.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	4
Number of 2015 Main CAPEX investments actually executed in 2015	3

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**1**
Optimised ATM Network Services	
-	
Advanced Air Traffic Services	
-	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
-	
Other features	
FDP - COOPANS	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**2.64**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**2**
Communications - VHFTX/RX & VCCS replacement (four locations) Surveillance & Navigation - Radar replacement	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**5.11**

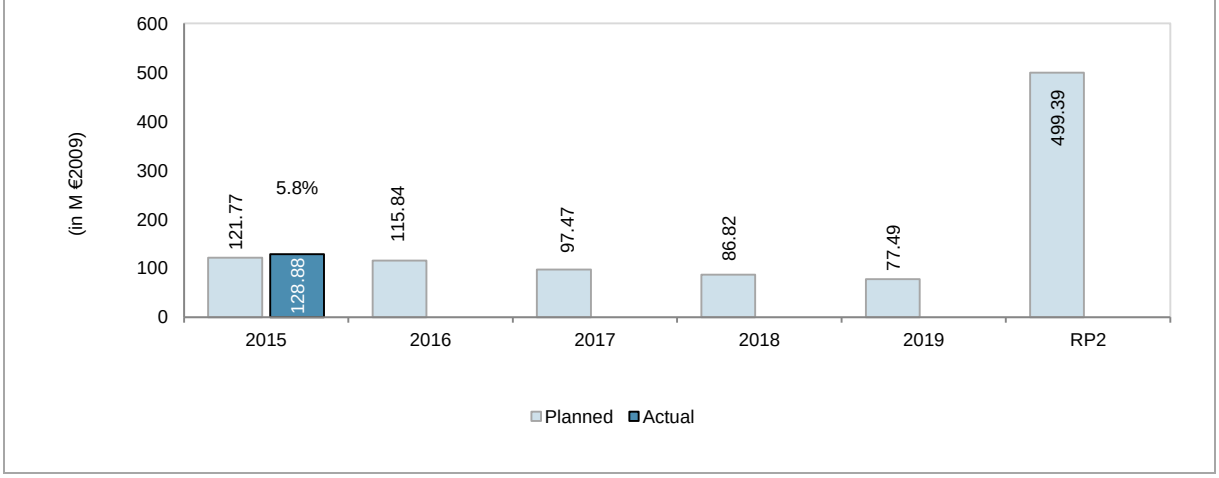
Number of 2015 Main CAPEX investments **linked** to PCP	**0**
-	
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**0**

Note: Ireland updated the links to ATM MP and PCP. Links to ATM MP were provided as a description of the contribution of the investments to the ATM MP, without making any reference to ESSIP Objectives, OI steps or enablers.

12.3. United Kingdom (NATS)

Overall Investment data						
Data from RP2 national performance plan	**2015P**	**2016P**	**2017P**	**2018P**	**2019P**	**RP2P**
Total CAPEX (in nominal MGBP)	128.21	124.28	106.67	96.92	88.23	544.31
Main CAPEX (in nominal MGBP))	115.26	113.79	97.21	87.51	75.85	489.62
Inflation%	1.9%	1.9%	2.0%	2.0%	2.0%	
Inflation index (100 in 2009)	118.2	120.5	122.9	125.3	127.8	
Exchange rate 2009	0.89	0.89	0.89	0.89	0.89	
Total CAPEX (in M €2009)	**121.77**	115.84	97.47	86.82	77.49	499.39
Main CAPEX (in M €2009)	109.47	106.06	88.83	78.39	66.62	449.37
% Main into Total CAPEX	89.9%	91.6%	91.1%	90.3%	86.0%	90.0%
Real gate-to-gate ANSP costs (in M €2009)	716.18	704.18	694.66	675.48	655.34	3445.85
% of CAPEX into Real gate-to-gate ANSP costs	17.0%	16.4%	14.0%	12.9%	11.8%	14.5%
Actual data from Reporting Tables	**2015A**	**2016A**	**2017A**	**2018A**	**2019A**	**RP2A**
Total CAPEX (in nominal MGBP)	132.70					
Main CAPEX (in nominal MGBP)	116.00					
Inflation%	0.0%					
Inflation index (100 in 2009)	115.6					
Exchange rate 2009	0.89					
Total CAPEX (in M €2009)	**128.88**					
Main CAPEX (in M €2009)	112.66					
% Main into Total CAPEX	87.4%					
Real gate-to-gate ANSP costs (in M €2009)	568.24					
% of CAPEX into Real gate-to-gate ANSP costs	22.7%					
Actuals vs Planned in absolute value & percentage	**2015**	**2016**	**2017**	**2018**	**2019**	**RP2**
Total CAPEX (in nominal MGBP)	4.49					
Total CAPEX (in M €2009)	7.11					
Total CAPEX (in %, for M €2009)	**5.8%**					
CEF / TEN-T funding granted for Main CAPEX	**Amount granted (as per grant agreement)**					
CEF / TEN-T funding (in nominal M €)	**111.00**					

Total Planned vs. Total Actual CAPEX



Investment Analysis and Information reported

12.3.1 In 2015 there were 6 Main investments for which money was spent by NATS. They were all initially planned in the RP2 PP. There were no unplanned investments. Five out of the 6 Main investments were linked to CAPEX projects from RP1.

12.3.2 NATS spent 7.11 M€$_{2009}$ (or 5.8%) more Total CAPEX than originally planned for the year. The actual CAPEX expressed in % of the real gate-to-gate ANSPs cost reached 22.7%.

12.3.3 Investment decreased vs. planning for 3 Main investments :

- Airspace Development: uncertainty around LAMP has also impacted progress on other aspects of the Airspace Programme, but NATS remains committed to delivering the previously planned projects, together with additional elements that have been identified as part of the revised plan.
- Centre Systems Software Development: the focus now is to replace ageing legacy systems with more efficient and scalable technology by reducing investment in legacy systems overall.
- CO2 and Fuel Saving: this investment is designed to implement a range of smaller procedural and other changes to deliver CO2 savings.

12.3.4 Investment increased vs. planning for 2 Main investments :

- CNS Infrastructure: due to the criticality, it was necessary to undertake additional testing of all radar, voice and data systems across the new network and overcome network delay issues which have a significant impact on the speech quality experienced by pilots and controllers. This required additional time and engineering expertise to 'fine tune' the network to NATS applications.
- iTEC FDP/NCW: as part of the 'Deploying SESAR' strategy there has been an increased emphasis on deploying new SESAR capable operational and technical solutions.

12.3.5 One Main Investment remained on the planned level: LAMP (London Airspace Management Programme). The expenditure in 2015 was largely unaffected by changes.

12.3.6 UK NATS gave additional comments regarding certain investments: e.g. about the UK ATS licence for NERL investment and the FAS Facilitation Fund (FFF).

12.3.7 NATS received CEF funding for 5 Main CAPEX investments, namely 'Airspace Development'. 'LAMP'. 'Centre Systems Software Development'. 'CNS Infrastructure' and 'iTEC FDP/NCW' in the amount of 111.00M€ from the 2014 funding round.

ATM MP / PCP Information

Number of 2015 Main CAPEX investments planned to be executed in 2015	6
Number of 2015 Main CAPEX investments actually executed in 2015	6

Out of the investments actually executed in 2015 the following information relating to the links to ATM MP and PCP can be provided:

Number of 2015 Main CAPEX investments **linked** to ATM MP	**5**
Optimised ATM Network Services	
iTEC FDP/NCW	
Advanced Air Traffic Services	
Airspace Development LAMP Centre Systems Software Development CNS Infrastructure iTEC FDP/NCW	
High Performing Airports	
-	
Enabling the Aviation Infrastructure	
Centre Systems Software Development CNS Infrastructure	
Other features	
-	
Total amount spent in 2015 for investments linked to ATM MP (in M€2009)	**112.27**

Number of 2015 Main CAPEX investments **not linked** to ATM MP	**1**
CO2 and Fuel Saving	
Total amount spent in 2015 for investments not linked to ATM MP (in M€2009)	**0.39**

Number of 2015 Main CAPEX investments **linked** to PCP	**5**
Airspace Development	AF1. AF3
LAMP	AF1
Centre Systems Software Development	AF1. AF2. AF3. AF4. AF5
CNS Infrastructure	AF5
iTEC FDP/NCW	AF2. AF3
Total amount spent in 2015 for investments linked to PCP (in M€2009)	**112.27**

Note: UK has updated the links to ATM MP and PCP, which have been provided as ESSIP Objectives and ATM functionalities, respectively.

Annex 1: REPORT ON THE APPLICATION OF IFRIC 12 OF THE INTERNATIONAL ACCOUNTING STANDARDS.

1. Introduction

This report is initiated at the request of Slovenia to the Commission on the application of IFRIC 12 to Air Traffic Management Services. The report is written as a discussion document for all participants involved in the discussion of the issue and recognises that some interested parties may have little or no understanding, of the complexities of the infrastructure management aspects of Air Navigation Services. Therefore, text has been given to highlight particular aspects of Air Transport that are considered relevant to the inspection of IFRIC 12 application to provide context.

These contextual inputs are however, not exhaustive; therefore, no inference should be drawn from the inclusion, or non-inclusion, of a particular aspect other than it is illustrative. Aviation management is a complex issue within considerable diversity of opinion. The PRB in its role as Commission advisor provides only high level advice on this issue and actions taken on this should also require a more detailed analysis of scope and impacts, from IAS accounting practitioners.

For the analysis extensive use has been made of the IFRS foundation eIFRS[5] resource at professional level.

2. Background

2.1. IFRIC 12 principles

The following text is supplied by eIFRS as background to the service concession arrangements.

In many countries, infrastructure for public services—such as roads, bridges, tunnels, prisons, hospitals, airports, water distribution facilities, energy supply and telecommunication networks has traditionally been constructed, operated and maintained, by the public sector and financed through public budget appropriation.

In some countries, governments have introduced contractual service arrangements to attract private sector participation in the development, financing, operation and maintenance of such infrastructure. The infrastructure may already exist, or may be constructed during the period of the service arrangement. An arrangement within the scope of this Interpretation typically involves a private sector entity (an operator) constructing the infrastructure used to provide the public service or upgrading it (for example. by increasing its capacity) and operating and maintaining that infrastructure for a specified period of time. The operator is paid for its services over the period of the arrangement. The arrangement is governed by a contract that sets out performance standards, mechanisms for adjusting prices, and arrangements for arbitrating disputes. Such an arrangement is often described as a 'build-operate-transfer', a 'rehabilitate-operate-transfer' or a 'public-to-private' service concession arrangement.

2.2. Chicago Convention and EU recognition

ATM Infrastructure is by its very nature public in the sense that ICAO, via the Chicago Convention, requires all States to manage its own sovereign airspace to provide a minimum level of public service.

5 HTTP://EIFRS.IFRS.ORG/EIFRS/MENU

Air Traffic services are created by member states obligations to ICAO under Article 15 of the Chicago Convention 1944. This requirement is recognised in the Framework regulations 549, 550 and 551/2004 (As amended)[6.7.8]

In 551, the recital states the importance of recognition of public service elements as in Article 1 of the 1944 Chicago Convention on Civil Aviation, which sets the tone for Air Transport Management of airspace by stating that '*every State has complete and exclusive sovereignty over the airspace above its territory*.' It is within the framework of such sovereignty that the Member States of the Community, subject to applicable international conventions, exercise the powers of a public authority when controlling air traffic.[9] Recital 6 goes onto take a larger view on the public interest aspects of the application of the interoperability regulation by stating '*airspace is a common resource for all categories of users that needs to be used flexibly by all of them, ensuring fairness and transparency whilst taking into account security and defence needs of Member States and their commitments within international organisations'.*

In 550 there is recognition in recital 5 which states that: *The provision of air traffic services, as envisaged by this Regulation, is connected with the exercise of the powers of a public authority, which are not of an economic nature justifying the application of the Treaty rules of competition.* This therefore confirms that where there is an absence of competition, and no economic value is being generated, there is some latitude to use discretion in the application of IAS as indicated by Article 12 of 550/2004 which states that:

> *These accounts shall comply with the international accounting standards adopted by the Community. Where, owing to the legal status of the service provider, full compliance with the international accounting standards is not possible, the provider shall endeavour to achieve such compliance to the maximum possible extent*[10].

This recognition is repeated throughout the documentary legislative arrangements and the ultimate translation into implementing rules.

Thus it is clear that the provision of En Route Air Traffic Management Infrastructure is a public service provided by entities under the supervision of the State who hold accountability to ICAO for open non-discriminatory access to the Public Network. Care needs to be taken though when it comes to EC funded responses to calls for funding from EC funds and also where competitive measures are being introduced in terminal operations. As it may be that this change of Status of measures applied or where privatised companies offer services may require the application of IFRIC 12 when the service provision is removed from State entity management as the arrangements are more of a service concession nature and public private financing may feature. Therefore, it is necessary to examine in depth the mechanisms of IFRIC 12 and its scope within this context.

3. Slovenian request

The initial request for advice on the application of IFRIC 12 was sent by the Slovenian Head of the Aviation Division. In that letter[11] they explained by way of background the following:

> *The Court of Audit in 2013 started with the efficiency audit of the regulation of the provision in the field of air navigation services in Slovenia and inter alia examined whether Slovenia Control. Slovenian Air Navigation Services (ANS) provider (hereinafter: Slovenia Control), properly records the infrastructure for provision of*

6 REGULATION (EC) No 549/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 10 March 2004, laying down the framework for the creation of the single European sky.
7 REGULATION (EC) No 550/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 10 March 2004 on the provision of air navigation services in the single European sky.
8 REGULATION (EC) No 551/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 10 March 2004 on the organisation and use of the airspace in the single European sky
9 Recital 5 REGULATION (EC) No 551/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 10 March 2004 on the organisation and use of the airspace in the single European sky
10 Article 12 REGULATION (EC) No 550/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 10 March 2004 on the provision of air navigation services in the single European sky
11 Slovenia Ref 3722-9/2016/54-02011413

air navigation services in their financial statements. Slovenia Control is the designated provider of air traffic services, communication, navigation and surveillance services and aeronautical services under the relevant Slovenian and SES regulations. It was established in 2004 as a public company on the basis of the Act on the Provision of the Air Navigation Services (hereafter: ANS Act) 1 to provide air navigation services as services of general economic interest in the Republic of Slovenia. The Slovenia Control's form of legal organization is a limited liability company. 100% owned by the Republic of Slovenia; i.e. not a public-to-private partnership.

Discussion on paragraph: Examination of these arrangements show that the entity controlling and providing the public service in Slovenia is a public body and subject to the control of the company by specific local legislation which states the type of body and operational controls along with provisions for transfer back of assets in the event of financial business continuity failure. It also provides restrictions on leveraging the assets in terms of loans and mortgages. These controls ensure that the entity providing have not only the room to operate as a government business enterprise raising revenues to pay for high quality infrastructure but also allow for management to operate in partnership with others where necessary to do so. The overall effect is that Slovenia control operates as a stand-alone entity with governance and oversight from the State provided at supervision board level.

Slovenia Control, Slovenian Air Navigation Services Limited. is established as public undertaking in accordance with Public Utilities Act which, in Article 6, defines that public services in utilities sector can be provided only in the following organisational forms (exhaustive list. numerous clauses): administrative department of public utilities (režijski obrat); public commercial institute (javni gospodarski zavod); concession (the only form of public services in utilities sector. which can be performed by a legal person of private law), and public undertaking (javno podjetje). One public service within the given geographical area can be provided only in one of the stated forms.

In accordance with Article 2 of the Public Utilities Act, all sector specific public services are defined and regulated with special sector specific laws - in case of air navigation services with the Act on the Provision of Air Navigation Services (ZZNSZP). Sector specific laws also define in which of the possible organisational forms those services shall be provided; if in the form of public undertaking, then public undertaking is established by that Act. Slovenia Control was therefore established with Act on the Provision of Air Navigation Services.

As IFRIC 12 is written to provide additional clarity and control to public private partnerships the Slovenia Control arrangement of public to public entity is not covered specifically by the interpretation as it applies to public-private arrangements. It is assumed from this that the Interpretations Committee therefore were looking to apply clarity and control in the specific case of public private agreements as they are specifically mentioned. In the absence of market based measures for terminal services then Slovenia Control operates under the same arrangements as for En Route albeit separated in terms of charging and cost supervision.

The letter continues: The provision of ANS is thus conferred to Slovenia Control based on the relevant national legislation and not based on a concession. Upon the establishment of Slovenia Control, the Republic of Slovenia was the owner of the infrastructure for the provision of ANS. Ownership of this infrastructure was subsequently transferred to Slovenia Control in form of in-kind contribution. Additionally, Slovenia Control owns all new infrastructure (i.e. infrastructure bought and developed after the establishment of Slovenia Control), including new Air Traffic Control Centre, which was financed by the Slovenia Control in accordance with the provisions of the ANS Act. Article 8 of the ANS Act clearly stipulates that the Slovenia

Control is the owner of the ANS infrastructure and that it plans, develops, procures and maintains facilities, devices and systems that are necessary for the provision of ANS.

Discussion on paragraph: This states that Slovenia Control owns on behalf of the Sate the infrastructure transferred to it 'in kind' this this was not a financial sale but a transfer of infrastructure. The purpose of the entity being to manage the requirements of the infrastructure on behalf of the State, this could be considered to be a special purpose vehicle under the SES regulation as it has a single purpose with some limited ability to take gains and losses. As a GBE it can then contract in on its own behalf for services and tasks and maintenance and new build contracts. This therefore is a slightly different arrangement from that envisaged by IFRIC12. It is arguable that should Slovenia Control place a new contract to a private partner for some additional piece of infrastructure they would have the option of applying IFRIC 12 to the arrangement on behalf of the State as that would qualify for public private partnership (PPP). So it would appear that this is a tool that can be applied by rather than a tool to be applied to Slovenia Control.

Since the Public Utilities Act is an umbrella act, it does not contain detailed provision on the organisational forms. Therefore, the Public Utilities Act in Article 28 defines that for all questions affecting public undertakings, which are not regulated within the Public Utilities Act itself, the provisions from the Companies Act (Zakon o gospodarskih družbah) are to be used subsidiary. The public undertakings can therefore have a status in companies register as Limited Liability Company, or as Public Limited Company.

However the status in companies register does not declare this company as "ordinary" LTD or PLC, but it is a public undertaking. In order that a company can have the status of public company, two main legislative conditions have to be fulfilled. First, it has to be establish only for the specific purpose of providing public service (on State level it has to be designated to provide specific public services for unlimited period of time with the law adopted by the Parliament) and secondly, it has to be 100% owned by the State (no private ownership is allowed in public undertakings in accordance with the Article 141 of the PPP Act in order to obtain the status of the "in-house" provider in accordance with the settled practice of the CJEU. Slovenia Control[12]

Contd: Furthermore, it stipulates that ANS infrastructure shall not be mortgaged and cannot be in any way a source of repayment in the bankruptcy procedure of the company. By that, Slovenia Control as designated and certified provider fulfils the requirements of the Regulation (EC) No. 550/2004 and Annex I of the Commission Implementing Regulation (EU) No. 1035/2011, according to which "air navigation service providers shall be able to provide their services in a safe, efficient, continuous and sustainable manner consistent with any reasonable level of overall demand for a given airspace. To this end, they shall maintain adequate technical and operational capacity and expertise.", Facts and formulas for the pricing and cost allocation related to the Slovenia Control as air navigation service provider and how services performed are charged to users and revenues shared on national level are stipulated by Commission Implementing Regulation (EU) No 391/2013 and Commission Implementing Regulation (EU) No 390/2013. Commission Regulation (EC) No 254/2009 introduces mandatory application of IFRIC 12 for all Member States and pertains to contracts on the granting of public service concessions to private operators. Point 1 of IFRIC Interpretation 12 stipulates: "In many countries, infrastructure for public services - such as roads, bridges, tunnels, prisons, hospitals, airports, water distribution facilities, energy supply and telecommunication networks -

[12] http://www.sloveniacontrol.si/en/about-the-company

has traditionally been constructed, operated and maintained by the public sector and financed through public budget appropriation."

This is further evidence of the above discussed State arrangements and it appears to be fully consistent with the SES regulation in that IFRIC 12 is applied to the extent possible i.e. it could be applied to a public private arrangement organised by Slovenia Control.

On this basis and recalling the definition of "airport" from Directive 2009/12/LC2, the Court of Audit was of the opinion and/or assumed that:

a) Associated equipment and systems for the provision of air navigation services, such as air traffic control centres, communications, radar and other similar facilities, devices and systems should be understood as airport infrastructure.
b) Traditionally the equipment - for provision of ANS - has been constructed, operated and maintained by the public sector and financed through public budget, and therefore the state owned air navigation service providers should be considered in the framework of the Regulation 254/2009.

This is an interesting view by the court of auditors but in reality this is not the case as ANSP's are physically separated and operational controlled separately of airports. Simplistic interpretation suggesting they are considered together would compete with the view of ICAO that treats the economic regulation of Airports, and Air Navigation Service Providers as different mechanisms. The ICAO Document 9082 entitled: ICAO's Policies on Charges for Airports and Air Navigation Services[13] clearly differentiates between the two. Thus this logic could be considered as in error.

The letter goes on to provide a detailed understanding from the Slovenian government's point of view with additional detail information. At this stage, this view is difficult challenge this view as the arguments by the Slovenian court would be considered as erroneous for the reasons stated above. But given that the application of IFRIC 12 has no net benefit to users, or the Government, the protections offered by IFRIC 12 are not necessary as they are not a public private partnership requiring the additional control.[14]

However, it should be noted that the Court of Auditors raise an issue about Airport Infrastructure which is pertinent and may need to be considered as in some cases these services can be offered as market based by private contractors.

As the SES regulations start the process of applying market based measures to aspects of the infrastructure, it may be necessary to examine this issue. Therefore, in examining the mechanism, it is necessary to look at the nature of the terminal infrastructure and the funding possibilities to see if IFRIC 12 offers a suitable protection for the control of accounting practices where some degree of PPP is present.

4. Conclusion

The reasons stated by the Court of Auditors bear some scrutiny towards terminal services but only if the services were of a market based measure approach, and the provider is a public private partnership. En Route services are not linked to Airports and operate independently of them. So it cannot be stated that because airports are listed in the list of exemplars listed in IFRIC 12, that it is considered that this means that the interpretation applies automatically to all arrangements of Air Traffic Service Provision as there is already extensive control measures applied. It is suggested therefore that it should be considered as a control measure which can be applied in some instances to provide infrastructure

13 ICAO's Policies on Charges for Airports and Air Navigation Services Ninth Edition

14 It should be noted that one company NATs in the UK does operate as a public private partnership and IFRIC 12 may apply to them. At this stage this would need to be examined in more depth with the local regulator.

when deemed appropriate by the State in providing service concession agreements when there is a clear public private element to the service provision and the controls of the charging regulation are reduced by application of market based measures.