



Performance Review Body
designated by
the European Commission



PRB Assessment Report of RP2 FAB Performance Plans

Volume 1 - Union-wide view assessment report

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Volume 1 – Union-wide view assessment Report

Table of Contents

EXECUTIVE SUMMARY	5
INTRODUCTION	5
UNION-WIDE PERFORMANCE TARGETS FOR RP2 (2015-19)	5
KEY CONCLUSIONS.....	7
PRB RECOMMENDATIONS TO THE EUROPEAN COMMISSION	10
1 INTRODUCTION AND CONTEXT	13
1.1 ABOUT THIS REPORT	13
1.2 ADOPTION OF PERFORMANCE TARGETS AND PLANS FOR RP2	13
1.3 PERFORMANCE IN THE FIRST TWO YEARS OF THE PERFORMANCE SCHEME	13
2 PRB'S APPROACH.....	16
2.1 SUPPORT FOR NSAs	16
2.2 LEGAL REQUIREMENTS.....	16
2.3 PRINCIPLES, METHODOLOGY, PROCESSES AND ORGANISATION	17
2.4 RECEIPT OF PERFORMANCE PLANS.....	19
2.5 MAIN PRB OBSERVATIONS ON THE COMPLETENESS OF THE PLANS AND FORMAL COMPLIANCE WITH THE CONTENT	20
3 SAFETY	21
3.1 UNION-WIDE LEVEL VIEW.....	21
3.2 FAB LEVEL VIEW	22
4 ENVIRONMENT	23
4.1 UNION-WIDE LEVEL VIEW.....	23
4.2 FAB LEVEL VIEW	23
5 CAPACITY.....	24
5.1 UNION-WIDE LEVEL VIEW FOR EN-ROUTE ATFM DELAY	24
5.2 OVERVIEW OF ARRIVAL ATFM DELAY.....	24
5.3 FAB LEVEL VIEW	25
5.4 JUSTIFICATION OF FAB CAPACITY TARGETS	27
6 COST-EFFICIENCY	28
6.1 OVERVIEW	28
6.2 BACKGROUND	29
6.3 OUTCOME OF THE 2012 AND 2013 PRB MONITORING	32
6.4 AGGREGATED RESULTS OF UNION-WIDE CONSOLIDATION OF RP2 FAB PERFORMANCE PLANS FOR EN-ROUTE CHARGING ZONES	35
6.5 HIGH LEVEL ANALYSIS AT EN-ROUTE STATE/CZ LEVEL.....	39
6.6 AGGREGATED RESULTS OF SES CONSOLIDATION OF RP2 FAB PERFORMANCE PLANS FOR TERMINAL CHARGING ZONES	45
7 INVESTMENT	50
7.1 OVERVIEW	50
7.2 COMPATIBILITY AND COHERENCE WITH THE ATM MASTER PLAN AND NSP REQUIREMENTS AND ELIGIBILITY FOR RECOVERY THROUGH AIR NAVIGATION SERVICES CHARGES	51
7.3 RELEVANCE AGAINST THE PILOT COMMON PROJECT	51
7.4 FAB AND A REGIONAL APPROACH.....	52
7.5 ANCILLARY ASSESSMENTS.....	53
7.6 TOTAL CAPEX FOR RP2.....	53

8	THE NETWORK MANAGER'S PERFORMANCE	57
9	INTERDEPENDENCIES AND TRADE-OFFS BETWEEN THE DIFFERENT KPAS	58
10	MONITORING PERFORMANCE PLANS.....	61
11	THE MILITARY DIMENSION.....	62
12	KEY CONCLUSIONS.....	63
12.1	OVERVIEW	63
12.2	GENERAL CRITERIA	64
12.3	SAFETY.....	64
12.4	ENVIRONMENT	64
12.5	CAPACITY	65
12.6	COST-EFFICIENCY	65
12.7	INVESTMENTS.....	66
13	PRB RECOMMENDATIONS TO THE EUROPEAN COMMISSION	67
	REFERENCES.....	70

Table of Figures

FIGURE 1: HIGH-LEVEL RP2 PPs ASSESSMENT TIMELINE	18
FIGURE 2: RP2 EN-ROUTE CHARGING ZONES.....	30
FIGURE 3: RP2 TANS CHARGING ZONES INCLUDED IN THE PERFORMANCE SCHEME	31
FIGURE 4: UNION-WIDE RP1 COST-EFFICIENCY DUR (ADOPTED PERFORMANCE PLANS, AND ACTUAL)	32
FIGURE 5: CHARGING ZONE RESULTS IN THE 2012 AND 2013 MONITORING	33
FIGURE 6: BREAKDOWN OF 2013 ACTUAL EN-ROUTE COSTS COMPARED WITH ADOPTED PPs (BY ENTITY AT UNION-WIDE STATE LEVEL AND BY NATURE AT UNION-WIDE ATSP LEVEL)	33
FIGURE 7: ESTIMATED SURPLUS FOR THE RP1 EN-ROUTE ACTIVITY FOR THE MAIN ATSPs AT UNION-WIDE LEVEL	34
FIGURE 8: 2013 TANS ACTUAL COSTS VS. RP1 PP AT STATE LEVEL	35
FIGURE 9: UNION-WIDE EN-ROUTE DUC TRENDS (CONSISTENT RP2 SERIES).....	35
FIGURE 10: UNION-WIDE EN-ROUTE ACTUAL COSTS 2013 AND DCs FOR 2014	37
FIGURE 11: UNION-WIDE EN-ROUTE DCs AND TRAFFIC (TSUs) TRENDS.....	39
FIGURE 12: CHANGES IN EN-ROUTE DCs AND SUs 2011-2019.....	40
FIGURE 13: CHANGES IN EN-ROUTE DCs AND SUs 2014-2019.....	40
FIGURE 14: AVERAGE ANNUAL CHANGES IN DCs IN VALUE, 2011-19 AND 2014-19	41
FIGURE 15: LEVEL OF EN-ROUTE DUC TARGETS PLANNED TO BE ACHIEVED IN 2019	43
FIGURE 16: DISTRIBUTION OF EN-ROUTE DUC TARGETS PLANNED TO BE ACHIEVED IN 2019, SHOWN AGAINST QUANTILES (LOWEST, LOW, HIGH, HIGHEST) AND THE WEIGHTED AVERAGE SES AGGREGATED DUC.....	43
FIGURE 17: CHANGES IN EN-ROUTE DCs AND SUs (2011-2019) BY CHARGING ZONE.....	44
FIGURE 18: CHANGES IN EN-ROUTE DCs, SUs AND DUCs AT FAB LEVEL, 2011-2019	45
FIGURE 19: CHANGES IN EN-ROUTE DCs, SUs AND DUCs AT FAB LEVEL, 2014-2019	45
FIGURE 20: RP2 NUMBER OF AIRPORTS INCLUDED IN THE PERFORMANCE SCHEME	46
FIGURE 21: SES AGGREGATED TERMINAL DUCs, WITH TERMINAL DCs AND TRAFFIC TRENDS	46
FIGURE 22: LEVEL OF TANS DUC TARGETS PLANNED TO BE ACHIEVED IN 2019	47
FIGURE 23: DISTRIBUTION OF TANS DUC TARGETS PLANNED TO BE ACHIEVED IN 2019, SHOWN AGAINST QUANTILES (LOWEST, LOW, HIGH, HIGHEST) AND THE WEIGHTED AVERAGE SES AGGREGATED DUC	48
FIGURE 24: RP2 SES TERMINAL ANS CZ TRENDS BY STATE	49
FIGURE 25: RP2 SES TERMINAL ANS CZ TRENDS BY STATE	49
FIGURE 26: ATM SYSTEMS IN USE	53
FIGURE 27: TOTAL & MAIN CAPEX 2012-19 (M€2009, REAL TERMS)	55
FIGURE 28: TOTAL & MAIN RP2 PLANNED CAPEX VS. 2010-14 UPDATE PLAN PER FAB (M€2009, REAL TERMS)	56

Table of Tables

TABLE 1: LEVEL OF EFFECTIVENESS OF SAFETY MANAGEMENT (EoSM)	5
TABLE 2: APPLICATION OF THE SEVERITY CLASSIFICATION BASED ON THE RISK ANALYSIS TOOL (RAT) METHODOLOGY	5
TABLE 3: AVERAGE HORIZONTAL EN-ROUTE FLIGHT EFFICIENCY	6
TABLE 4: AVERAGE EN-ROUTE AIR TRAFFIC FLOW MANAGEMENT (ATFM) DELAY PER FLIGHT.....	6
TABLE 5: AVERAGE UNION-WIDE DETERMINED UNIT COST FOR EN-ROUTE AIR NAVIGATION SERVICES	6
TABLE 6: RECEIPT OF PERFORMANCE PLANS	19
TABLE 7: SAFETY UNION-WIDE TARGETS FOR RP2 – LEVEL OF EFFECTIVENESS OF SAFETY MANAGEMENT (EoSM)	21
TABLE 8: SAFETY UNION-WIDE TARGETS FOR RP2 – APPLICATION OF THE SEVERITY CLASSIFICATION BASED ON THE RISK ANALYSIS TOOL (RAT) METHODOLOGY.....	21
TABLE 9: ENVIRONMENT UNION-WIDE TARGETS FOR RP2 - AVERAGE HORIZONTAL EN-ROUTE FLIGHT EFFICIENCY	23
TABLE 10: COMPARISON BETWEEN THE REFERENCE VALUES AND THE ADOPTED TARGETS FOR THE ENVIRONMENT KPI.....	23
TABLE 11: CAPACITY UNION-WIDE TARGETS FOR RP2 – AVERAGE EN-ROUTE AIR TRAFFIC FLOW MANAGEMENT (ATFM) DELAY PER FLIGHT	24
TABLE 12: AGGREGATION OF THE EN-ROUTE CAPACITY TARGETS	24
TABLE 13: COMPARISON BETWEEN THE FAB TARGETS AND THE REFERENCE VALUES FOR EN-ROUTE CAPACITY	25
TABLE 14: OVERVIEW OF THE ARRIVAL ATFM DELAY ASSESSMENT.....	26
TABLE 15: COST-EFFICIENCY UNION-WIDE TARGETS FOR RP2 – AVERAGE UNION-WIDE DETERMINED UNIT COST FOR EN-ROUTE AIR NAVIGATION SERVICES.....	28
TABLE 16: UNION-WIDE RESULTS OF 2012 AND 2013 EN-ROUTE COST-EFFICIENCY MONITORING.....	32
TABLE 17: 2013 TANS ACTUAL COSTS VS. RP1 PP	34
TABLE 18: DIFFERENCE BETWEEN RP2 PPS AGGREGATED DUC AND UNION-WIDE TARGET, WITH RESULTING DIFFERENCE IN TOTAL COSTS FOR RP2	36
TABLE 19: DIFFERENCE BETWEEN RP2 PPS AGGREGATED DUC (ASSUMING STATFOR BASE CASE FOR ALL STATES) AND UNION-WIDE TARGET, WITH THE RESULTING DIFFERENCE IN TOTAL COSTS FOR RP2	37
TABLE 20: UNION-WIDE EN-ROUTE DCs TRENDS (CONSISTENT RP2 SERIES)	37
TABLE 21: UNION-WIDE EN-ROUTE TRAFFIC (TSUs) FORECAST TRENDS	38
TABLE 22: TRAFFIC FORECAST GROWTH BY STATE WITH ALIGNMENT TO STATFOR FORECASTS	42
TABLE 23: SES AGGREGATED TERMINAL ANS DCs TRENDS	46
TABLE 24: TERMINAL SU TRAFFIC FORECAST DIFFERENCES VS STATFOR'S LOW CASE OF FEBRUARY 2014	47
TABLE 25: RP2 TOTAL PLANNED CAPEX – EU/FAB	54
TABLE 26: PLANNED TOTAL CAPEX RP2 VS. 2010-14 (M€ ₂₀₀₉ , REAL TERMS)	55

EXECUTIVE SUMMARY

Introduction

1. This report, which has been prepared by the Performance Review Body (PRB) in accordance with the provisions of Article 3 of Regulation (EU) N° 390/2013 (the performance Regulation), presents the PRB's overall assessment of the Performance Plans submitted by the Functional Airspace Blocks (FABs) and initial results of the Network Manager (NM), and has been divided into two Volumes.
2. Volume 1 presents the PRB's high-level Union-wide view of the Performance Plans' assessment for RP2 as well as the PRB's recommendations to the European Commission. The PRB's detailed assessment and recommendations of the individual Performance Plans can be found in Volume 2.
3. The purpose of this report is to support the Commission in preparing either acceptance letters or draft recommendations to revise individual Performance Plans or parts thereof. These recommendations will be discussed at an *ad hoc* meeting of the Single Sky Committee on 24 October 2014.

Union-wide performance targets for RP2 (2015-19)

4. For the second Reference Period (RP2: 2015-2019) of the performance scheme, which is a fundamental element of the Single European Sky legislation, the European Commission adopted Union-wide targets in February 2014, covering four Key Performance Areas, namely Safety, Environment, Capacity and Cost-efficiency.

SAFETY

Level of Effectiveness of Safety Management (EoSM)		2015	2016	2017	2018	2019
State level	Union-wide target					C
ANSP level	Union-wide target for Safety Culture MO					C
	Union-wide target for all other MOs					D

Table 1: Level of Effectiveness of Safety Management (EoSM)

Application of the severity classification based on the Risk Analysis Tool (RAT) methodology						
Ground score (ANSP level)		2015	2016	2017	2018	2019
Union-wide targets	SMIs			≥ 80%		100%
	RIs			≥ 80%		100%
	ATM-S			≥ 80%		100%
Overall score (State level)		2015	2016	2017	2018	2019
Union-wide targets	SMIs			≥ 80%	≥ 80%	≥ 80%
	RIs			≥ 80%	≥ 80%	≥ 80%
	ATM-S			≥ 80%		100%

Table 2: Application of the severity classification based on the Risk Analysis Tool (RAT) methodology

ENVIRONMENT

Average horizontal en-route flight efficiency	2015	2016	2017	2018	2019
KEP (horizontal en-route flight efficiency for the last filed flight plan trajectory)					4.10%
KEA (horizontal en-route flight efficiency for the actual trajectory)	2.89%	2.82%	2.74%	2.66%	2.60%

Table 3: Average horizontal en-route flight efficiency**CAPACITY**

Average en-route air traffic flow management (ATFM) delay per flight	2015	2016	2017	2018	2019
Minutes	0.5	0.5	0.5	0.5	0.5

Table 4: Average en-route air traffic flow management (ATFM) delay per flight**COST-EFFICIENCY**

Average Union-wide determined unit cost for en-route air navigation services	2015	2016	2017	2018	2019
Real terms EUR 2009	56,64	54,95	52,98	51,00	49,10

Table 5: Average Union-wide determined unit cost for en-route air navigation services

5. For that purpose, the national supervisory authorities, at functional airspace block level, have drawn up Performance Plans containing targets which needed to be consistent with the Union-wide performance targets and the criteria laid down in Annex IV of the performance Regulation.
6. These Performance Plans have to be adopted by the Commission before the beginning of the Reference Period, or shortly thereafter if they are subject to a revision. In any case, they shall apply retroactively as from the first day of the Reference Period. These plans and the monitoring of their delivery are fundamental in meeting the Union-wide targets.
7. Indeed, the success of the SES performance scheme depends on the effective monitoring of ANSPs' performance. Performance targets will have no value if they are not used to guide and monitor the ANSPs' actions in the scope of the scheme.

Key Conclusions

8. All Performance Plans for the second Reference Period, prepared and officially adopted by the nine FABs and the NM, were due for submission by 30 June 2014. The deadline was observed by most of the FABs. In the subsequent process of data verification, individual FABs were approached with requests for clarification. These were addressed in a timely manner and States/FABs provided signed responses. In addition, some of the FABs provided corrigenda to their Performance Plans. Corrigenda were received from the following FABs: Blue Med, FAB CE, DANUBE and FABEC. The additional information was taken into consideration during the assessment of the Performance Plans as carried out by the PRB.
9. It should be noted that since the Network Performance Plan (NPP) will be consolidated and endorsed for formal submission to the EC after the NMB ad-hoc meeting to be held on 8 October 2014, the PRB's assessment results for the NPP will be made available at a later stage.
10. The Union-wide view depicted by the detailed assessment reports contained in Volume 2 show the following results:
11. The Baltic FAB, the DK-SE FAB and the NEFAB Performance Plans could be declared as acceptable after having addressed a number of compliance issues and, in the case of Poland, having established a local target for the arrival ATFM delay.
12. All other plans meet the criteria in some KPAs and could, therefore, be declared partially acceptable, but will require revision. The PRB is of the opinion that the DANUBE FAB and FAB CE Performance Plans can be improved immediately for the Capacity KPA.
13. While all Performance Plans were received at FAB level for RP2, considering the experience gained during RP1 and the lack of operational benefits or the absence of any joint environmental or CAPEX approach, the PRB is not convinced of the added value brought by the FAB layer.
14. Also, the PRB suggests reconsidering downwards the levels of Determined Costs in the early years of RP2 in the light of the actual performance achieved in 2013, for both en-route and terminal charging zones.
15. Considered the results of its assessment, the PRB is nevertheless of the strong belief that the Union-wide performance targets for RP2 are clearly within reach with only reasonable efforts to be made by all States/FABs.
16. The PRB would like to reiterate the paramount importance of safety, and thereby urges the European Commission to request FABs/States to ensure that any measures and operational changes that are taken in order to improve performance as a result of this review in the areas of cost-efficiency, capacity and environment, must be made in accordance with safety requirements/legislation.
17. Moreover, a review of all FAB Performance Plans has revealed no evidence to suggest that the required performance in any KPA will be a limiting factor, preventing improvements, in any of the other KPAs. The PRB is therefore of the opinion that, at the moment, interdependencies cannot be used as a justification to pursue specific KPAs/KPIs at the expense of others.
- 18.

SAFETY

19. Although all FABs have adopted the Union-wide targets for 'Effectiveness of Safety Management' and the application of the 'severity classification using the RAT methodology', some have reported different target values for the RAT methodology

application for ATM-S (i.e. ATM Ground and ATM Overall score should be the same) or did not provide annual target values for each year of the Reference Period on the Effectiveness of Safety Management and/or RAT methodology application, which are due for monitoring purposes.

20. It appears that there is no harmonised approach to the implementation of Just Culture. Even when FABs state that they have established a common FAB approach in certain areas for Just Culture improvements, detailed information that explains the basic elements in place to promote the application of Just Culture is usually not provided (i.e. local/FAB targets at both State and ANSP level appear to be only set formally). Therefore, explanatory guidance material that was made available for the development of Just Culture implementation plans, in order to foster a common FAB approach, should be consulted and used.

ENVIRONMENT

21. The NM has adopted the target for the 'average horizontal en-route flight efficiency of the last filed flight plan'. This information might be subject to change once the final plan is made available.
22. The Union-wide target for 'average horizontal en-route flight efficiency of the actual trajectory' has been adopted by NM and all FABs have adopted their respective reference values. This information might be subject to change once the final plan is made available.

CAPACITY

23. The targets for en-route ATFM delay adopted by the FABs are not all consistent with the respective FAB reference values.
24. FABs should ensure that the individual ANSP contributions for en-route capacity, when aggregated, are consistent with the required level of performance, as determined by the reference values from the Network Operations Plan (2014-2018/2019).
25. The PRB noticed that several FABs did not establish a quantitative national target on arrival ATFM delay and/or associated breakdown per airport for monitoring purposes (or alternatively an aggregated share for airports with low levels of arrival ATFM delay).

COST-EFFICIENCY

26. States at an aggregated level have made some effort (-2.2% p.a.) to meet Union-wide en-route Determined Unit Costs (DUC) targets (-3.3% p.a.) in their RP2 Performance Plans. However:
27. the 2014 aggregated Determined Costs (DCs, 6,242 M€2009) are materially higher than the 2013 DCs (6,038 M€2009) reported in the PRB Monitoring Report, which leads to an artificially high starting point for RP2;
28. the vast majority of the improvement in RP2 is expected to be obtained through traffic growth of +2.0% p.a., which is higher than STATFOR's February 2014 low traffic forecast (+1.2% p.a.), underpinning the Union-wide targets;
29. the DCs' trend shows very little ambition, at -0.3% p.a. on average over RP2. This is well below the assumption underpinning the Union-wide target of -2.1% p.a. and

reflects the fact that no major organisational or functional restructuring has been planned by the FABs in RP2;

30. while the aggregated Performance Plan (PP) DUC level is similar or better than the Union-wide target for 2015 and 2016, there are material differences in the targets for 2017, 2018 and 2019. By 2019, the aggregated PP DUC is +4.4% higher than the Union-wide target. Over RP2, the total difference in costs between the aggregated PPs and the costs underpinning the Union-wide target is +511.2 M€₂₀₀₉.
31. For the five largest States, the aggregated PP trend masks strong contributions from Spain and the United Kingdom that are offset by poor contributions from France, Italy and Germany. For the smaller States, there are mixed levels of performance planned, with some showing much less ambition than others.
32. Annex IV of Regulation 390/2103, which sets the criteria for assessing Performance Plans, emphasises that performance in the previous reference period needs to be taken into account when assessing Performance Plans for the next reference period. The 2013 PRB Monitoring Report shows that cost-efficiency performance improvements have been achieved in the first two years of RP1 in the form of lower cost-bases. The PRB believes that these improvements need to be carried forward in RP2; Determined Costs are expected to reflect these lower costs in the form of lower user charges in RP2.
33. Although there are no Union-wide cost-efficiency targets set at Terminal ANS (TANS), the aggregated TANS DUC trends are very similar to en-route, both in the trends experienced in 2012 and 2013, and in the level of ambition planned for RP2. This reflects the fact that most ANSPs have similar terminal and en-route businesses, with common and joint costs and labour arrangements. Moreover, there is pressure from TANS airspace users at a local level, so ANSPs are hesitant to raise costs. These trends, along with a lack of a consistent TANS cost and TNSUs time series, and considering the better regulation principles – regulate only when and where necessary and at the appropriate level, may mean that a ‘light touch’ approach to the terminal ANS cost-efficiency KPI is appropriate for the whole of RP2.
34. The PRB encourages those States which have been identified as not making an adequate contribution to Union-wide cost-efficiency targets and/or not complying with the criteria laid down in Annex IV of the performance Regulation, to review their Performance Plans so as to introduce more ambitious measures. This will enable the Union-wide targets to be met and contribute to the performance of the European ATM network overall.

INVESTMENTS

35. Within the limit detailed in paragraph 7.2.2, the investments of most States could be declared eligible for recovery through ANS charges in application of Article 6 (4) of the charging Regulation. Some countries should nevertheless provide appropriate links between their main investments and the ATM Master Plan requirements so as to allow their eligibility to be assessed.

PRB Recommendations to the European Commission

The assessment shows that the Performance Plans of the Baltic FAB, the DK-SE FAB and the NEFAB could be declared acceptable after only minor upgrades and modifications.

Arising from the key conclusions highlighted in Chapter 12 the PRB advises the Commission to adopt the following recommendations for FABs and Member States.

RECOMMENDATION 1 – GENERAL CRITERIA

Austria, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Greece, Germany, Hungary, Ireland, Latvia, Luxembourg, Malta, Netherlands, Norway Poland, Portugal, Romania, Slovakia, Spain, Slovenia, Sweden, Switzerland and UK should provide the list of airports submitted to, and exempted from, the provisions of Regulations (EU) No 390/2013 and 391/2013 in line with the clarification provided by the European Commission.

Rationale:

The States did not use a consistent approach when establishing the list of airports submitted to, and exempted from, the provisions of the performance and charging Regulations. Most of the lists included in the Performance Plans were either incomplete, or not compliant with, the clarification provided by the European Commission.

RECOMMENDATION 2 – GENERAL CRITERIA

Austria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Latvia, Malta, Norway, Romania, Slovakia and Sweden, should clearly differentiate between traffic forecast and Service Unit forecast, in particular for the purpose of specifying which traffic assumptions are used for the operational Key Performance Areas.

Rationale:

The majority of the performance plans failed to make the distinction between “traffic forecast” and “service unit forecast”. As a result, many FABs did not specify which traffic assumptions were used for the operational Key Performance Areas.

RECOMMENDATION 3 – GENERAL CRITERIA

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, France, Ireland, Malta, Portugal Romania, Slovak Republic, Slovenia, Spain and Switzerland, should describe and/or justify in more detail the cost, nature and contribution of their investments in new systems or major overhauls, so as to allow a proper understanding of the importance and need for such investments, in relation with the traffic forecasted, the capacity needed and with a view to ensuring timely deployment of the relevant ATM Master Plan requirements, in particular the Pilot Common Project.

Rationale:

Most of the FABs have described and/or justified the cost, nature and contribution of the CAPEX investments in a very generic way, which did not allow a proper understanding of the importance and need for such investments. Also, the “Common Project” field did not contain the proper reference to the proper PCP ATM functionalities.

RECOMMENDATION 4 - SAFETY

For the RAT methodology application for ATM-S, the Blue Med, DANUBE, FAB CE, NEFAB and SW FABs should adopt targets with the same values for ATM Ground and ATM Overall.

Baltic, DK-SE and FABEC FABs should provide annual target values for each year of the reference period on the Effectiveness of Safety Management and/or the RAT methodology application, which are required for monitoring purposes in compliance with the provisions of Article 3.1 of Annex II of Regulation (EU) No 390/2013.

Rationale:

Although all FABs have adopted the Union-wide targets for 'Effectiveness of Safety Management' and the application of the 'severity classification using the RAT methodology', some have reported different sets of targets, as was the case for the RAT methodology application for ATM-S, or did not provide annual target values for each year of the Reference Period for EoSM and/or RAT methodology, which are due to be used for monitoring purposes.

RECOMMENDATION 5 – EN-ROUTE DELAY

Baltic, Blue Med, DANUBE, DK-SE, FAB CE, FABEC, South-West and UK-IRL FABs should ensure that targets for en-route ATFM delay are consistent with the respective FAB reference values as published in the Network Operations Plan (2014-2018/2019), and that the individual ANSP contributions for en-route capacity, when aggregated, are consistent with the required level of performance.

Rationale:

The targets for en-route ATFM delay adopted by some FABs are not consistent with the respective FAB reference values.

To assist with the quantification of a high level of performance for incentive purposes and/or to enable effective monitoring of performance, FABs should ensure that the individual ANSP contributions for en-route capacity, when aggregated, are consistent with the required level of performance, as determined by the reference values from the Network Operations Plan (2014-2018/2019).

RECOMMENDATION 6 – ATFM DELAY AT AIRPORTS

Belgium, Cyprus, Greece, Italy, Ireland, France, Germany, Luxembourg, Poland, Portugal, Norway, The Netherlands and UK should establish a quantitative national target on arrival ATFM delay with a breakdown per airport for monitoring purposes.

Member States of FAB CE, FAB UK-IRL, FAB Baltic, FAB Blue Med, FAB DK-SE, and FAB SW should establish associated incentive schemes. Within FAB EC, Belgium, Luxembourg, and The Netherlands should establish an incentive scheme or refine the proposed scheme to ensure consistency with the general principles of the Performance and Charging Regulation.

Rationale:

Across all FABs, several Member States did not establish a quantitative national target on arrival ATFM delay and/or associated breakdown per airport for monitoring purposes (or alternatively an aggregated share for airports with low levels of arrival ATFM delay).

Following the European Commission clarification, all capacity-related targets are subject to an incentive scheme. Some Member States included incentive schemes for the national target on arrival ATFM delay, but not all of them were consistent with the general principles of the Performance Regulation, Charging Regulation, or the methodology chosen.

RECOMMENDATION 7 – COST-EFFICIENCY

All Member States should:

- a. review their traffic assumptions in the light of the latest available information, for both en-route and terminal charging zones.
- b. reconsider downwards their levels of determined costs in the early years of the reference period in the light of the actual performance achieved in 2013, for both en-route and terminal charging zones.
- c. To the exception of Denmark, Estonia, Finland, Lithuania, Latvia, Poland, Norway, Sweden, and UK, set more ambitious en-route cost-efficiency targets so as to collectively reach the union-wide target throughout the reference period.

Rationale:

States at an aggregated level have made some effort (-2.2% p.a.) to meet Union-wide en-route Determined Unit Costs (DUC) targets (-3.3% p.a.) in their RP2 Performance Plans. However:

- the 2014 aggregated en-route Determined Costs (DCs, 6,242 M€₂₀₀₉) are materially higher than the 2013 DCs (6,038 M€₂₀₀₉) reported in the latest PRB Monitoring Report, which leads to an artificially high starting point for RP2;
- the vast majority of the improvement in RP2 en-route DUC is expected to be obtained through traffic (en-route service units) growth of +2.0% p.a., which is higher than STATFOR's February 2014 low traffic forecast (+1.2% p.a.), underpinning the Union-wide targets;
- the en-route DCs' trend shows very little ambition, at -0.3% p.a. on average over RP2. This is well below the assumption underpinning the Union-wide targets of -2.1% p.a. and reflects the fact that no major organisational or functional restructuring has been planned by the FABs in RP2;
- while the aggregated Performance Plan (PP) en-route DUC level is similar or better than the Union-wide target for 2015 and 2016, there are material differences in the targets for 2017, 2018 and 2019. By 2019, the aggregated PP en-route DUC is +4.4% higher than the Union-wide target. Over RP2, the total difference in costs between the aggregated PPs and the costs underpinning the Union-wide en-route target is +511.2 M€₂₀₀₉.

For the largest five States, the aggregated PP trend masks strong contributions from Spain and the United Kingdom that are offset by poor contributions from France, Italy and Germany. For the smaller States, there are mixed levels of performance planned, with some showing much less ambition than others.

1 INTRODUCTION AND CONTEXT

1.1 About this report

- 1.1.1 This report was prepared by the Performance Review Body (PRB) of the Single European Sky (SES). EUROCONTROL, acting through its Performance Review Commission (PRC), supported by the Performance Review Unit (PRU), has been designated as the PRB until mid-2015. In this context, the PRB reports to the European Commission in accordance with the provisions of Article 3(2) of Regulation (EU) N° 390/2013 (the performance Regulation).
- 1.1.2 It presents the PRB's assessment of the Performance Plans submitted by the Functional Airspace Blocks (FABs) for the second Reference Period (RP2: 2015-2019) under the SES performance scheme, as well as the PRB's recommendations to the European Commission.
- 1.1.3 Based on this report, the European Commission may either prepare acceptance letters or draft recommendations to revise individual Performance Plans or parts thereof. These recommendations will be discussed at an ad-hoc meeting of the Single Sky Committee on 24 October 2014.
- 1.1.4 The PRB's assessment of the Performance Plans is divided into two volumes:
 - Volume 1 is a high-level report presenting the Union-wide view (this Volume);
 - Volume 2 is the compilation of 10 assessment reports comprising nine FABs and the Network Manager. It contains the detailed assessment results and the PRB's recommendations addressing the improvement and revision of the Performance Plans. It should be noted that since the Network Performance Plan (NPP) will be consolidated and endorsed for formal submission to the EC after the NMB/11 meeting to be held on 8 October 2014, the PRB's assessment results for the NPP will be made available at a later stage.

1.2 Adoption of performance targets and plans for RP2

- 1.2.1 The PRB prepared its formal "advice to the Commission in the setting of Union-wide performance targets for RP2", which was issued on 27 September 2013¹.
- 1.2.2 The Commission submitted the draft Union-wide targets to the SSC on 7 October 2013 for consideration at their 51st meeting (22-23 October 2013). Discussions spanned two meetings (SSC/51 of 22-23 October 2013; SSC/52 of 17-18 December 2013).
- 1.2.3 Eventually, the Commission's proposal received the *ad hoc* Single Sky Committee's positive vote on the RP2 Union-wide targets (4 February 2014).
- 1.2.4 The final decision² on the Union-wide RP2 performance targets was published in the Official Journal of the European Union on 12th March 2014.
- 1.2.5 The Performance plans were developed by the FABs and the Network Manager (NM), following consultations with their stakeholders, and were delivered as described in section 2.4 of this report. Details for each FAB and the participating States, where applicable, are included in Volume 2 of this report (PRB Assessment Report of RP2 FAB Performance Plans).

1.3 Performance in the first two years of the performance scheme

- 1.3.1 The performance scheme was first introduced in 2010 by the performance Regulation³.

- 1.3.2 The first Reference Period (RP1) began in 2012 and will be completed after three years at the end of 2014, before the start of RP2 in 2015.
- 1.3.3 The scope of RP1 covers the airspace controlled by the RP1 SES States in the ICAO EUR and AFI regions. Therefore, it covers the airspace controlled by the 27 EU Member States (in 2012) as well as the airspace controlled by Norway and Switzerland (making for a total of 29 States) in the ICAO EUR region, as well as the Canaries FIR (Spain), Bodø FIR (Norway) and NOTA/SOTA (UK/IRL). RP2 also includes the airspace of Croatia, which became a member of the European Union in the RP1 period.
- 1.3.4 The following Union-wide objectives were set for RP1:
- the Union-wide **Environment** target is a reduction of -0.75% of the route extension in 2014 compared with 2009;
 - the Union-wide **Capacity** target is set at 0.5 minute's en-route ATFM delay per flight for 2014;
 - the en-route Union-wide **Cost-efficiency** target, set for each year of the Reference Period, is the en-route determined unit rate expressed in €₂₀₀₉ per service unit: €57.88 in 2012, €55.87 in 2013 and €53.92 in 2014.
- 1.3.5 The legislation prescribes that the Member States shall report to the Commission at least on an annual basis and when performance targets are at risk of not being achieved. The Commission shall report to the Single Sky Committee on the achievement of performance targets at least on an annual basis. The PRB produces an annual monitoring report for this purpose. Monitoring obligations also include objectives set at national / FAB levels and are therefore not subject to Union-wide target setting.
- 1.3.6 At the date of the publication of this report, two years of the application of the performance scheme in RP1 (2012 and 2013) are available as PRB Performance Monitoring Reports 2012 and 2013, whereas the 'year-to-date' monitoring for 2014 is already available via the PRB's online monitoring dashboard.
- 1.3.7 The following general conclusions can be drawn:
- **Safety:**
 - (i) Since the performance scheme was first applied, there have been no fatal accidents with an ANS contribution. In addition, the number of serious incidents displays a decreasing trend since 2010.
 - (ii) In addition, improvements are visible in both safety management and in the application of the severity classification of occurrences.
 - **Environment:**
 - (i) Since the performance scheme was first applied, horizontal en-route flight efficiency has continued to improve. The actual horizontal en-route extension was 5.15% of the Great Circle Distance in 2012 and this decreased slightly to 5.11% in 2013. Both results are very close to NM's envisaged profile (targets) of 5.12% and 4.92% in 2012 and 2013 respectively, but they do not meet the profile (targets). The Network Manager assumed responsibility for coordinating the pan-European approach in improving flight efficiency. Local Free Route Airspace (FRA) initiatives continue to make for improvements in en-route flight efficiency; harmonised implementation in coordination with the Network Manager ensures that there is interconnectivity between the various initiatives.

- **Capacity:**

- (i) Since the performance scheme was first applied, **en-route ATFM delays** decreased (-46% compared with 2011 and a further -15% in 2013 compared with the previous year), in the context of a general decrease in traffic. The Union-wide value achieved for 2012 was 0.63 minutes of ATFM delay per flight and 0.54 in 2013, which satisfied the intermediate values of 0.7 and 0.6 minutes/flight respectively. En-route ATFM delay in that period was mainly concentrated in Cyprus, France, Germany, Poland and Spain.
- (ii) Airports with an average **arrival ATFM delay** of over two minutes in the period mainly include London Heathrow (LHR) and Zurich (ZRH), although overall, the average airport ATFM delay is consistently decreasing (by -28% in 2012 and -15% in 2013). This must, however, be seen in the context of a general decline in traffic.

- **Cost-Efficiency:**

- (i) The results of the first two years of RP1, under the Determined Costs, “DCs”, method (specific risk-sharing arrangements aimed at incentivising ANSPs’ economic performance), confirms that the performance scheme for the cost-efficiency KPA is working as expected for ANSPs. They are taking action to adjust their cost-bases according to traffic demand (en-route SUs) so as to retain or increase their profit margins. In the context of lower traffic, the European ANS system has collectively adjusted its cost structure downwards in order to match lower revenues and meet its defined targets. As a result, actual ANS costs in 2012 were lower than the Performance Plan projections because States reduced their costs (by €207M), whereas the actual en-route unit cost for 2013 (56.85 €₂₀₀₉) almost equals the planned DUR (Determined Unit Rate) adopted in the RP1 National Performance plans (56.69 €₂₀₀₉).
- (ii) Even though no specific targets were set for terminal ANS costs and terminal unit rates in RP1, monitoring of that period shows that actual Union-wide terminal ANS costs were well below those forecast in the National Performance plans. This partially reflects that the ‘light touch’ tools of transparency and monitoring plus the side-effect of en-route costs regulation, where the same ANSP provides both terminal and en-route services, are having a positive impact.

2 PRB'S APPROACH

2.1 Support for NSAs

- 2.1.1 The major forum for interaction with the National Supervisory Authorities (NSAs) is the NCP Workgroup on Performance (sub-group of the NSA Coordination Platform). In order to structure the FAB Performance Plans and to help the NSAs and FABs to fulfil their legal requirements, the PRB developed - in close interaction with this workgroup -, an Excel template for the elaboration and submission of the FAB Performance Plans. This interactive PRB development took place at the end of 2013 and the beginning of 2014.
- 2.1.2 After various drafts containing improvement proposals were received by the NSAs, the template to be used was sent out to the NSAs and FABs on 3 March 2014. An important feature was that the template had pre-completed fields containing information known to the PRB; this helped reduce the NSAs/FABs' workload. Regarding the information that was not available at the time of releasing the template, the NSAs/FABs received an update-patch which they could include in their template (e.g. at the end of April, the EUROSTAT and IMF published official inflation rates that were then given to the FABs/NSAs).
- 2.1.3 For the rather complex financial data requirements stemming from the performance regulation and, especially, the charging regulation, dedicated guidance material was developed and distributed by the PRB (4 April 2014). For each charging zone, pre-completed Excel templates were distributed in order to guarantee that the correct breakdown of the en-route and TNC charges needed were included in Annex-C of the FAB Performance Plan.
- 2.1.4 NSAs and FABs also made much use of the central NSA-PRU-Support e-mail account to submit technical questions to the PRU's experts during the elaboration of their Performance plans. When legal interpretation was required, the questions were always forwarded to the European Commission.

2.2 Legal requirements

- 2.2.1 The assessment of each Performance Plan was carried out according to the requirements of Article 14 and Annex IV of the performance Regulation, as well as the European Commission's Decision 2014/132/EU setting the Union-wide performance targets for the air traffic management network and alert thresholds for the second Reference Period. These stipulate, *inter alia*, that:
- *the Performance plans are assessed on the basis of the criteria laid down in Annex IV to the performance Regulation;*
 - *the consistency and adequate contribution of the FAB targets are assessed against the Union-wide targets;*
 - *the evolution of the context that may have occurred between the date of adoption of the EU-wide targets and the date of assessment of the Performance Plan should be taken into account;*
 - *the PRB should make recommendations for the revision of FAB Performance Plans when the targets contained therein are found not to be consistent with and/or adequately contributing to the Union-wide targets;*
 - *The Commission will then take a decision after consultation with the Member State(s) concerned. This decision will identify precisely which target(s) has/have to be revised, as well as the rationale of the Commission's assessment.*

2.3 Principles, methodology, processes and organisation

PRINCIPLES

2.3.1 While assessing the Performance Plans and targets, the PRB's principle concern was to be fully in line with the performance scheme's requirements and, in particular, to comply with the principles defined in Annex IV of the performance Regulation. So, the PRB followed these principles:

- Fair: the assessment shall be performed by treating all the plans equally;
- Systematic: the assessment shall consider all the elements presented in the plans according to a holistic approach;
- Robust: conclusions shall be supported by detailed analysis;
- Transparent: the elements considered and the methodology followed shall be communicated to the stakeholders concerned.

METHODOLOGY

2.3.2 The high-level principles of the assessment methodology used by the PRB were communicated to the SSC/53 held on 2nd and 3rd of April 2014.

PROCESS AND ORGANISATION

2.3.3 The process and organisation (including updates) were communicated to the Single European Sky on different occasions by the PRB Chairman (i.e. SSC/53 agenda item 6; SSC/54 Agenda item 3.1).

2.3.4 According to the performance Regulation, FABs had to adopt their Performance Plans containing binding targets and submit them to the Commission by 30 June 2014 at the latest (their actual submission is addressed in this report under section 2.4).

2.3.5 The PRB started analysing the received plans as of 1 July 2014, according to the requirements of the performance Regulation (Article 11, Article 14 and Annex II and IV).

2.3.6 The scope of work covered the assessment of the nine FABs (including the specific analysis at national/charging zone level, where applicable) and of the NM Performance Plan for the second Reference Period (RP2).

2.3.7 Regarding the Fact validation process, the FAB coordinators received the necessary documentation (i.e. draft assessment report the comment response sheet and, for information, the first report on costs exempt) on 15 September 2014. All FABs, with the exception of the Blue Med, delivered their comments by the deadline of 26 September. The relevant comment response documents are attached to the Volume 2 of this report.

2.3.8 The PRB and its Chairman, with the technical support of PRU and, for Safety matters, of EASA, carried out these tasks:

- planning and organising the teams (e.g. PRU/PRB field experts working in teams on the relevant KPAs and the integration/drafting team) for the assessment in winter 2013 and spring 2014 including a dry-run in April/May 2014;
- setting-up and testing the assessment support tools in spring 2014;
- data collection and verification in cooperation with States/NSAs and their

insertion into the database used for the assessment in spring 2014;

- creating a secure site for uploading and delivering the FAB Performance Plans to the Commission, i.e. NSA workspace on www.eusinglesky.eu (spring 2014).
- participating in meetings on the request of States/NSAs/NM before the formal submission of the Performance Plans;
- asking for clarification on those Performance Plans when data was incomplete or incorrect (summer 2014);
- assessing the Performance Plans received (summer 2014);
- Stakeholder meeting (3 September 2014). The meeting with the PRB was attended by some 60 stakeholders from ATM industry (Unions, Airlines, NSAs), who were presented with the preliminary results of the assessment;
- preparing assessment reports for the Commission (summer/autumn 2014).

TIMELINE

2.3.9 The figure below provides the high level RP2 Performance Plan (PP) assessment timeline of the production of this report, with the current understanding that the Commission will present a first view at the *ad hoc* SSC, scheduled for 24 October 2014.

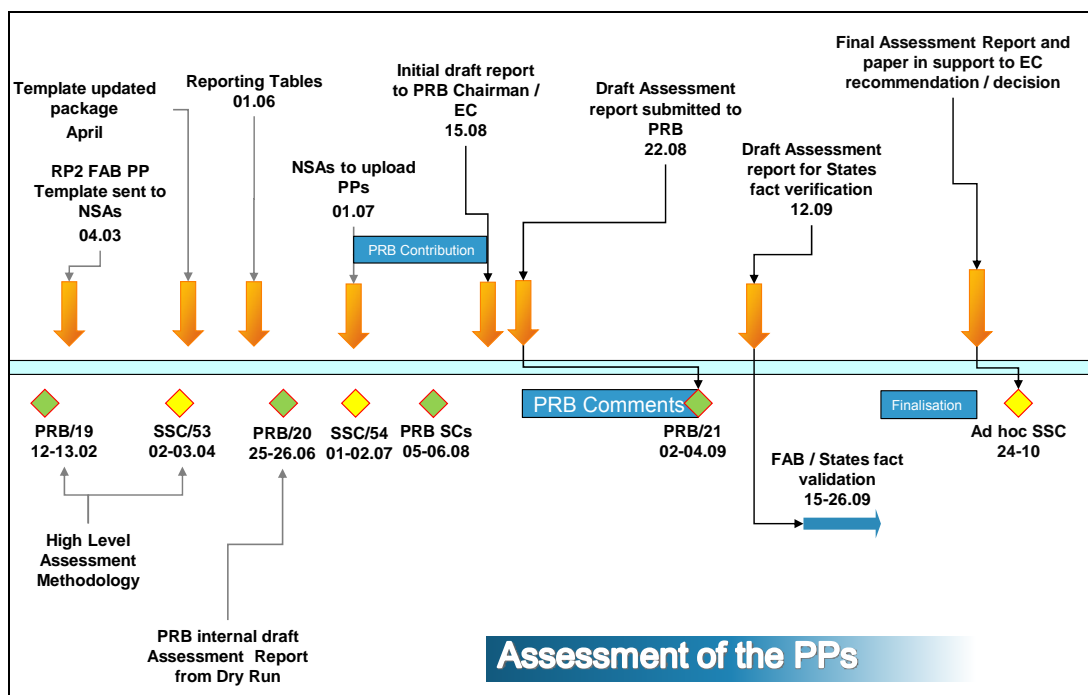


Figure 1: High-level RP2 PPs assessment timeline

2.3.10 It is clear from Figure 1 above that, compared with the original planning presented at the SSC/53 and SSC/54 in which it was assumed that the report would be delivered to the SSC/55 scheduled for November, the timing available for refining the reports was shortened by about three weeks, following mutual agreement between the Commission and the PRB/PRU, so allowing for the first results to be discussed at the *ad hoc* SSC in October.

2.4 Receipt of Performance Plans

2.4.1 All Performance Plans for the second Reference Period, prepared and officially adopted by the nine FABs and NM, were due for submission no later than 30 June 2014. This deadline was observed by most of the FABs, as shown in Table 6 below:

Performance Plan	Status	Date of receipt	Signed by
Baltic FAB	Final	24-06-2014	Vilius Veitas (LT) Marcin Zimny (PL)
Blue Med FAB	Final	30-07-2014	Persephoni Papadopoulou (CY) Dimitrios Koukis (GR) Benedetto Marasa (IT) George Borg Marks (MT)
DANUBE FAB	Final	27-06-2014	Mintcho Tzvetkov (BG) Armand Petrescu (RO)
DK-SE FAB	Final	01-07-2014	Niels Remmer (DK) Staffan Widert (SE)
FAB CE	Final	19-06-2014	Franz Nirschl (AT) Dinko Staničić (HR) Vítězslav Hezký (CZ) Gyula Győri (HU) Mário Németh (SK) Alojz Krapez (SI)
FABEC	Final	30-06-2014	Gerold Reichle (DE) Patrick Vanheyste (BE) Patrick Gandil (FR) Claude Luja (LU) Jacqueline Prins (NL) Peter Mueller (CH)
NEFAB	Final	27-06-2014	Eero Pärgrmäe (EE) Minna Kivimäki (FI) Arnis Muiznieks (LV) Øyvind Ek (NO)
SW FAB	Final	01-07-2014	Luis Miguel Pereira Trindade Santos (PT) Isabel Maestre (ES)
UK-Ireland FAB	Final	27-06-2014	John J. Fearon (IE) Patricia Hayes (UK)
NM	Final	After 08-10-2014	Agreed by NMB

Table 6: Receipt of Performance Plans

2.4.2 The formal vehicle for submitting the Performance Plans and their relevant annexes was the “NSA Workspace” SharePoint repository on the eusinglesky.eu website. The formal date of receipt is considered the date that the formally signed pdf version of the plan was uploaded onto that platform.

2.4.3 During the data verification process, individual FABs were approached with requests for clarification, which were addressed in a timely manner, and States/FABs provided signed responses. In addition, some of the FABs provided corrigenda on their Performance Plans to the PRB via the SharePoint platform and e-mail. Such corrigenda were received from the Blue Med FAB, the FAB CE, the DANUBE FAB and the FABEC. This additional information was taken into consideration when

assessing the Performance Plans, so ensuring that all the details and data provided by the FABs were captured in the analysis carried out by the PRB.

2.5 Main PRB observations on the completeness of the Plans and formal compliance with the content

- 2.5.1 As a general trend, it has been noted that some requirements mandated by the performance Regulation were either incomplete or missing from the FABs' Performance Plans.
- 2.5.2 Although it did not prevent the PRB from carrying out its assessment, missing and/or incomplete elements were identified and are presented in sections 9.2 of the individual FAB assessments in Volume 2 of this assessment report.

3 SAFETY

3.1 Union-wide level view

Level of Effectiveness of Safety Management (EoSM)		2015	2016	2017	2018	2019
State level	Union-wide target					C
ANSP level	Union-wide target for Safety Culture MO					C
	Union-wide target for all other MOs					D

Table 7: Safety Union-wide targets for RP2 – Level of Effectiveness of Safety Management (EoSM)

Application of the severity classification based on the Risk Analysis Tool (RAT) methodology						
Ground score (ANSP level)		2015	2016	2017	2018	2019
Union-wide targets	SMLs			≥ 80%		100%
	RIs			≥ 80%		100%
	ATM-S			≥ 80%		100%
Overall score (State level)		2015	2016	2017	2018	2019
Union-wide targets	SMLs			≥ 80%	≥ 80%	≥ 80%
	RIs			≥ 80%	≥ 80%	≥ 80%
	ATM-S			≥ 80%		100%

Table 8: Safety Union-wide targets for RP2 – Application of the severity classification based on the Risk Analysis Tool (RAT) methodology

- 3.1.1 'Effectiveness of Safety Management' and the 'severity classification using the RAT methodology' targets were set at Union-wide level.
- 3.1.2 All nine FABs and NM made a commitment to reach these Union-wide targets by the end of 2019.
- 3.1.3 However, based on the results of EASA's verification of the effectiveness of safety management in States in all nine FABs, there still appears to be a lack of some of the core elements of an efficient Safety Oversight System. This has a potentially serious consequence as only FABs and their constituent States with mature safety oversight systems will be able to realise the benefits associated with safety management principles, and so make further improvements in their overall safety performance.
- 3.1.4 All nine FABs and NM have made a commitment to reach the specified targets for using the severity classification of the RAT methodology by the end of 2017 and 2019.
- 3.1.5 Nevertheless, it is important to mention that a number of FABs have reported different figures for the RAT methodology application for ATM-S for ATM Ground and ATM Overall. This should not be the case, as these values should be the same (i.e. the ANSP target established for 'ATM Ground' severity should be identical to the NSAs/States' target established for 'ATM Overall' severity). Therefore, this is a cause for concern, as it appears that some States are not aware of how ATM-S occurrences should be classified.

3.2 FAB level view

- 3.2.1 Just Culture targets have been set at the local/FAB level.
- 3.2.2 Based on the review of States in all nine FABs, it appears that there is no harmonised approach to the implementation of Just Culture. Some FABs made a commitment to apply the Just Culture principles and to work together on Just Culture issues. Others only made simple policy statements, without giving detailed working arrangements and how indications of how improvements will be measured.
- 3.2.3 It is evident that additional work is needed in this area, as FAB Member States and their ANSPs need to work together to enhance cooperation in order to ensure that a Just Culture environment is maintained in all the States and in participating ANSPs. Establishing a Just Culture in all Performance Scheme States is an essential pre-requisite for any achievements for the European wide safety improvements and successful use of all Safety (K)PIs.
- 3.2.4 Even when FABs state that they have established a common FAB approach in certain areas for Just Culture improvements, detailed information that explains the basic elements in place to promote the application of Just Culture is usually not provided (i.e. local/FAB targets appear to be only set formally).
- 3.2.5 The PRB believes that this fragmented and non-coherent approach is the outcome of a lack of intention to establish a Just Culture Union-wide target. Leaving Just Culture implementation to FABs/States, i.e. setting target only at local level, obviously produced additional (unwanted) problems. An approach which should have allowed a maximum level of consistency of the Just Culture approach across Europe and which should have helped avoiding having difficulties to achieve results in other Safety (K)PIs is clearly needed in the future.

4 ENVIRONMENT

4.1 Union-wide level view

Average horizontal en-route flight efficiency	2015	2016	2017	2018	2019
KEP (horizontal en-route flight efficiency for the last filed flight plan trajectory)					4.10%
KEA (horizontal en-route flight efficiency for the actual trajectory)	2.89%	2.82%	2.74%	2.66%	2.60%

Table 9: Environment Union-wide targets for RP2 - Average horizontal en-route flight efficiency

- 4.1.1 The Union-wide targets for KEP and KEA have been adopted by the Network Manager. This will need to be validated once the final plan is made available.

4.2 FAB level view

FAB Name	2015		2016		2017		2018		2019	
	Ref. value	Adopted	Ref. value	Adopted	Ref. value	Adopted	Ref. value	Adopted	Ref. value	Adopted
Baltic FAB	1.50%	✓	1.47%	✓	1.44%	✓	1.40%	✓	1.36%	✓
Blue Med FAB	2.78%	✓	2.70%	✓	2.62%	✓	2.54%	✓	2.45%	✓
Danube FAB	1.55%	✓	1.50%	✓	1.46%	✓	1.41%	✓	1.37%	✓
DK-SE FAB	1.20%	✓	1.20%	✓	1.20%	✓	1.20%	✓	1.19%	✓
FAB CE	1.99%	✓	1.94%	✓	1.90%	✓	1.85%	✓	1.81%	✓
FABEC	3.30%	✓	3.22%	✓	3.14%	✓	3.05%	✓	2.96%	✓
NEFAB	1.35%	✓	1.32%	✓	1.29%	✓	1.26%	✓	1.22%	✓
SW FAB	3.85%	✓	3.71%	✓	3.57%	✓	3.43%	✓	3.28%	✓
UK-Ireland FAB	3.36%	✓	3.27%	✓	3.18%	✓	3.09%	✓	2.99%	✓

Table 10: Comparison between the reference values and the adopted targets for the environment KPI

- 4.2.1 All the FABs have adopted targets which correspond to the reference values.
- 4.2.2 It should be noted, though, that the Network Manager, which coordinates the pan-European approach to improving flight efficiency, highlighted in its latest ERNIP report (June 2014) that most FABs' contribution to the main projects included in the ERNIP would not, on their own, be enough to meet the FAB targets.
- 4.2.3 The Network Manager has highlighted the need to pay particular attention to interfaces between the FABs and the deployment of Free Route Airspace (FRA) initiatives.

5 CAPACITY

5.1 Union-wide level view for en-route ATFM delay

Average en-route air traffic flow management (ATFM) delay per flight	2015	2016	2017	2018	2019
Minutes	0.5	0.5	0.5	0.5	0.5

Table 11: Capacity Union-wide targets for RP2 – Average en-route air traffic flow management (ATFM) delay per flight

- 5.1.1 En-route capacity targets were established for each year of RP2. The Union-wide capacity target is consistent, standing at 0.5 minute of en-route ATFM delay for all causes.
- 5.1.2 The aggregation of the en-route capacity targets proposed by each FAB in the FAB Performance Plans is presented in the table below.

	2015	2016	2017	2018	2019
Aggregation of FAB targets	0.65	0.66	0.66	0.65	0.63
Difference with the Union-wide target	0.15	0.16	0.16	0.15	0.13
Cost of additional delay (€83/minute)	€116M	€127M	€129M	€124M	€110M

Table 12: Aggregation of the en-route capacity targets

- 5.1.3 The table above was calculated by aggregating the total delay minutes per FAB and dividing it by the SES traffic. The numbers of IFR flights are as reported in the STATFOR baseline 7-year forecast February 2014 for each FAB and for the SES area in RP2.
- 5.1.4 The figure of €83 per minute delay was used in setting the Union-wide target for capacity.
- 5.1.5 Clearly, Table 12 shows that the Union-wide capacity targets will not be met unless several FABs revise their performance targets.

5.2 Overview of arrival ATFM delay

- 5.2.1 With RP2, States were required to establish a national target on arrival ATFM delay. Most States have complied with the requirement and have established a quantitative national target on arrival ATFM delay.
- 5.2.2 Across all Performance Plans, these major observations can be made:
- target reference: several States established the target for all causes of ATFM delay, others only on the basis of ANS-related causes (i.e. CRSTMP causes⁴), and a third group set a target on both subsets (all causes and CRSTMP⁴ causes).
 - breakdown of national target level per airport: a variety of States did not provide the required breakdown of the national target for monitoring values on a local level. In some cases, only a qualitative statement or an aggregated value for airports with minor historical contributions to arrival ATFM delay were provided.

- associated incentive scheme: a variety of States did not establish an incentive scheme for the national target on arrival ATFM delay. Several States establishing an incentive scheme opted for the exemption clause under the charging Regulation restricting the incentive scheme to CRSTMP⁴ causes only.
- explanation and justification of the target: there is limited or no information and justification at all for the established targets. Noteworthy exemptions are the United Kingdom and Switzerland, which provided some information on expected benefits from the initiatives planned.

5.3 FAB level view

EN-ROUTE

- 5.3.1 A comparison between FAB targets as contained in the FAB Performance Plans and the respective FAB reference values for en-route capacity is shown in the table below.

FAB	2015		2016		2017		2018		2019	
FAB name	Target	Ref. value	Target	Ref. value	Target	Ref. value	Target	Ref. value	Target	Ref. value
Baltic FAB	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22
Blue Med FAB	0.35	0.17	0.36	0.18	0.37	0.18	0.37	0.18	0.38	0.18
Danube FAB	0.08	0.04	0.08	0.04	0.08	0.04	0.09	0.05	0.09	0.06
DK-SE FAB	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09
FAB CE	0.32	0.30	0.31	0.29	0.31	0.29	0.30	0.29	0.29	0.29
FABEC	0.48	0.43	0.49	0.42	0.48	0.42	0.47	0.42	0.43	0.43
NEFAB	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13
SW FAB	0.52	0.30	0.52	0.31	0.52	0.31	0.52	0.30	0.52	0.30
UK-Ireland FAB	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26

Table 13: Comparison between the FAB targets and the reference values for en-route capacity

- 5.3.2 The Baltic FAB, the DK-SE FAB and the NEFAB adopted FAB capacity targets that are consistent with the reference values for each year of RP2.
- 5.3.3 The UK-Ireland FAB adopted FAB capacity targets that are consistent with the FAB reference values for the years 2016-2019, although inconsistent with the year 2015.
- 5.3.4 The FAB CE and the FABEC adopted FAB capacity targets that are inconsistent with the reference values for the years 2015-2018, but which are consistent for the year 2019. Contrary to RP1, the en-route capacity targets are binding for each year of RP2, not just the final year.
- 5.3.5 The Blue Med, DANUBE and SW FABs adopted FAB capacity targets that are inconsistent with the respective reference values for each year of RP2. The capacity deficit from the Blue Med and SW FABs, in particular, are a significant cause for concern about the performance scheme's effectiveness in RP2.
- 5.3.6 The information contained in the Network Operations Plan (NOP) from June 2014

suggests that some FABs could lower their targets even further and make a more significant contribution to achieving the EU-wide target.

AIRPORT

5.3.7 The table below provides an overview of the FAB Performance Plans' assessment for airport capacity:

Performance Plan	National Targets	Breakdown per Airport	Incentive Scheme	Comment
Baltic FAB	Partially established	Incomplete	none	Limited justification, qualitative statements
Blue Med FAB	Partially established	complete	None	Limited justifications, for Greece and Cyprus no quantitative national target, Italy comments on incentive scheme at a later stage
DANUBE FAB	established	complete	established	Limited justification
DK-SE FAB	established	complete	none	Limited justification, comment about reviewing incentive scheme at later stage
FAB CE	established	complete	none	Limited justification
FABEC	Partially established	Not consistently provided across FAB	Not consistently established across FAB	Limited justification, no breakdown for France and Germany, incomplete breakdown for Belgium and the Netherlands, incentive scheme established for France, Germany, and Switzerland, incomplete/inconsistent for Belgium and the Netherlands, none for Luxembourg
NEFAB	established	Not consistently provided across FAB	established	Limited justification, breakdown per airport not provided for Norway; incentive scheme for Latvia with low activation threshold for bonuses
SW FAB	established	Not consistently provided across FAB	none	Partial justification of target / supporting evidence; Portugal provides an aggregated value for 7 airports (of 9 in total); Spain provides a case for the immaturity of the indicator and the non-establishment of an associated incentive scheme
UK-Ireland FAB	established	complete	none	Partial justification of target / supporting evidence for UK; inconsistency of list of airports subject to the performance Regulation for Ireland

Table 14: Overview of the Arrival ATFM Delay assessment

5.3.8 On average, the national targets are established at levels consistent with the observed performance over the past five years.

- The targets set by Denmark and Germany are worth highlighting. Indeed,

Denmark sets a national target at 0.11 minutes per arrival that represents a significantly improved value in comparison with the historical performance observed. The German targets for both all arrival ATFM causes and CRSTMP⁴ causes only is set at the lower bound of the observed performance over the last two years.

- Other States adopt a conservative approach. For example, Italy establishes a target with significant padding of the historical average (~2/3 minute per arrival), including associated buffers for each airport. The national target for the Netherlands has a similarly high range above the historical average and adds a reasonable buffer of 0.2 minute per arrival for the CRSTMP⁴ monitoring, while not specifying the share of delays expected from other airports.

5.4 Justification of FAB capacity targets

- 5.4.1 FABs were asked to provide justification whenever the FAB capacity targets for en-route and arrival ATFM delay were inconsistent with the respective FAB reference values.
- 5.4.2 An acceptable justification for (FAB X) not setting a capacity target consistent with the FAB reference value would be that an agreement had been made with a separate FAB (FAB Y) that a performance deficit in FAB X would be compensated for by a performance surplus in FAB Y.
- 5.4.3 For en-route, Table 13 shows that no FAB adopted a target that was more ambitious than the respective FAB reference value. Consequently, there is no capacity surplus which could be used by another FAB, while ensuring that the binding Union-wide target for en-route capacity is achieved.
- 5.4.4 Another acceptable justification for FAB X's not setting a FAB capacity target consistent with the FAB reference value would be when the FAB is unable to monitor the overall FAB's performance effectively and wishes to split it into mini-FABs with individual targets. In this case, it would necessitate the aggregation of the mini-FAB targets' being consistent with the overall FAB's reference value.
- 5.4.5 No FAB Performance Plan contained details of how any FAB had decided to break the FAB target down into local targets that remain consistent with the FAB's reference value.
- 5.4.6 For arrival ATFM delay, Table 14 presents the situation for the national target on arrival ATFM delay. There is a varying degree of justification provided. In particular, little information is available about the contribution of the different airports to the national target and how performance benefits would positively influence the national target.

6 COST-EFFICIENCY

Average Union-wide determined unit cost for en-route air navigation services	2015	2016	2017	2018	2019
Real terms (EUR ₂₀₀₉)	56,64	54,95	52,98	51,00	49,10

Table 15: Cost-efficiency Union-wide targets for RP2 – Average Union-wide determined unit cost for en-route air navigation services

6.1 Overview

- 6.1.1 States at an aggregated level have made some effort (-2.2% p.a.) to meet Union-wide en-route Determined Unit Costs (DUC) targets (-3.3% p.a.) in their RP2 Performance Plans. However:
- the 2014 aggregated Determined Costs (DCs, 6,242 M€₂₀₀₉) are materially higher than the 2013 DCs (6,038 M€₂₀₀₉) reported in the PRB Monitoring Report, which leads to an artificially high starting point for RP2;
 - the vast majority of the improvement in RP2 is expected to be obtained through traffic growth of +2.0% p.a., which is higher than STATFOR's February 2014 low traffic forecast (+1.2% p.a.), underpinning the Union-wide targets;
 - the DCs' trend shows very little ambition, at -0.3% p.a. on average over RP2. This is well below the assumption underpinning the Union-wide target of -2.1% p.a. and reflects the fact that no major organisational or functional restructuring has been planned by the FABs in RP2;
 - while the aggregated Performance Plan (PP) DUC level is similar or better than the Union-wide target for 2015 and 2016, there are material differences in the targets for 2017, 2018 and 2019. By 2019, the aggregated PP DUC is +4.4% higher than the Union-wide target. Over RP2, the total difference in costs between the aggregated PPs and the costs underpinning the Union-wide target is +511.2 M€₂₀₀₉.
- 6.1.2 For the five largest States, the aggregated PP trend masks strong contributions from Spain and the United Kingdom that are offset by poor contributions from France, Italy and Germany. For the smaller States, there are mixed levels of performance planned, with some showing much less ambition than others.
- 6.1.3 Annex IV of Regulation 390/2103, which sets the criteria for assessing Performance Plans, emphasises that performance in the previous reference period needs to be taken into account when assessing Performance Plans for the next reference period. The 2013 PRB Monitoring Report shows that cost-efficiency performance improvements have been achieved in the first two years of RP1 in the form of lower cost-bases. The PRB believes that these improvements need to be carried forward in RP2; Determined Costs are expected to reflect these lower costs in the form of lower user charges in RP2.
- 6.1.4 Although there are no Union-wide cost-efficiency targets set at Terminal ANS (TANS), the aggregated TANS DUC trends are very similar to en-route, both in the trends experienced in 2012 and 2013, and in the level of ambition planned for RP2. This reflects the fact that most ANSPs have similar terminal and en-route businesses, with common and joint costs and labour arrangements. Moreover, there is pressure from TANS airspace users at a local level, so ANSPs are hesitant to raise costs. These trends, along with a lack of a consistent TANS cost and TNSUs time series, and considering the better regulation principles – regulate only when and where necessary and at the appropriate level, may mean that a 'light touch'

approach to the terminal ANS cost-efficiency KPI is appropriate for the whole of RP2.

- 6.1.5 The PRB encourages those States which have been identified as not making an adequate contribution to Union-wide cost-efficiency targets and/or not complying with the criteria laid down in Annex IV of the performance Regulation, to review their Performance Plans so as to introduce more ambitious measures. This will enable the Union-wide targets to be met and contribute to the performance of the European ATM network overall.

6.2 Background

- 6.2.1 The SES legislation (Regulations (EU) No 390/2013 and 391/2013) supporting the performance scheme provides for RP2 Union-wide and local targets to be set for the cost-efficiency KPA. These targets cover en-route, and at local level only, terminal ANS provision. Furthermore, the criteria for assessing FAB Performance Plans have been expanded and this has been reflected in the updated approach to the PRB's assessment of Performance Plans.
- 6.2.2 It should be noted that in the RP2 Performance Plans submitted, all States adopted cost-efficiency targets at a local charging zone (CZ) level; none were FAB targets.

EN-ROUTE UNION-WIDE TARGETS FOR RP2

- 6.2.3 The Commission Implementing Decision of 11 March 2014 laid down en-route Union-wide targets and alert thresholds for RP2.
- 6.2.4 The traffic assumption applied to RP2 for setting the en-route Union-wide targets used the Low Case Scenario of STATFOR's September 2013 forecasts; they predicted an annual average growth in traffic of +1.2% over 2014-2019. In applying this forecast, the Commission recognised that the longer-term forecasting period in RP2 from 2014 to 2019 involves some uncertainty and States collectively expressed a degree of risk aversion.
- 6.2.5 The 2014 baseline value for the en-route Determined Unit Costs (DUC) is 58.09€₂₀₀₉ and the en-route cost-efficiency target is for a reduction in DUC by -3.3% per year. Given the traffic assumptions described above, it is estimated that the Determined Costs (DCs) underpinning the DUC targets will be reduced by -2.1% per annum on average in order for the DUC target reduction to be met; this is an indication of the level of ambition for RP2. Local targets should be consistent with, and adequately contribute to, these Union-wide performance targets.
- 6.2.6 For the SES (28+2) area there are 30 separate en-route Charging Zones (CZs) (no CZ for Luxembourg, but two for Spain), as shown in Figure 2 below.

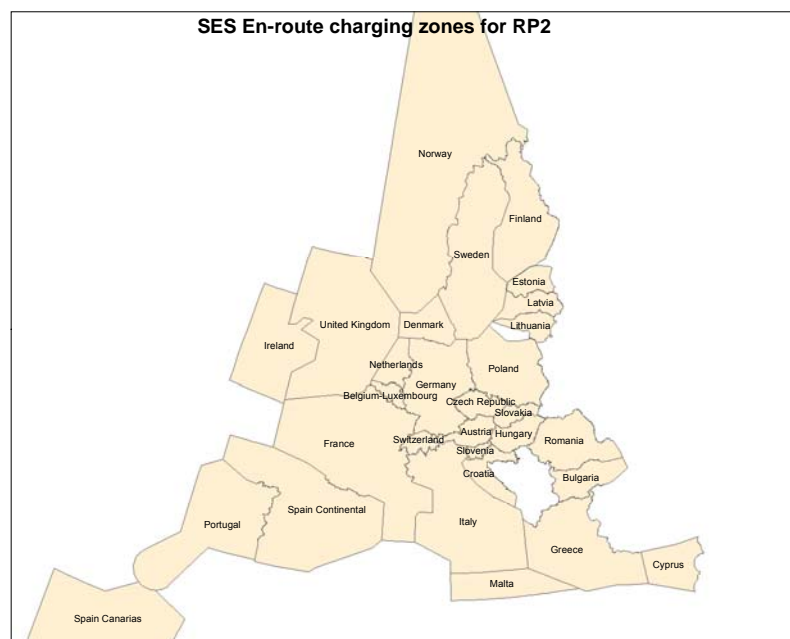
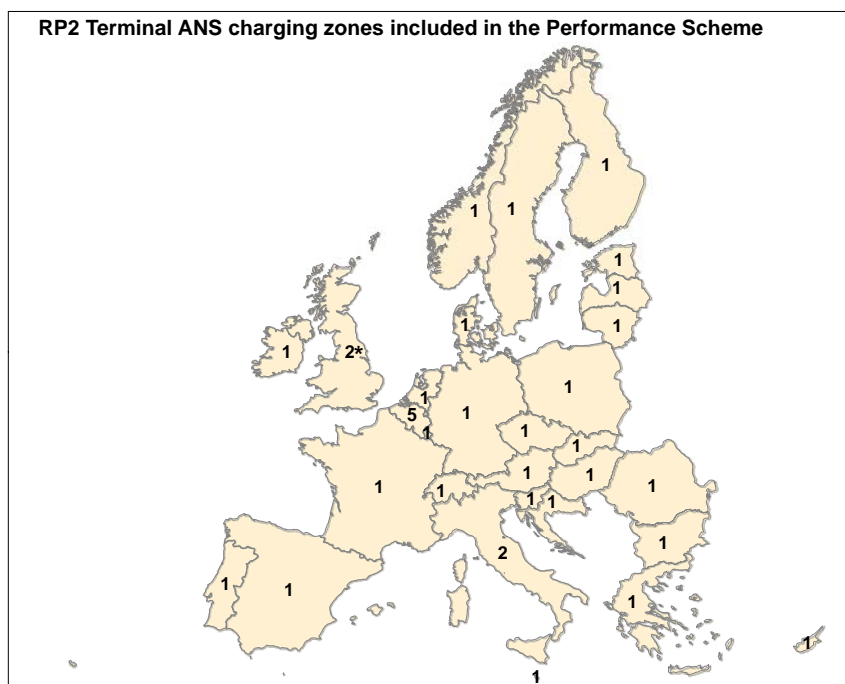


Figure 2: RP2 en-route charging zones

LOCAL TERMINAL ANS (TANS) TARGETS FOR RP2

- 6.2.7 No Union-wide TANS cost-efficiency target has been set for the time being. Subject to a future Commission decision, a Union-wide TANS cost-efficiency target may be proposed by the Commission in 2016 with effect from 2017.
- 6.2.8 Nevertheless, each State is required to set local TANS cost-efficiency targets covering every year of RP2 and these need to be consistent with the criteria laid down in Annex IV of the performance Regulation.
- 6.2.9 For the SES area (28+2 States), in RP2 there are 36 separate terminal charging zones (TCZs) as shown in Figure 3 below. This means that these 36 TCZs are subject to the performance scheme and therefore regulated with a local DUC target. Some States have decided to split their terminal charging into more than one charging zone: Belgium (5), Italy (2) and the United Kingdom (2). (Note: Based on the information provided in the UK-Ireland FAB RP2 Performance Plan, there are three TCZs in the UK. For the purposes of this Level 1 report, we only consider two of these (UK TCZ B and TCZ C), since no information is provided for TCZ A. The Performance Plan states that TCZ A is reserved for airports operating under Market Conditions, although no such airports have been formally declared as yet (as per Article 3 of Regulation (EU) N° 391/2013). It should also be noted that the qualification of the UK charging zone C (either en-route or terminal charging zone) is under review by the Commission and the UK but it does not impact the PRB conclusions).
- 6.2.10 The scope of airports included in a TCZ varies greatly from 60 airports in France to just one airport in several other States. The PRB notes that the pooling of TANS costs from several airports into a single TCZ allows for internal cross-subsidisation but on the other hand it does not tally with the principle of cost-relatedness of the terminal ANS charges at a specific airport.



Note: all UK airports are allocated to UK TCZ B. The second zone, UK TCZ C (London Approach), does not contain any airports, but is additionally applicable to the London subset of UK TCZ B airports.

Figure 3: RP2 TANS charging zones included in the performance scheme

ASSESSMENT OF COST-EFFICIENCY TARGETS

6.2.11 When undertaking the review of FAB Performance Plans and their State/charging zone level cost-efficiency targets, the PRB assessed all the key criteria required by the SES legislation in line with the criteria laid down in Annex IV of the performance Regulation. In substance, the various criteria cover these elements, arising from the submitted Performance Plans:

- traffic forecast assumptions and underlying economic assumptions;
- the DUC trends and levels;
- the cost of capital;
- the relevant information underpinning the application of cost exemptions from cost risk-sharing.

6.2.12 While each criterion is assessed by means of a test, Performance Plans are not required to pass all criteria in order to be deemed consistent with achieving the en-route Union-wide target and contributing to the performance of the European ATM network. The assessments have taken expert judgement and the specific local circumstances into consideration: the historical development of cost-efficiency performance and the potential for future improvement is used to provide a tailored assessment for each State and for each of its en-route and terminal CZs.

6.3 Outcome of the 2012 and 2013 PRB monitoring

EN-ROUTE COST-EFFICIENCY

6.3.1 2012 and 2013 were the first two years of RP1. Across SES States, en-route service units were lower than planned (-4.5% and -5.6%, respectively). The reduction in costs in 2012 and 2013, by 210 M€₂₀₀₉ (-3.4%) and 340 M€₂₀₀₉ (-5.4%), respectively, demonstrates the impact of the performance scheme and, at a network level, the desire to retain the expected level of return/profitability forecast by States/ANSPs. Details are available in the PRB Annual Monitoring Report 2013.

Actual 2013 unit cost vs. DUR in adopted Performance Plans						
SES States - Data from RP1 national performance plans						
	2009A	2010A	2011F	2012P	2013P	2014P
Real en-route costs (determined costs 2012-2014) - (in EUR2009)	6,247,946,111	6,067,472,645	6,164,114,436	6,258,122,341	6,318,609,442	6,304,761,101
Total en-route Service Units	98,066,532	100,498,232	104,906,871	108,359,738	111,461,030	114,964,695
Real en-route unit costs per Service Units - (in EUR2009)	63.71	60.37	58.76	57.75	56.69	54.84
SES States - Actual data from June 2014 Reporting Tables						
	2009A	2010A	2011A	2012A	2013A	2014A
Real en-route costs - (in EUR2009)	6,247,946,111	6,069,483,962	5,971,771,317	6,047,596,876	5,978,776,266	
Total en-route Service Units	98,066,532	100,486,950	105,044,077	103,501,763	105,171,670	
Real en-route unit costs per Service Units - (in EUR2009)	63.71	60.40	56.85	58.43	56.85	
Difference between Actuals and Planned in absolute value and in percentage (Actuals vs. NPP)						
				2012	2013	2014
Real en-route costs - (in EUR2009)	in value			-210,525,464	-339,833,176	
	in %			-3.4%	-5.4%	
Total en-route Service Units	in value			-4,857,975	-6,289,360	
	in %			-4.5%	-5.6%	
Real en-route unit costs per Service Units - (in EUR2009)	in value			0.68	0.16	
	in %			1.2%	0.3%	

Table 16: Union-wide results of 2012 and 2013 en-route cost-efficiency monitoring

6.3.2 The RP1 Union-wide target for the en-route Determined Unit Rate (DUR) for 2011-2014 was -3.5% p.a. and over 2009-2014 it was -3.2%. Figure 4 shows the targets adopted in the RP1 aggregated National Performance plans and the actual unit costs for the period 2009-2013. This shows that the 2011 actual value was -3.2% lower than was forecast in the RP1-adopted Performance Plans, but that, in 2012 and 2013 actual unit costs were slightly higher (as lower levels of traffic were not fully offset by lower costs).

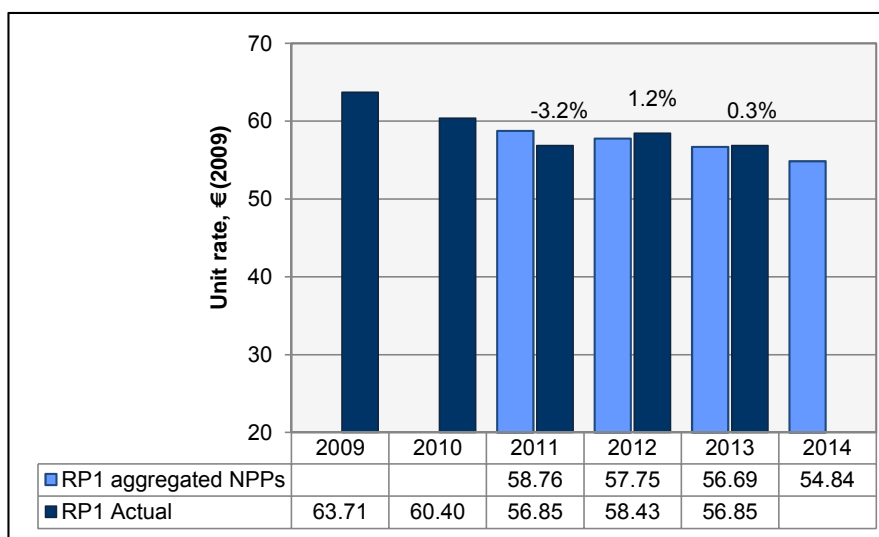


Figure 4: Union-wide RP1 cost-efficiency DUR (Adopted Performance plans, and Actual)

6.3.3 As illustrated in Figure 5, 22 States (en-route CZs) experienced service unit (TSU) volumes in 2013 that were lower than planned. Seven States had higher TSUs than planned. 24 of the 29 States were able to reduce their actual costs compared with

the National Performance plans; 14 of these States had a lower unit cost in 2013 than the DUR in the adopted Performance Plans. Eight States achieved lower unit costs despite lower than planned traffic volumes.

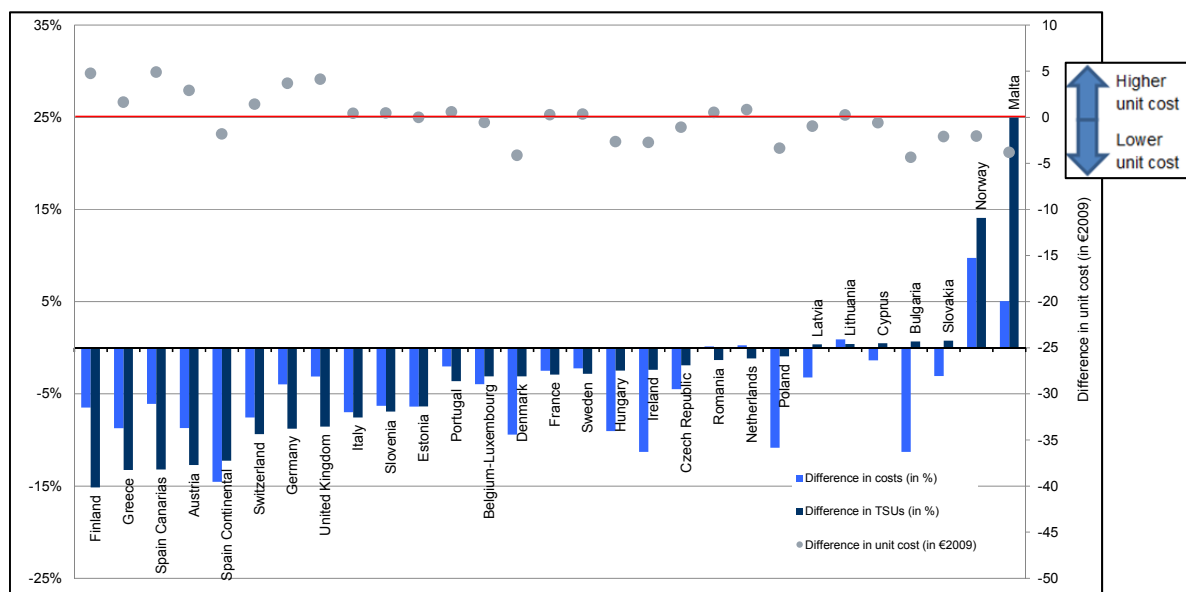


Figure 5: Charging zone results in the 2012 and 2013 monitoring

6.3.4 In a context of lower traffic (-5.6% in 2013 compared with the RP1 adopted PPs), the European ANS system has collectively adjusted its cost structure downwards in order to match lower revenues. Savings observed in the 2012 Monitoring report were also sustained in 2013. Based on this factual evidence, it is considered that the starting point for 2014, based on the EC 2010 Decision of 6,179 M€₂₀₀₉, is certainly within reach and, in fact, should not be particularly challenging.

6.3.5 Figure 6 shows that all entities have contributed to cost reductions as compared with the National Performance Plan forecasts. In absolute size (M €2009), the ATSPs contribute the largest value to the cost-reduction by entity, and staff costs and depreciation costs for costs by nature.

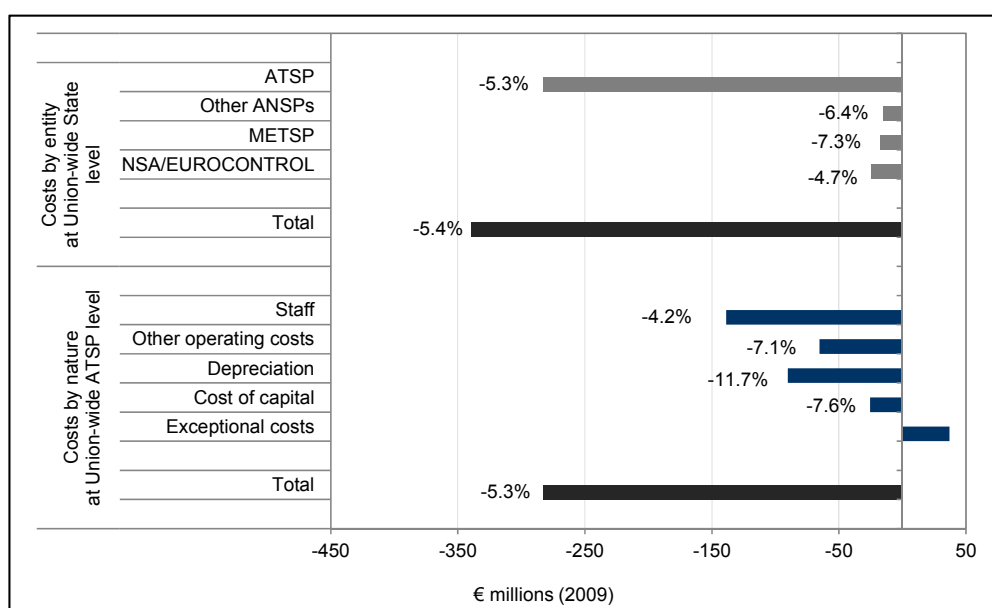


Figure 6: Breakdown of 2013 actual en-route costs compared with adopted PPs (by entity at Union-wide State level and by nature at Union-wide ATSP level)

- 6.3.6 As illustrated in Figure 7, in aggregate, the 2013 Monitoring Report finds that ATSPs' estimated economic surplus has been materially higher than expected in the National Performance plans, as a result of actions taken to manage costs.

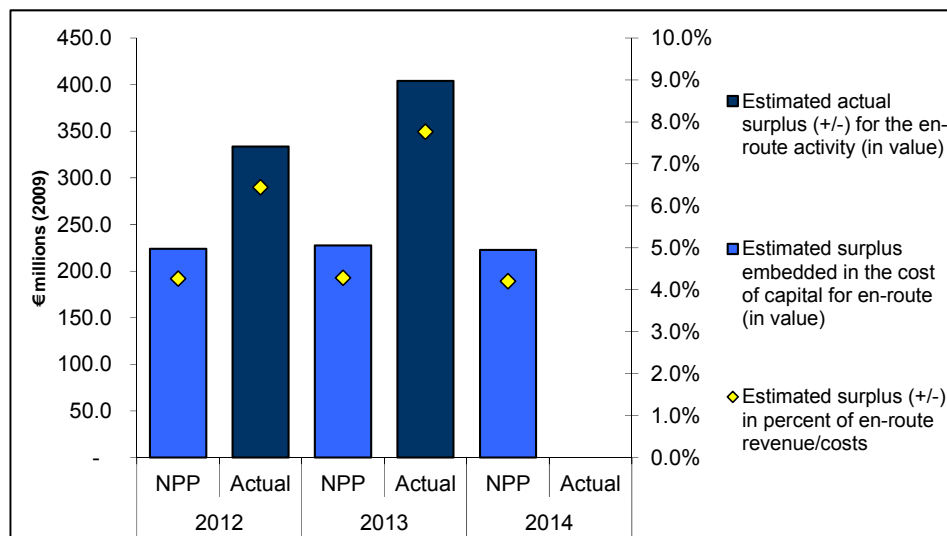


Figure 7: Estimated surplus for the RP1 en-route activity for the main ATSPs at Union-wide level

- 6.3.7 Overall, the performance improvements achieved through lower State/ANSP cost-bases observed in 2012 and 2013 should underpin the setting of the DCs' base for RP2 targets, with a share of the performance improvements used to set lower user charges.

TERMINAL ANS (TANS) COST-EFFICIENCY

SES States - Data from RP1 national performance plans		2012P	2013P	2014P
Real terminal ANS costs - (in EUR2009)		1,476,675,685	1,469,589,294	1,475,519,179
SES - Actual data from June 2013 Reporting Tables		2012A	2013A	2014A
Real terminal ANS costs - (in EUR2009)		1,395,162,571	1,342,961,968	
Difference between Actuals and Planned in absolute value and in percentage		2012	2013	2014
Real terminal ANS costs - (in EUR2009)	in value	-81,513,114	-126,627,325	
	in%	-5.5%	-8.6%	

Table 17: 2013 TANS actual costs vs. RP1 PP

- 6.3.8 SES-wide TANS costs in 2012 and 2013 were -5.5% (-81.5 M€₂₀₀₉) and -8.6% (-126.6 M€₂₀₀₉) lower than forecast in the adopted PPs. For both 2012 and 2013, it is noted that the (%) **costs reductions are actually larger for TANS than for en-route** (see §6.3.1 above). This was driven by savings achieved in 22 States (see Figure 8 below).

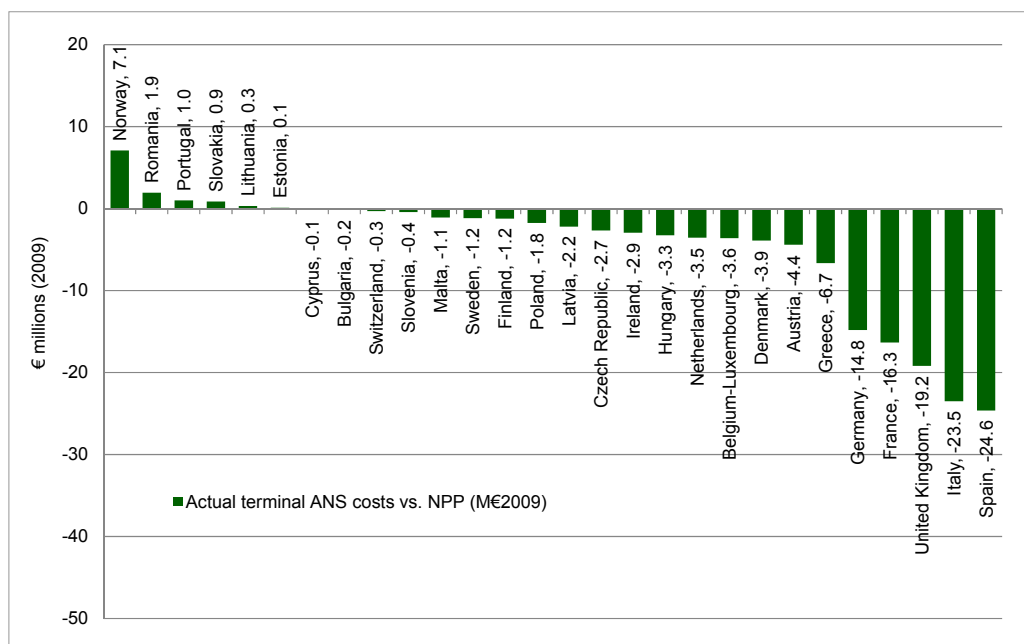


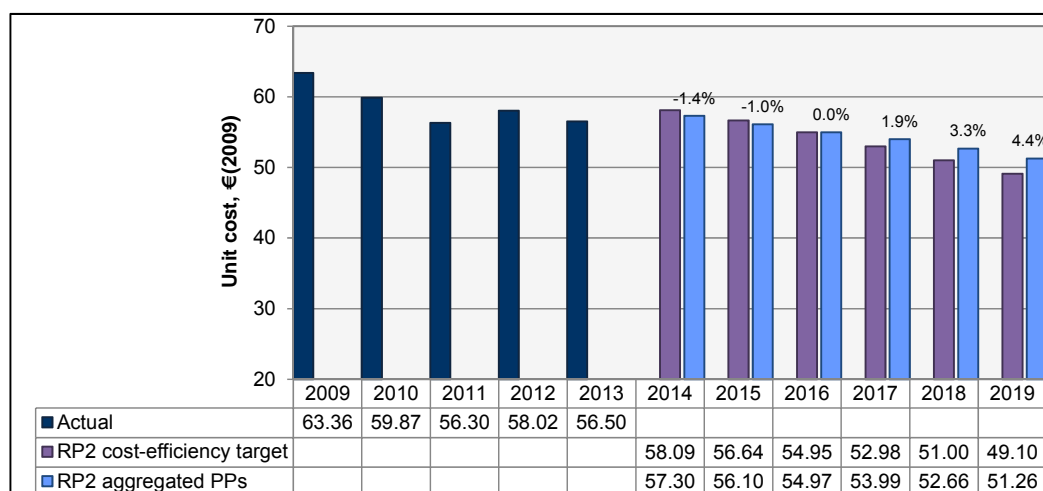
Figure 8: 2013 TANS actual costs vs. RP1 PP at State level

6.3.9 Due to the non-uniform application of the formula for calculating the terminal service units (TNSUs) and terminal navigation costs (TNC) before 2015, it is not possible to provide an aggregation or consolidation of a SES-wide unit cost for TANS services (but this is the case for RP2 – see Section 6.6 below).

6.4 Aggregated results of Union-wide consolidation of RP2 FAB Performance Plans for en-route charging zones

6.4.1 The aggregated en-route DUC at Union-wide level for a particular year is calculated as the sum of the individual en-route charging zone DCs for each Performance Plan, divided by the sum of the total en-route service units (TSUs).

EN-ROUTE DETERMINED UNIT COSTS TRENDS



Note: the DUC given for each year is consistent with the DUC definition used for RP2, which does not include VFR costs but does include costs and traffic for Croatia

Figure 9: Union-wide en-route DUC trends (consistent RP2 series)

6.4.2 Figure 9 shows the Union-wide cost efficiency targets, the aggregated DUC from the RP2 Performance plans and the actual unit costs for past years. These initial observations can be made:

- the 2009-2019 trend shown above covers a ten-year period, at the start of which the unit costs were at their highest level (economic recession combined with, at system level, a significant drop in traffic and a relative inability to adjust costs downwards);
- the low level of actual unit cost observed in 2011 is principally due to a one-off reduction of EUROCONTROL costs;
- the average annual DUC trend (compound annual growth rate-CAGR) over 2011-2019 (i.e. covering both RP1 and RP2) is -1.2%. According to current plans, the DUC in 2019 will be -9.0% lower than in 2011;
- the DUC CAGR over 2014-2019 (covering RP2) is -2.2%. The DUC in 2019 will be +4.4% higher than the Union-wide target. However, this trend is based on an assumed starting point for 2014 that relies on the updates provided by States for 2014. Not all States updated their 2014 costs and traffic forecasts from those determined for 2014 in RP1: out of 29 en-route CZs in RP1, four (Austria, Italy, Romania and Slovakia) did not give updates. In the context of lower than planned traffic, it would be expected that total en-route costs would also be lower than planned in 2014;
- the DUC starting point of the aggregate RP2 PPs in 2014 is -1.4% lower than the one underpinning the Union-wide RP2 DUC target. This is the result of similar costs between the RP2 PPs and the March 2014 EC Decision (6,242 M€₂₀₀₉), but higher traffic in the PPs than appeared in the EC Decision;
- for the first two years of RP2, the DUC is lower (-1.0% in 2015) or equivalent (in 2016) to the Union-wide target;
- however, from 2017 the DUC diverges from the Union-wide target, expanding from +1.9% in 2017 to +4.4% in 2019. This coincides with the more ambitious reductions in DCs from 2017 (-1.5% for 2015-2016; -2.5% for 2017-2019) in the assumptions underpinning the Union-wide DUC targets.

6.4.3 Table 18 below shows the difference in total costs that result from the deviations between the planned and Union-wide DUC target in each year of RP2. Over RP2, the total difference in costs between aggregated PPs and the Union-wide target is +511.2 M€₂₀₀₉.

	2015	2016	2017	2018	2019	RP2 Total
Difference between target and PP DUC (%)	-1.0%	0.0%	1.9%	3.3%	4.4%	-
Difference in total costs (M€ ₂₀₀₉)	-60.8	1.4	116.3	195.7	258.6	511.2

Table 18: Difference between RP2 PPs aggregated DUC and Union-wide target, with resulting difference in total costs for RP2

6.4.4 Overall, a number of States have made an effort to meet Union-wide targets, especially in the early years of RP2. However, as discussed below, there remains a gap in 2017-2019, mainly because of a small number of States. Clearly, there are no indications from the FAB Performance Plans that, in the second part of RP2, there will be a gradual implementation of structural, organisational, operational and technological changes that will drive the performance improvements commensurate with the level of ambition underpinning the Union-wide targets.

6.4.5 Table 19 shows the difference between the DUC target and the aggregated PPs

had all States adopted the STATFOR (Feb 2014) base case traffic scenario. In this situation, the DUC would be lower than the Union-wide target in all the years and the total difference in costs between the aggregated PPs and the Union-wide target would be -566.8 M€₂₀₀₉.

Scenario where all States use STATFOR base case	2015	2016	2017	2018	2019	RP2 Total
Difference between target and PP DUC (%)	-2.7%	-2.7%	-1.7%	-1.0%	-0.8%	-
Difference in total costs (M€ ₂₀₀₉)	-171.4	-176.3	-107.9	-63.5	-47.7	-566.8

Table 19: Difference between RP2 PPs aggregated DUC (assuming STATFOR base case for all States) and Union-wide target, with the resulting difference in total costs for RP2

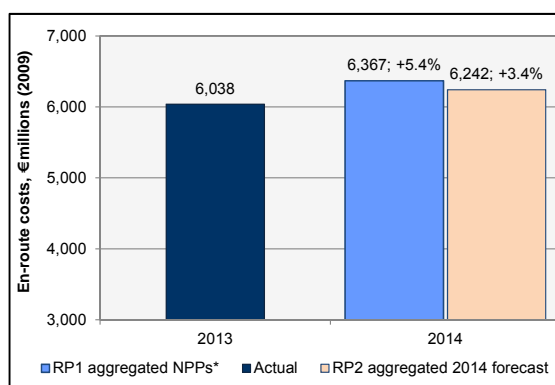
EN-ROUTE DETERMINED COSTS TRENDS

6.4.6 Table 20 shows the DCs included in the EC Decision on the Union-wide targets and the aggregated DCs from the Performance Plans.

Determined costs (€ ₂₀₀₉ Million)	2011A	2012A	2013A	2014F	2015D	2016D	2017D	2018D	2019D	CAGR 2011-2019	CAGR 2014-2019
DC in EC Decision	-	-	-	6,242	6,148	6,056	5,904	5,757	5,613	-	-2.1%
Aggregated DC from PPs	6,006	6,102	6,038	6,242	6,272	6,258	6,250	6,206	6,159	0.3%	-0.3%
Difference between PPs and EC Decision (€M)	-	-	-	0.3	123.9	202.1	345.6	449.4	546.0	-	-
Difference between PPs and EC Decision (%)	-	-	-	0.0%	2.0%	3.3%	5.9%	7.8%	9.7%	-	-

Table 20: Union-wide en-route DCs trends (consistent RP2 series)

6.4.7 The trend in aggregated DCs planned by the States is relatively flat across RP2 and over 2011-2019. The small annual decrease of -0.3% over 2014-2019 is mainly the result of some States not having revised their 2014 cost-bases, and for some of those that have, a material cost escalation between 2013 actual and 2014 projected. Figure 10 below shows the actual DCs for 2013, alongside those determined for 2014 in RP1 and the revised DCs for 2014 submitted for RP2. The revised DCs are +3.4% higher than the actuals in 2013, as compared with +5.4% that were planned in RP1.



* RP1 aggregated National Performance plans adjusted for VFR and Croatia, consistent with RP2

Figure 10: Union-wide en-route actual costs 2013 and DCs for 2014

6.4.8 Over 2011-2019, the primary contributors (in absolute amounts) to reduced DCs are

Spain and the United Kingdom. Eight other States (with smaller cost-bases) also contributed to reduced costs. These reductions are countered by the remaining States, including the remaining States in the “largest five”, i.e. France, Germany and Italy.

- 6.4.9 The flat profile of the DCs indicates that few structural and/or organisational changes have been planned to take place in RP2 in terms of service delivery. There are no apparent genuine cost-efficiency savings to be made from FAB synergies and no significant improvements from technological advances and associated CAPEX.

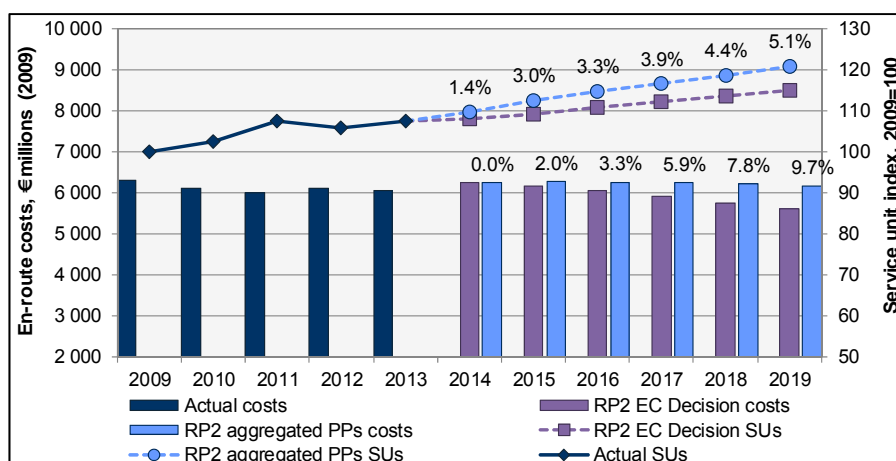
EN-ROUTE TOTAL SERVICE UNIT (TSU) FORECASTS

- 6.4.10 Table 21 shows the difference between en-route service unit forecasts included in the March 2014 EC Decision in relation to the RP2 cost-efficiency Union-wide targets and the aggregated service unit forecasts from the RP2 Performance Plans.

En-route service units ('000s)	2011A	2012A	2013A	2014F	2015D	2016D	2017D	2018D	2019D	CAGR 2011-2019	CAGR 2014-2019
SUs in EC Decision	-	-	-	107,454	108,541	110,196	111,436	112,884	114,305	-	1.2%
Aggregate SUs from PPs	106,678	105,180	106,866	108,944	111,802	113,849	115,763	117,857	120,159	1.5%	2.0%
Difference %	-	-	-	1.4%	3.0%	3.3%	3.9%	4.4%	5.1%	-	-

Table 21: Union-wide en-route traffic (TSUs) forecast trends

- 6.4.11 The EC Decision applied the low case scenario of STATFOR's September 2013 forecasts, which indicates an average annual growth in traffic of +1.2% over 2014-2019.
- 6.4.12 Collectively, the States have used traffic forecasts that are higher than those used in the EC Decision in their Performance Plans, with an annual average growth, Union-wide, of +2.0% forecast over 2014-2019. This can partly be attributed to the February 2014 update of STATFOR's forecasts, which are marginally higher (+1.5% in 2019) than those published in September 2013. More generally, most States have used forecasts that range between the STATFOR low and base cases, though some variation exists, as is summarised later in Table 21, and in doing so, the latter States have taken on relatively higher risk.
- 6.4.13 Overall, as shown in Figure 11, the annual average reduction in the DUC of -2.2% has been achieved through limited reductions in DCs and a more optimistic growth in TSU than that assumed in the EC Decision. However, this higher TSU growth is not enough to compensate for the relatively flat profile in DCs, resulting in the DUC target's not being achieved by the end of RP2. The percentage values presented in Figure 11 below present the gap for each year between the EC Decision and aggregated RP2 PPs for traffic and DCs respectively. By 2019, SUs are forecast to be +5.1% higher than those in the EC Decision, however this is more than offset by DCs being +9.7% higher, resulting in the 2019 DUC being +4.4% higher. As noted in §6.4.5, the results in terms of DUC levels would significantly differ if States had adopted the STATFOR (Feb 2014) base case TSU scenario.



Note: the DC given for each year is consistent with the DC definition used for RP2, which does not include VFR costs but does include costs and traffic for Croatia

Figure 11: Union-wide en-route DCs and traffic (TSUs) trends

6.5 High level analysis at en-route State/CZ level

- 6.5.1 Although the profile of the Union-wide aggregated DCs is relatively flat, at the en-route charging zone level there is considerable variation in the planned growth (reduction) in DCs. Similarly, there is some variation between charging zones in the traffic scenarios adopted in the Performance Plans. Evaluating whether each FAB/State CZ has provided an adequate contribution to the DUC target is the result of a comprehensive and detailed assessment, which is provided in the Level 2 FAB assessment reports.
- 6.5.2 Figure 12 and Figure 13 below illustrate the annual average change in DCs and TSUs planned by States in the periods 2011-2019 and 2014-2019. It is important to reflect on both periods, given that not all States have revised their 2014 cost-bases from those planned for RP1, and the potential for manipulating the 2014 starting point with respect to the RP2 trends exists, even for those that have provided updates for 2014.
- 6.5.3 From Figure 12 and Figure 13 below, it is clear that most States are relying on growth in TSU to deliver reductions in the DUC. Only a limited number of States have planned DCs reductions over 2011-2019, including Spain and the United Kingdom.

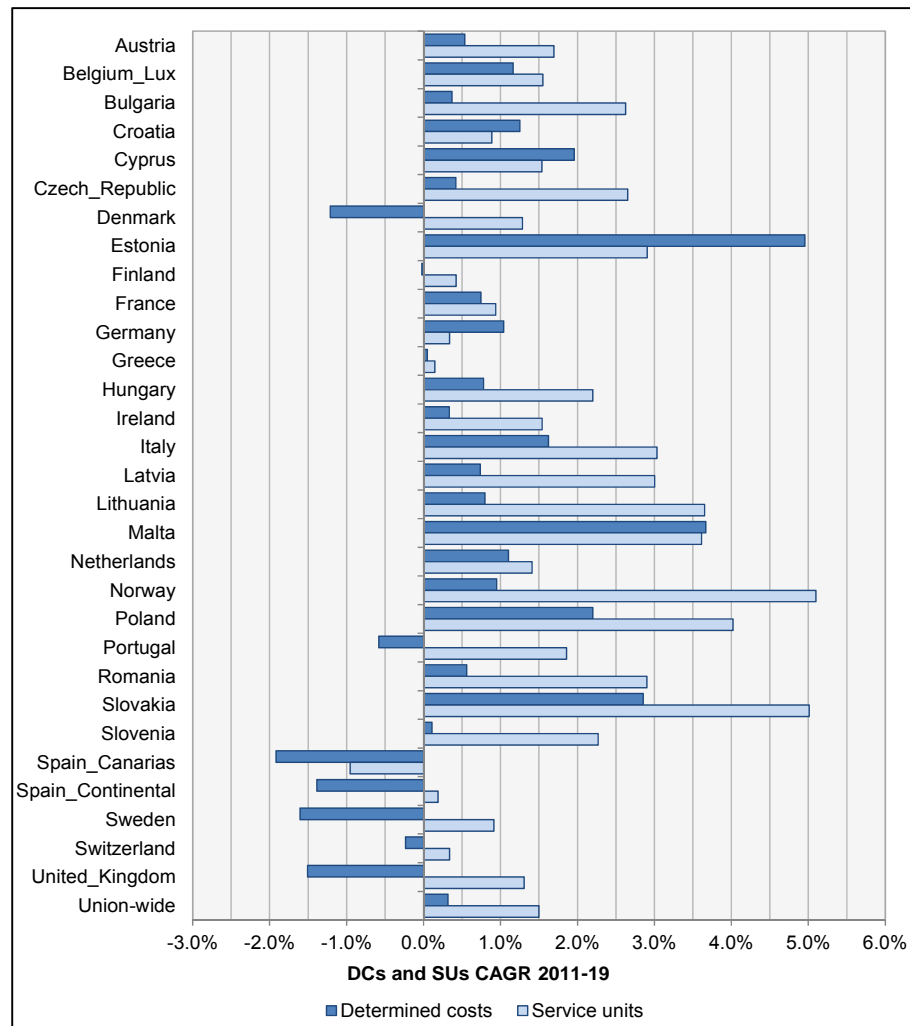


Figure 12: Changes in en-route DCs and SUs 2011-2019

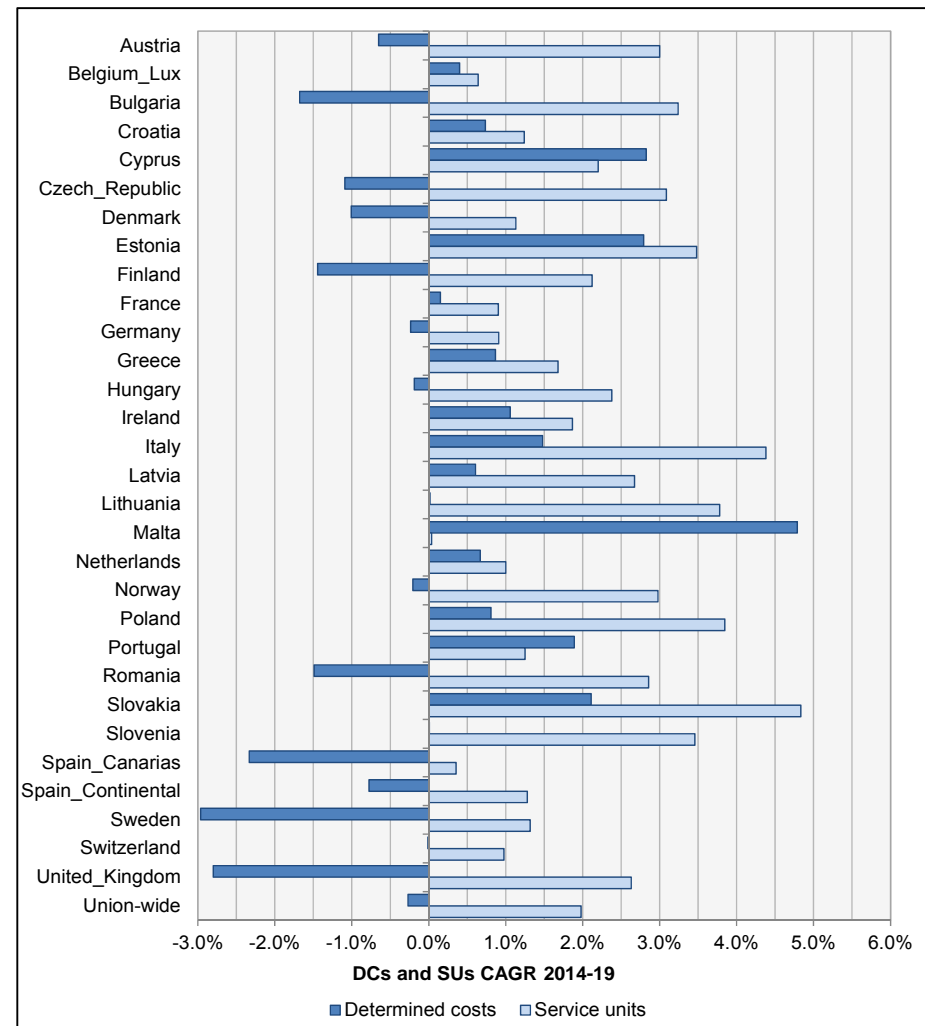


Figure 13: Changes in en-route DCs and SUs 2014-2019

- 6.5.4 Figure 14, shows the average annual change in DCs in terms of value (€₂₀₀₉) for each en-route CZ over 2011-2019 and 2014-2019. The figure highlights the prominence of the “largest five” (Italy, Germany, France, Spain and the United Kingdom) in driving the Union-wide cost-base, although in aggregate, the remaining States also contribute substantially.
- 6.5.5 Over 2011-2019, the cost reductions achieved by the United Kingdom, Spain, Sweden, Denmark, Portugal and Switzerland (towards the bottom of the figure) are outweighed by the increases in the remaining States; this is driven in particular by the increases seen in Italy, Germany and France. In contrast, over 2014-2019 the picture is more mixed and in the absence of large increases in France and Germany over this period, the reductions forecast by the United Kingdom, Spain and Sweden drive the reductions seen at Union-wide level.

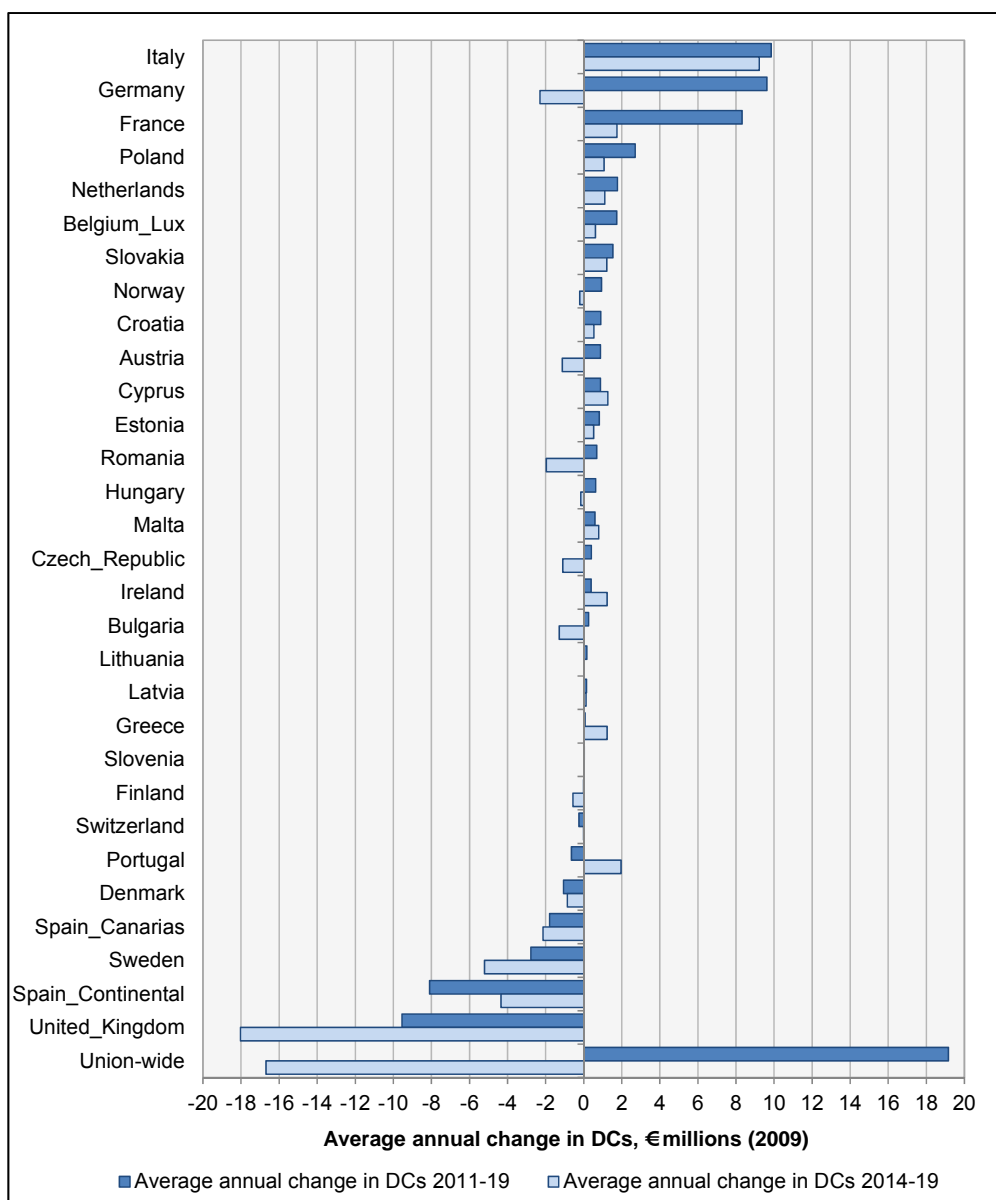


Figure 14: Average annual changes in DCs in value, 2011-19 and 2014-19

- 6.5.6 Table 22 shows the traffic forecasts used by each State, with colour coding indicating how they relate to the STATFOR February 2014 low, base and high scenarios.

En-route service units growth (%)	2015	2016	2017	2018	2019
Austria	3.7%	3.1%	2.6%	2.6%	3.0%
Belgium/Luxembourg	-2.1%	1.1%	1.2%	1.5%	1.6%
Bulgaria	2.4%	3.3%	3.4%	3.6%	3.5%
Croatia	0.2%	1.3%	1.4%	1.5%	1.9%
Cyprus	2.2%	2.2%	2.2%	2.2%	2.2%
Czech Republic	3.3%	3.4%	3.0%	2.6%	3.1%
Denmark	0.9%	1.2%	1.1%	1.2%	1.2%
Estonia	3.8%	3.5%	3.2%	3.4%	3.5%
Finland	2.2%	2.4%	1.8%	1.9%	2.1%
France	1.4%	0.6%	0.6%	0.9%	1.0%
Germany	1.1%	0.8%	0.8%	0.9%	1.0%
Greece	0.0%	2.0%	2.0%	2.0%	2.4%
Hungary	3.2%	2.1%	2.1%	2.1%	2.4%
Ireland	2.5%	1.7%	1.6%	1.7%	1.8%
Italy	5.1%	4.8%	4.0%	3.9%	4.1%
Latvia	2.8%	2.7%	2.4%	2.7%	2.7%
Lithuania	5.6%	3.6%	3.2%	3.2%	3.3%
Malta	-9.2%	2.0%	2.1%	3.0%	2.9%
Netherlands	1.6%	0.7%	0.7%	1.0%	1.0%
Norway	3.9%	3.5%	3.0%	2.5%	2.0%
Poland	4.6%	4.2%	3.4%	3.4%	3.7%
Portugal	3.8%	0.4%	0.6%	0.8%	0.8%
Romania	4.0%	2.6%	2.5%	2.3%	2.9%
Slovakia	6.0%	4.8%	4.4%	4.0%	4.9%
Slovenia	5.0%	3.4%	2.9%	2.7%	3.3%
Spain Canarias	1.0%	-0.2%	0.2%	0.4%	0.4%
Spain Continental	2.4%	0.6%	0.9%	1.2%	1.2%
Sweden	1.5%	1.4%	1.2%	1.3%	1.2%
Switzerland	1.3%	0.7%	0.8%	1.0%	1.1%
United Kingdom	6.6%	1.9%	1.4%	1.7%	1.7%

Key:

STATFOR High
Between STATFOR Base-High
STATFOR Base
Between STATFOR Base-Low
STATFOR Low
Very Low (outside STATFOR range)

Table 22: Traffic forecast growth by State with alignment to STATFOR forecasts

- 6.5.7 Ten States use forecasts aligned with the STATFOR February 2014 base case (in yellow). Although this is STATFOR's view of the most likely outcome, by using the base case, these States are taking on more risk than States using the low case (light blue), as the resulting lower DUC will leave them more exposed to under-recoveries if outturn traffic is lower than planned.
- 6.5.8 Only two States – Italy and Norway – use forecasts that are higher than the STATFOR base case. The 17 States using the STATFOR low case (or below) forecasts have mirrored the March 2014 EC Decision and provided themselves with greater insurance and lower risk of under-achievement, and a higher potential for outperformance (i.e. revenues higher than planned).
- 6.5.9 Some States (e.g. Italy, Norway) have used their own forecasts, based on local trends and their understanding of market trends.
- 6.5.10 The latest STATFOR May 2014 forecast is slightly more optimistic than the February 2014 and September 2013 forecasts, and in the first eight months of 2014 across the RP1 SES States, actual traffic (TSU) was +4.2% higher than in the same period in 2013 (January-August data). This, together with a better economic outlook, provides some context against a very conservative choice (i.e. low case) of forecast made by States.
- 6.5.11 Besides changes and trends in en-route DCs and DUCs, it is also important to consider the level of DUCs achieved. Figure 15 below maps the en-route DUC targets planned to be achieved at the end of RP2 (in 2019), noting that the Union-wide average from the aggregation of the PPs is 51.26 €₂₀₀₉ and the Union-wide target is 49.10 €₂₀₀₉ (see Figure 9 above).

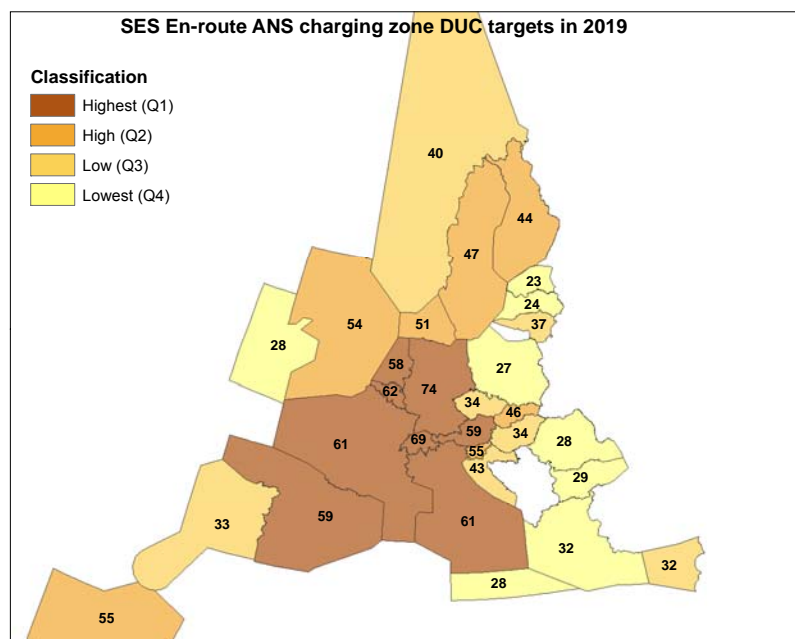


Figure 15: Level of en-route DUC targets planned to be achieved in 2019

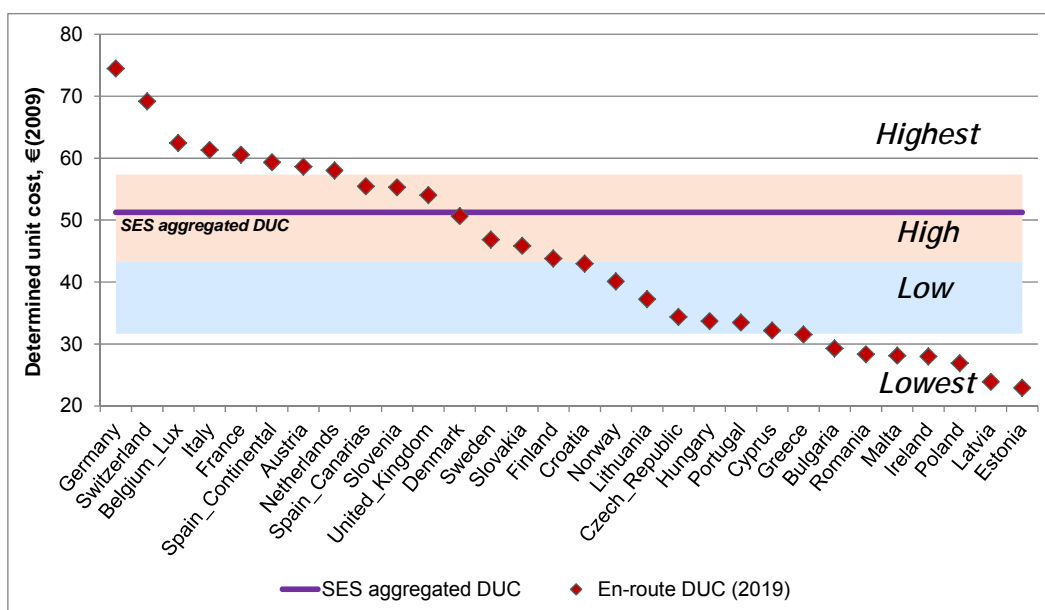


Figure 16: Distribution of en-route DUC targets planned to be achieved in 2019, shown against quartiles (Lowest, Low, High, Highest) and the weighted average SES aggregated DUC

- 6.5.12 As seen in Figure 16 above, there is considerable variation in the level of en-route DUC planned by States for 2019, with a factor of more than three between the lowest (Estonia 22.92 €₂₀₀₉) and the highest (Germany 74.44 €₂₀₀₉). This reflects the States' different operational and economic environments, and also the different levels of performance that are planned to be achieved.
- 6.5.13 Figure 16 also shows the distribution's quartiles (labelled lowest, low, high and highest) alongside the level of the Union-wide SES aggregated DUC in 2019 (51.26 €₂₀₀₉). This lies in the high quartile, impacted significantly by the levels planned by the five largest States (Germany, Italy, France, Spain and the UK).

- 6.5.14 Figure 17 shows the changes in en-route DCs and SUs over 2011-2019 by CZ, where the size of each circle relates to the proportion of Union-wide RP2 costs that each State's en-route CZ represents. The combination of these factors indicates the changes in en-route DUC for each CZ, along with the size of the contribution made to the Union-wide target.

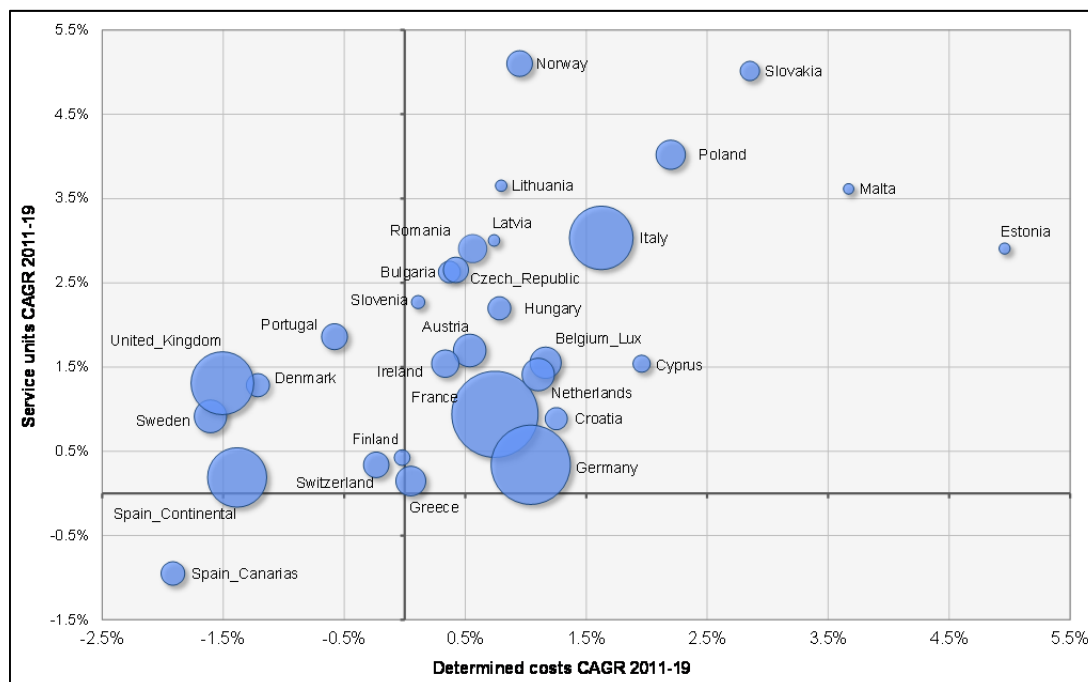


Figure 17: Changes in en-route DCs and SUs (2011-2019) by Charging Zone

- 6.5.15 As seen before, most States are relying on traffic growth rather than cost reduction in order to achieve lower DUCs. Notably, only two out of the “five largest” States are planning reductions in DCs, while the SU growth assumed by Germany does not fully compensate for the accompanying growth in DCs.

FAB LEVEL ANALYSIS (EN-ROUTE)

- 6.5.16 The Performance Plans were submitted at the Functional Airspace Block (FAB) level, as requested by the performance Regulation. However, local en-route cost-efficiency targets were set at the en-route charging zone level. In order to have a FAB view of cost-efficiency, this section consolidates the local cost-efficiency targets at FAB level.
- 6.5.17 The analysis shows that all FABs, apart from the FABEC, make a contribution to the Union-wide DUC cost-efficiency target over 2011-2019 and over 2014-2019 that is the case for all nine FABs (see the yellow diamonds in Figure 18 and Figure 19 below). In RP2, out of the nine FABs, the DANUBE, Denmark-Sweden and UK-Ireland FABs have the more ambitious DC reduction plans. While the Baltic and Blue Med FABs increase their DCs over RP2, the accompanying forecast strong growth in traffic allows them to contribute to the DUC cost-efficiency target as well. The remaining FABs: the FAB CE, FABEC, NEFAB and SW forecast small percentage changes in DCs alongside traffic growth, resulting in forecast DUC reductions.

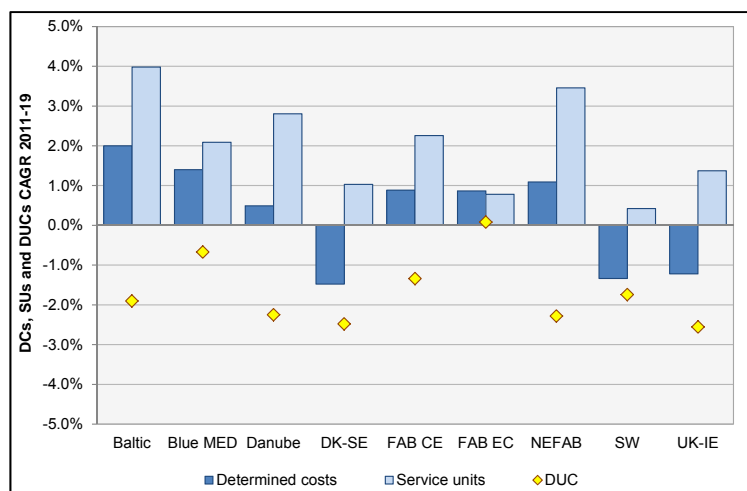


Figure 18: Changes in en-route DCs, SUs and DUCs at FAB level, 2011-2019

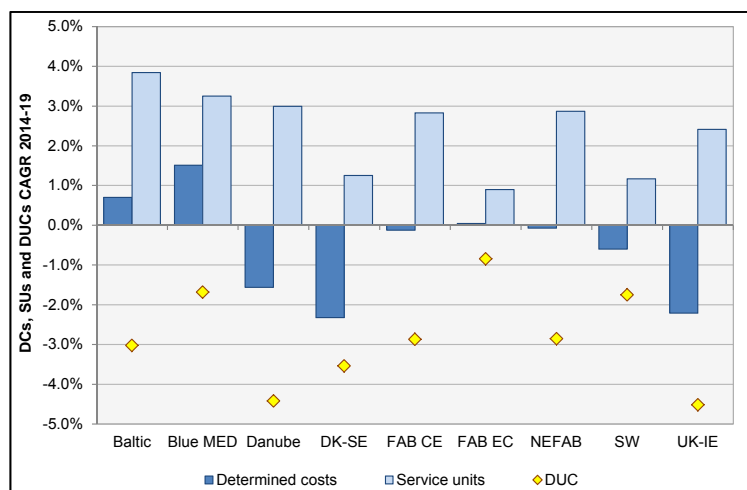


Figure 19: Changes in en-route DCs, SUs and DUCs at FAB level, 2014-2019

6.6 Aggregated results of SES consolidation of RP2 FAB Performance Plans for terminal charging zones

- 6.6.1 There are no Union-wide targets set for TANS, however States are expected to introduce local targets which will contribute to the improvement of the ATM network. The Commission will reconsider the case for a Union-wide TANS cost-efficiency target ahead of a potential 2017 implementation.
- 6.6.2 The requirements of the charging Regulation mean that by 2015 there will be a common Terminal Service Unit formula across all States. Further changes to the TCZs and airports covered by the Performance Plans have been made (see Figure 20). In these 36 regulated TCZs, 48 airports have been exempted from traffic risk-sharing. States have declared a larger number of TCZs than RP1, however the 'above 70,000 IFR movements' rule means that fewer airports are covered than was the case in RP1. Despite this, the RP2 TCZs still cover more than 80.4% of total Terminal Navigation SUs (TNSU) throughout the SES States. For the year 2015, the 36 regulated TCZs comprise 177 airports. The largest TCZs in terms of number of airports are France (61), Germany (16), Poland (14) and the UK (9).

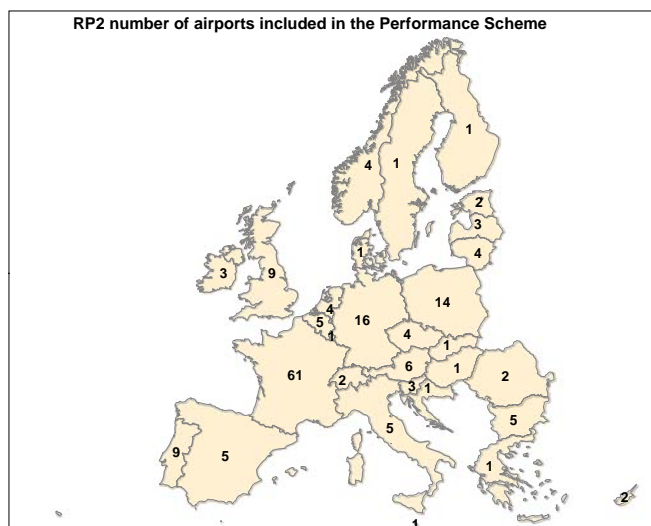


Figure 20: RP2 number of airports included in the performance scheme

STATE TANS COST-EFFICIENCY PLANS

Terminal Determined Unit Cost trends

- 6.6.3 Table 23 and Figure 21 show the trend in submitted RP2 aggregated PPs for the regulated TCZs. In a similar way to en-route, Terminal DCs are expected to be broadly flat between 2015 and 2019, with reductions in the Terminal DUC resulting from traffic growth. Comparisons with pre-2015 data are not given, due to changes in the SU formulas and composition and numbers of TCZs by State.

Terminal determined costs (€2009 Million)	2015	2016	2017	2018	2019	CAGR 2015-2019
Aggregated DCs from PPs	1,274	1,272	1,271	1,262	1,260	-0.3%

Table 23: SES aggregated terminal ANS DCs trends

- 6.6.4 Aggregated TCZ DCs in 2019 (1,260 M€₂₀₀₉) are forecast to comprise 17% of total DCs (en-route plus terminal CZs) submitted in the RP2 PPs (7,420 M€₂₀₀₉).
- 6.6.5 Between 2015 and 2019, the terminal DUC is expected to fall from 174.93 €₂₀₀₉ to 159.92 €₂₀₀₉, a cumulative reduction of -8.6%, which is identical to the -8.6% reduction predicted for the en-route DUC (€₂₀₀₉) in the same period.

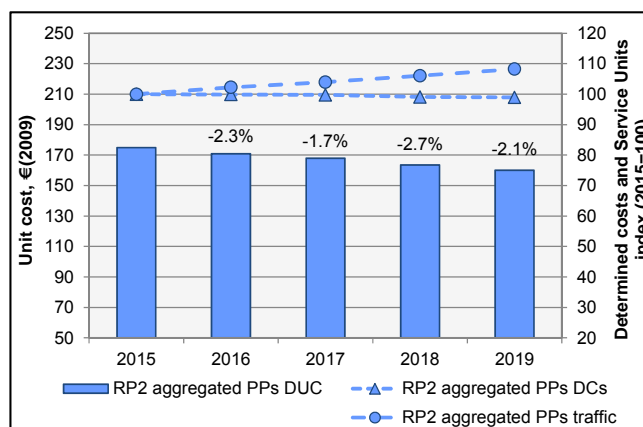


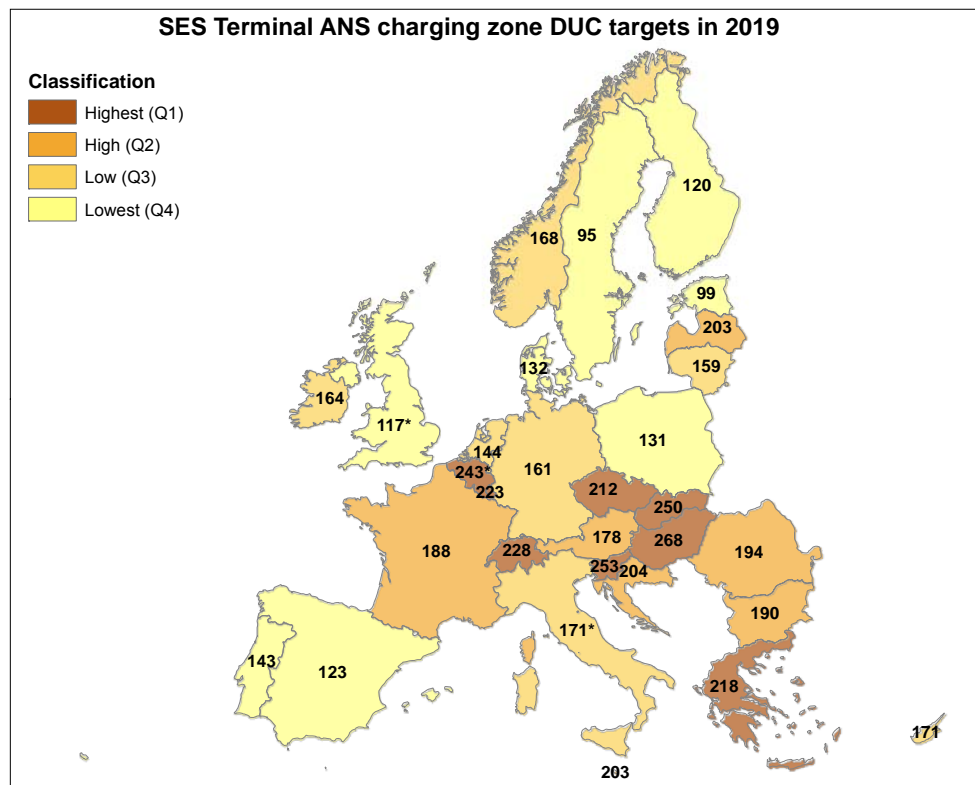
Figure 21: SES aggregated terminal DUCs, with terminal DCs and traffic trends

Traffic forecasts

6.6.6 Table 24 shows that the aggregated Terminal SUs (TNSU) from RP2 PPs are higher than STATFOR's February 2014 TNSU forecast, with Performance Plans forecasting annual average growth between 2015 and 2019 of +2.0% compared with the +1.3% seen in STATFOR's February 2014 low case forecast.

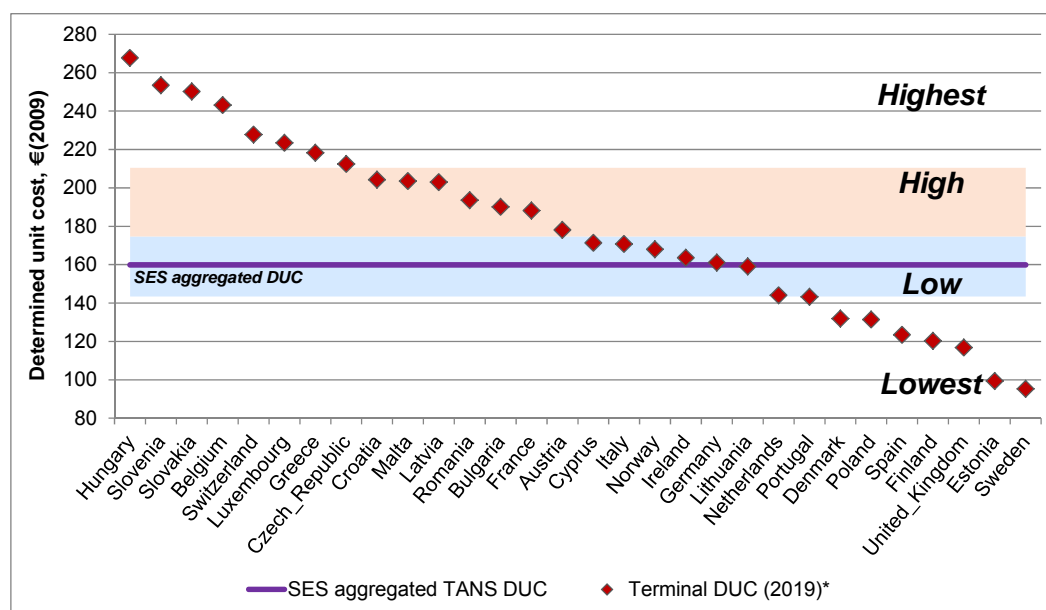
Terminal service units ('000s)	2015	2016	2017	2018	2019	CAGR 2015-2019
STATFOR forecast	7,145	7,234	7,314	7,411	7,516	1.3%
Aggregate TNSUs from PPs	7,282	7,447	7,571	7,723	7,881	2.0%
Difference %	1.9%	2.9%	3.5%	4.2%	4.9%	-

Table 24: Terminal SU traffic forecast differences vs STATFOR's low case of February 2014



Note: For Belgium (5 TCZs), Italy (2 TCZs) and the United Kingdom (2 TCZs) that have multiple TCZs, the terminal DUC shown is the aggregated terminal DUC (weighted average) across all zones in that State.

Figure 22: Level of TANS DUC targets planned to be achieved in 2019



Note: For Belgium (5 TCZs), Italy (2 TCZs) and the United Kingdom (2 TCZs) that have multiple TCZs, the terminal DUC shown is the aggregated terminal DUC (weighted average) across all zones in that State.

Figure 23: Distribution of TANS DUC targets planned to be achieved in 2019, shown against quartiles (Lowest, Low, High, Highest) and the weighted average SES aggregated DUC

- 6.6.7 As seen in Figure 23 above, there is considerable variation in the level of TANS DUC planned by States for 2019; a factor of nearly three between the lowest (Sweden 95.26 €₂₀₀₉) and the highest (Hungary 267.66 €₂₀₀₉). As with en-route, this reflects the States' different operational and economic environments, and also the different levels of performance that are planned to be achieved. It also captures the reality that operations and service provision vary from one place to another, and that there exists a 'minimum' level of fixed costs required to maintain TANS provision even where there are very low levels of traffic. In some instances such as some TCZs in Belgium, it is recognised that users will not be paying these unit costs, as income from other sources will subsidise these.
- 6.6.8 Figure 23 also shows the distribution's quartiles (labelled lowest, low, high and highest) alongside the level of the SES aggregated DUC (159.92 €₂₀₀₉). This lies in the low quartile, impacted significantly by the levels planned by the five largest States (Germany, Italy, France, Spain and the UK).

Terminal ANS trends across the SES

- 6.6.9 As depicted in Figure 24 and Figure 25, Spain, Slovenia, Norway and Germany show the largest percentage reductions in terminal DCs over 2015-2019, while Malta, the Czech Republic and Greece show the largest increases. Of the other five largest States, France and the United Kingdom forecast slight reductions in DCs, however Italy forecasts an increase in DCs.

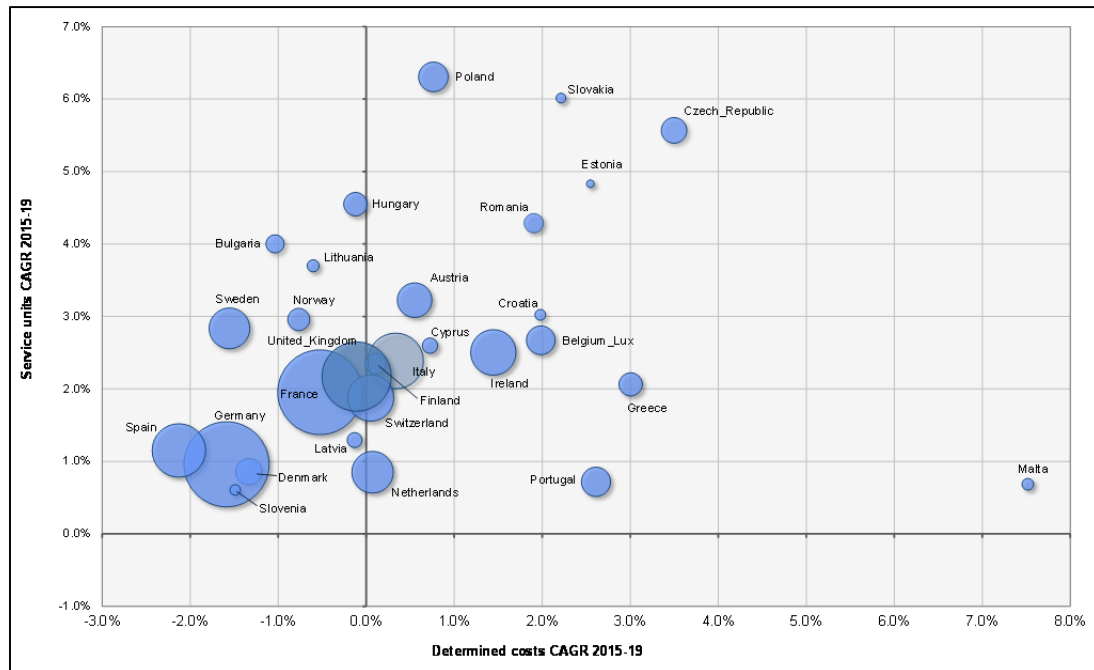


Figure 24: RP2 SES Terminal ANS CZ trends by State

6.6.10 There is no systematic evidence of changes to the allocation of costs across en-route/terminal ANS segments impacting upon the trends observed, as most changes are within the +/-2% range and are relatively evenly spread between positives (17) and negatives (13). The exceptions to this are in the Czech Republic and Malta where substantial changes (in terms of terminal percentage of gate-to-gate ANS DCs) are planned, as demonstrated by the position of the yellow diamonds in Figure 25.

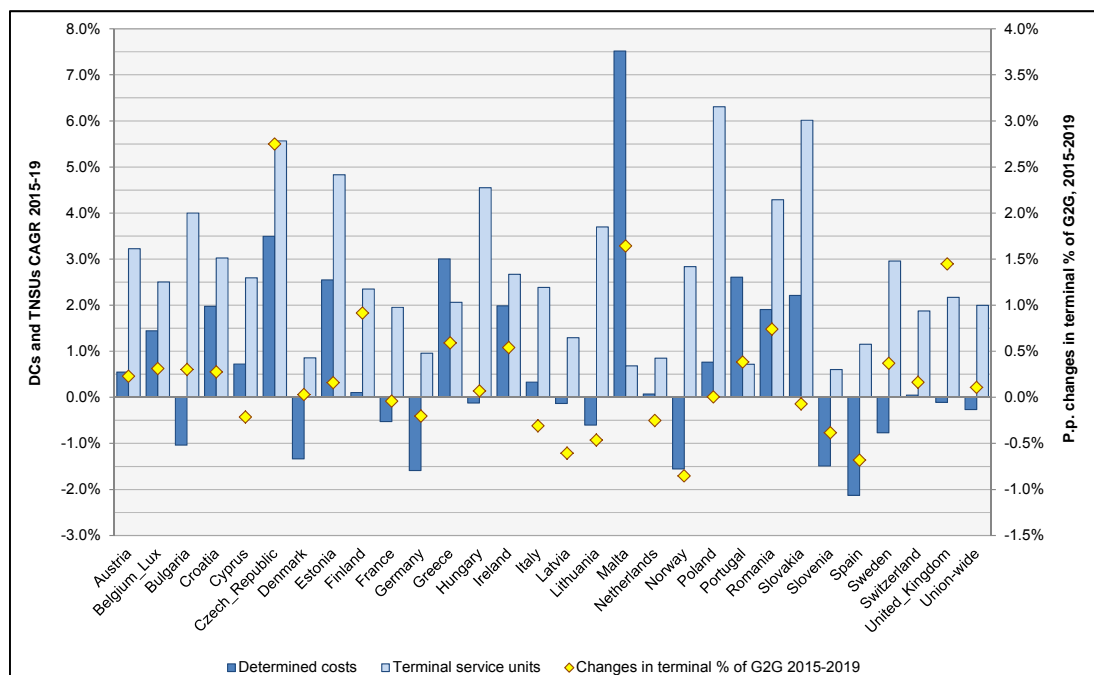


Figure 25: RP2 SES Terminal ANS CZ trends by State

7 INVESTMENT

7.1 Overview

- 7.1.1 The PRB has assessed the investment of thirty States (twenty-eight EU Member States plus Norway and Switzerland). In addition, it has assessed the investment of Maastricht ACC – MUAC, and this is included in the report on the FABEC.
- 7.1.2 Annex III (Template for the network Performance Plan) of the performance Regulation does not require the Network Manager to disclose and justify its planned capital expenditure, so the PRB did not assess it. On the other hand, the relevance of FAB Performance Plans with the requirements of the Network Strategy Plan was assessed as and when appropriate.
- 7.1.3 The assessment of the investment planned in the FAB Performance Plans for RP2 was substantially more detailed than was the case for RP1. Annex II, Point 2 of the performance Regulation now requires Member States to describe and justify *“the cost, nature and contribution to achieving the performance targets of investments in new ATM systems and major overhauls of existing ATM systems, including their relevance and coherence with the European ATM Master Plan, the common projects (...) and, as appropriate, the Network Strategy Plan”*. Annex II, Point 2.1, contains a number of additional transparency requirements relating to the share of investments against total costs, the differentiation between new systems, major overhauls and replacement, synergies at FAB or regional level, performance benefits expected, and decision-making processes, including the existence of CBAs and user consultation.
- 7.1.4 On this basis, Annex IV (Principles for assessing Performance Plans and targets), Point 1(e), requires the Commission (assisted by the PRB) to carry out the assessment of *“the relevance of investments and capital expenditure as regards the European ATM Master Plan, the common projects (...), and, as appropriate, the Network Strategy Plan as well as synergies achieved at functional airspace block or regional level”*.
- 7.1.5 Furthermore, Implementing Regulation (EU) N° 391/2013 (the charging Regulation) stipulates in its Article 6(4) that *“investments in new ATM systems and major overhauls of existing ATM systems are eligible insofar they are consistent with the implementation of the European ATM Master Plan, and, in particular, through the common projects (...)”*.
- 7.1.6 The PRB’s assessment of the investment planned for RP2 covers both issues and contains recommendations in relation to both Annex IV of the performance Regulation and Article 6(4) of the charging Regulation.
- 7.1.7 The economic assessment of CAPEX (with, in particular, the assessment of the ratio investment costs/total costs, the evolution RP1 – RP2 with possible carry-overs and “catch-up effects” which may generate double charging of airspace users for the same investment and a modification of the depreciation costs profile) is also important in that it gives information needed for the PRB’s assessment of the cost-efficiency target of the Performance Plan.

7.2 Compatibility and coherence with the ATM Master Plan and NSP requirements and eligibility for recovery through air navigation services charges

- 7.2.1 Twenty-six States have referred their main investment projects to globally relevant European ATM Master Plan deployment requirements (ESSIP objectives, OI – operational improvement - steps or enablers) interoperability Implementing Regulations and/or the Network Strategy Plan.
- 7.2.2 This allowed the PRB to recommend that their investments be declared eligible for recovery through air navigation services charges in application of Article 6(4) of the charging Regulation. This recommendation is the result of a factual mapping between these investments and the general Master Plan deployment requirements. It does not bring any judgement or support, even implicit, on the need for, and added value of, such investment at ANSP level.
- 7.2.3 However, four States (Cyprus, Finland, Malta and Norway) did not provide even the most basic information allowing the PRB to link the planned investment with the European ATM Master Plan's requirements. In consequence, the PRB recommends that adequate information be provided by the States concerned before the Plan can be approved and a positive recommendation can be made on the eligibility of the recovery of these investments through air navigation services charges.
- 7.2.4 For many States, minimal information was provided on the relevance of investment against European ATM Master Plan requirements, allowing only a very basic compliance assessment. Consequently, recommendations are made to ask the States concerned for more detailed information, so as to obtain a better view of the status of SESAR deployment and to facilitate monitoring in future years. Details are provided in Volume 2 with each Performance Plan's assessment. Such recommendations are not made with a view to leading to the rejection of a plan, but are to be associated with the other recommendations, resulting from the general assessment of the plans and targets.

7.3 Relevance against the Pilot Common Project

PCP PREREQUISITES

- 7.3.1 The PRB first assessed whether the Pilot Common Project's (PCP) prerequisites were likely to be implemented in a timely manner in the relevant States. This assessment was made by cross-examining the Performance Plan and by scrutinising the most recent ATM Master Plan monitoring exercise (the ESSIP report on the year 2013, published on 4 July 2014). Presented in the form of a table in Volume 2 of this report, this assessment is not one of the criteria for assessing a Performance Plan as listed in Annex IV of the performance Regulations, but it points out potential obstacles for the timely deployment of the PCP in RP2. The Commission is likely to find this useful in future years as, it is probable, will the Deployment Manager in monitoring PCP deployment.

PCP ATM FUNCTIONALITIES

- 7.3.2 The PRB then assessed whether the Performance Plans demonstrated foresight of the need to deploy certain relevant ATM functionalities of the PCP. This was a crucial part of the PRB's assessment of the investment, for two reasons:
- this assessment is one of the criteria listed in Annex IV of the performance Regulation, and it may therefore potentially lead the Commission to reject a

Performance Plan;

- the plan, once adopted, will set out the determined costs for each charging zone for the period. Any investment required for the deployment of the PCP that has not been earmarked in these determined costs will generate additional costs that will not have been covered in the cost-base. Under the determined costs principle, the financing of the needed PCP functionalities will have to be secured through prioritisation and savings in other parts of the determined costs. To flag the problem at the time of assessing the plan informs the Commission of potential PCP deployment risks, and the NSAs of the need to anticipate these investments so as to ensure that the PCP deployment is done on time and to establish robust determined costs for the period. In contrast, one State has planned investment related to a PCP functionality which is not in its geographical scope. In this case, the PRB flagged the issue, taking into account the general assessment of the cost-efficiency targets. It also recommended the NSA concerned to reconsider the issue and examine whether such an investment still makes compliance with robust and ambitious cost-efficiency targets possible.

- 7.3.3 From the 30 States + UAC Maastricht, twenty one States were identified as not having taken the PCP deployment requirements enough into consideration: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Sweden,
- 7.3.4 For these States, the ability to deploy the required PCP technology in RP2 with the determined costs that are presented in the Performance Plan for the period may be at risk.

7.4 FAB and a regional approach

- 7.4.1 The assessment led the PRB to the conclusion that, as far as investment is concerned, a FAB approach is the exception, not the norm. Joint investments are very rare.
- 7.4.2 The investment plans seem to have been developed in isolation and appear to respond mostly to the ANSPs' individual needs. Even when a project is reported by an ANSP as providing FAB benefits, the FAB's other ANSPs do not make the same statement.
- 7.4.3 The map below reflects the current fragmentation of the different ATC systems implemented in FABs/States. This map is at EUROCONTROL States level, but the conclusions are similar when "zooming" on the States applying the SES legislation.

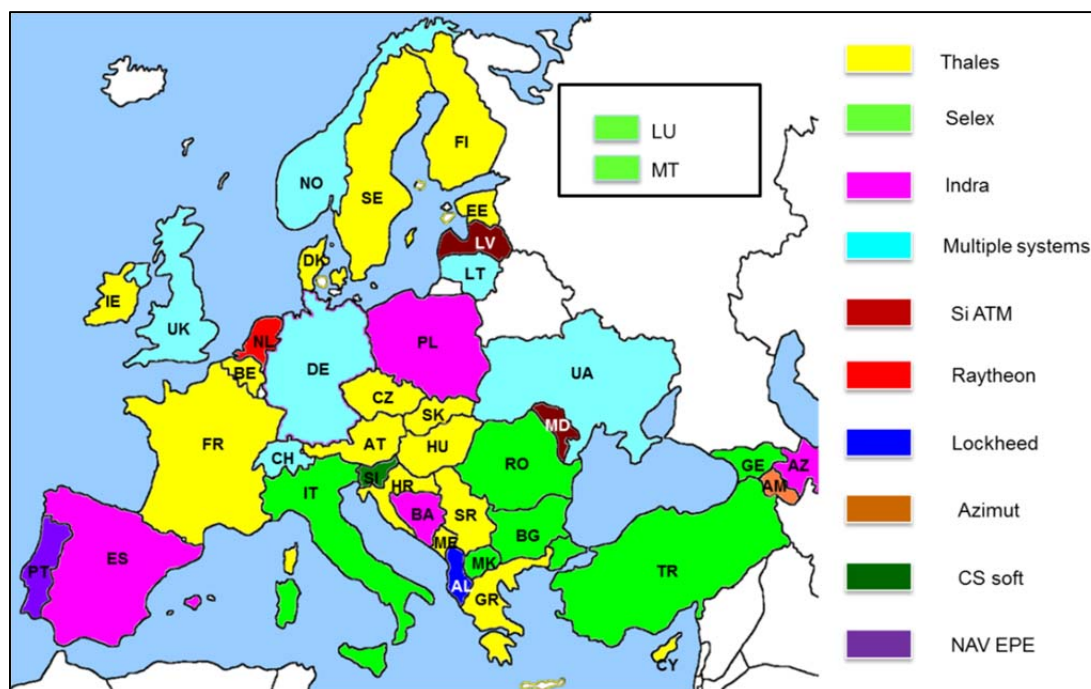


Figure 26: ATM systems in use

- 7.4.4 In this context, the ANSPs looked for more natural partners, outside their FAB, to find synergies with other ANSPs which have the same system. This is, for example, the rationale for the COOPANS partnership.
- 7.4.5 In some cases, ANSPs are working together towards achieving joint system functionalities as a result of local/regional service provision requirements. This is the case, for instance, of the 4flight project (ENAV and DSNA) aimed at developing a next generation ATC common system, compliant with SES Regulations and SESAR requirements.
- 7.4.6 A number of FABs have also undertaken joint actions – for example, to implement Free Route Airspace (FRA) in applying AF3 of the PCP, but this does not necessarily imply joint investment.

7.5 Ancillary assessments

- 7.5.1 As part of the general assessment of investment, the PRB also examined the information provided in the application of Point 2.1 of Annex II of the performance Regulation (mainly transparency requirements, synergies at FAB or regional level, performance benefits planned, and decision-making processes, see 7.1.3 above). This assessment is not itself intended to lead to the approval or rejection of a Performance Plan, but to contribute to the overall assessment of the robustness and balance of the Performance Plans. On occasion, it highlighted useful elements for assessing the Performance Plans in the cost-efficiency key performance area.

7.6 Total CAPEX for RP2

- 7.6.1 Total planned CAPEX at Union-wide level for RP2 (2015-19) is expected to amount to 4.6 billion €₂₀₀₉ of which 73% are planned for “main”⁵ projects.
- 7.6.2 As shown in the table below, the planned investment average ratio per year for RP2 is expected to be 10% higher than for the previous five years (updated for 2010-14⁶)

(907.3 M€₂₀₀₉ RP2 yearly average vs. 822.2 M€₂₀₀₉ updated average over the past five years).

FAB Name	TOTAL CAPEX RP2 (M€ ₂₀₀₉ , real terms)						Average RP2	% RP2 FAB vs. Total
	2015	2016	2017	2018	2019	RP2		
Baltic	34	26	41	42	16	159	31.9	4%
Blue Med	162	178	166	155	126	786	157.2	17%
DANUBE	53	31	19	14	22	138	27.7	3%
DK-SE	20	19	20	19	19	97	19.5	2%
FAB CE	96	90	75	84	67	411	82.2	9%
FABEC	368	393	381	352	286	1780	356.0	39%
NEFAB	53	38	35	30	27	184	36.9	4%
SW	75	81	75	72	75	379	75.8	8%
UK-Ireland	135	133	135	107	93	603	120.5	13%
TOTAL EU	997	989	947	874	731	4538	907.6	100%

Table 25: RP2 Total Planned CAPEX – EU/FAB

- 7.6.3 For the first two years in RP2, CAPEX levels are at their maximum, whereas they continue to decline significantly over the last two years. However, the planned total CAPEX will decrease on average by -7.5% over RP2, following the past five years (2010-14) trend (-1.1%).
- 7.6.4 After assessing the actual CAPEX for 2012 and 2013 and the updated planning for 2014, it has been observed that 389 M€₂₀₀₉ is assumed to be carried-over to RP2, mainly for projects concerning the ATM system upgrades.
- 7.6.5 As observed in the chart below, actual CAPEX for 2012 and 2013 are significantly lower than planned in the performance plans for RP1, i.e. -31%, respectively -28%. An important downward revision (-14%) is envisaged for the updated planned CAPEX for 2014 (870 M€₂₀₀₉) than was initially planned (1017 M€₂₀₀₉). However, for the first year of RP2 (2015), CAPEX is planned to be 15% higher than the updated level for last year of RP1 (2014).
- 7.6.6 In a large number of cases, it was observed that several projects included in the planning for 2015-19 are entirely/partly carried over from projects planned but not achieved over RP1. It can be inferred that several planned amounts already included in the cost-bases for previous years may be charged twice to airspace users. For this reason, additional information/clarification should be sought from the States concerned so as to obtain assurance that such double charging will not occur. Relevant recommendations will be found to this effect in Volume 2.
- 7.6.7 At the consultation meetings on investments with the stakeholders for several FABs/States (Baltic FAB, DANUBE FAB, FAB CE, FABEC and SW FAB), among other important issues, the request to return the non-spent CAPEX amounts to the States was raised. It was also recommended that several FABs use the restructuring mechanism for airspace projects and that they rationalise infrastructure and support functions across the FABs.

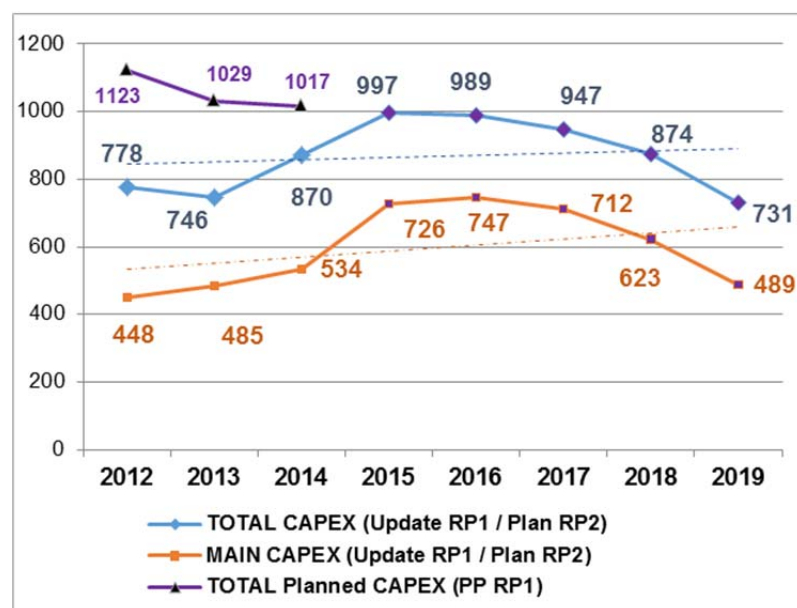


Figure 27: Total & Main CAPEX 2012-19 (M€2009, real terms)

7.6.8 The total planned CAPEX for RP2 vs. the previous five years (2010-14) shows significant differences at FAB level, as can be seen in the table below. If for several FABs the level of planned CAPEX for RP2 is expected to be lower than the level for 2010-14 (updated) (e.g. -25% for SW), for others, the planning is significantly higher for the RP2 timeframe (e.g. +131% for the Baltic FAB).

FAB Name	RP2	2010-14 Update	RP2 vs. 2010-14
Baltic	159	69	+131%
Blue Med	786	633	+24%
DANUBE	139	126	+10%
DK-SE	97	100	-3%
FAB CE	411	469	-12%
FABEC	1780	1462	+22%
NEFAB	184	129	+43%
SW	379	507	-25%
UK-Ireland	603	623	-3%
TOTAL CAPEX	4538	4118	10%

Table 26: Planned Total CAPEX RP2 vs. 2010-14 (M€₂₀₀₉, real terms)

7.6.9 The level for the main CAPEX at EU level is foreseen to be 34% higher for RP2 vs. the previous five years (2010-14) mainly due to the significant rise for BALTIC FAB (+152%). Details per FAB are provided in the chart below.

7.6.10 When comparing the fluctuation of the total and the main CAPEX between RP2 and the previous five-year period (2010-14), as shown in the charts below, the following conclusions can be drawn:

- for five FABs the total planned CAPEX for RP2 is expected to be higher than the total updated CAPEX planned for 2010-14 (FABEC (+22%), Blue Med

(+24%), Baltic (+131%), DANUBE (+10%) and NEFAB (+43%));

- at the same time, for the Blue Med and DANUBE FABs, the main planned CAPEX for RP2 is expected to decrease, if compared with the main updated CAPEX for 2010-14; -11% and -6% respectively, which implies that the level of “other” CAPEX for these FABs is expected to rise, in detriment to the main projects.

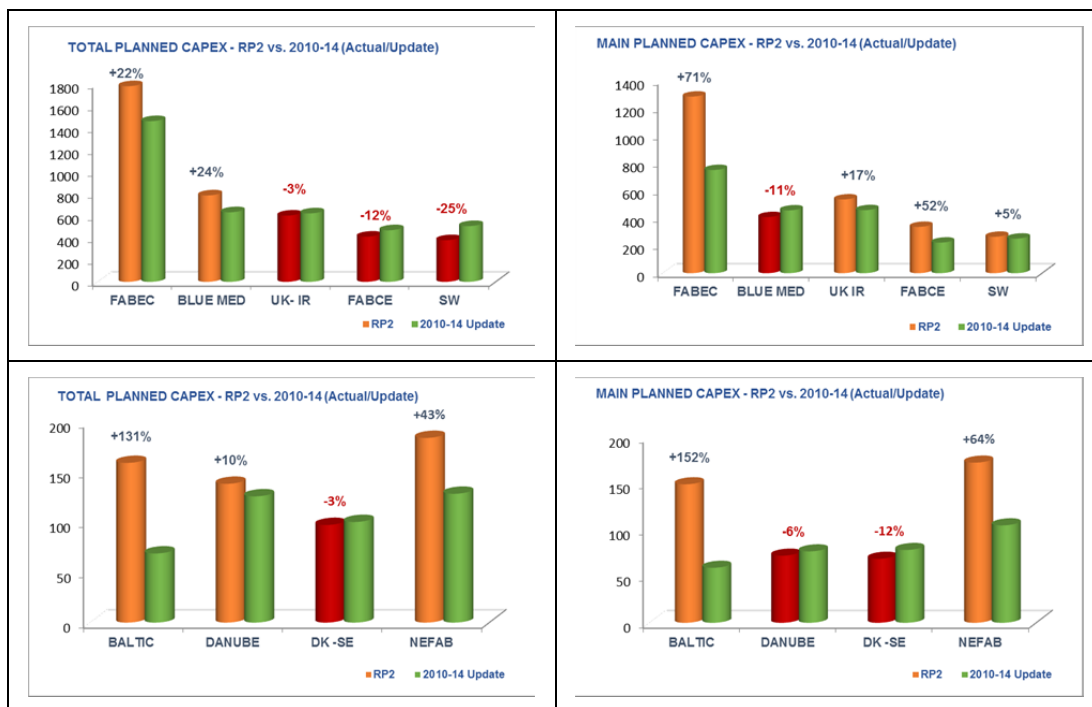


Figure 28: Total & Main RP2 Planned CAPEX vs. 2010-14 update plan per FAB (M€2009, real terms)

7.6.11 On the other hand:

- for four FABs, the total planned CAPEX for RP2 is forecasted to be lower than the total updated CAPEX foreseen for 2010-14, i.e. UK-Ireland (-3%), FAB CE (-12%), SW (-25%) and DK-SE (-3%);
- at the same time, for the UK-Ireland, FAB CE and SW FABs, the main planned CAPEX for RP2 is expected to increase, if compared with the main updated CAPEX for 2010-14; +17%, +52% and +5% respectively, implying that “other” CAPEX are going to decline, to the benefit of major investments that are more likely to bring added value to performance and contribute to a positive network effect. For DK-SE main CAPEX are foreseen to fall by 12% in RP2 vs. 2010-14.

8 THE NETWORK MANAGER'S PERFORMANCE

- 8.1.1 In line with an agreement between the EC, the PRB Chairman and NM, the PRB has provided the European Commission and NM with informal comments on the Network Performance Plan (NPP)⁷ on 13 August 2014.
- 8.1.2 Following the NMB Task Force meetings (5 and 23 September 2014) and the NMB ad-hoc meeting on 8 October 2014, the NPP will be consolidated and endorsed for formal submission to the EC soon after NMB/11.
- 8.1.3 Although preliminary details on the KEP KPI target can be found in section 4 of this report, the PRB will provide its formal assessment results after the NPP has been officially submitted to the EC.

9 INTERDEPENDENCIES AND TRADE-OFFS BETWEEN THE DIFFERENT KPAS

- 9.1.1 In accordance with the performance Regulation, interdependencies between the four KPAs were considered during the Union-wide targets setting process for RP2, and played a factor in the final values that were adopted by the Single Sky Committee and the Commission⁸.
- 9.1.2 The performance Regulation also requires FABs to demonstrate how interdependencies between the different KPAs will be considered during RP2. Specifically, this should include the evaluation of any potential impact on safety with mitigation measures that may be required to maintain safety assurance⁹. The template for Performance Plans, Annex II, asks FABs to provide details of any assumptions that will be used to assess the trade-offs between KPAs¹⁰.
- 9.1.3 On a local/FAB level, it is understood that existing mandatory safety management processes will ensure that any actions to achieve the binding targets in capacity, flight efficiency, and cost efficiency will not adversely impact on the safety of air navigation services. The performance scheme is designed to improve performance in each of the KPAs and this may entail the assessment of individual action plans to ensure that improvement in one KPA is not to the detriment of another.
- 9.1.4 A review of all FAB Performance Plans has revealed no evidence to suggest that the required performance in any KPA will be a limiting factor, preventing improvements, in any of the other KPAs.
- 9.1.5 In addition, the following observations can be made from a review of the FAB Performance Plans:
- all Performance Plans include statements that interdependencies between different KPAs were considered during the development of the plans;
 - interdependency was primarily addressed at national levels rather than FAB levels;
 - the manner of addressing interdependency between the KPAs, including the amount of information provided (Section 3.3), differed considerably from one FAB Performance Plan to another;
 - in all cases, assessment of potential interdependencies between different KPAs was conceptual- rather than evidence based.
- 9.1.6 The PRB is of the firm opinion that in RP2 it is possible to achieve the requisite levels of performance and to meet the Union-wide targets in all KPAs. However, as indicated by the Network Manager (specifically with regard to capacity)¹¹, this will require that individual ANSPs' existing plans be improved: that is, capacity plans, flight efficiency plans, business plans, safety plans or a combination of any, or all, of the above.
- 9.1.7 The PRB considers that specific expertise is available in the various expert groups and stakeholder fora regarding Safety; Capacity Planning; Route Design & Airspace Management; and Finance. Such expertise can and should be utilised to provide alternatives to action plans which do not satisfy all the binding targets.
- 9.1.8 The PRB is therefore of the opinion that, at the moment, interdependencies cannot be used as an excuse for pursuing specific KPAs/KPIs at the expense of others.

BETTER UNDERSTANDING THE “TRAFFIC FORECAST ISSUES”:

- 9.1.9 EUROCONTROL STATFOR produces for the benefit of Member States, 7-year

ahead traffic forecasts; namely:

- IFR flight forecasts;
- en-route TSU forecasts; and,
- terminal navigation service units (TNSU) forecasts.

- 9.1.10 There is a perception that all these “traffic” forecasts ought to provide the same results (% growth) to be consistent. In reality IFR flights and TSU forecasts are highly correlated but not 100% because changes in TSU are also driven by changes in average distance and average aircraft weight. These differences tend to vary from one State (or charging zone) to the other, just like there are differences as well between passengers’ forecasts and flight forecasts or airport movement forecasts. All these forecasts describe a certain view of “air traffic”, depending on the final forecast user needs and requirements.
- 9.1.11 The PRB notes that the RP2 Union-wide capacity target (average en-route ATFM delay per IFR flight) is based on the STATFOR September 2013 baseline IFR flight forecast. On the other hand, the Union-wide cost-efficiency target (en-route DUC) is based on the STATFOR September 2013 low case scenario TSU (en-route total service units) forecast. The PRB expects to see consistency across KPAs in the choice of the traffic forecast scenario used in the performance plans, but not necessarily the same results in % growth. It should be noted that the PRB expects Member States to use their most relevant and latest available information when selecting a forecast.
- 9.1.12 For the cost-efficiency KPA the choice of the TSU forecast is particularly sensitive as it is linked to financial incentives through the traffic risk sharing mechanisms embedded in the charging Regulation (Art. 13 of regulation (EU) No 391/2013). Therefore the choice of forecast has direct financial implications. Indeed during a reference period when the actual TSU recorded is above the selected TSU forecasts, the ATSP can keep the related revenues (in full for the first +2% and then 30% in the range [+2%:+10%]. For RP2 this is also the case for TANS unless Member States decide to exempt from traffic risk-sharing the TANS provided to traffic departing from airports with less than 225 000 IFR movements.
- 9.1.13 The PRB notes that several Member States have selected a capacity target based on a relatively higher IFR flights forecast scenario and simultaneously a cost-efficiency target based on a relatively lower TSU forecast scenario. This risk management strategy should be carefully considered in the light of the different implications on the achievement of the RP2 EU-wide targets and of the fairness with respect to airspace users.
- 9.1.14 The PRB expects to see joint-up (consistent) performance plans. An ANSP who heavily invests and recruits ATCOs to increase capacity should be challenged by its regulators if simultaneously its performance plan indicates that low to no delay are historically recorded, and that it expects low traffic levels over the coming reference period. Similarly, if the downside traffic risk is reduced by choosing a low TSU scenario, the PRB expects that the return on equity (and associated cost of capital) reflects the lower risk actually faced by the ATSP. These issues have been carefully considered by the PRB for its assessment of the cost-efficiency targets in line with the requirements in Annex IV of regulation (EU) No 390/2013,
- 9.1.15 In conclusion, forecasting relies on complex assumptions about the state of the world and the reality is bound to be different (preferably slightly only). The performance and charging schemes Regulations have embedded mechanisms to manage the traffic risk (alert mechanism, risk sharing mechanisms, etc.) and the required flexibility. Member States are expected to (1) challenge their ATSPs to

provide the reasons and substantiate their underlying assumptions for selecting a lower or higher traffic forecast (2) make best use of the latest available actual and forecast information, including specific local circumstances, and (3) present joint-up performance plans which effectively balance the risks and opportunities across the different KPAs with a view to achieve the RP2 EU-wide targets.

10 MONITORING PERFORMANCE PLANS

- 10.1.1 The success of the SES performance scheme rests upon the effective monitoring of ANSP performance. Performance targets will have no value if they are not used to guide and monitor the ANSPs' actions in the scope of the scheme.
- 10.1.2 ANSPs' action plans to meet the targets in each key performance area should be judged against the requisite performance. If they do not promise sufficient performance, then they must be revised until they do.
- 10.1.3 However, it is not simply enough to have the paper promise of acceptable performance. Without the timely implementation of the plans, performance will not improve.
- 10.1.4 The only way to ensure both the development of appropriate action plans and the implementation of the said plans to improve performance is through an effective monitoring system.
- 10.1.5 Article 18 of the performance Regulation (EU) 390/2013 clearly obliges both the Commission and the national supervisory authorities to monitor the implementation of the Performance Plans. The Commission have tasked the PRB with monitoring performance on its behalf (Article 3.3), using information obtained from the national supervisory authorities (Article 3.6(a)).
- 10.1.6 Similarly to performance Regulation (EU) 691/2010, national supervisory authorities are mandated to apply appropriate measures to rectify a situation where performance targets have not been achieved, and when there is a risk that performance targets risk will not be met.
- 10.1.7 However, in contrast to Regulation 691/2010, the revised performance Regulation 390/2013, Article 18.1 obliges the national supervisory authorities to tell the Commission specifically what measures have been defined and applied.
- 10.1.8 Following a review of the relevant sections in the FAB Performance Plans, the PRB is not satisfied that the proposed measures described by the FABs will underpin an effective monitoring process which will in turn deliver the expected benefits of the SES performance scheme.
- 10.1.9 The PRB recommends that each FAB make a clear undertaking that they will abide by the legislative requirements of Regulation 390/2013 and will assist the Commission in effectively monitoring the European ATM network. Such assistance may take the form of providing information or by initiating actions as described in the performance Regulation.

11 THE MILITARY DIMENSION

- 11.1.1 Given the fact that the performance Regulation states “Civil-military cooperation and coordination are of the utmost importance in achieving the objectives of the performance scheme...” and that Commission Regulation (EC) No 2150/2005 lays down the rules for the flexible use of airspace, it is disappointing that very few FAB Performance Plans provided any details on how the FUA legislation could be applied to provide additional capacity for general air traffic.
- 11.1.2 The FABEC, through the ATFCM/ASM cell run during the London Olympics in July/August 2012, have shown that capacity performance can be significantly improved (0.96 minutes delay per flight in August 2011, compared with 0.45 minutes per flight in August 2012) simply by enhancing the coordination and cooperation between civil and military stakeholders – even in the core area’s congested airspace, and without adverse impact to military operations and training.
- 11.1.3 The PRB has previously invited Member States to review the impact of restricted and segregated airspace on the capacity and flight efficiency of general air traffic. A quantification of the impact of such areas will improve the effectiveness of managing airspace to meet users’ requirements.
- 11.1.4 Improving cooperation and coordination between civil and military stakeholders will ensure that the needs of both civil and military airspace users are met while the constraints placed upon either party are minimised.
- 11.1.5 Only two FAB Performance Plans, FAB CE and NEFAB, contained additional indicators relating to military mission effectiveness. After careful review, these specific indicators were determined neither to be consistent with the indicators and targets of the performance scheme, nor with the objectives of improving the provision of air navigation services for general air traffic. To avoid the possibility of conflicting performance objectives, the PRB considers that such additional indicators should be withdrawn from the relevant FAB Performance Plans.

12 KEY CONCLUSIONS

This chapter presents the PRB's findings and conclusions at Union-wide level resulting from the analysis of the FAB Performance Plans, and does not aim at replicating the assessment result for each individual FAB, which can be found in Volume 2 to this report.

12.1 Overview

- 12.1.1 All Performance Plans for the second Reference Period, prepared and officially adopted by the nine FABs and the NM, were due for submission by 30 June 2014. The deadline was observed by most of the FABs. In the subsequent process of data verification, individual FABs were approached with requests for clarification. These were addressed in a timely manner and States/FABs provided signed responses. In addition, some of the FABs provided corrigenda to their Performance Plans. Corrigenda were received from the following FABs: Blue Med, FAB CE, DANUBE and FABEC. The additional information was taken into consideration during the assessment of the Performance Plans as carried out by the PRB.
- 12.1.2 It should be noted that since the Network Performance Plan (NPP) will be consolidated and endorsed for formal submission to the EC after the NMB ad-hoc meeting to be held on 8 October 2014, the PRB's assessment results for the NPP will be made available at a later stage.
- 12.1.3 The Union-wide view depicted by the detailed assessment reports contained in Volume 2 show the following results:
 - The Baltic FAB, the DK-SE FAB and the NEFAB Performance Plans could be declared as acceptable after having addressed a number of compliance issues and, in the case of Poland, having established a local target for the arrival ATFM delay.
 - All other plans meet the criteria in some KPAs and could, therefore, be declared partially acceptable, but will require revision. The PRB is of the opinion that the DANUBE FAB and FAB CE Performance Plans can be improved immediately for the Capacity KPA.
- 12.1.4 While all Performance Plans were received at FAB level for RP2, considering the experience gained during RP1 and the lack of operational benefits or the absence of any joint environmental or CAPEX approach, the PRB is not convinced of the added value brought by the FAB layer.
- 12.1.5 Also, the PRB suggests reconsidering downwards the levels of Determined Costs in the early years of RP2 in the light of the actual performance achieved in 2013, for both en-route and terminal charging zones.
- 12.1.6 Considered the results of its assessment, the PRB is nevertheless of the strong belief that the Union-wide performance targets for RP2 are clearly within reach with only reasonable efforts to be made by all States/FABs.
- 12.1.7 The PRB would like to reiterate the paramount importance of safety, and thereby urges the European Commission to request FABs/States to ensure that any measures and operational changes that are taken in order to improve performance as a result of this review in the areas of cost-efficiency, capacity and environment, must be made in accordance with safety requirements/legislation.
- 12.1.8 Moreover, a review of all FAB Performance Plans has revealed no evidence to suggest that the required performance in any KPA will be a limiting factor, preventing improvements, in any of the other KPAs. The PRB is therefore of the opinion that, at the moment, interdependencies cannot be used as a justification to

pursue specific KPAs/KPIs at the expense of others.

12.2 General Criteria

- 12.2.1 FABs did not use a consistent approach when establishing the list of airports submitted to, and exempted from, the provisions of the performance and charging Regulations. Most of the lists included in the Performance Plans were either incomplete or not compliant with the clarification provided by the European Commission.
- 12.2.2 Also, it did not seem clear to all States that the geographical scope of the performance scheme is limited to the SES airspace and should be based on Flight Information Regions or Upper Information Regions (FIR/UIRs).
- 12.2.3 Confusion seems to exist in the differentiation between traffic forecast and Service Unit forecast. For most of the cases, these were not clearly identified in the Performance Plans, which lead to many of the FABs not specifying which traffic assumptions were used for the operational KPAs.
- 12.2.4 Further guidance relating to the stakeholder consultations' material might also be necessary in the future as, with a few exceptions, none of the FABs provided a complete list of items as mandated by Annex II, Point 1.3 of the performance Regulation.
- 12.2.5 Since only one FAB provided a detailed description of the measures put in place to monitor and report on the implementation of the Performance Plans, no Union-wide level view could be established of how the situation would be addressed if targets are not reached during the reference period.

12.3 Safety

- 12.3.1 Although all FABs have adopted the Union-wide targets for 'Effectiveness of Safety Management' and the application of the 'severity classification using the RAT methodology', some have reported different target values for the RAT methodology application for ATM-S (i.e. ATM Ground and ATM Overall score should be the same) or did not provide annual target values for each year of the Reference Period on the Effectiveness of Safety Management and/or RAT methodology application, which are due for monitoring purposes.
- 12.3.2 It appears that there is no harmonised approach to the implementation of Just Culture. Even when FABs state that they have established a common FAB approach in certain areas for Just Culture improvements, detailed information that explains the basic elements in place to promote the application of Just Culture is usually not provided (i.e. local/FAB targets at both State and ANSP level appear to be only set formally). Therefore, explanatory guidance material that was made available for the development of Just Culture implementation plans, in order to foster a common FAB approach, should be consulted and used.

12.4 Environment

- 12.4.1 The NM has adopted the target for the 'average horizontal en-route flight efficiency of the last filed flight plan'. This information might be subject to change once the final plan is made available.
- 12.4.2 The Union-wide target for 'average horizontal en-route flight efficiency of the actual trajectory' has been adopted by NM and all FABs have adopted their respective

reference values. This information might be subject to change once the final plan is made available.

- 12.4.3 FABs should ensure that the evolution of their performance in the Environment KPA is monitored appropriately and should plan for remedial actions when a risk of not meeting the target is identified.
- 12.4.4 To avoid the possibility of conflicting performance objectives, FABs should ensure that performance evaluations and, where applicable, incentives are based on the metrics adopted in the performance regulation.
- 12.4.5 In case FABs have adopted additional indicators, targets need to be provided for the said indicators.

12.5 Capacity

- 12.5.1 The targets for en-route ATFM delay adopted by the FABs are not all consistent with the respective FAB reference values.
- 12.5.2 FABs should ensure that the individual ANSP contributions for en-route capacity, when aggregated, are consistent with the required level of performance, as determined by the reference values from the Network Operations Plan (2014-2018/2019).
- 12.5.3 The PRB noticed that several FABs did not establish a quantitative national target on arrival ATFM delay and/or associated breakdown per airport for monitoring purposes (or alternatively an aggregated share for airports with low levels of arrival ATFM delay).
- 12.5.4 While all FABs have introduced incentive schemes for en-route ATFM delay, only a few included one for the arrival ATFM delay. In both cases, most of the presented incentive schemes were inconsistent with the performance Regulation.
- 12.5.5 The majority of FABs presented details of how improved civil military coordination and cooperation could provide additional capacity for general air traffic.

12.6 Cost-efficiency

- 12.6.1 States at an aggregated level have made some effort (-2.2% p.a.) to meet Union-wide en-route Determined Unit Costs (DUC) targets (-3.3% p.a.) in their RP2 Performance Plans. However:
 - the 2014 aggregated Determined Costs (DCs, 6,242 M€₂₀₀₉) are materially higher than the 2013 DCs (6,038 M€₂₀₀₉) reported in the PRB Monitoring Report, which leads to an artificially high starting point for RP2;
 - the vast majority of the improvement in RP2 is expected to be obtained through traffic growth of +2.0% p.a., which is higher than STATFOR's February 2014 low traffic forecast (+1.2% p.a.), underpinning the Union-wide targets;
 - the DCs' trend shows very little ambition, at -0.3% p.a. on average over RP2. This is well below the assumption underpinning the Union-wide target of -2.1% p.a. and reflects the fact that no major organisational or functional restructuring has been planned by the FABs in RP2;
 - while the aggregated Performance Plan (PP) DUC level is similar or better than the Union-wide target for 2015 and 2016, there are material differences in the targets for 2017, 2018 and 2019. By 2019, the aggregated PP DUC is +4.4% higher than the Union-wide target. Over RP2, the total difference in costs

between the aggregated PPs and the costs underpinning the Union-wide target is +511.2 M€₂₀₀₉.

- 12.6.2 For the five largest States, the aggregated PP trend masks strong contributions from Spain and the United Kingdom that are offset by poor contributions from France, Italy and Germany. For the smaller States, there are mixed levels of performance planned, with some showing much less ambition than others.
- 12.6.3 Annex IV of Regulation 390/2103, which sets the criteria for assessing Performance Plans, emphasises that performance in the previous reference period needs to be taken into account when assessing Performance Plans for the next reference period. The 2013 PRB Monitoring Report shows that cost-efficiency performance improvements have been achieved in the first two years of RP1 in the form of lower cost-bases. The PRB believes that these improvements need to be carried forward in RP2; Determined Costs are expected to reflect these lower costs in the form of lower user charges in RP2.
- 12.6.4 Although there are no Union-wide cost-efficiency targets set at Terminal ANS (TANS), the aggregated TANS DUC trends are very similar to en-route, both in the trends experienced in 2012 and 2013, and in the level of ambition planned for RP2. This reflects the fact that most ANSPs have similar terminal and en-route businesses, with common and joint costs and labour arrangements. Moreover, there is pressure from TANS airspace users at a local level, so ANSPs are hesitant to raise costs. These trends, along with a lack of a consistent TANS cost and TNSUs time series, and considering the better regulation principles – regulate only when and where necessary and at the appropriate level, may mean that a ‘light touch’ approach to the terminal ANS cost-efficiency KPI is appropriate for the whole of RP2.
- 12.6.5 The PRB encourages those States which have been identified as not making an adequate contribution to Union-wide cost-efficiency targets and/or not complying with the criteria laid down in Annex IV of the performance Regulation, to review their Performance Plans so as to introduce more ambitious measures. This will enable the Union-wide targets to be met and contribute to the performance of the European ATM network overall.

12.7 Investments

- 12.7.1 Within the limit detailed in paragraph 7.2.2, the investments of most States could be declared eligible for recovery through ANS charges in application of Article 6 (4) of the charging Regulation. Some countries should nevertheless provide appropriate links between their main investments and the ATM Master Plan requirements so as to allow their eligibility to be assessed.
- 12.7.2 Most of the FABs have described and/or justified the cost, nature and contribution of the CAPEX investments in a very generic way, which did not allow a proper understanding of the importance and need for such investments. Also, the “Common Project” field did not contain the proper reference to the proper PCP ATM functionalities.

13 PRB RECOMMENDATIONS TO THE EUROPEAN COMMISSION

The assessment shows that the Performance Plans of the Baltic FAB, the DK-SE FAB and the NEFAB could be declared acceptable after only minor upgrades and modifications.

Arising from the key conclusions highlighted in Chapter 12 the PRB advises the Commission to adopt the following recommendations for FABs and Member States.

RECOMMENDATION 1 – GENERAL CRITERIA

Austria, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Greece, Germany, Hungary, Ireland, Latvia, Luxembourg, Malta, Netherlands, Norway Poland, Portugal, Romania, Slovakia, Spain, Slovenia, Sweden, Switzerland and UK should provide the list of airports submitted to, and exempted from, the provisions of Regulations (EU) No 390/2013 and 391/2013 in line with the clarification provided by the European Commission.

Rationale:

The States did not use a consistent approach when establishing the list of airports submitted to, and exempted from, the provisions of the performance and charging Regulations. Most of the lists included in the Performance Plans were either incomplete, or not compliant with, the clarification provided by the European Commission.

RECOMMENDATION 2 – GENERAL CRITERIA

Austria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Latvia, Malta, Norway, Romania, Slovakia and Sweden, should clearly differentiate between traffic forecast and Service Unit forecast, in particular for the purpose of specifying which traffic assumptions are used for the operational Key Performance Areas.

Rationale:

The majority of the performance plans failed to make the distinction between “traffic forecast” and “service unit forecast”. As a result, many FABs did not specify which traffic assumptions were used for the operational Key Performance Areas.

RECOMMENDATION 3 – GENERAL CRITERIA

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, France, Ireland, Malta, Portugal Romania, Slovak Republic, Slovenia, Spain and Switzerland, should describe and/or justify in more detail the cost, nature and contribution of their investments in new systems or major overhauls, so as to allow a proper understanding of the importance and need for such investments, in relation with the traffic forecasted, the capacity needed and with a view to ensuring timely deployment of the relevant ATM Master Plan requirements, in particular the Pilot Common Project.

Rationale:

Most of the FABs have described and/or justified the cost, nature and contribution of the CAPEX investments in a very generic way, which did not allow a proper understanding of the importance and need for such investments. Also, the “Common Project” field did not contain the proper reference to the proper PCP ATM functionalities.

RECOMMENDATION 4 - SAFETY

For the RAT methodology application for ATM-S, the Blue Med, DANUBE, FAB CE, NEFAB and SW FABs should adopt targets with the same values for ATM Ground and ATM Overall.

Baltic, DK-SE and FABEC FABs should provide annual target values for each year of the reference period on the Effectiveness of Safety Management and/or the RAT methodology application, which are required for monitoring purposes in compliance with the provisions of Article 3.1 of Annex II of Regulation (EU) No 390/2013.

Rationale:

Although all FABs have adopted the Union-wide targets for 'Effectiveness of Safety Management' and the application of the 'severity classification using the RAT methodology', some have reported different sets of targets, as was the case for the RAT methodology application for ATM-S, or did not provide annual target values for each year of the Reference Period for EoSM and/or RAT methodology, which are due to be used for monitoring purposes.

RECOMMENDATION 5 – EN-ROUTE DELAY

Baltic, Blue Med, DANUBE, DK-SE, FAB CE, FABEC, South-West and UK-IRL FABs should ensure that targets for en-route ATFM delay are consistent with the respective FAB reference values as published in the Network Operations Plan (2014-2018/2019), and that the individual ANSP contributions for en-route capacity, when aggregated, are consistent with the required level of performance.

Rationale:

The targets for en-route ATFM delay adopted by some FABs are not consistent with the respective FAB reference values.

To assist with the quantification of a high level of performance for incentive purposes and/or to enable effective monitoring of performance, FABs should ensure that the individual ANSP contributions for en-route capacity, when aggregated, are consistent with the required level of performance, as determined by the reference values from the Network Operations Plan (2014-2018/2019).

RECOMMENDATION 6 – ATFM DELAY AT AIRPORTS

Belgium, Cyprus, Greece, Italy, Ireland, France, Germany, Luxembourg, Poland, Portugal, Norway, The Netherlands and UK should establish a quantitative national target on arrival ATFM delay with a breakdown per airport for monitoring purposes.

Member States of FAB CE, FAB UK-IRL, FAB Baltic, FAB Blue Med, FAB DK-SE, and FAB SW should establish associated incentive schemes. Within FAB EC, Belgium, Luxembourg, and The Netherlands should establish an incentive scheme or refine the proposed scheme to ensure consistency with the general principles of the Performance and Charging Regulation.

Rationale:

Across all FABs, several Member States did not establish a quantitative national target on arrival ATFM delay and/or associated breakdown per airport for monitoring purposes (or alternatively an aggregated share for airports with low levels of arrival ATFM delay).

Following the European Commission clarification, all capacity-related targets are subject to an incentive scheme. Some Member States included incentive schemes for the national target on arrival ATFM delay, but not all of them were consistent with the general principles of the Performance Regulation, Charging Regulation, or the methodology chosen.

RECOMMENDATION 7 – COST-EFFICIENCY

All Member States should:

- d. review their traffic assumptions in the light of the latest available information, for both en-route and terminal charging zones.
- e. reconsider downwards their levels of determined costs in the early years of the reference period in the light of the actual performance achieved in 2013, for both en-route and terminal charging zones.
- f. To the exception of Denmark, Estonia, Finland, Lithuania, Latvia, Poland, Norway, Sweden, and UK, set more ambitious en-route cost-efficiency targets so as to collectively reach the union-wide target throughout the reference period.

Rationale:

States at an aggregated level have made some effort (-2.2% p.a.) to meet Union-wide en-route Determined Unit Costs (DUC) targets (-3.3% p.a.) in their RP2 Performance Plans. However:

- the 2014 aggregated en-route Determined Costs (DCs, 6,242 M€₂₀₀₉) are materially higher than the 2013 DCs (6,038 M€₂₀₀₉) reported in the latest PRB Monitoring Report, which leads to an artificially high starting point for RP2;
- the vast majority of the improvement in RP2 en-route DUC is expected to be obtained through traffic (en-route service units) growth of +2.0% p.a., which is higher than STATFOR's February 2014 low traffic forecast (+1.2% p.a.), underpinning the Union-wide targets;
- the en-route DCs' trend shows very little ambition, at -0.3% p.a. on average over RP2. This is well below the assumption underpinning the Union-wide targets of -2.1% p.a. and reflects the fact that no major organisational or functional restructuring has been planned by the FABs in RP2;
- while the aggregated Performance Plan (PP) en-route DUC level is similar or better than the Union-wide target for 2015 and 2016, there are material differences in the targets for 2017, 2018 and 2019. By 2019, the aggregated PP en-route DUC is +4.4% higher than the Union-wide target. Over RP2, the total difference in costs between the aggregated PPs and the costs underpinning the Union-wide en-route target is +511.2 M€₂₀₀₉.

For the largest five States, the aggregated PP trend masks strong contributions from Spain and the United Kingdom that are offset by poor contributions from France, Italy and Germany. For the smaller States, there are mixed levels of performance planned, with some showing much less ambition than others.

References

- 1 <http://www.eurocontrol.int/sites/default/files/content/documents/single-sky/pru/news-related/2013-09-27-rp2-union-wide-targets-final-report.pdf>
- 2 COMMISSION IMPLEMENTING DECISION of 11 March 2014 setting the Union-wide performance targets for the air traffic management network and alert thresholds for the second Reference Period 2015-19 (2014/132/EU)
- 3 COMMISSION REGULATION (EU) No 691/2010 of 29 July 2010 laying down a performance scheme for air navigation services and network functions and amending Regulation (EC) No 2096/2005 laying down common requirements for the provision of air navigation services
- 4 CRSTMP stands for the following delay causes: ATC Capacity (C), ATC Routeing (R), ATC Staffing (S), ATC Equipment (T), Military activities (M) and Special Events (P). The exhaustive list of all ATFM delay causes can be found out in the ATFCM Users Manual available on <http://www.eurocontrol.int/publications/atfcm-users-manual-0>
- 5 “main” relates to the categories of investments described in Annex II Point 2.1 and Annex IV
- 6 2010-2013 actual CAPEX, 2014 updated planned CAPEX
- 7 Network Performance Plan 2015-2019 – Proposed edition June 2014 - Agreed by NMB for submission to European Commission (file name NPP_June2014_submission to EC, delivered via e-mail to the PRB and uploaded to the “eusinglesky” platform on 30 June 2014).
- 8 Performance Regulation 390/2013, Recitals (9) & (11).
- 9 Performance Regulation 390/2013, Article 11.3 (3) – provides legislative requirement concerning interdependencies.
- 10 Performance Regulation 3901/2013, Annex II, 3.3 — establishes what should have been provided in Performance Plans about interdependencies.
- 11 European Network Operations Plan 2014-2018/19, (version June 2014), paragraph 4.4.1.