

PRB assessment of the revised draft performance plans for RP3

Union-wide assessment report

March 2022

REMARKS FROM THE CHAIR

The COVID-19 pandemic and the related travel restrictions forced all stakeholders of the European aviation industry to redefine their plans. The air navigation service providers (ANSPs) were no exceptions. After adopting the exceptional measures Regulation in November 2020, Member States revised the draft performance plans they had submitted in 2019, incorporating the revised Union-wide targets.

As I write these remarks, another crisis hits Europe. The invasion of Russia into Ukraine brings unspeakable suffering to the nation of Ukraine. These tragic developments will affect the rest of Europe, including aviation, as countries have restricted the use of their airspace. It is too early to assess the impact of these measures. Unlike the pandemic and the related travel restrictions, which affected all Member States in a comparable manner, the current situation will likely impact the Member States in different ways. The Performance Review Body (PRB) thus recommends that the European Commission should proceed as planned with the assessment of the revised draft performance plans. This will provide legal certainty for all stakeholders and allow most Member States to start to close the revenue gap incurred in 2020/2021 from 2023. Member States severely impacted by changes in traffic due to the war in the Ukraine should be able to revise their local targets in the relevant key performance areas, including where their plans have been found consistent with the Union-wide targets.

Based on the facts and figures available before the war in the Ukraine broke out, the PRB recommends the European Commission to approve most of the revised draft performance plans; those which we assess as not consistent all show insufficient ambition aligning the cost to the new realities, planning for substantial cost increases. This overall result is a better outcome compared to the plans submitted in 2019 where the PRB recommended only three plans to be approved.

The PRB has assessed the plans with scrutiny. We have found that many Member States aim to improve the effectiveness of safety management, their environmental performance, capacity and cost-efficiency. Performance is not only about money, but in times when the airspace users as the customers of air navigation service providers have suffered unprecedented financial losses, regulators and providers must take their financial strength into account, especially when deciding how the revenue gap incurred in 2022/2021 is transferred to the users.

The revised draft performance plans also lead to a few sobering conclusions: Air traffic management remains within national silos. Only a few states highlighted cross-border projects. Secondly, even in times where the industry has committed to substantially reduce the emissions of aviation, no Member State has introduced an incentive scheme to improve horizontal flight efficiency. Equally disappointing is the fact that only a few Member States have voluntarily committed to return unspent money for investments collected from the users during RP2. Fortunately, since the beginning of RP3, ANSPs are legally obliged to return unspent money to the users. The revised draft performance plans also confirm that the scalability of ANSP services remains a challenge, both operationally and financially. Responding to change in demand (not only during crisis) and putting capacity where needed requires cross-border cooperation and interoperability. Both still need to be tackled.

This report would not have been possible without the support from our colleagues at Eurocontrol, namely the Network Manager and the Performance Review Unit, as well as the European Union Aviation Safety Agency. I would like to thank them all for the excellent cooperation. Most of all, I would like to thank the PRB support team that again has done a superb job supporting the work of the PRB. Last but not least, I also thank the authorities of the Member States who have collaborated in a truly cooperative spirit with the PRB to resolve issues we encountered during our work.



Regula Dettling-Ott
PRB Chair

EXECUTIVE SUMMARY

The economic regulation of air navigation service providers requires planning of future quality and price with performance plans approved by Member States and the European Commission. The present report is part of this process, evaluating whether the revised draft performance plans Member States submitted in late 2021 are consistent with the revised Union-wide performance targets.¹

This second round of performance planning comes after an unprecedented downturn in traffic following the outbreak of the COVID-19 pandemic in March 2020 and at a time of uncertainty regarding the speed and consistency of the recovery. The objective of this planning is to ensure that European air traffic management (ATM) can operate safely, efficiently and offer value for money to airspace users at a time when they have been hit hard by the pandemic.

The PRB assessment shows a more positive outcome compared to the assessment of the performance plans Member States submitted before the pandemic (October 2019):

- **Safety:** The effectiveness of safety management targeted as a key performance indicator remains mostly excellent.
- **Environment:** The revised draft performance plans demonstrate that Member States are planning to achieve the Union-wide targets. Achieving the targets would be a good outcome for air traffic management in Europe. However, given that the European Commission's Green Deal will affect all aviation stakeholders, ATM will be challenged more than ever to mitigate the effects of aviation on the environment. It is therefore of great concern that a number of Member States did not achieve their targets for 2021. All Member States are encouraged to use all means at their disposal, such as incentive schemes to achieve the targets for the remaining years of RP3 (until 2024).
- **Capacity:** The majority of Member States (all but two) plan to be consistent with the Union-wide targets. This result still achieves the Union-wide targets for the capacity KPA and would be a good outcome for RP3. Concerns remain that – as it was the case before the pandemic - a few area control centres will fail to provide sufficient capacity impacting the entire network. The Network Manager and a few adjacent Member States stand ready to mitigate adverse effects on the network.
- **Cost-efficiency:** The PRB has found that the plans of 22 Member States are consistent with the criteria for the cost-efficiency KPA and seven are not. The majority being consistent is largely a result of the Union-wide targets being set on a less optimistic traffic forecast than the one applied in the revised draft performance plans. Looking at the determined cost planned for the remainder of RP3, the result is more sobering: Cost in 2024 will be slightly higher than in 2019 (additional ATCOs and investment), despite the fact that traffic is forecasted to remain below 2019 and despite the fact that ANSPs plan to invest 5.3B€ - money which should improve performance.

The revised draft performance plans demonstrate that a number of Member States are willing to use instruments of economic regulation to steer the behaviour of the service providers with an incentive scheme as provided for in the performance and charging Regulation. However, Member States often proposed incentive schemes lacking penalties with a material impact on ANSPs' revenues.

Each Member State held consultation meetings with stakeholders to present their revised plans. While a few Member States organised this consultation in an exemplary manner, too many consultations lacked proper preparation. Information was often provided at short notice and the meetings were

¹ With Member States we refer to EU Members plus Norway and Switzerland.

often a one-way flow of information from the national supervisory authority (NSA) and ANSP to stakeholders without sufficient opportunity for meaningful dialogue. Attending 28 of such meetings in three months is a major challenge for airspace users at a time when their resources are limited. Improvements to the consultation process are a high priority for RP4.

Concluding the assessment of all the revised draft performance plans, the PRB finds 17 of them consistent with the Union-wide targets and recommends the Commission to consider them for adoption. The revised draft performance plan jointly submitted by FABEC states is not among them. Whilst only one of them could not pass the consistency criteria, the FABEC states decided to submit a joint plan, and therefore their plans can only be considered as a package. The plans that are deemed inconsistent will have to be revised by the Member States concerned, which will follow the publication of a new STATFOR forecast planned for May 2022. These revisions will need to consider the impact on cost-efficiency targets should the traffic forecast be less optimistic. The PRB will assist the NSAs in their revisions of the performance plans, if requested.

Due to the current situation in Ukraine and the related airspace restrictions, some of the Member States will be heavily impacted also in terms of air traffic management. They are also invited to revise their plans. The PRB will support them in this difficult endeavour. In terms of procedure for the revision, Commission Implementing Regulation (EU) 2019/317 provides for a simpler and more efficient procedure than RP2, avoiding lengthy delays to the planning for ANSPs.

TABLE OF CONTENTS

1	INTRODUCTION	7
1.1	<i>About this report.....</i>	7
1.2	<i>Revised planning for RP3.....</i>	7
1.3	<i>Performance for the remainder of RP3.....</i>	7
2	DEVELOPMENT AND ASSESSMENT OF PERFORMANCE PLANS	9
2.1	<i>Development of the revised performance plans.....</i>	9
2.2	<i>Completeness checks.....</i>	9
2.3	<i>Assessment process.....</i>	9
2.4	<i>Impact of consultation meetings on the performance plans.....</i>	9
2.5	<i>Applicable regulations for the assessment of the draft performance plans.....</i>	10
3	SAFETY	14
3.1	<i>Union-wide targets for RP3.....</i>	14
3.2	<i>Impact of COVID-19 on the safety KPA.....</i>	14
3.3	<i>Approach to the assessment.....</i>	14
3.4	<i>Result of the assessment of the Effectiveness of Safety Management.....</i>	15
3.5	<i>Measures to achieve safety targets in the performance plans.....</i>	15
3.6	<i>Summary and recommendations for the safety KPA.....</i>	15
4	ENVIRONMENT	17
4.1	<i>Union-wide targets for RP3.....</i>	17
4.2	<i>Impact of COVID-19 on the environment KPA.....</i>	17
4.3	<i>Results of the assessment of the environment KPA.....</i>	17
4.4	<i>Measures to achieve environment targets.....</i>	18
4.5	<i>Incentive schemes.....</i>	18
4.6	<i>Summary and recommendations for the environment KPA.....</i>	19
5	CAPACITY.....	20
5.1	<i>Union-wide targets for RP3.....</i>	20
5.2	<i>Impact of COVID-19 on the capacity KPA.....</i>	20
5.3	<i>Results of the assessment of the capacity KPA.....</i>	20
5.4	<i>Measures to achieve the capacity targets.....</i>	22
5.5	<i>Local targets on average arrival ATFM delay per flight.....</i>	23
5.6	<i>Incentive schemes.....</i>	23
5.7	<i>Summary and recommendations of the capacity KPA.....</i>	24
6	COST-EFFICIENCY	26
6.1	<i>Union-wide en route targets for RP3.....</i>	26
6.2	<i>Results of the assessment of the cost-efficiency KPA.....</i>	27
6.3	<i>En route traffic forecasts used in the performance plans.....</i>	28
6.4	<i>Cost analysis for en route.....</i>	29
6.5	<i>Allocation of costs between en route and terminal.....</i>	35
6.6	<i>Union-wide terminal determined unit cost for RP3.....</i>	36
6.7	<i>Summary and recommendations of the cost-efficiency KPA.....</i>	36
7	NETWORK PERFORMANCE PLAN.....	38
7.1	<i>Requirements of the NM within the performance and charging Regulation.....</i>	38
7.2	<i>Summary and recommendations of the network performance plan.....</i>	38
8	INTERDEPENDENCIES AND TRADE OFFS	39
8.1	<i>Interdependencies relating to the safety KPA.....</i>	39
8.2	<i>Interdependencies between the environment and capacity KPAs.....</i>	39
8.3	<i>Interdependencies between the capacity and cost-efficiency KPAs.....</i>	40
8.4	<i>Summary of the interdependencies.....</i>	40
9	THE CIVIL-MILITARY DIMENSION.....	41

11	SUMMARY OF RECOMMENDATIONS.....	42
12	NEXT STEPS FOR RP3	43
12.1	<i>Adoption of performance plans.....</i>	43
12.2	<i>Preparation for RP4</i>	43
12.3	<i>Monitoring activities.....</i>	43

1 INTRODUCTION

1.1 About this report

- 1 In November 2020, the Commission Implementing Regulation (EU) 2020/1627 (exceptional measures Regulation) entered into force to mitigate the impact of the COVID-19 pandemic on air navigation service providers and airspace users.
- 2 Based on this Regulation, the Union-wide targets for the third reference period (RP3) initially adopted in 2019 were revised in 2021. The Performance Review Body of the Single European Sky (PRB) provided advice to the Commission regarding the targets in March 2021. Revised Union-wide targets were adopted and published in June 2021.²
- 3 The PRB has prepared this report to assess the revised draft performance plans (hereafter performance plans) which the Member States and one Functional Airspace Block (FAB) submitted as required by the exceptional measures Regulation. The performance plans cover each year of RP3, from 2020 to 2024.
- 4 This report describes how the PRB has assessed the performance plans and provides a summary of the Union-wide assessment and it is supported by three annexes:
 - Annex I – Technical guide. Description of the methodology applied for the preparation of the factbooks (annex II).
 - Annex II – Factbooks. Detailed assessment of each performance plan.
 - Annex III – Assessment of the Network Performance Plan.

1.2 Revised planning for RP3

- 5 The aviation industry has been hit extremely hard by the impact of the pandemic and the related travel restrictions imposed by governments. In 2021, traffic began to recover as the governments across Europe and the globe began to lift travel

restrictions following the decrease in infections after vaccines and improved testing became available.

- 6 In October 2021 traffic levels were 23% lower compared to October 2019. On 15th October 2021 STATFOR published a new traffic forecast, expecting a substantial recovery above what had previously been projected by the ‘most likely’ Scenario 2 forecast.³
- 7 STATFOR published this forecast after Member States had submitted their performance plans on 30th September 2021. The Commission requested Member States to update the traffic figures of the performance plans to account for the new traffic forecast, to resolve issues identified by the completeness check and to resubmit the plans in November 2021.
- 8 The challenges regarding the forecasting will remain for RP3. For those plans that are not deemed to be consistent with the Union-wide targets, the submission of the revised performance plans will follow the publication of a new STATFOR forecast planned for May 2022, which will take into account the developments caused by the conflict in Ukraine. This may create issues for Member States when re-planning to achieve the Union-wide targets for cost-efficiency.

1.3 Performance for the remainder of RP3

- 9 The recovery of European and global aviation remains uncertain and the impact of the pandemic and geopolitical developments continues to be difficult to predict. This will require Member States, air navigation service providers (ANSPs), and airspace users to adapt to changing traffic without impairing safe and efficient service.
- 10 Regarding safety, the pandemic has created different challenges, which air navigation service providers have overcome, providing high levels of safety throughout the pandemic. These challenges will continue in 2022 and onwards as traffic

² Commission Implementing Decision (EU) 2021/891 of 2 June 2021 setting revised Union-wide performance targets for the air traffic management network for the third reference period (2020-2024) and repealing Implementing Decision (EU) 2019/903.

³ The STATFOR forecast update published on 15th October shows traffic recovering to 87% of 2019 levels in 2022 for the “most likely” scenario. This compares with 69% for the “most likely” scenario in the forecast published in May 2021.

continues to grow with a high degree of unpredictability.

- 11 In 2020, the key performance indicators (KPIs) for the environment KPA within the performance and charging scheme showed significant improvements following the reduction in traffic. The horizontal flight efficiency of the actual route improved from 2.84% in 2019 to 2.51% in 2020, i.e. the extension of routes was reduced.⁴
- 12 En route air traffic flow management (ATFM) delays also improved with the lower traffic, with 0.36 minutes of ATFM delay per flight in 2020.⁵ The volatility of traffic flows and peak times will continue to challenge ANSPs and airspace users.
- 13 Retaining the improvements in performance as traffic grows should be a focus for ATM for the remainder of RP3. This will be challenging, particularly if the latest STATFOR forecast, with a stronger 'bounce back' in 2022, materialises. The uncertainty demonstrates the need for greater flexibility and scalability of ANS provision to adapt to the demands of airspace users as traffic fluctuates. Despite these challenges, with traffic forecasted to remain under the 2019 levels until 2024, the PRB expects the Union-wide capacity and environment targets to be achieved.
- 14 Cost-efficiency will remain a major issue. Air traffic management implies substantial fixed costs. The last two years have shown that ANSPs have managed their costs in very different ways. Some have shown remarkable efforts to reduce costs in view of the biggest crisis of European aviation. Others claim higher costs despite the crisis. The PRB expects that discrepancies will remain. To the extent possible, the effort those Member States have made to contribute to the recovery should be recognised.

⁴ Performance data suggests that the majority of this improvement extended into 2021, with the value increasing to 2.59% as traffic increased compared to 2020 (<https://www.eurocontrol.int/prudata/dashboard/vis/2021/>).

⁵ Performance data suggests that delay fell further in 2021. This is likely to be an effect of heavy delays in the first three months of 2020 prior to and during the early stages of the pandemic.

2 DEVELOPMENT AND ASSESSMENT OF PERFORMANCE PLANS

2.1 *Development of the revised performance plans*

- 15 The national supervisory authorities (NSAs) of the Member States play a vital role in the development and revision of the performance plans.
- 16 In 2019, Member States submitted performance plans for RP3 of the performance and charging scheme. The PRB assessed each of these plans and the Commission prepared draft Decisions related to the consistency of each submission. However, in March 2020 the impact of the pandemic became clear and the focus shifted to adapting the performance and charging Regulation by introducing exceptional measures for RP3. Nonetheless, the performance plans submitted in 2019 provide a useful reference for the present assessment. The PRB expects Member States to have used the period of lower traffic during RP3 to address the issues identified in 2019/2020, such as the capacity shortages in a number of area control centres, and will monitor progress as traffic recovers.
- 17 The PRB and the Commission revised the template for the development of performance plans to align it with the requirements of the exceptional measures Regulation. This template was provided to Member States in June 2021 and was pre-filled with information available for each Member State and FAB. The Member States used these templates to revise their performance plans. Member States were required to consult their performance plans with stakeholders. These consultations took place between June and September 2021. Most were held virtually. Representatives of the PRB, the Commission, and Eurocontrol participated in most of the consultation meetings.

2.2 *Completeness checks*

- 18 The performance plans were to be submitted using the ESSKY platform no later than 30th September 2021.⁶ The majority of Member States submitted their plans on time.

- 19 Upon receipt, the PRB and the Commission assessed the completeness of the performance plans and verified whether they contained all the elements needed to comply with the requirements.⁷
- 20 The PRB and Commission found that all performance plans were missing information. In many cases the issues were minor and due to administrative oversight. A few plans showed major issues and Member States were requested to submit updated performance plans by 17th November 2021.
- 21 In addition to the request for complete submissions, the Commission asked Member States to align their traffic forecasts in their performance plans with the latest STATFOR traffic forecast published on 15th October 2021.⁸

2.3 *Assessment process*

- 22 The PRB assessed the performance plans with the expert support of the Network Manager, the Performance Review Unit (PRU) of Eurocontrol and the European Union Aviation Safety Agency (EASA).
- 23 With the present report, the PRB submits its recommendations to the Commission following the completion of the assessment.

2.4 *Impact of consultation meetings on the performance plans*

- 24 All Member States complied with the statutory requirement to hold consultation meetings with stakeholders. Consultation meetings were held between early June and mid-September. 15 of these meetings were held in August.
- 25 Whilst there were exceptions, the preparation for these meetings was not adequate. Many Member States uploaded supporting material only shortly before the meeting. The volume of material to review, the number of meetings, and their close proximity did not allow sufficient time for airspace users to fully prepare in advance of the meetings.

⁶ The ESSKY platform is a web-based portal provided by the Commission to enable Member States to provide information, data and communication related to the Single European Sky.

⁷ Based on 317 and exceptional measures Regulation.

⁸ Eurocontrol Forecast Update 2021-2027. European Flight Movements and Service Units. Three Scenarios for Recovery from COVID-19.

- 26 Consultation meetings were mostly information sessions from the NSAs and the ANSPs, with little opportunity for meaningful dialogue with stakeholders. The relevant experts were not always present to answer questions, meaning that answers were provided in the days or weeks after the consultation took place.
- 27 The PRB managed the consultation calendar to try to avoid scheduling back-to-back meetings. However, several Member States refused to adapt their timings.
- 28 One Member State (the Netherlands) wished to consult with airspace users separately to the PRB and the Commission. The PRB does not support this approach as it leads to duplication and has no apparent additional value.
- 29 The PRB has reviewed the feedback provided by airspace users and how this has been accounted for by NSAs. Some Member States, but not all, have adapted their performance plans following the feedback received during the consultations.
- 30 At a time when resources are scarce and scheduling is difficult, the PRB encourages Member States to hold single well-planned consultation meetings with all stakeholders present and with information provided well in advance of the meeting. In this regard, the PRB believes an improved consultation process is a high priority for RP4, which would include an obligation to consider the feedback received from airspace users.

2.5 Applicable regulations for the assessment of the draft performance plans

- 31 For the assessment of the performance plans, both the performance and charging Regulation (EU) 2019/317 and the exceptional measures Regulation (EU) 2020/1627 are applicable. The principles applicable to the assessment, such as those laid down in Annex IV of the Commission Implementing Regulation (EU) 2019/317, remain unchanged. Article 14 (1) of this Regulation states that the Commission will assess *“the consistency of the national performance targets contained in the draft performance plans with the Union-wide performance targets on the basis of the criteria laid down in point 1 of Annex IV, and taking into account local circumstances. The Commission may complement the assessment by reviewing the draft performance plans in respect to the elements specified in point 2 of Annex IV”*. This annex defines elements subject to review for each key performance area. The Factbooks (Annex II) cover each of these elements for each KPA in detail.
- ### Application of traffic forecasts
- 32 Article 10 (2) (f) and (g) of the performance and charging Regulation requires the performance plans to be based on Eurocontrol’s latest available STATFOR base traffic forecast.
- 33 During the pandemic, STATFOR built forecasts on scenarios relating to the stages of the pandemic and vaccination availability. These scenarios provided a much wider range of possible outcomes than in previous STATFOR forecasts due to the uncertainty of the recovery. In its forecast published in October 2021, STATFOR produced a seven-year forecast with base, high, and low scenarios.
- 34 The forecast published on 15th October 2021 was based on assumptions regarding the usual parameters including flight statistics, economic growth and models of other industry drivers, including costs, airport capacity, passengers, load factors and aircraft size.
- 35 In addition, STATFOR considered the following information specific to the pandemic:
- the efficacy and uptake of vaccines;
 - the emergence of new variants (including the requirement to update vaccines);
 - the test, trace and isolate programmes;
 - travel restrictions.
- 36 Article 10 (2) (f) and (g) of the performance and charging Regulation also allows national supervisory authorities to use other forecasts if they:
- Consult with airspace users and air navigation service providers concerned.
 - Set out in the draft performance plan the reasons for using a different forecast.
 - Only deviate where specific local factors are not sufficiently addressed by Eurocontrol’s STATFOR base traffic forecast.
 - Apply the same forecast for all key performance areas (KPAs).
- 37 The Commission wrote to Member States in October 2021 to ask them to adapt their traffic forecast following the publication of the forecast on 15th October 2021.

- 38 17 Member States updated their plans in accordance with the new forecast. 12 Member States submitted performance plans specifying reasons to deviate and to use a local forecast. The PRB has accepted a deviation in these cases having assessed their impact on the associated KPAs.
- 39 In order to avoid excessive gains stemming from the traffic risk sharing mechanism for the combined year 2020/2021, the PRB urged the Member States applying the May forecast to update the traffic values for 2021. All the Member States modified the 2021 traffic, as requested.

EASA acceptable means of compliance

- 40 Member States are required to set targets for the key performance indicator related to safety for each calendar year of RP3. For RP3, EASA has developed Acceptable Means of Compliance (AMC) and Guidance Material (GM) defining the requirements to be achieved for the maturity levels for each management objective, published as supporting technical material to Commission Implementing Regulation (EU) 2019/317.⁹
- 41 The AMC and GM for RP3 are different to those used in RP2. For each safety management objective, the level is expected to be one level lower in RP3 compared to RP2 for the same level of safety maturity. This implies a change in the interpretation of the maturity level and does not imply a degradation of safety or safety management practices.
- 42 The PRB considers that Member States and their ANSPs as well as the Network Manager should apply the AMC in their performance plans for calibrating the effectiveness of their safety management system, because these common standards provide legal certainty and uniform implementation.

Local reference values

- 43 The assessment criteria set out in Annex IV paragraph 1.2 and 1.3 of the performance and charging Regulation consider the consistency between the draft performance targets and the local or FAB reference values. Given the downturn in traffic the local or FAB reference values for environment or

capacity should be adopted by States in their plans.

- 44 Member States not targeting to achieve their reference values for environment and capacity for the remainder of RP3 will be recommended to revise their plans.

Cost-efficiency criteria

- 45 Commission Implementing Regulation (EU) 2019/317 defines the criteria for the cost-efficiency of performance plans in Article 10 and their assessment in terms of consistency of the local targets with the Union-wide targets in Annex IV: The determined unit cost proposed in the performance plan needs to meet certain criteria and the proposed values should be compliant with the comparator group.
- 46 Section 2 of Annex IV specifies the elements the PRB reviews for the assessment, namely “*key factors and parameters underpinning the national or FAB performance targets*” in (2.1 (d)). Criteria (a) and (b) ensure that the trend of local determined unit cost is consistent with the Union-wide trends. Criterion (a) assesses the consistency of this trend over the third reference period, while criterion (b) assesses it over the second and third reference period combined. Criterion (c) assesses the baseline for the determined unit cost with the corresponding average value of the relevant comparator group.¹⁰
- 47 Annex IV 1.4 of the performance and charging Regulation does not stipulate whether a performance plan should meet all the criteria of paragraphs (a) to (c) or a subset of them. The exceptional measures Regulation (EU) 2020/1627 only addresses the revision of the targets in view of the traffic development during the COVID-19 pandemic, but not the assessment criteria of the performance plans.
- 48 The PRB has used the same approach as in the previous assessment published in March 2020, in that:
- A Member State must comply with two of the three criteria ((a) to (c)) to be consistent with the Union-wide trends. By being consistent

⁹ Union-wide targets for the safety KPA are set against this supporting material. Member States, therefore, use this technical material for their assessment to avoid a mismatch between the targets and the assessment.

¹⁰ The comparator groups of air navigation service providers with a similar operational and economic environment, for the purposes of assessing performance targets in the key performance area of cost-efficiency.

with both criteria (a) and (b), the charging zone has to achieve the short-term evolution of determined unit cost according to RP3 targets (criteria (a)), and the long-term evolution as defined by criteria (b). This combination ensures that a charging zone with historically high unit costs continues its efforts to reduce cost. By being consistent with criteria (a) and (c), the charging zone has to achieve the short-term evolution of determined unit cost according to the RP3 targets (criteria (a)), as well as showing a relatively low 2019 baseline (criteria (c)). This combination ensures that charging zones with historically relatively low unit costs continue their efforts to have determined unit cost corresponding to the RP3 targets. By being consistent with criteria (b) and (c), the charging zone has to achieve the long-term evolution of determined unit costs, showing as well a relatively low 2019 baseline. This combination ensures a continuous effort to decrease costs for relatively low unit cost charging zones.

- A Member State may deviate from the Union-wide trend and long-term trend to achieve the capacity targets or to implement restructuring measures leading to restructuring costs. In the case of restructuring costs, the deviation needs to deliver a net financial benefit to airspace users at the latest in the subsequent reference period.
- A deviation for capacity reasons (criterion (d)(i)) can only be considered in relation to performance plans which deviate from at least one of the Union-wide cost-efficiency trends and which include capacity targets which are consistent with the reference values. For all the Member States deviating from the trend criteria, the PRB analysed and assessed the application of such a deviation.

49 In addition to the aforementioned criteria, the PRB has also considered Article 10 (2)(a) of Commission Implementing Regulation (EU) 2019/317 specifying that, *“(t)he baseline value for determined costs shall be estimated by using the actual costs available for the preceding reference period and shall be adjusted to take account of latest*

available cost estimates, traffic variations and their relation to cost”.

- 50 With respect to the legal requirements laid down in Annex IV (criteria (a) and (b)), the local trend is assessed comparing the values for the determined unit costs (DUC) a Member State establishes in its performance plan against the Union-wide trends stemming from the targets. However, the Regulation does not define the term “trend”. For the evaluation of the performance plans submitted in 2019, the PRB applied a linear trend as a reference, more specifically a single linear compounded annual growth rate (CAGR) over RP3 starting from the DUC baseline value. Small deviations were allowed during the period, and the consistency was evaluated based on the average decrease, with the cost-efficiency target being constant and equal for each year of RP3 (i.e. -1.9%).
- 51 The revised year-on-year Union-wide cost-efficiency targets adopted in June 2021 are not constant or equal over the period. The targets and the DUC included in the revised plans show a sharp increase for the combined years of 2020/2021 and high values during 2022 and 2023 because of low traffic levels. Moreover, the targets are based on the STATFOR May 2021 base traffic forecast while the majority of the revised performance plans are based on the higher STATFOR October 2021 traffic forecast. Considering this and the wording of the Regulation, the PRB concludes that the method used in 2019 for the assessment of cost-efficiency is also adequate to evaluate the revised performance plans. The Union-wide trend during RP3 (criterion (a)) calculated based on the Union-wide targets equals +1.0%. The Union-wide long-term trend (covering RP2 and RP3) equals -1.3%.¹¹
- 52 The PRB recognises that the trend approach emphasises the baseline and last year of the period, while not considering the evolution of the DUC in the middle years (i.e. 2020/2021, 2022, 2023). Nevertheless, such analysis has been taken into consideration when assessing the performance plans.
- 53 Assessing the local DUC trend for RP3 and the local long-term DUC trend, it is also necessary to verify that the DUC baseline values used for each charging zone comply with the principles set out in Article 10(2)(a) of Commission Implementing

¹¹ Both CAGR calculation considers 20/21 as a combined year.

Regulation (EU) 2019/317. Those baseline values should be underpinned by sound assumptions reflecting the actual costs and traffic recorded for the charging zone, including adjustments, if duly justified. The review of the baseline value is an essential part of the assessment as an inflated baseline value would distort the calculation of the local DUC trends for the charging zone concerned.

Change management

- 54 Member States were required to describe the change management practices and transition plans for the entry into service of major airspace changes or for changes to ATM Functional Systems to minimise any negative impact on the network performance.
- 55 The PRB has agreed with EASA that change management procedures compliant with the Commission Implementing Regulation (EU) 2017/373, including coordination with the Network Manager, are sufficient means to address any negative impact from changes on network performance. The NSAs and EASA would oversee the application of such procedures

Monitoring of the implementation of the plans

- 56 Given the traffic situation, the PRB expects that Member States will achieve the Union-wide targets in each year of RP3. Some Member States have submitted a plan that demonstrates that the targets can be achieved. Several Member States have submitted plans that do not achieve the targets. Others have submitted plans that are consistent with the local reference values but did not achieve the 2021 performance target. Additionally, some plans do not include sufficient measures to achieve the proposed targets for the remainder of RP3.
- 57 The PRB will monitor the implementation of measures and the evolution of performance during RP3 to highlight shortcomings to the Commission. The PRB will analyse and evaluate the rectification and remedial measures implemented by the NSAs.

3 SAFETY

- The PRB recommends to approve the safety targets of all Member States.
- All Member States provided targets for all five years in RP3 and achieve the RP3 targets by 2024.
- Some Member States should improve measures to ensure these are sufficient to achieve the maturity levels within the performance plans.

3.1 Union-wide targets for RP3

- 58 The Union-wide targets for RP3 for the effectiveness of safety management (EoSM) remain unchanged. The targets are defined as a minimum maturity level to be achieved for five management objectives at the end of RP3 (Table 1).¹² In order to monitor progress and ensure targets can realistically be met at the end of RP3, Member States shall provide planned maturity levels for each year of RP3.
- 59 The key performance indicator for RP3 is based on the definition of maturity levels published in Spring 2020.¹³

Management objectives	2024 Maturity Level
Safety Policy and Objectives	C
Safety Risk Management	D
Safety Assurance	C
Safety Promotion	C
Safety Culture	C

Table 1 – Union-wide safety targets for RP3.

3.2 Impact of COVID-19 on the safety KPA

- 60 In 2020, 13 ANSPs already achieved the RP3 targets (target maturity level in 2024) for the effectiveness of safety management for all management objectives (based on the new revised questionnaire). The remaining ANSPs must achieve the target maturity level for EoSM by 2024.
- 61 Comparing the performance of ANSPs in each individual management objective between the end of RP2 and what was achieved the first year of RP3 shows that, unfortunately, more achieved maturity level B in 2020 than expected for all safety management objectives other than safety risk management. For safety risk management, which

was considered more difficult to achieve, more ANSPs have already achieved the RP3 target than anticipated when considering maturity levels at the end of RP2.

- 62 The difference between what could be expected and what was achieved may relate to 2020 being the first year the new definitions of the maturity levels were applied, with ANSPs and NSAs still becoming familiar with the new definition.
- 63 Looking at safety performance in 2020, it showed a consistently high level of safety achieved within the aviation industry - ANSPs included - despite the impact from COVID-19. Hence the aviation industry has found effective ways of mitigating impacts from COVID-19 on their operations. The challenge for the remainder of RP3 will be to ensure safety levels remain high when traffic recovers and ANSPs again have to increase capacity to match demand.

3.3 Approach to the assessment

- 64 The PRB has coordinated with EASA on the completeness and consistency of the performance plans.
- 65 The PRB compared the targets within each performance plan with the Union-wide targets. The PRB also considered whether measures included in a plan should enable the Member States to achieve the targets at the end of RP3, i.e. that measures reflect the improvements needed over RP3 based on the starting level in 2020 and the targets thereafter.
- 66 Where targets were not proposed for each year of RP3 in the performance plans submitted in October, it was not possible to assess whether the measures proposed would be sufficient to comply with the target by 2024. Therefore, the PRB

¹² The levels of achievement for the five management objectives range from Level "A" (lowest maturity) to Level "E" (highest maturity). For further details please refer to the 'PRB assessment of performance plans for RP3 – Technical Guide'.

¹³ Easy access rules for S(K)PI (Regulations (EC) No 549/2004 and (EU) 2019/317), [Easy access rules for S\(K\)PI \(Regulations \(EC\) No 549/2004 and \(EU\) 2019/317\) \(europa.eu\)](#). The definition of maturity levels and associated questionnaires are supporting technical material made available by the Commission Services.

considered these plans as incomplete and requested the relevant Member States to provide maturity levels for all years in RP3.

- 67 The PRB and EASA assessed whether the proposed measures were sufficient. In several cases, the PRB concluded that additional measures would be necessary. Measures related to the NSAs were also considered, in particular measures for NSAs to comply with Commission Implementing Regulation (EU) 2017/373.¹⁴ This ensures the NSA has the capability to verify an ANSP's assessment of their level of maturity.

3.4 Result of the assessment of the Effectiveness of Safety Management

- 68 The performance plans submitted in November 2021 cover a total of 36 ANSPs and show that all Member States have provided targets for the effectiveness of safety management for each year of RP3 and that all ANSPs plan to achieve the Union-wide targets at the latest by end of RP3:

- Seven ANSPs plan to achieve the RP3 targets during the first year of RP3 (the ANSPs of Cyprus, Finland, MUAC, Ireland, Sweden (ACR, SDATS and AFAB)).
- 14 ANSPs plan to achieve the RP3 targets in the last year of RP3 (Austria, Croatia, Greece, Malta, Norway, Poland (PANSA, Warmia i Mazury, Port Lotniczy Bydgoszcz), Portugal, Romania, Slovakia, Slovenia, Spain (ENAIRES, Ferrovies)).
- 13 ANSPs plan a gradual improvement over RP3 to achieve the targets (Belgium, Luxembourg, Bulgaria, Czech Republic, Denmark, France, Germany, Hungary, Italy, Latvia, the Netherlands, Sweden (LFV), Switzerland).
- Two ANSPs plan to exceed the RP3 targets by the end of RP3 on management objectives other than safety risk management, with the target for safety risk management already defined as the highest achievable (Latvia, Malta).

- 69 The PRB notes that 13 ANSPs achieved higher maturity levels in 2020 than planned for that year (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Italy, Lithuania, Norway, Poland (PANSA), Portugal, Romania, Slovakia, Spain (ENAIRES)).

Moreover, 12 ANSPs are already achieving RP3 targets in 2020 (Bulgaria, Czech Republic, Estonia, Hungary, Italy, Lithuania, Norway, Poland (PANSA), Portugal, Romania, Spain (ENAIRES)) and MUAC).

- 70 As mentioned, some ANSPs planned to start RP3 at a lower level of maturity than could be anticipated based on the levels achieved at the end of RP2. The PRB does not consider that this puts safety or the management of safety at risk as it is likely to be related to a conservative approach by ANSPs in the interpretation of what is required to achieve a certain maturity level under the new RP3 AMC/GM.

3.5 Measures to achieve safety targets in the performance plans

- 71 Member States defined various measures to ensure they can meet the targets and - where needed - that the maturity levels will improve over RP3. Some provided detailed measures, but most Member States provided general descriptions. Most Member States included compliance with Commission Implementing Regulation (EU) 2017/373 as a measure; the PRB and EASA agree that this is an important measure.

- 72 The PRB recommends 16 Member States to consider improving measures by linking them to a certain management objective or by including measures for the NSA to comply with Commission Implementing Regulation (EU) 2017/373.

- 73 The PRB considers the performance plans to be consistent with the requirements of the performance and charging Regulation, but will monitor the shortcomings identified.

3.6 Summary and recommendations for the safety KPA

- 74 All Member States set their targets at the end of RP3 consistent with the Union-wide targets for RP3 and all provided planned maturity levels for each year of RP3.

- 75 The PRB considered that the majority of Member States plan measures for their ANSPs which are sufficient to reach the target by end of RP3. The measures of 16 Member States were considered not to be sufficient. Five issues were related to

¹⁴ Commission Implementing Regulation (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight.

measures for ANSPs, and 13 related to measures for NSAs.

- 76 Moreover, five ANSPs have planned levels at the start of RP3, which are lower than the level they actually achieved in 2020. These ANSPs need to ensure that the maturity levels do not degrade

over RP3 even if they still would be in line with their performance plans.

- 77 The PRB recommendations as a result of the assessment of the performance plan within the safety KPA are shown in Table 2.

Recommend to approve (consistent)		Recommend not to approve (inconsistent)
Without comment for the safety KPA	With specific PRB monitoring points	
Belgium	Austria	
France	Bulgaria	
Germany	Croatia	
Greece	Cyprus	
Ireland	Czech Republic	
Italy	Denmark	
Malta	Estonia	
MUAC	Finland	
The Netherlands	Hungary	
Slovenia	Latvia	
Switzerland	Lithuania	
	Luxembourg	
	Norway	
	Poland	
	Portugal	
	Romania	
	Slovakia	
	Spain	
	Sweden	

Table 2 – PRB recommendations for the safety KPA.

4 ENVIRONMENT

- The PRB recommends to approve the environment targets of all Member States.
- Some Members States include targets for 2021 in the environment KPA that are consistent with the national reference values, but that were not achieved. Meeting future targets will be more difficult as traffic increases.
- Most Member States’ performance plans fail to commit to all the major ERNIP projects related to improving environmental performance, leaving it unclear how they will achieve the targets.

4.1 Union-wide targets for RP3

- 78 The target for the environment KPA is set on the actual horizontal flight inefficiency (KEA), calculated as a ratio between the horizontal length of the flown routes and the so-called achieved distance.
- 79 Following the impact of the COVID-19 pandemic, Commission Implementing Decision (EU) 2021/891 revised the Union-wide targets for the environment KPA, as shown in Table 3. The revised targets differ in calendar years 2021 and 2022, reflecting the lower (expected) traffic.

	2020	2021	2022	2023	2024
Initial KEA targets from 2019 (%)	2.53	2.47	2.40	2.40	2.40
Revised KEA targets (%)	2.53	2.37	2.37	2.40	2.40

Table 3 – Union-wide environment targets for RP3. The “initial” targets refer to the ones in Commission Implementing Decision (EU) 2019/903 and the “revised” targets refer to the ones in Commission Implementing Decision (EU) 2021/891.

4.2 Impact of COVID-19 on the environment KPA

- 80 The pandemic caused air traffic to significantly decrease in 2020 compared to what was expected in the February 2019 STATFOR forecast.
- 81 The decrease in traffic impacted the environment KPA. As an example, during April 2020, when demand on ATM services was at its lowest point of the pandemic, KEA was 2.11%. This is an improvement of 26.5% compared to April 2019 when KEA was at 2.87%.

- 82 Plotting the 2020 and 2019 monthly performance of KEA against the number of instrument flight rules (IFR) movements shows a distinct correlation between traffic and KEA (i.e. when traffic decreases, KEA improves and vice versa) (Figure 1).

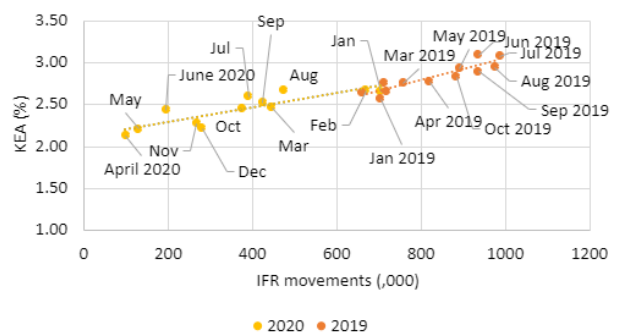


Figure 1- (source: PRB elaboration), correlation between IFR movements and horizontal flight efficiency, showing that the variation of KEA in 2020 followed a similar gradient as in 2019.

- 83 The linear relationship between traffic and KEA in 2019 was also apparent in 2020, suggesting that the main determinant of environmental performance is traffic levels and the ability of Member States to manage it with the capacity available.
- 84 As of December 2021, traffic is gradually recovering and the latest STATFOR forecast (October 2021) suggests that traffic will reach 2019 levels by the end of RP3 and that Member States will need to improve in order to ensure environmental performance does not degrade to the performance observed in 2019.

4.3 Results of the assessment of the environment KPA

- 85 The revised Union-wide targets shown in Table 3 were broken down into national and FAB reference values by the Network Manager in Part 2 of the June 2021 European Route Network Improvement Plan (ERNIP).¹⁵

¹⁵ European Route Network Improvement Plan (ERNIP) - Part 2: European ATS Route Network - Version 2021-2030 - Edition June 2021.

86 All Member States plan to achieve their allocated national reference values and, therefore, plan a performance that is consistent with the Union-wide targets.

4.4 Measures to achieve environment targets

87 The Commission may complement the assessment process by reviewing measures a Member State has proposed for achieving (national or FAB) performance targets in each KPA.

88 The performance plans include the following reasons proposed by Member States, which may adversely affect their ability to reach their planned environment KPA targets:

89 **Flight planning and airspace users' route choices:** Member States highlight that airspace users' route choices are an uncontrollable factor that affects their ANSPs' ability to deliver performance according to the national reference values. Article 32 (1) of Commission Implementing Regulation (EU) 2019/317 allows Member States to modulate their air navigation service charges to 'reduce the environmental impact of flying', enabling Member States to influence the routes airspace users choose. No Member States included this option to modulate charges to support achieving the environmental targets.

90 **Re-routing due to geopolitical situations:** Geopolitical situations (e.g. re-routing to avoid Belarus airspace, conflict in Ukraine) affect flight planning and cause re-routing of flights that are not permitted or would like to avoid certain airspace. This has a significant impact on the performance of surrounding States.

91 **Military airspace requirements:** Active temporary reserved areas (TRAs)/temporary segregated areas (TSAs) can require airspace users to fly up to 20 additional nautical miles per flight. Cooperation between civil and military air traffic management can help meet the needs of the military, while minimising the impact on civil airspace users. France, Italy, Poland and Romania included a flexible use of airspace (FUA) concept in their performance plans, releasing airspace the military does not use, or no longer uses, to civil airspace users.

92 **Free route airspace deployment (FRA):** The PRB considers the deployment of free route airspace, as mandated by ATM Functionality 3 (AF3) in the pilot common project (PCP)¹⁶ to be important for achieving the Union-wide targets. Most States have committed to, or are already, offering free route airspace, often beyond the requirements of the PCP. The ERNIP includes recommendations where FRA should be deployed, including cross-border (CB) FRA as detailed. Only Bulgaria, Cyprus, Denmark, Italy, Malta, Norway, Slovakia and Switzerland did not provide sufficient information to determine whether they offer or plan to implement FRA or CB FRA as detailed in the ERNIP.¹⁷ The PRB considers the recommendations in the ERNIP as a measure, which States should take to achieve the reference values.

93 **Weather disturbance:** Adverse weather may cause ANSPs and airspace users to extend the planned route for safety and comfort. The targets for RP3 account for weather-related impacts on horizontal flight efficiency. They are integrated in the Union-wide targets and the national and FAB reference values. Therefore, Member States should not add additional tolerance for weather-related route extension.

94 In addition, Member States have proposed other measures to achieve the environment targets, such as performance-based navigation (PBN), air traffic service (ATS) route improvement, airspace redesign, new air traffic management system implementations, and other projects. The PRB has taken these measures into account in the assessment.

95 All Member States set targets to be consistent with the national reference values, but some Member States were unable to achieve their targets for 2021. Thus, even though these performance plans are recommended for approval, the PRB will closely monitor their performance and may recommend measures should they fail to meet the targets in 2022.

4.5 Incentive schemes

96 Article 14(1) of Commission Implementing Regulation (EU) 2019/317 specifies that the Commission

¹⁶ Commission Implementing Regulation (EU) No 716/2014.

¹⁷ These Member States may have ongoing FRA projects but not all the related FRA ERNIP projects were committed to in the performance plan.

may complement the assessment process with a review of the incentive scheme or schemes.

- 97 Article 11(4) of Commission Implementing Regulation (EU) 2019/317 enables Member States to incentivise its ANSP(s) to achieve their environment targets. Applying an optional incentive scheme for the environment KPA, where appropriate, can provide momentum and incentivise ANSPs to prioritise the environment KPA since revenue would be placed at risk.
- 98 None of the Member States chose to incentivise its ANSP on environmental performance.

4.6 Summary and recommendations for the environment KPA

- 99 All Member States set their environment targets so that they are consistent with their national reference values.

100 Several Member States have not fully demonstrated that they will actually reach their targets. The PRB will monitor the implementation of measures and the evolution of performance during RP3.

101 The Network Manager listed major projects in the ERNIP that will help Member States achieve the environmental targets. Most Member States do not commit to implementing all the projects recommended to them, which includes free route airspace and route optimisation projects.

102 The PRB recommendations as a result of the assessment of the performance plan are shown in Table 4.

Recommend to approve (consistent)		Recommend not to approve (inconsistent)
Without comment for the Environment KPA	With specific PRB monitoring points	
Austria	Belgium - Luxembourg	
Croatia	Bulgaria	
Czech Republic	Cyprus	
Denmark	Estonia	
Finland	France	
Germany	Greece	
Ireland	Hungary	
Norway	Italy	
Portugal	Latvia	
Slovenia	Lithuania	
Sweden	Malta	
Switzerland	The Netherlands	
	Poland	
	Romania	
	Slovakia	
	Spain	
	FABEC	

Table 4 - PRB recommendations for the environment KPA.

5 CAPACITY

- The PRB recommends to approve the capacity targets of 21 Member States and FABEC, and to not approve them for two Member States (Cyprus and Greece).
- Despite Member States planning to meet the capacity targets, and traffic levels being lower than in 2019, the Network Manager will have to intervene with strategically planned measures to mitigate network level disruptions caused by transition projects in some of the ACCs.

5.1 Union-wide targets for RP3

- 103 The targets for the capacity KPA are set on average en route ATFM delay attributable to air navigation services, expressed in minutes per flight for each calendar year of RP3.
- 104 Following the impact of the COVID-19 pandemic, Commission Implementing Decision (EU) 2021/891 revised the Union-wide targets for the capacity KPA, as shown in Table 5.

	2020	2021	2022	2023	2024
Initial targets (min/flight)	0.9	0.9	0.7	0.5	0.5
Revised targets (min/flight)	0.9	0.35	0.5	0.5	0.5

Table 5 - Union-wide capacity targets for RP3. The “initial” targets refer to the ones in Commission Implementing Decision (EU) 2019/903 and the “revised” targets refer to the ones in Commission Implementing Decision (EU) 2021/891.

5.2 Impact of COVID-19 on the capacity KPA

- 105 At the beginning of 2020, before the onset of the pandemic, en route ATFM delays were higher than those during the same period in 2019. 2020 looked likely to be another year of record high delays. Following the first three months however, and the reduction in traffic, en route ATFM delays diminished, resulting in 0.36 minutes per flight for 2020.
- 106 After seven years of continuous growth in traffic demand, and the pressure to improve capacity,

ANSPs were faced with the new challenge of managing excess capacity and having to scale down their operations. At the same time they had to ensure the continuity of air traffic control services, and to protect the health and safety of their personnel.

- 107 The reactions of ANSPs differed, ranging from halting investment projects and reducing sector capacities to accelerating project work and increasing the number of sectors at maximum configuration.
- 108 At the time of writing this report, uncertainty about traffic forecast remains, both because of the pandemic and the conflict in Ukraine. It is still unclear when and how quickly air traffic will recover and how volatile it will be in the future. This uncertainty and volatility means that ANSPs must prepare to handle traffic levels close to 2019, or even higher during peak periods, while at the same time improving their flexibility to adjust downwards should events take an unfortunate turn.
- 109 Even with the unprecedented uncertainty in traffic, en route ATFM delays should be kept close to zero until traffic fully recovers, particularly with costs remaining stable at Union-wide level and with performance benefits from investment to be expected.

5.3 Results of the assessment of the capacity KPA

- 110 The Union-wide capacity performance included in the performance plans appears to be on track to achieve the Union-wide targets. The overall picture is presented in Figure 2 (next page).

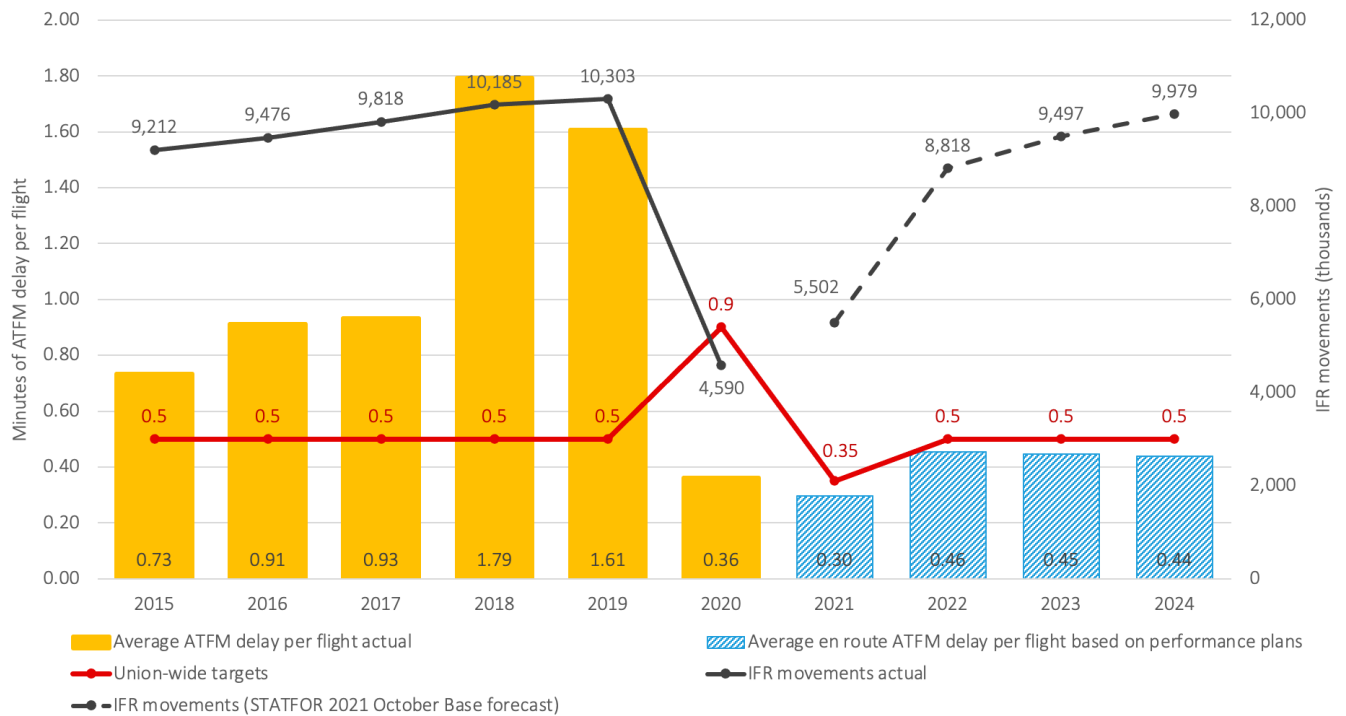


Figure 2 - Union-wide capacity targets for RP3, compared to average en route ATFM delays calculated based on the performance plans.

- 111 Out of the 25 submitted performance plans, only two plans include capacity targets above the corresponding national reference values (Cyprus and Greece).
- 112 Greece is the only Member State to set targets, which are less ambitious than the respective reference values in each year between 2021 and 2024. However, the difference between the national target and the reference value for Greece is marginal in 2023 and 2024. Cyprus proposes targets that are significantly less ambitious than the respective reference values for 2022-2024, without a clear trend of moving towards achieving the targets in RP3. In both Member States, structural issues will continue to impair capacity. This includes limited resources for implementing projects and recruiting and training ATCOs, and a lack of flexible rostering schemes.
- 113 There is only one State which proposes a more ambitious target than the national reference value: the national capacity target proposed by Norway for 2022 is marginally more ambitious than the national reference value for that year.
- 114 Apart from the aforementioned exceptions, Member States have proposed targets, which are set equal to the corresponding national reference values for all years of RP3.
- 115 Based on the proposed performance targets, and the STATFOR 2021 October baseline forecast of IFR movements, the Union-wide targets for capacity can be achieved, provided that Member States achieve their national targets. Based on the evidence presented in the performance plans, the achievement of the targets is driven largely by the relatively low traffic volumes, which are only expected to reach close to 2019 levels in 2024 on a Union-wide average.
- 116 Reduced capacity due to the implementation of new technology (namely in French Area Control Centres of Reims, Brest and Bordeaux) may affect adjacent ANSPs and increase delays in the coming years and requires the Network Manager to introduce strategically planned re-routing schemes to offload the sectors with reduced capacity. Thus, close and continuous coordination with the Network Manager is crucial to minimise the impact of such reductions.
- 117 The overall Union-wide capacity performance looks positive assuming that Member States will perform as planned. However, significant uncertainty remains how ANSPs will handle the recovery of traffic, especially if traffic increases at higher rates than anticipated.

5.4 Measures to achieve the capacity targets

- 118 Most of the ANSPs plan to invest in their ATM systems. The planned investments range from the introduction of new tools and functionalities to the implementation of whole new ATM systems. Many ANSPs are planning their ATM system related investments in a coordinated manner, either bilaterally or as part of an alliance or user group.
- 119 Improving the ATM systems can be an effective way of increasing capacity, however, there is always a transitional period associated with larger implementations, during which capacity may be significantly reduced. Depending on the duration and timing of these transitions, the impact on capacity performance might be notable. One of the key factors affecting capacity performance in RP3 will be how well these transitions are managed, and how quickly capacity ramps up afterwards. The PRB will monitor this issue in coordination with the Network Manager.
- 120 Besides investing in ATM systems, ANSPs also include projects on airspace reorganisation and restructuring in their plans. These measures are typically aimed at reorganising and rearranging terminal areas and their interface with upper airspace. They often focus on how the number of sectors can be increased, while avoiding additional complexity. Airspace reorganisation projects can be an effective way of improving capacity, while at the same time they can be cost-efficient measures when compared to costly investments into ATM systems, with the caveat that the ANSPs must be able to allocate resources to the additional sectors and keep them open for sustained periods during peak hours.
- 121 Nearly all ANSPs plan or refer to measures to introduce and/or further implement free route airspace, in some cases with cross-border projects. Even though free route airspace operations have many benefits, the impact on capacity performance is rather indirect, and it is largely dependent on the scale and scope of the implementation.
- 122 One of the key drivers behind en route ATFM delays has been the lack of ATCOs in ANSPs, and the inability of ANSPs to open enough sectors to cope with traffic demand. In 2020, most of the ANSPs responded to the pandemic by postponing recruitment and training for ATCOs.
- 123 All the submitted performance plans include figures on the planned number of ATCOs in operations expressed in full-time equivalents (ATCOs in OPS FTEs).
- 124 At Union-wide level, the performance plans indicate an average increase of +7% in FTE ATCOs in OPS, when comparing 2024 and 2019, which translates into 8,470 FTEs in 2024, 548 more than the 7,922 registered in 2019. Almost half of these controllers will be employed by three ANSPs: DFS in Germany (108), DSNA in France (87), and HCAA in Greece (71).
- 125 Out of the 29 ANSPs concerned, 23 ANSPs plan to have more FTE ATCOs in OPS in 2024 than in 2019. Out of these, nine ANSPs plan an increase of at least 15% or more. Czech Republic (+38%), Greece (+33%), Cyprus (+28%), Portugal (+25%) and Belgium (+21%) represent the top five, in terms of the planned increase.
- 126 Five performance plans include a reduction in their FTE ATCOs in OPS figures by 2024, compared to 2019: Spain (-3%), Switzerland (-4%), The Netherlands (-9%), Estonia (-10%), and Denmark (-12%). The Netherlands and Estonia included capacity profile plans for 2024 which are higher than those of 2019, with less ATCOs in OPS. Only Ireland plans the same number of ATCOs in 2024 as in 2019.
- 127 While the information provided in the performance plans on ATCO planning indicates that Member States are now committed to resolving the shortage of ATCO staff, which has been so apparent in 2019 and before, a considerable uncertainty remains regarding to what extent the more ambitious recruiting and training plans will be realised in given ANSPs. In addition, recruiting and training of ATCOs, including the selection process, shows vast differences among Member States, making it difficult to assess at what time an ATCO contributes to increasing capacity. The PRB will monitor closely how ANSPs realise these ambitious training programmes.
- 128 While all performance plans contain information on measures to provide the planned capacity and are also in line with the measures listed in the Network Operations Plan, the PRB would have welcomed additional details regarding how the proposed targets are planned to be achieved.

5.5 Local targets on average arrival ATFM delay per flight

- 129 According to Article 1(3) of the performance and charging Regulation, terminal services provided at airports that have more than 80,000 IFR movements per year are within the bounds of the scheme.¹⁸ The Regulation requires targets for the average arrival ATFM delay per flight. They are among the elements to be reviewed in the course of the assessment criteria for performance plans (2.1(b) of Annex IV). The performance plans of 23 Member States included terminal ANS.
- 130 Belgium, Greece, Romania and Portugal have set national targets which are significantly less ambitious than those of 2019, although it must be noted, that the national targets in Belgium, Greece and Romania have been close to (or equal to) zero (Figure 3).

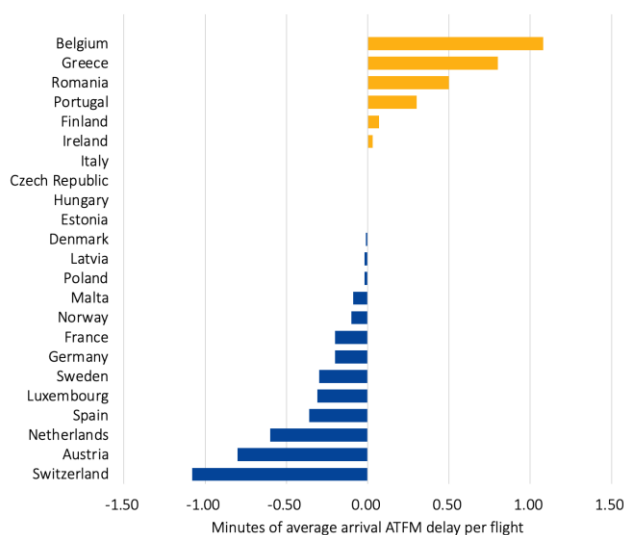


Figure 3 - National targets on average arrival ATFM delay: 2021 targets compared to 2019 targets. Out of the 24 Member States which have set national targets on average arrival ATFM delay, six states set targets which are less ambitious than those set for 2019, four states retained their 2019 national targets, whereas 13 states set more ambitious targets than in the targets within the performance plans submitted in 2019.

- 131 The most notable planned improvement for 2021 compared to 2019 are planned in the Netherlands, Austria, and Switzerland, with all of these Member States setting targets which are more than 0.5 minutes per arrival lower than in 2019.
- 132 When comparing the national targets set for 2024 with those of 2019, the picture is only slightly

different: There are six Member States setting less ambitious targets compared to 2019, however Poland is the sixth State instead of Ireland. 14 Member States plan more ambitious targets in 2024 than in 2019, whereas three Member States retain their targets from 2019.

- 133 When looking at the ambition of the proposed targets, it appears that seven Member States have set less ambitious targets for 2024 than for 2021. Out of these, Portugal, Finland, Switzerland, and Austria set targets, which are significantly higher than in 2021, while Sweden and Spain set marginally higher targets for 2024.
- 134 In comparison to the average performance observed in RP2, only 11 Member States set targets which represent improved performance in 2021, and only seven set targets which represent improved performance compared to 2024 (Figure 4).
- 135 The information provided in the performance plans about the rationale and measures behind the national targets on average arrival ATFM delays does not provide sufficient detail to explain why a certain level of performance is foreseen, what measures are planned, and what benefits are expected from those measures.

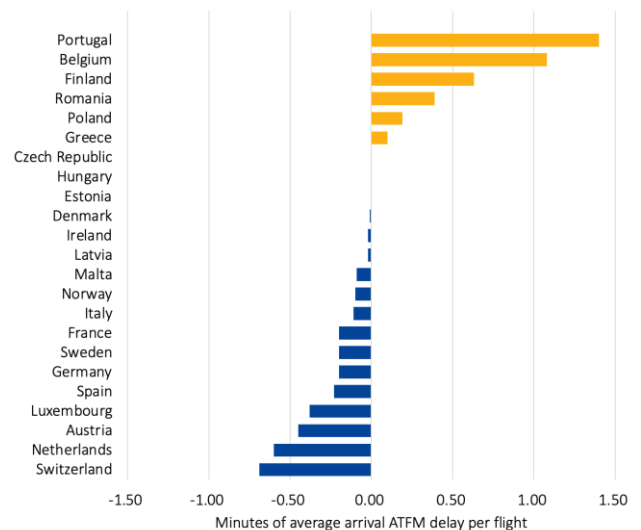


Figure 4 - National targets on average arrival ATFM delay: 2024 targets compared to the targets within the performance plans submitted in 2019.

5.6 Incentive schemes

- 136 Article 11(3) of the performance and charging Regulation defines the requirements for incentive schemes for the capacity KPA. The Regulation

¹⁸ Member States may also include airports in their performance plans on a voluntary basis as per Article 1(4) of the Regulation.

stipulates that performance plans must contain an incentive scheme with regard to the achievement of en route and terminal capacity targets.

- 137 Out of the 29 en route capacity incentive schemes proposed (29 ANSP-level schemes plus one FAB-level scheme for FABEC), six incentive schemes are set up with penalties only. There are ten incentive schemes where the maximum penalty is set at or above 1% of determined costs, and half of the incentive schemes are asymmetric, with maximum penalties higher than maximum bonuses (Figure 5). 13 incentive schemes include only the delay from causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events.¹⁹

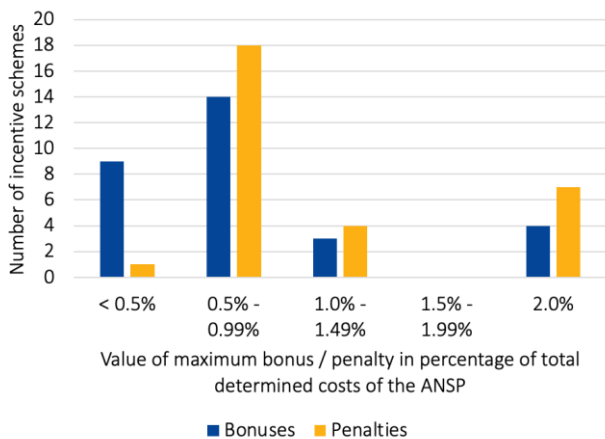


Figure 5 - Frequency of maximum bonus and penalty values of en route capacity incentive schemes.

- 138 As for terminal capacity incentive schemes, 23 schemes were proposed, ten of which are asymmetric schemes with maximum penalties higher than the maximum bonus or penalty only. There are only five terminal incentive schemes which have at least 1% of determined cost as maximum penalty.
- 139 In the cases where maximum penalties are below 1% of determined costs, the incentive schemes have very limited effectiveness and have no material impact on the revenue of ANSPs.
- 140 The PRB supports asymmetric incentive mechanisms, weighted towards penalties where ANSPs have historically good capacity performance, and with close to zero delay forecast in the NOP for the years of RP3.

- 141 Incentive schemes should not generate partial, or even full bonuses in cases where the en route ATFM delay targets are in line, or are less ambitious than corresponding NOP delay forecast values. The ANSP should be able to reach those targets without any additional effort to improve the quality of service.

5.7 Summary and recommendations of the capacity KPA

- 142 The overall picture presented by the performance plans for the remainder of RP3 shows that if traffic recovery is consistent with the forecast, and provided that Member States implement their capacity improvement measures, the Union-wide performance targets on capacity may be achieved.
- 143 All but two Member States (Cyprus and Greece) have proposed en route capacity targets which are consistent with the respective national reference values in each year of RP3.
- 144 The overall data quality of the draft performance plans has slightly improved compared to that of 2019. Nevertheless, there remains a lack of detail to explain the measures planned to enhance capacity performance and their expected benefits.
- 145 Several ANSPs are planning major ATM system overhauls during RP3. These measures are accompanied by transition periods, during which ATC capacity will be limited, and which will have a notable network impact. These transitions will have to be planned and executed in close cooperation with the Network Manager in order to mitigate network impacts.
- 146 Partially due to these transition periods, and in particular the implementation of the new ATM system in French ACCs, the Network Manager is likely to engage in strategic and tactical actions to resolve capacity constraints during the summer peak periods. Member States and ANSPs should take all possible measures to deliver the necessary capacity strategically, and not rely on the Network Manager to resolve longstanding issues, with such resolutions likely to impact on the environment KPA. The measures of the Network Manager should only be used as a last resort, rather than as part of day-to-day operations.

¹⁹ Annex XIII of Regulation (EU) 2019/317 states that for the purposes of incentives delay can be modulated to include delay causes C, R, S, T, M, and P of the ATFCM user manual only.

147 The PRB recommendations as a result of the assessment of the performance plans are shown in Table 6.

Recommend to approve (consistent)		Recommend not to approve (inconsistent)
Without comment for the Capacity KPA	With specific PRB monitoring points	
Belgium	Austria	Cyprus
Bulgaria	France	Greece
Croatia	Germany	
Czech Republic	Portugal	
Denmark	Spain	
Estonia		
FABEC		
Finland		
Hungary		
Ireland		
Italy		
Latvia		
Lithuania		
Luxembourg		
Malta		
MUAC		
The Netherlands		
Norway		
Poland		
Romania		
Slovakia		
Slovenia		
Sweden		
Switzerland		

Table 6 – PRB recommendations for the capacity KPA.

6 COST-EFFICIENCY

- The PRB recommends to approve the cost-efficiency targets of 22 Member States and to not approve it for seven Member States.
- The average annual decrease of the planned en route Union-wide DUC (by -0.4% between the 2019 baseline and 2024) is better than the RP3 Union-wide trend (+1.0%).
- The RP3 en route Union-wide planned costs in 2024 are +3.6% higher than the 2019 actual costs, while the traffic, as reported by Member States, is planned to be +3.4% higher.

6.1 Union-wide en route targets for RP3

148 The targets for the cost-efficiency key performance area are set on the year-on-year change of the average Union-wide DUC for en route air navigation services.

149 Following the impact of the COVID-19 pandemic, Commission Implementing Decision (EU) 2021/891 revised the Union-wide targets for the cost-efficiency KPA, as shown in Table 7. The calendar years 2020/2021 were combined into a single period for the cost-efficiency KPA.²⁰

	2020	2021	2022	2023	2024
Initial targets (%)	-1.9	-1.9	-1.9	-1.9	-1.9
Revised targets (%)	+120.1		-38.5	-13.2	-11.5

Table 7 - Union-wide cost-efficiency targets for RP3. The “initial” targets refer to the ones in Commission Implementing Decision (EU) 2019/903 and the “revised” targets refer to the ones in Commission Implementing Decision (EU) 2021/891.

Union-wide cost-efficiency targets for RP3 and Member States’ performance plans

150 The cost-efficiency Union-wide targets for RP3 as defined in the Commission Implementing Decision (EU) 2021/891 compared to the aggregated results of the performance plans are shown in Figure 6 (next page).²¹ It also shows the RP2 determined unit costs and the RP2 determined costs against the actual values.

151 The PRB observes that:

- The Union-wide determined unit cost (DUC) as planned in the aggregated Member States’ performance plans is consistently lower than the Union-wide target. This is the result of the applied traffic forecast. Union-wide targets are based on the STATFOR May 2021 base forecast, while most of the plans are based on the more optimistic October 2021 forecast.
- The Union-wide DUC computed as the aggregation of the performance plans starts at 51.13€₂₀₁₇ in 2019 (baseline) and is planned to decrease on average by -0.4% per year between 2019 and 2024, which is better than the RP3 Union-wide trend (+1.0%). According to the performance plans, the DUC would decrease on average by -1.9% per year between 2014 and 2024, which is better than the long-term Union-wide trend (-1.3%).
- The 2019 baseline aggregated value (i.e. 6,376M€₂₀₁₇) from the revised performance plans is +110M€₂₀₁₇ (or +1.8%) above the baseline as defined in the Commission Implementing Decision (6,266M€₂₀₁₇).
- The Union-wide determined costs as planned in the aggregated performance plans are consistently higher than the Union-wide targets over RP3, except for 2020-2021.

152 The Regulation provides an option for Member States to establish and apply a simplified charging scheme for the duration of an entire reference period.²² No Member State requested to apply the provision.

²⁰ As for RP3 regulation, the cost of capital and depreciation cost categories are not inflated to Euro 2017. However, for the sake of simplicity, in this report all costs are written as €₂₀₁₇ although cost of capital and depreciation are nominal.

²¹ DFS’ corporate action programme is not included in the analysis of RP2 actual costs.

²² Article 34 of Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013.

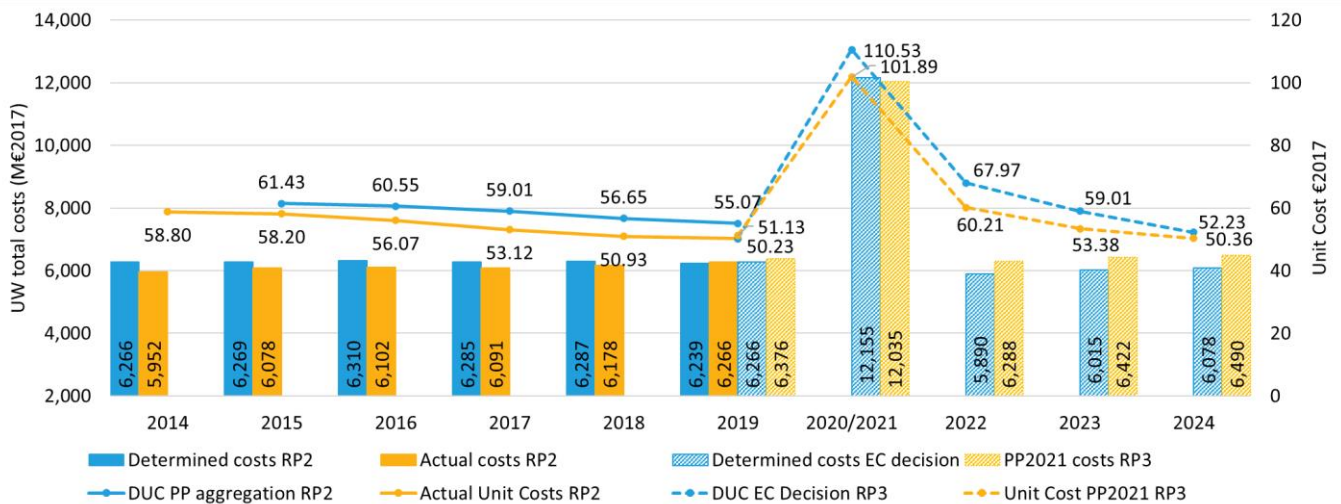


Figure 6 - RP3 Union-wide en route cost-efficiency targets for RP3.

6.2 Results of the assessment of the cost-efficiency KPA

153 The aggregated results of the performance plan assessment, in accordance with the criteria specified in Section 1.4 of Annex IV of the Regulation show that:²³

- 19 Member States meet the short-term trend (criterion (a));
- 13 Member States meet the long-term trend (criterion (b));
- 15 Member States have a lower 2019 baseline than their comparator group (criterion (c));

- A deviation from the criteria to achieve the capacity targets (criterion d) i)) has been considered justified for five Member States; and
- A deviation for restructuring costs (criterion d) ii)) has been considered justified for one Member State.

154 In total, the PRB recommends to approve the cost-efficiency targets of 22 Member States. The results at Member State level with respect to each cost-efficiency criteria are shown in Table 8 (next page).

²³ The performance plan of Spain is composed by two charging zones: Canarias and Continental. The cost-efficiency targets are assessed separately for both the charging zones. For the sake of simplicity in the cost-efficiency section they are counted as two separate Member States.

	Criterion a: Short-term trend (+1.0%)	Criterion b: Long-term trend (-1.3%)	Criterion c: Comparator group	Criterion d i): deviation for capacity	Criterion d ii): deviation for restructuring costs
Austria	-5.7%	-3.6%	-21.3%		
Belgium-Luxembourg ²⁴	+5.7%	+4.0%	+13.2%	X	
Bulgaria	+0.9%	-0.2%	-32.5%		
Croatia	+0.3%	-2.3%	+3.2%	X	
Cyprus	+4.9%	-0.2%	-4.7%		
Czech Republic	+2.4%**	-0.1%**	+8.0%	X	
Denmark	-2.1%	-2.4%	+28.0%		
Estonia	-1.7%	+2.0%**	+19.8%		X
Finland	-0.3%	-3.6%	-17.4%		
France	-0.4%	-1.2%*	-1.8%	X	
Germany	-2.4%	-3.8%	+13.2%	X	
Greece	+9.1%	+0.5%	-18.9%		
Hungary	+2.8%**	-0.9%**	-20.9%	X	
Ireland	-0.4%	-0.7%	-52.9%		X
Italy	-2.3%	-3.5%	+7.2%		
Latvia	+3.3%	-0.4%	-17.2%		
Lithuania	-0.1%	-2.0%	+46.4%		
Malta	+2.0%	+1.6%	-19.7%		
The Netherlands	+0.7%	+0.7%	-10.8%	X	
Norway	-3.0%	-1.4%	+22.0%		
Poland	-1.7%	-0.4%**	+5.4%	X	
Portugal	+2.1%**	+0.5%	-12.2%	X	
Romania	+2.9%	+0.6%	-14.6%	X	
Slovakia	+2.4%**	-1.1%**	+23.5%	X	
Slovenia	+0.9%	-1.9%	+45.2%		
Spain - Canarias	+0.7%	-2.9%	-17.2%		
Spain - Continental	-1.9%	-4.0%	-17.2%		
Sweden	+0.2%	+1.0%	+31.6%		
Switzerland	-0.5%	-1.2%*	+21.9%		

Table 8 – Assessment criteria applied to local cost-efficiency KPA targets, results per Member State. * Difference with the Union-wide trend is considered negligible. ** Passing trend criteria considering a deviation.

6.3 En route traffic forecasts used in the performance plans

155 At an aggregated level over RP3, the STATFOR October 2021 base forecast is +15% higher than the STATFOR May 2021 base forecast for RP3. The forecasts Member States used in their performance plans are -2.0% lower than the October base forecasts. The deviations are mostly related to 2022 and 2023, where some Member States view the October base forecast as too optimistic.

156 The difference between the forecasts for the en route service units included in the performance plans compared to the STATFOR May 2021 base forecast and the STATFOR October 2021 base forecast is shown in Figure 7 (next page).

157 17 Member States applied the STATFOR October 2021 base forecast: Austria, Belgium and Luxembourg, Cyprus, Denmark, Estonia, Finland, Germany²⁵, Greece, Ireland, Malta, Poland, Portugal, Romania, Spain (Continental and Canarias), Sweden, and Switzerland. The remaining 12 Member

²⁴ Luxembourg is together with Belgium in the same charging zone for the analysis of the en route targets.

²⁵ Germany applied the STATFOR October 2021 base forecast after adjustment for OAT traffic.

States used a local forecast: Bulgaria, Croatia, Czech Republic, France, Hungary, Italy, Latvia, Lithuania, the Netherlands, Norway, Slovakia, and Slovenia.

- 158 Croatia, Czech Republic, Hungary, and Slovakia initially applied the May forecast for all the years of RP3.²⁶ In order to avoid excessive gains stemming from the traffic risk sharing mechanism for the combined year 2020/2021, the PRB urged these Member States to update the 2021 traffic values. All the Member States modified the 2021 traffic figures as requested.

Traffic risk sharing

- 159 No Member State modulated the standard values of the traffic risk sharing mechanism in their performance plan.²⁷

6.4 Cost analysis for en route

Cost baselines

- 160 The 2019 and 2014 baseline costs are important elements of the performance plans because they define the starting point for the short-term and long-term evolution of the determined costs (and determined unit costs) over the reference periods. By setting a high starting point, Member States may reach the DUC trend reduction target more easily. The aggregated difference between the 2019 baseline costs and the 2019 actual costs submitted by the Member States amounts to +110M€₂₀₁₇ (+1.8%) for en route, and +80M€₂₀₁₇ (+1.3%) for the difference between the 2014 actual values and the 2014 baselines.

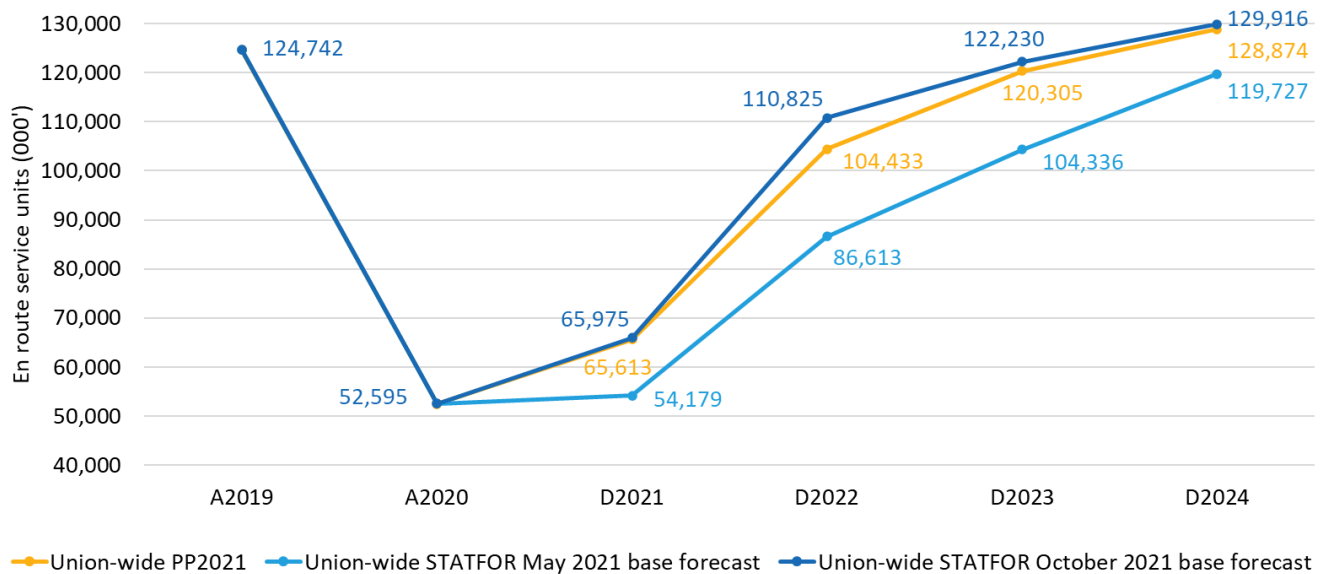


Figure 7 - Comparison of service units reflected in the different traffic forecasts used in the performance plans., showing that some Member States view the STATFOR October 2021 as too optimistic but still remaining above the STATFOR May 2021 forecast.

²⁶ Hungary applied the STATFOR May 2021 high forecast, which is less optimistic in the short-term but more optimistic for the second half of RP3 compared to the STATFOR October 2021 base forecast. Croatia, Czech Republic, and Slovakia apply the STATFOR May base 2021 forecast, which is consistently less optimistic.

²⁷ According to the performance and charging regulation, Member States shall set up values of the traffic risk sharing parameters referred to in Article 27(2) and (3) and, in the event that the national supervisory authority has adapted the values for these parameters in accordance with Article 27(5), justifications should be provided for those values.

161 The contribution to this difference per Member State is shown in Figure 8. The greatest differences as a percentage are attributable to: Norway, Belgium and Luxembourg, and Poland, whilst Germany presents the greatest absolute difference in costs.²⁸ Three Member States decreased their 2019 baseline costs compared to 2019 actual costs: Finland, Portugal, and Spain Continental. 13 Member States have not adjusted their 2019 baseline costs compared to 2019 actual costs.

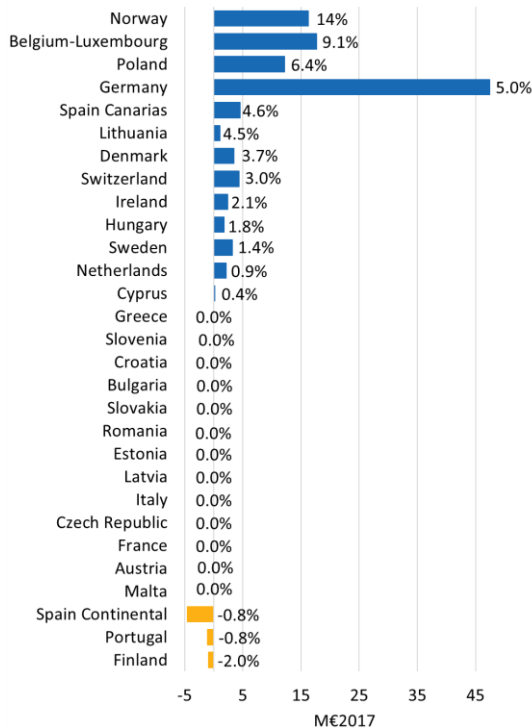


Figure 8 – En route 2019 actual costs vs 2019 baseline costs by Member State ordered by % difference.

162 Most Member States reported a 2014 baseline that is consistent with the 2014 actual costs. Only seven Member States reported a 2014 baseline that deviates from the 2014 actual costs: Belgium and Luxembourg (+3.6%, +5.8M€₂₀₁₇), Estonia (+5.1%, +1.0M€₂₀₁₇), Germany (+5.2%, +54M€₂₀₁₇), Lithuania (+400€₂₀₁₇), the Netherlands (+2.2%, +4.0M€₂₀₁₇), Norway (+15%, +16M€₂₀₁₇), and Portugal (-0.9%, -0.9M€₂₀₁₇).

163 The PRB analysis regarding the compliance of the specific adjustments are reported in Annex II of this report.

Planned determined costs – 2019 actual costs compared to 2024 determined costs

164 The 2024 en route planned determined costs vs 2019 actual costs by entity at Union-wide level are shown in Figure 9.²⁹

165 The total Union-wide planned determined costs in 2024 are +224M€₂₀₁₇ (+3.6%) higher than the 2019 actual costs, with the majority of absolute cost increase being attributable to the ANSPs (+3.2%, +179M€₂₀₁₇).³⁰ The greatest percentage increase is related to the NSAs (+28%, +28M€₂₀₁₇) with Greece planning the highest increase (+17M€₂₀₁₇). Greece justifies the increase with the establishment of a new Hellenic Civil Aviation Authority.

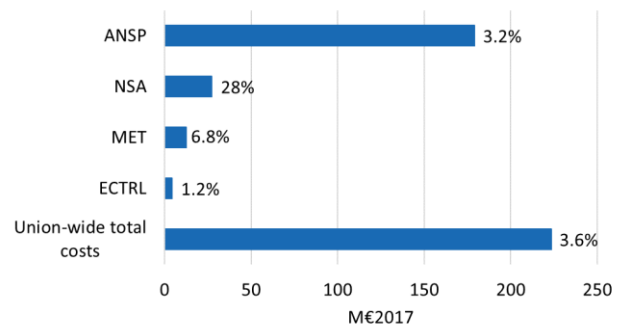


Figure 9 – En route 2024 planned determined costs vs 2019 actual costs by entity.

166 22 Member States plan to increase their costs from 2019 actuals to 2024 planned (ranging from +1.3% to +45%). The three highest planned percentages increase in costs from 2019 to 2024 are attributable to: Greece (+45%, +63M€₂₀₁₇), Cyprus (+29%, +16M€₂₀₁₇), and Belgium and Luxembourg (+28%, +54M€₂₀₁₇).

167 Seven Member States plan to decrease their costs (ranging from -0.3% to -16%): Austria, Czech Republic, Estonia, Germany, Slovakia, Spain Continental, and Spain Canarias. The three highest planned percentages decrease in costs are from: Austria (-16%, -35M€₂₀₁₇), Slovakia (-7.1%, -4.3M€₂₀₁₇), and Estonia (-5.1%, -1.5M€₂₀₁₇).

168 The 2024 planned en route determined costs vs. 2019 actual costs by nature at Union-wide level

²⁸ DFS' corporate action programme is not considered in 2019 actuals, while it is taken into account in the baseline of Germany. If the corporate action (i.e. 87M€₂₀₁₇) had been considered in 2019 actual, the difference between 2019 actual and 2019 baseline would be +134M€₂₀₁₇ instead of +47M€₂₀₁₇.

²⁹ The bars represent the magnitude difference in M€₂₀₁₇, while the percentages displayed in the graph represent the percentage difference.

³⁰ DFS' corporate action programme is not considered in 2019 actuals.

are shown in Figure 10.³¹ The highest planned difference (in both percentage and magnitude) between the 2024 planned determined costs and the 2019 actual costs is for depreciation costs (+126M€₂₀₁₇, +19%). Exceptional costs are set to decrease by -61M€₂₀₁₇ (-105%). Germany contributes most to this decrease (-40M€₂₀₁₇, -100%).

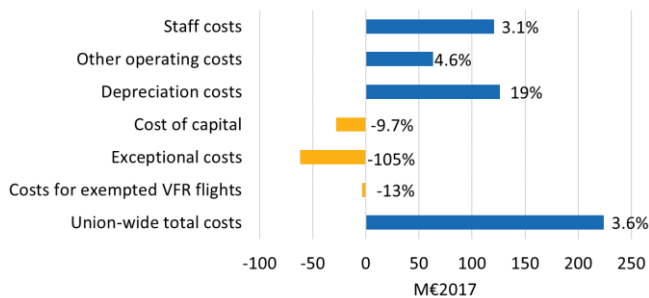


Figure 10 - En route 2024 planned determined costs vs 2019 actual costs by nature.

Staff costs

169 The en route actual staff costs for RP2 and the planned determined staff costs for RP3 are shown in Figure 11. For RP3, pension costs are displayed separately.³² After a decrease in staff costs in 2020 (-4.3%, -169M€₂₀₁₇) and 2021 (-3.9%, -152M€₂₀₁₇) compared to 2019 actuals, staff costs are expected to increase reaching 4.0B€₂₀₁₇ in 2024 (+3.1%, or +120M€₂₀₁₇ compared with 2019 actuals).

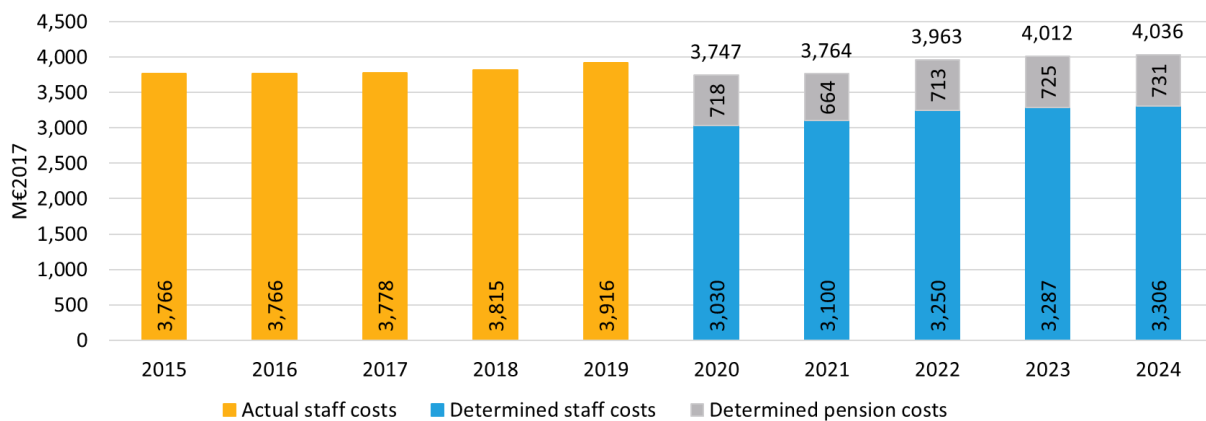


Figure 11 - Overview of Union-wide staff costs over RP2 and RP3.

170 At Union-wide level, Member States plan stable staff costs, that account for 63% on average of the total planned determined costs during RP3, which is consistent with the actual RP2 average. Pension costs represent a constant share of the staff costs over RP3, with an average share of 18%.

171 The Union-wide number of FTE ATCOs in OPS at year end is planned to grow from 7,728 in 2020 to 8,470 in 2024.³³ The yearly average staff cost per FTE ATCO in OPS is planned to decrease from 485K€₂₀₁₇ in 2020 to 476K€₂₀₁₇ in 2024 (-1.7%).³⁴

Costs of investments (i.e. depreciation, cost of capital and cost of leasing)

172 The costs related to investments include depreciation, cost of capital, and cost of leasing for en route and terminal services. These costs are reported in three different categories: new major investments, other new investments, and existing investments (i.e. investments starting in the previous reference period(s)).³⁵ The total determined costs for en route and terminal related to investments and the distribution between the investment categories are shown in Figure 12 (next page).

³¹ DFS' corporate action programme is not considered in 2019 actuals.

³² The pension costs over RP2 were not provided as a breakdown of the staff costs, therefore these are not shown for 2019. This changes in RP3 as per article 22 paragraph 4 point a) of Commission Implementing Regulation (EU) 2019/307.

³³ Number of RP3 FTE ATCOs in OPS at year's end is 7,728 in 2020, 7,934 in 2021, 8,223 in 2022, 8,350 in 2023, and 8,470 in 2024.

³⁴ The yearly average cost per FTE ATCO in OPS is an estimation computed based on total staff costs reported in the reporting tables.

³⁵ Art. 2(13) of Regulation 2019/317 'major investment' means the acquisition, development, replacement, upgrade, or leasing of fixed assets representing a total value over the whole lifetime of the assets greater than EUR 5 million in real terms.

- 173 Over RP3, the total determined costs for investments for en route and terminal are planned to amount to 5.6B€₂₀₁₇, with costs for new investments (major and other, 2.3B€₂₀₁₇) being lower than the total determined costs of existing investments (3.3B€₂₀₁₇).
- 174 In 2020, existing investments are the largest share of the total determined costs for investments (780M€₂₀₁₇, or 78% of the total determined costs for investments) due to costs stemming from previous reference periods. In 2024, at the end of RP3, the determined costs of existing investments will represent only 43% of the total costs of investments, a similar share of the costs of new major investments (42%).

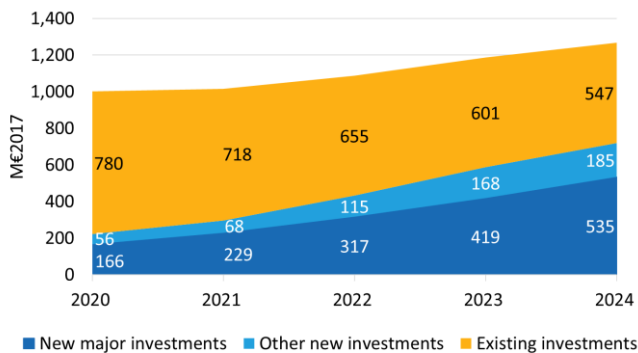


Figure 12 - Union-wide determined costs of investments over RP3 for en route and terminal.

- 175 The total determined costs of investments across the Member States over RP3 for en route and terminal are presented in Figure 13 (next page). The three highest determined costs of investments over RP3 are planned by: France (1.6B€₂₀₁₇), Spain (715M€₂₀₁₇), and Germany (582M€₂₀₁₇).³⁶ Austria

did not provide a split per category of the determined costs of investments, therefore in the figure all the determined costs are identified as new major investments for representation purposes. France, Spain, and Germany represent 53% (2.9B€₂₀₁₇) of the Union-wide RP3 total .

- 176 The total determined costs of investments currently reported by Member States (5.6B€₂₀₁₇) are -11% lower than the ones included in the 2019 performance plan submissions (6.3B€₂₀₁₇). The difference is caused by the COVID-19 pandemic, which led to the cancellation of numerous new investments (new major: -236M€₂₀₁₇ or -12%; other new: -439M€₂₀₁₇ or -43% with respect to the 2019 submissions).

CAPEX

- 177 The total Union-wide CAPEX for new investments allocated to ANS (en route and terminal) and planned for RP3 amounts to 5.3B€, out of which 3.9B€ (74%) are planned for new major investments and 1.4B€ (or 26%) for other new investments. Due to the impact of the COVID-19 pandemic, several Member States modified their investments plans for RP3. The CAPEX planned in the October 2019 submissions amounted to 5.9B€ over RP3, +688M€ more than currently planned. In RP2, the planned CAPEX amounted to 4.9B€, while the actual CAPEX amounted to 4.2B€, both lower than the CAPEX currently planned for RP3.
- 178 The number of new major investments decreased from 176 in the 2019 submission to 166 in the current submission.

³⁶ The determined costs reported by Germany include an “experience-based DFS management correction” (-79.4M€₂₀₁₇), which shows reduced depreciation figures.

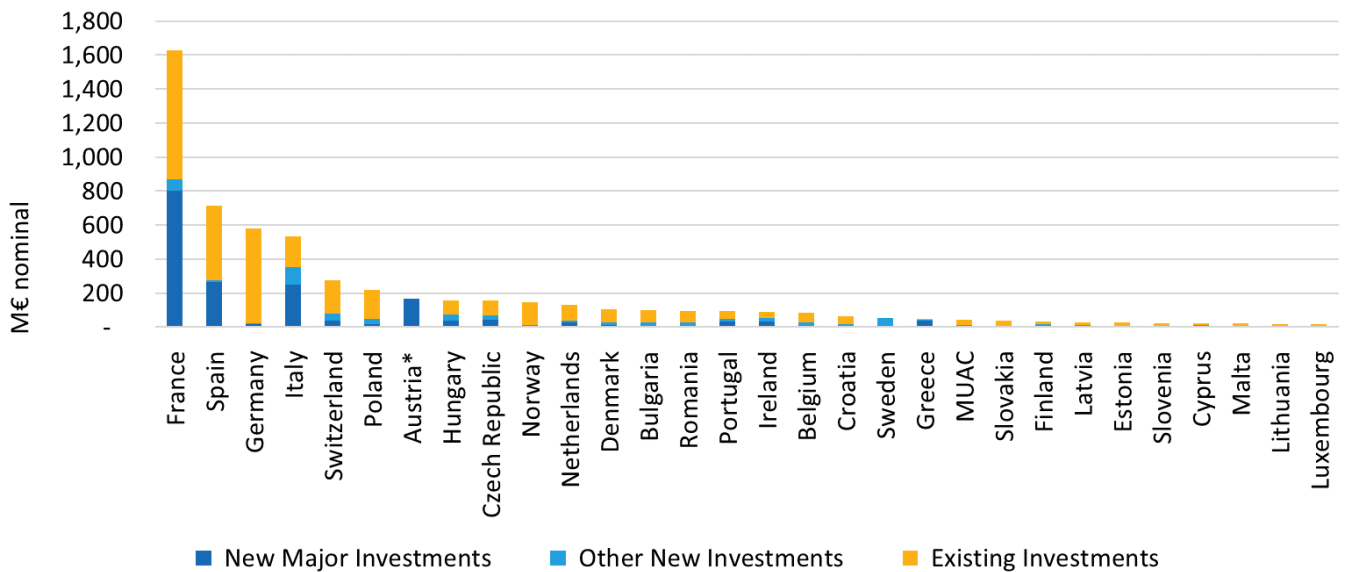


Figure 13 - Determined costs of investments across Member States over RP3 for en route and terminal.

- 179 43% of the new major investments reported in the performance plans are expected to contribute to achieving capacity targets. The most common benefits to capacity are:
- New systems or tools to improve the resilience of air navigation services (making the provision of capacity less dependent on weather or other exogenous factors);
 - New investments to maintain or improve existing systems or infrastructure providing improved radar coverage, providing extra space to accommodate new controller working positions or by increasing bandwidth;
 - New investments to implement new operational concepts (i.e. systems allowing for more precise flight planning, better sector management, etc.);
 - New investments to ensure continuity of air traffic services and surveillance to provide backup/contingency systems in case of a major ATM system failure.
- 180 Several Member States have included investments for managing unmanned air vehicles (UAV) or drone activities. The main focus of the investments is detection and prevention of UAVs and drones from entering certain secured airspace such as areas around airports with the purpose of mitigating the risk of collisions or unlawful behaviour.
- 181 The following drone/UAV-related investments were specifically mentioned in the performance plans:
- “Drone Detection system”, Germany (total asset value 194M€, value allocated to ANS 57M€);
 - “Drone Passive Scout System”, Hungary (9.5M€)
 - “IP470701 U-Space Program”, Poland (total asset value 6.8M€, value allocated to ANS 2.6M€);
 - “U-space”, Spain (0.2M€).
- 182 In the 2019 submission of the performance plans, France and Belgium also included drone/UAV-related investments, however there is no indication of these specific investments in 2021 performance plans.
- 183 During the preparation of the performance plans, the European Commission specified the eligibility of drone/UAV-related investments, clarifying that only certain (new) investments to prevent collisions between aircraft and drones would be eligible, provided that without such new investments the ANSP would not be able to detect the position of the drone.³⁷ The European Commission also requested Member States to provide detailed description, cost allocation (between ANSP and other responsible entities), and other information

³⁷ https://webgate.ec.europa.eu/eusinglesky/sites/default/files/drone_cost_in_de.pdf, Ref. Ares(2021)3876111 – 14/06/2021.

related to drone/UAV investments.³⁸ The PRB will assist DG MOVE in evaluating and monitoring the information provided.

Cost of Capital

- 184 The total RP3 cost of capital of the main ANSPs planned in the performance plans is significantly lower compared to the values in the performance plans submitted in 2019 (-39%, or -746M€₂₀₁₇ over RP3).³⁹ Except for Norway and Bulgaria, all Member States lowered the planned costs of capital.
- 185 When considering the planned return on equity of the main ANSPs, the three highest planned percentage decreases over RP3 compared to the previous submission are: Germany (-100%), where no return on equity is planned to be charged over RP3 following a decision of the German Ministry of Transport, Sweden (-82%), where the Swedish government restricted the application of a return on equity during RP3, and Finland (-55%).⁴⁰ The three highest percentage increases in the planned return on equity over RP3 are: Switzerland (+148%), France (+122%), and Romania (+56%).
- 186 The Union-wide value of cost of capital for en route as planned by the main ANSPs of the Member States in the performance plans are shown in Table 9. The PRB compared this to the efficient cost of capital and the maximum risk exposure borne by ANSPs over RP3 based on the report published by the PRB “Study on Cost of Capital”.⁴¹ The Union-wide cost of capital planned by the main ANSPs is +345M€₂₀₁₇ higher than the efficient cost of capital and almost equal to the maximum risk exposure over RP3. The main contributors to this excess in percentage are the main ANSPs of Bulgaria, France, and Czech Republic.

	Reported by ANSPs (M€ ₂₀₁₇)	Efficient (M€ ₂₀₁₇)	Maximum risk exposure (M€ ₂₀₁₇)
2020	217	144	229
2021	220	151	233
2022	228	161	245
2023	242	171	254
2024	246	180	260
Total RP3	1,152	807	1,222

Table 9 – Union-wide cost of capital over RP3 of main ANSPs.

Weighted average cost of capital (WACC)

- 187 An overview of the average RP3 WACC for en route planned by the main ANSPs in the performance plans is shown in Figure 14 (next page). The Union-wide RP3 average WACC is 4.2%, while the actual average in RP2 was 5.8%. 16 main ANSPs reported a WACC higher than the Union-wide average, with Romania (7.9%), Bulgaria (7.0%), and Hungary (6.3%) being among the highest.
- 188 The lowest WACC rates over RP3 were reported by: the Netherlands, due to its capital structure (i.e. fully financed by debt) and low interest rates for its loans at 0.3% on average over RP3 (LVNL, the ANSP of the Netherlands is entitled to national treasury banking); Germany (0.9%); and Sweden (1.2%).
- 189 Six Member States are fully financed through equity: Bulgaria, Cyprus, Finland, Greece, Ireland, and Lithuania. The Netherlands is the only one with capital based fully on debt. The remaining Member States established their capital structure as a combination of equity and debt. The average share of financing through equity of these Member States is 59%.

³⁸ Letter from DG MOVE to National Supervisory Authorities of 11/01/2022 date, Subject: Drone detection costs –request for additional information, Ref. Ares(2022)166890 – 11/01/2022.

³⁹ MUAC is not included in the analysis of the cost of capital.

⁴⁰ However, the revised performance plan of Finland is not comparable with the one submitted in 2019 (since Finland reported notional WACC parameters in the performance plan of 2019).

⁴¹ Report and data sources available at: https://webgate.ec.europa.eu/eusinglesky/sites/default/files/prb_cost_of_capital_report_2021_published.pdf.

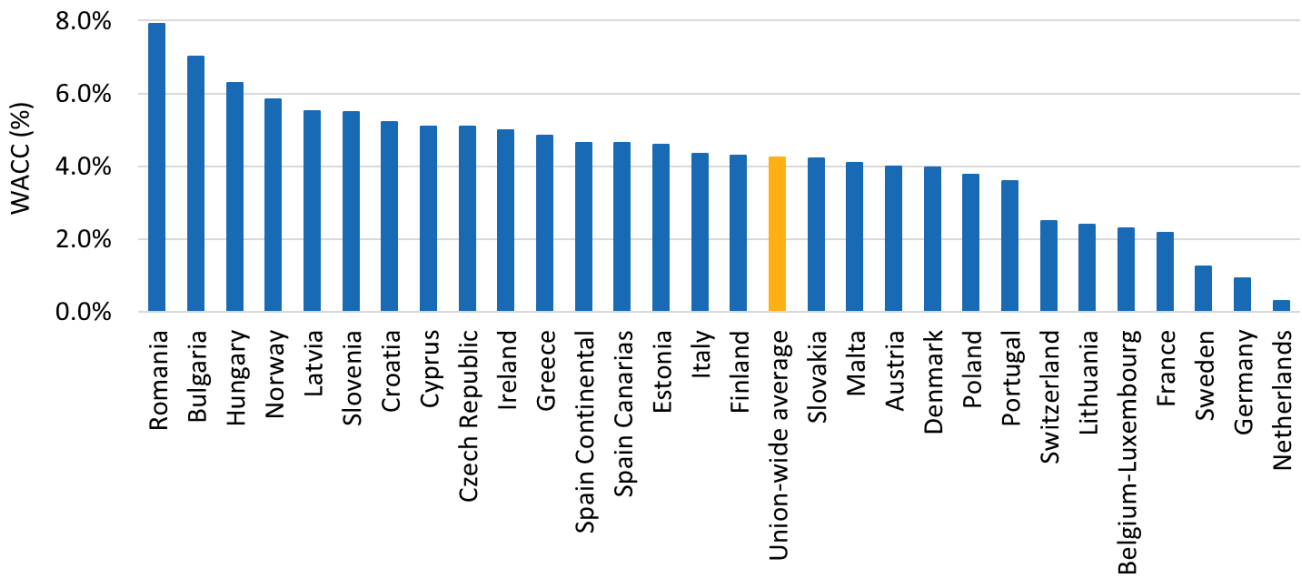


Figure 14 - Overview of the average RP3 WAAC across main ANSPs of Member States.

Regulated asset base (RAB)

190 The Union-wide regulated asset base (RAB) of main ANSPs is planned to increase by +40% (+2.3B€₂₀₁₇) between 2019 actual values and 2024 planned values. The RAB has been stable during RP2, while it started to increase in 2020. This has been mainly induced by an increase of +171% (+1.5B€₂₀₁₇) in the net current assets between 2019 and 2024. This may be due to the inclusion of the under recoveries of 2020 and 2021 in the net current assets. France and Germany planned by far the highest asset base across Member States in 2024 (2.0B€₂₀₁₇ and 1.8M€₂₀₁₇, respectively), followed by Italy (0.9B€₂₀₁₇).

6.5 Allocation of costs between en route and terminal

191 As stated in the PRB methodology review of the en route and terminal cost allocation⁴², Commission Implementing Regulation (EU) 2019/317 does not define the methodology or criteria to be used by service providers for allocating services to the cost base. The findings of the study remain valid for the assessment of the 2021 performance plans, as the

information provided by the Member States in the additional information to the reporting tables or other annexes is in different formats and contains different levels of detail.

192 Unfortunately, Member States did not yet implement the PRB recommendation asking them to report information on cost allocation in a harmonised format.

193 With respect to RP2, six Member States made changes to the cost allocation:

- Belgium – changes to approach services allocation and supervision;
- Norway – changes to approach services allocation;
- Poland – changes in the allocation keys of some investments and the inclusion of other service providers in the cost base;
- Portugal - changes in the allocation of MET services and NSA costs;
- Romania - changes to approach services allocation;
- Switzerland - changes in allocation of indirect OPEX costs and MET services.

⁴² Performance Review Body: En route and terminal cost allocation – Methodology review study, September 2021.

6.6 Union-wide terminal determined unit cost for RP3

194 The average Union-wide DUC for terminal services over RP3 for the aggregated performance plans is shown in Table 10.

	2020/ 2021	2022	2023	2024
DUC (€ ₂₀₁₇)	369.11	206.17	189.86	182.73

Table 10 – Union-wide DUC for terminal air navigation services as aggregation of performance plans.

195 The Union-wide DUC for RP3 from the results of the performance plans compared to RP2 (determined and actual unit costs) is shown in Figure 15. The figure also shows the RP2 determined and actual costs against the values reported in the performance plans for RP3.

196 The PRB observes that the DUC for terminal computed as the aggregation of the performance plans starts at 176.93€₂₀₁₇ in 2019 (baseline) and increases by +3.3% between 2019 and 2024. The terminal Union-wide DUC is planned to increase on average by +0.8% between 2019 and 2024, which is better than the en route RP3 Union-wide trend (+1.0%).

197 Costs are planned to increase from 1.2B€₂₀₁₇ in 2019 (actual) to 1.3B€₂₀₁₇ in 2024. At the same time, terminal service units are forecast to slightly increase from 7.1K to 7.2K in 2024.

198 The scope of some of the terminal charging zones has changed between RP2 and RP3, therefore a comparison across reference periods must be treated with caution.

6.7 Summary and recommendations of the cost-efficiency KPA

199 At Union-wide level, the en route determined unit cost as planned by Member States in the performance plans is consistently lower than the Union-wide targets. However, this has been the result of the traffic forecast. Union-wide targets are based on STATFOR May 2021 base forecast, while most of the performance plans are based on the more optimistic STATFOR October 2021 base forecast.

200 The en route 2019 baseline aggregated value (i.e. 6,376M€₂₀₁₇) from the performance plans is 110M€₂₀₁₇ (or +1.8%) above the baseline as defined in the Commission Implementing Decision (EU) 2021/891 (6,266M€₂₀₁₇).

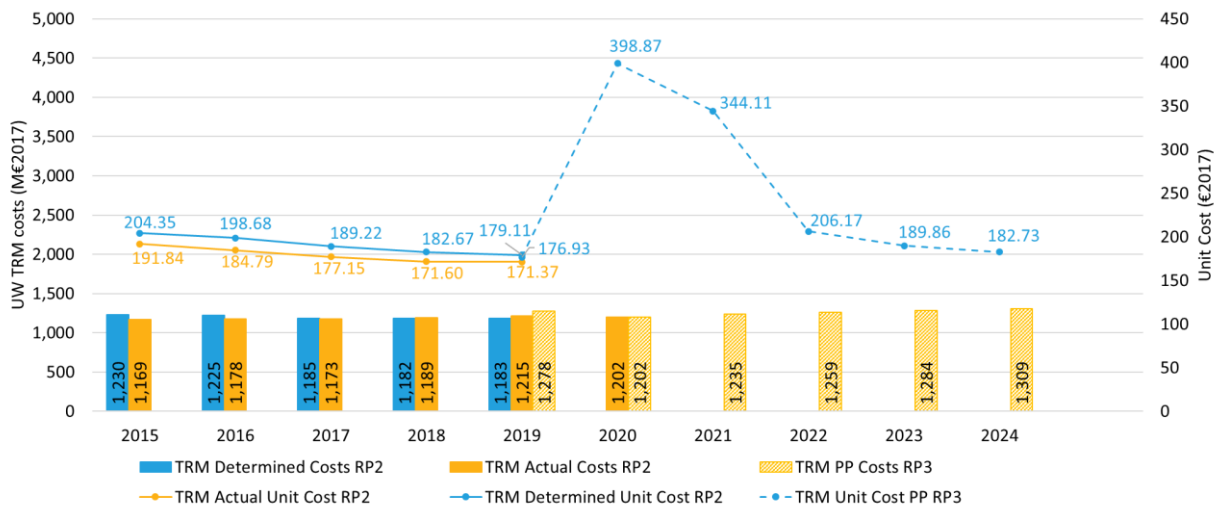


Figure 15 - Union-wide total costs and unit costs for terminal for RP3.⁴³

⁴³ The definition/scope of terminal charging zones changed between RP2 and RP3. In order to improve comparability between RP2 and RP3 figures, only the terminal charging zones according to RP3 are included in the aggregated RP2 and RP3 figures. However, figures between RP2 and RP3 might still not be fully comparable.

- 201 The total en route Union-wide planned determined costs in 2024 are +224M€₂₀₁₇ (+3.6%) higher than the 2019 actual costs, with the majority of absolute costs increase being attributable to the ANSPs (+179M€₂₀₁₇, +3.2%). This is driven largely by an increase in depreciation costs (+126M€₂₀₁₇, +19%) and staff costs (+120M€₂₀₁₇, +3.1%).
- 202 The total Union-wide CAPEX for new investments (en route and terminal) planned for RP3 amounts to 5.3B€. Due to the impact of the COVID-19 pandemic, several Member States made modifications to their investments plans for RP3, decreasing their CAPEX compared to the 2019 submissions (5.9B€), however planned CAPEX remains higher than actual values in RP2 (4.2B€).
- 203 The en route cost of capital of the main ANSPs planned in the performance plans submitted in November 2021 is significantly lower compared to the values in the performance plans submitted in 2019. However, Member States can further improve their performance in this cost category, as
- the reported cost of capital is +345M€₂₀₁₇ higher than the efficient cost of capital over RP3.
- 204 The DUC for terminal computed as the aggregation of the performance plans starts at 176.93€₂₀₁₇ in 2019 (baseline) and increases by +3.3% between 2019 and 2024.
- 205 The Member States fulfilling at least two criteria of Annex IV point 1.4 of the Regulation from (a) to (c), considering as well a deviation for criterion (d), and thus passing the assessment against the cost-efficiency criteria are: Austria, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain (Canarias and Spain Continental) and Switzerland.
- 206 The PRB recommendations as a result of the assessment of the performance plan are shown in Table 11.

Recommend to approve (consistent)	Recommend to not approve (inconsistent)
Austria	Belgium-Luxembourg
Bulgaria	Cyprus
Croatia	Greece
Czech Republic	Latvia
Denmark	Malta
Estonia	Romania
Finland	Sweden
France	
Germany	
Hungary	
Ireland	
Italy	
Lithuania	
The Netherlands	
Norway	
Poland	
Portugal	
Slovakia	
Slovenia	
Spain Canarias	
Spain Continental	
Switzerland	

Table 11 – PRB recommendation, cost-efficiency KPA.

7 NETWORK PERFORMANCE PLAN

- The PRB recommends to approve the network performance plan.
- The targets for the safety KPA are consistent with the Union-wide safety targets.
- The targets for the environment and capacity KPAs are realistic, with relevant and sufficient measures defined to achieve the targets.
- The measures defined in the cost-efficiency KPA are considered to be sufficiently comprehensive.

7.1 *Requirements of the NM within the performance and charging Regulation*

- 207 The European Commission established the Network Manager (NM) function under the Single European Sky (SES) II legislative package. The network functions are further laid down in Commission Implementing Regulation (EU) 2019/123.
- 208 The role of the NM is a transversal function that manages air traffic management network functions. The European Commission re-nominated Eurocontrol to undertake the NM functions between 2020 and 2029. The performance and charging Regulation states that the Network Manager should prepare a network performance plan.
- 209 In September 2021, the draft Network performance plan (NPP) was endorsed by the Network Management Board and submitted to the Commission.

7.2 *Summary and recommendations of the network performance plan*

- 210 Considering the criteria defined in Annex V of the performance and charging scheme Regulation

(EU) 2019/317, the PRB recommends to approve the network performance plan.

- 211 The PRB also recommends the network manager:
- To focus on helping ANSPs accommodate the traffic recovery without generating delays;
 - To focus on FRA implementation and in particular the effect of waypoint restrictions with Members States that do not implement FRA from ground to upper airspace;
 - To have a strong alignment between the NM and the PRB to assess the effects of the NM measures on local performance, including on capacity and delay, and to monitor the assumed effects against actual performance.

8 INTERDEPENDENCIES AND TRADE OFFS

- Member States confirm that retaining safety levels has priority over other performance areas and that the changes planned during RP3 should not degrade safety.
- Member States plan to manage the interdependencies between capacity and the environment, but may require additional capacity (compared to 2019) to achieve the Union-wide performance targets.
- Member States plan to achieve both the Union-wide cost-efficiency and capacity targets.
- With RP3 costs being a high priority, Member States must manage the recovering traffic whilst avoiding capacity restrictions and measures to extend routes.

8.1 *Interdependencies relating to the safety KPA*

- 212 Member States highlight that retaining safety levels has priority over other performance areas and that the changes planned during RP3 should not be allowed to degrade safety. Current safety management processes, compliant with Commission Implementing Regulation (EU) 2017/373, would ensure that safety levels are not compromised when implementing changes to airspace, staffing or ATM Functional Systems. EASA concurs that compliance with Commission Implementing Regulation (EU) 2017/373 can ensure that no trade-offs are made affecting safety.
- 213 Member States further argue that the oversight of changes performed by the NSA will complement the ANSPs own assessment. However, Member States did not address whether the NSA has sufficient resources to oversee the changes to be implemented by the ANSPs.
- 214 Most of the Member States underline that the ANSPs declare to have sufficient resources required for safety activities and that any shortfall in staff would be alleviated through various other means (delay of implementation of changes, reduction of capacity, rescheduling the training activities or over-time working hours). A number of Member States declare having developed specific metrics (KPIs and PIs) at ANSP level to assess any trade-offs between safety and other KPAs. A few Member States note that specific changes are expected to improve safety (e.g. through improved safety nets, reduced airspace complexity, etc.), without being the primary objective of the change.

8.2 *Interdependencies between the environment and capacity KPAs*

- 215 All Member States plan to achieve the local reference values for the environment KPA. The Union-wide targets should therefore be achieved for the remainder of RP3.
- 216 Only two Member States do not plan to achieve the capacity reference values. Despite this, the PRB assessment demonstrates that the Union-wide targets should be achieved for the capacity KPA.
- 217 This suggests that, for RP3, Member States plan to successfully manage the interdependency between capacity and the environment and that the forecasted rise in traffic should not affect the achievement of the capacity and environment targets.
- 218 The low traffic levels during 2020/2021 have highlighted the interdependency between the environment and capacity KPAs. The reduction in traffic and excess capacity since 2020 shortened routings and reduced delays.⁴⁴ Conversely, the forecasted increase in traffic will put pressure on both the capacity and environment KPAs. Namely the forecasted increase in 2024 (but still below 2019 level) will require additional capacity (compared to 2019) to achieve the Union-wide performance targets for capacity and environment (Table 12, next page).
- 219 European aviation has tended to prioritise capacity (reducing delay) over the impact on the environment. If capacity is insufficient, airspace users and the NM route flights around congested areas or airspace design measures may be implemented to deconflict flows in the network. Whilst this can minimise delays, it lengthens routes. System upgrades in Reims, Bordeaux and Brest ACCs will

⁴⁴ The lower traffic meant that flights did not need to route around congested sectors, allowed for the cancellation of most route availability restrictions, whilst minimising delays.

cause a temporary 50% reduction in the capacity of these ACCs. This reduction in capacity will most probably require the NM to implement re-routing schemes planned to offload traffic from the affected ACCs towards Germany, Spain and Portugal. They will inevitably have an impact the horizontal flight efficiency, although the NM is committed to minimising such effects.

8.3 Interdependencies between the capacity and cost-efficiency KPAs

- 220 22 Member States plan their cost to be consistent with the Union-wide targets in the cost-efficiency KPA (five of these are consistent considering a deviation to achieve the targets). The PRB assessment concludes that these plans will allow the Union-wide targets for both the capacity and cost-efficiency KPAs to be met.
- 221 The performance plans highlight measures to increase capacity during RP3 to achieve this. These include an additional 548 ATCOs in OPS FTEs by 2024 and substantial CAPEX plan of 5.3B€ over the period (Table 13).
- 222 The relatively low traffic levels for the coming years may obscure the actual benefit of these measures. Their true value will only become apparent once traffic recovers to 2019 levels or higher, and the performance of ANSPs can again be evaluated against that of the pre-COVID years.

8.4 Summary of the interdependencies

- 223 The aggregated performance plans, are consistent with the Union-wide targets with safety remaining the highest priority.
- 224 Member States are planning to manage the interdependency between capacity and environment KPAs, and plan additional ATCOs and investment.
- 225 With RP3 costs being a high priority, Member States must manage the recovering traffic whilst avoiding capacity restrictions and measures to extend routes. If capacity is sufficient, delay will remain at optimal levels and the targets for the environment KPA are more likely to be achieved.
- 226 The performance plans achieve the level of performance five years later than planned (traffic, delay and cost in 2024 are planned to be similar to the Union-wide targets at the end of RP2 in 2019).
- 227 The PRB also highlights the critical role NSAs must play in ensuring that the measures ANSPs are planning (to manage interdependencies) are implemented to achieve the Union-wide targets.

Union-wide	2019A	2024D	% change
En route delay (min/flight)	1.61	0.44	-73%
En route IFR flights (STATFOR October base) (M)	10,303	9,979	-3.1%
En route ATCOs at year-end (FTE)	7,922	8,470	+6.9%
En route and terminal costs of investments (B€ ₂₀₁₇)	1.0	1.3	+25%
En route total costs (B€ ₂₀₁₇)	6.3	6.5	+3.6%

Table 12 – Comparison between key metrics in RP2 and RP3 demonstrates a planned increase in number of ATCOs and investments, lower traffic and lower delay.

Union-wide CAPEX (en route and terminal)	RP2 actual	RP3 determined	% change
Total new CAPEX allocated to ANS (B€)	4.2	5.3	+25%
ATM CAPEX (New Major investments) allocated to ANS (B€)	1.6	1.9	+17%

Table 13 – Comparison between actual CAPEX in RP2 and CAPEX planned for RP3.

9 THE CIVIL-MILITARY DIMENSION

- The civil-military dimension is not described in detail within the performance plans.
- There is a variety of local arrangements between civil and military stakeholders described by a few performance plans.
- The majority of the civil-military related objectives introduced by the ATM Master Plan have been implemented only locally necessitating network-level solutions to gain Union-wide performance benefits.

- 228 The civil-military dimension of the performance and charging scheme defines aspects of the civil-military interactions that can impact the achievement of performance targets. Measures to mitigate or enhance these impacts are included by the performance plans. The civil-military interactions can influence all key performance areas directly or indirectly.
- 229 The current legal framework does not oblige Member States to include specific information on how they will coordinate military and civil flights. Neither does it provide indicators to measure the impact of civil-military interactions on performance. The regulations allows for the development of indicators for targeting and monitoring aspects related to civil-military performance.
- 230 Cooperation between military and civil authorities and service providers improves the performance of air traffic management, in particular where capacity is constrained. Implementation of flexible use of airspace (FUA) into airspace management functions provides both performance enhancement measures and options for monitoring.⁴⁵
- 231 The planned measures submitted by the Member States remain mostly general and aim to intensify civil-military cooperation, without indicating specific targets and/or without being supported by data. It is important for national supervisory authorities to develop the military dimension of their performance plan in full cooperation with the military authorities. Based on such data, the performance plans could better quantify the potential impact on the environmental performance (shortest routes) and on capacity (reducing delays).
- 232 The performance plans indicate a variety of local solutions to cover the costs of services shared between the civil and military ANSPs (e.g. exempted flights, provision of CNS). These range from no charges to including them within the cost base.
- The granularity of information does not enable the impact of local arrangements to be measured.
- 233 The performance plans lack cross-border solutions to address the impact of military activities, with a few exceptions (e.g. Finland and Estonia).
- 234 The major initiatives planned by Member States include the implementation of support systems, connectivity to services provided by the Network Manager, real time data exchange among the systems, training of airspace management personnel, reduction of buffer zones between military and civil traffic and relocation of military training zones.
- 235 According to the Local Single Sky Implementation Plan (LSSIP), the majority of the ATM Master Plan objectives have been locally implemented. To gain Union-wide performance benefits, the network-level solutions must follow.

⁴⁵ FRA shall be implemented by the end of 2025 according to the Commission Implementing Regulation (EU) 2021/116 of 1 February 2021 on the establishment of the Common Project One.

11 SUMMARY OF RECOMMENDATIONS

236 Table 14 presents a summary of the PRB's assessment of the performance plans for RP3. Elements of the performance plans the PRB recommends being approved but with close monitoring during RP3 are highlighted with an orange symbol.

237 The PRB recommends that 17 plans are approved and the remainder be revised.

Performance plan	Overall assessment	Recommendation per KPA			
		SAF	ENV	CAP	CEF
Austria	✓	✓ (!)	✓	✓ (!)	✓
Bulgaria	✓	✓ (!)	✓ (!)	✓	✓
Croatia	✓	✓ (!)	✓	✓	✓
Cyprus	✗	✓ (!)	✓ (!)	✗	✗
Czech Republic	✓	✓ (!)	✓	✓	✓
Denmark	✓	✓ (!)	✓	✓	✓
Estonia	✓	✓ (!)	✓ (!)	✓	✓
Finland	✓	✓ (!)	✓	✓	✓
Greece	✗	✓	✓ (!)	✗	✗
Hungary	✓	✓ (!)	✓ (!)	✓	✓
Ireland	✓	✓	✓	✓	✓
Italy	✓	✓	✓ (!)	✓	✓
Latvia	✗	✓ (!)	✓ (!)	✓	✗
Lithuania	✓	✓ (!)	✓ (!)	✓	✓
Malta	✗	✓	✓ (!)	✓	✗
Norway	✓	✓ (!)	✓	✓	✓
Poland	✓	✓ (!)	✓ (!)	✓	✓
Portugal	✓	✓ (!)	✓	✓ (!)	✓
Romania	✗	✓ (!)	✓ (!)	✓	✗
Slovakia	✓	✓ (!)	✓ (!)	✓	✓
Slovenia	✓	✓	✓	✓	✓
Spain	✓	✓ (!)	✓ (!)	✓ (!)	✓
Sweden	✗	✓ (!)	✓	✓	✗
FABEC	✗		✓ (!)	✓	
Belgium/Luxembourg	✗	✓	✓ (!)	✓	✗
France	✗	✓	✓ (!)	✓ (!)	✓
Germany	✗	✓	✓	✓ (!)	✓
The Netherlands	✗	✓	✓ (!)	✓	✓
Switzerland	✗	✓	✓	✓	✓

Table 14 - Summary of the PRB assessment across the KPAs.

12 NEXT STEPS FOR RP3

12.1 Adoption of performance plans

- 238 This report provides the PRB's recommendations to the Commission regarding the performance plans submitted by Member States. Based on the advice provided by the PRB, the Commission will decide on the consistency/inconsistency of the performance plans.
- 239 The Member States with plans found to be inconsistent will start the revision process as set out in Article 14(3) of the performance and charging Regulation.
- 240 Article 17 of the performance and charging Regulation requires that in the case of revision, the submitted performance plans will be used as the basis for charging airspace users.

12.2 Preparation for RP4

- 241 The performance planning and assessment process has highlighted areas to be improved for RP4.

Consultation process

- 242 The consultation of performance plans with stakeholders should be improved in the following ways:
- The material for discussion at the meeting must be sent out sufficiently in advance for review.

- There must be adequate opportunity for stakeholders to raise their questions and concerns and be reassured that these are duly considered.
- The scheduling of such meetings must ensure that stakeholders can attend each one with sufficient time to prepare.

Traffic forecasts

- 243 The performance plans are reliant on the traffic forecast from STATFOR. The timings of these forecasts should better align with the performance planning cycle to avoid the issues encountered for this round when a new forecast was released two weeks after the deadline for submitting the plans.

12.3 Monitoring activities

- 244 The PRB will continue to monitor performance for RP3. The PRB will monitor performance compared to plans that are adopted and to draft plans where they are considered not to be consistent with the Union-wide performance targets.
- 245 The PRB will monitor aspects of the performance plans that have been identified to require additional scrutiny. Should a Member State fail to deliver planned performance, the PRB will request, analyse, and evaluate the rectification and remedial measures implemented by the NSAs.