Performance Plan

Belgium

Third Reference Period (2020-2024)

Status: Revised draft performance plan with corrective measures (Art. 15(6) of IR 2019/317)

Date of issue: 4,53E+04

Table of Content

Signatories

Performance plan details	
State name	Belgium
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We hereby confirm that the present performance plan is consistent with the scope of Regulation (EU) No 2019/317 pursuant to Article 1 of Regulation (EU) No 2019/317 and Article 7 of Regulation (EC) No 549/2004.

Name, title and signature of representative	
Koen Milis Director-General Belgian Civil Aviation Authority	

Additional comments	

Document change record		
Version	Date	Reason for change
v3	15/09/2023	Commission Implementing Decision (EU) 2023/1336 of 16 June 2023
v3.3	7/11/2023	verification of completeness
v3.3 adopted	22/12/2023	adoption performance plan

SECTION 1: INTRODUCTION

Annexes of relevance to this section

ANNEX C. CONSULTATION
ANNEX D. LOCAL TRAFFIC FORECASTS
ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME

1 - INTRODUCTION

1.1 - The situation

NSA(s) responsible for drawing up the Performance Plan	Federal Public Service Mobility and Transport, Belgian Civil Aviation Authority, Belgian Supervisory Authority for Air Navigation Services (BSA-ANS)

1.1.1 - List of ANSPs and geographical coverage and services

Number of ANSPs	2

ANSP name	Services	Geographical scope
skeyes	ATM, MET	Belgium, Luxembourg
MUAC	ATM	Belgium, Luxembourg, The Netherlands, Germany (North-West)

Cross-border arrangements for the provision of ANS services

Number CB arrangements where ANSPs provide services in an other State	2

ANSPs providing services in the FIR of another State	
ANSP Name	Description and scope of the cross-border arrangement
SKEYES	ATS, FIS, alerting service for Germany (DFS) ATS, FIS, alerting service, CNS, AIS, MET for Luxembourg (ANA) ATS, FIS, alerting service for The Netherlands (LVNL) ATS, FIS, alerting service for France (DSNA) ATS, FIS, alerting service in Belgium airspace assigned to MUAC
MUAC	ATS, FIS, alerting services in Luxembourg airspace above FL245 ATS, FIS, alerting services for Denmark ATS, FIS, alerting service for France ATS, FIS, alerting services for Germany

Number CB arrangements where ANSPs from another State provide services in the State	Click to select

ANSPs established in another Member State providing services in one or more of the State's FIRs	
ANSP Name	Description and scope of the cross-border arrangement

1.1.2 - Other entities in the scope of the Performance and Charging Regulation as per Article 1(2) last para.

Number of other entities	2

Entity name	Domain of activity	Rationale for inclusion in the Performance Plan
Belgian Supervisory Authority for Air Navigation Services (BSA-ANS)	Competent authority	Determined costs incurred in relation to the provision of air navigation services in accordance with the article 22(1) of Commission implementing regulation (EU) 2019/317
Eurocontrol		Determined costs incurred in relation to the provision of air navigation services in accordance with the article 22(1) of Commission implementing regulation (EU) 2019/317

1.1.3 - Charging zones (see also 1.4-List of Airports)

En-route	Number of en-route charging zones	1
En-route charging zone 1	Belgium-Luxembourg	
Terminal	Number of terminal charging zones	1
Terminal charging zone 1	Belgium EBBR	

1.1.4 - Other general information relevant to the plan

This PP was formerly produced as a FAB PP, and was, after coordination with COM, truncated to a national PP. The national Belgian(-Luxembourg) targets and inputs for safety, environment and capacity are the same as of Version 2.1 of the FABEC PP. There are no updated targets, just ANSP (MUAC+skeyes) level targets produced to national targets. There are no additions as regards the national input in rspect to those three Key Performance indicators. While in some regards to MUAC a split between the participating countries on PP level was not feasible (compare MUAC investments, pensions and interest rates) NSAs are aware of this situation. Possible redundancies will be taken into consideration on oversight level.

Relevant local circumstances with high significance for performance target setting and updated view on the impact of the COVID-19 crisis on the operational and financial situation of ANSPs covered in the performance plan

The Covid-19 pandemic affects performance and performance planning in a number of ways :

-> <u>Practical issues</u>

- **Financial impact**
- **Staff issues (protection, rostering,...)**
- **System implementation**
  * distancing constraints and remote working requirements affect practical elements of development, testing, validation and training
  * travel constraints limit presence and delivery by international suppliers
- **ATCO training and availability**
  * distancing constraints limit training capacity
  * increased pressure on simulators for training as well as currency
  * lack of high load traffic levels in OJT
  * working requirements following vaccination

-> <u>Uncertainty and data availability</u>

- **Ongoing pandemic**
- **Uncertainty and variability in traffic recovery**
- **short term volatility in traffic demand**

Additional comments

1.2 - Traffic Forecasts

1.2.1 - En route

En route Charging zone 1 | **Belgium-Luxembourg**

En route traffic forecast | STATFOR forecast March 2023 - base scenario

	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	1.240	1.275	1.249	541	639	1.023	1.160	1.244	-0,1%
IFR movements (yearly variation in %)		2,9%	-2,1%	-56,6%	18,0%	60,1%	13,4%	7,2%	
En route service units (thousands)	2.594	2.644	2.620	1.081	1.167	2.096	2.404	2.560	-0,5%
En route service units (yearly variation in %)		1,9%	-0,9%	-58,7%	8,0%	79,6%	14,7%	6,5%	

1.2.2 - Terminal

Terminal Charging zone 1 | **Belgium EBBR**

Terminal traffic forecast | STATFOR forecast March 2023 - base scenario

	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	116,1	114,9	114,6	45,7	57,1	87	96	104	-1,8%
IFR movements (yearly variation in %)		-1,1%	-0,3%	-60,1%	25,0%	52,6%	10,3%	8,7%	
Terminal service units (thousands)	157,8	161,1	162,3	72,9	93,8	131,5	146,2	161,0	-0,2%
Terminal service units (yearly variation in %)		2,1%	0,8%	-55,1%	28,7%	40,1%	11,3%	10,1%	

1.3 - FABEC Stakeholder consultation

1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan

Introductory remark
Information of this Belgian national plan has been previously presented to the stakeholders through 2 consultation processes, a FABEC consultation process for operational targets (safety, environment, en-route capacity) as part of the initial 2019 & 2021 revised FABEC performance plan, and a national one for the cost-efficiency and the terminal capacity. **The initial FABEC stakeholder consultations and outcomes are listed and described below. The operational targets for Belgium where already presented to the stakeholders during these consultations for the safety, environment and en route capacity performance areas.** **The national consultations on cost-efficiency, investments and terminal capacity and related outcomes are presented in the following chapter.**

Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan
SAFETY: airspace users fully support the targets set by FABEC and related national targets, but more transparency by NSA and ANSP is needed, in terms of information on the different ANSP targets.
ENVIRONMENT: the proposed KEA target and related national breakdown values, in line with the reference value is strongly supported. ANSPs have to build an efficient airspace by reducing complexities. Moreover, greater focus should be put on improving vertical flight efficiency to reduce CO2 emissions.
CAPACITY: the FABEC targets and related national breakdown values, which are in line with the reference values, are supported. Mitigation measures shall be identified and planned to manage volatility, staff availability, rostering, training, new ATC system implementation.
INCENTIVE SCHEME: airspace users strongly advocated for a penalty-only scheme. The CRSTMP limitation is not supported. Furthermore, only the achievement of both FAB and ANSP targets would drive the changes required by airspace users.
Although stakeholders commented on the challenging nature of the targets, the targets in the areas of safety, environment and capacity and related national and ANSPs breakdown values are in line with EU-wide targets, as well as the incentive scheme is consistent with EU Regulation 2019/317 laying down a performance and charging scheme in the single European sky. Therefore, the AFBEC Council decided not to alter the proposed targets and incentive scheme.

1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	Select	Not discussed at FABEC consultation; part of national level consultations.
Charging policy	Yes	Not discussed at FABEC consultation; part of national level consultations.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	The FABEC en route incentive scheme uses a symmetrical maximum amount of bonus and penalty corresponding to 0,5% of the determined costs. Airspace User representatives strongly advocated for a penalty-only scheme. No bonus should be awarded unless there would be a siginificant improvment in CAP performance.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	The FABEC en route incentive scheme will apply one point of the modulation mechanism as referred to the Annex XIII of the regulation IR (EU) 2019/317 to limit the scope of incentives to cover only CRSTMP delay causes. Airspace User representatives did not support the limitation of the scope to cover only CRSTMP delay causes.

Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	The FABEC en route incentive scheme is elaborated with a dead band around the pivot value in recognition of the volatile nature of performance at current delay levels. Only penalising does not serve the purpose of improving performance. Airspace User representatives did not agree such a symmetric approach. They consider that only a penalty scheme should be developed to manage performance.
Establishment or modification of charging zones	Select	Not discussed at FABEC consultation; part of national level consultations.
Establishment of determined costs included in the cost base for charges	Yes	Not discussed at FABEC consultation; part of national level consultations.
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	Select	Not discussed at FABEC consultation; part of national level consultations.
Where applicable, decision to apply the simplified charging scheme	Select	Not discussed at FABEC consultation; part of national level consultations.
New and existing investments, and in particular new major investments, including their expected benefits	Yes	Not discussed at FABEC consultation; part of national level consultations.

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	FABEC ATSPs (ANA Luxembourg, DFS, DSNA, LVNL, MUAC, skeyes and Skyguide)
Dates of main meetings / correspondence	General FABEC stakeholder consultation meeting, 2 September
Main issues discussed	See minutes of the meeting
Actions agreed upon	See minutes of the meeting
Points of disagreement and reasons	See minutes of the meeting
Final outcome of the consultation	See minutes of the meeting

Additional comments

#2 - Airspace Users	
Stakeholder group composition	Air France, DLH, Ryanair,SWISS, Easyjet, Tuifly, IATA, A4E, ERAA
Dates of main meetings / correspondence	General FABEC stakeholder consultation meeting, 2 September
Main issues discussed	See minutes of the meeting
Actions agreed upon	See minutes of the meeting
Points of disagreement and reasons	See minutes of the meeting
Final outcome of the consultation	See minutes of the meeting

Additional comments

#3 - Professional staff representative bodies	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#4 - Airport operators	
Stakeholder group composition	ACI was invited to the FABEC stakeholder consultation meeting as representative body for the airports. No representative attended.
Dates of main meetings / correspondence	General FABEC stakeholder consultation meeting, 2 September
Main issues discussed	See minutes of the meeting
Actions agreed upon	See minutes of the meeting
Points of disagreement and reasons	See minutes of the meeting
Final outcome of the consultation	See minutes of the meeting

Additional comments
Not consulted by the NSA; consultation of staff is considered the responsibility of the ANSPs.

#5 - Airport coordinator	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#6 - Other (specify)	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

1.3.1 - Belgium-Luxembourg en route Stakeholder consultation

1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan

Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan
Stakeholders questioned the rise in costs over the reference period. In particular, the number of ATCO-hirings together with the corresponding costs for training and the pre-retired ATCOs, the inclusion of the carry over related to the correction mechanism of 2020 and 2021 in the asset base and the assumptions used to calculate the return on equity. The Belgian NSA (BSA-ANS) decided to not include the carry over related to the correction mechanism of 2020 and 2021 in the asset base and revise the assumptions on the return on equity, resulting in a reduction of the cost of capital. For MUAC, it was highlighted that the rise in costs was mainly due to a shift of costs from the general Eurocontrol budget towards MUAC and that the corresponding rise of the MUAC budget is not sustainable in the current situation. Airspace users advocated that the MUAC member states should bear this cost. For ANA, it was stated that the main cost driver is staff costs and that there were discussions ongoing concerning additional public funding. At this moment, there is uncertainty on the evolution of traffic. The traffic scenario proposed (STATFOR May 2021 scenario 2) was adjusted, but only with regard to the change of the distance factor. It still remained to be seen whether the STATFOR October 2021 forecast will be included after the submission, depending on the development of the evolution of traffic.

1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	No	stakeholders were informed on the intention of the Belgian and Luxembourg NSAs to adjust the STATFOR May 2021 scenario 2 to reflect the change of the distance factor. No comments were received.
Charging policy	Yes	BE and LUX NSA stated that it was the intention to spread the carry-over related to the correction mechanism of 2020 and 2021 underrecoveries over 7 years in accordance with art. 5(5) of commission Implementing Regulation 2020/1627. One stakeholder expressed concerns with regard to the effect this might have on the liquidity of skeyes.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	Not discussed as this was treated by the FABEC consultation held on the 2nd of September.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	Not discussed as this was treated by the FABEC consultation held on the 2nd of September.
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	Not discussed as this was treated by the FABEC consultation held on the 2nd of September.
Establishment or modification of charging zones	No	No charging zones were modified.
Establishment of determined costs included in the cost base for charges	Yes	See also description of main points discussed during the consultation meeting: Airspace users expressed concerns about the cost levels and stated that the benefit of the activities and investments that will be generated by these costs are not always clear. The NSAs interacted with the ANSPs to make sure all investments and activities are generated in a cost efficient way. However, the NSAs have not reconsidered any of those with the objective of reducing costs.
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	Not applicable

Where applicable, decision to apply the simplified charging scheme	No	Not applicable
New and existing investments, and in particular new major investments, including their expected benefits	Yes	Stakeholders questioned the level of investments of skeyes, and commented that the benefit of the investments was not demonstrated enough. Skeyes replied that a lot of equipment had to be replaced due to end-of-life and that synergies with BEL Defense were set up in order to mitigate the costs of the investements. For MUAC, investments were scaled back and postponed to RP4 where possible.

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	skeyes, MUAC, ANA
Dates of main meetings / correspondence	woensdag 18 augustus 2021
Main issues discussed	Cost-efficiency target for the Belgium-Luxembourg en route charging zone, comprising the costs of skeyes, (part of) MUAC, ANA and the NSAs, as well as the traffic scenario.
Actions agreed upon	No specific actions were agreed upon.
Points of disagreement and reasons	skeyes highlighted that opting for a 7-year period for the carry-over of the underrecoverries might potentially raise liquidity issues should the forecasted traffic not materialise.
Final outcome of the consultation	In conclusion, the Belgian and Luxembourg NSAs decided to accept the financial plans of skeyes, MUAC and ANA to be included in the cost-base of the Belgian-Luxembourg en route charging zone for RP3, apart from the Cost of Capital of skeyes, which was adjusted by revising the assumptions used to calculate the return on equity and exclude the carry over related to the correction mechanism of 2020 and 2021 out of the asset base used to calculate the cost of capital.

Additional comments

#2 - Airspace Users	
Stakeholder group composition	IATA, Lufthansa Group, Brussels Airlines, Ryanair,KLM, TUI Fly
Dates of main meetings / correspondence	woensdag 18 augustus 2021
Main issues discussed	Cost-efficiency tartget for the Belgium-Luxembourg en route charging zone, comprising the costs of skeyes, (part of) MUAC, ANA and the NSAs, as well as the traffic scenario. The main topics discussed were: Financial plan of skeyes (especially: the cost evolution, skeyes' ATCO-training, cost of capital and skeyes' staff increase), financial plan of MUAC (especially: increase in costs and the shift of costs from the general Eurocontrol to the MUAC budget) and ANA Luxembourg (especially: staff evolution and potential state support).
Actions agreed upon	It was agreed upon that skeyes would provide additional information on cost allocation for investments, cost of capital and staffing evolution.
Points of disagreement and reasons	Airspace users raised concerns about the cost evolution at skeyes during RP3. Specifically, questions were raised on the investment level and cost of capital. With regard to the investments, skeyes indicated that these were necessary due to end-of-life, and that where possible, synergies with BEL Defense were set up in order to mitigate the costs of the investements. Additionally, questions were raised on the return on equity used and the inclusion of the underrecoverries of 2020 and 2021 in the asset base. According to the airspace users, the percentage used should be lower and the underrecoverries should be excluded from the asset base. With regard to MUAC, airspace users stated that the rise in costs by the recent cost allocation shift was not sustainable, and requested that the state would bear at least a proportion of these costs. For ANA Luxembourg, airspace users appreciated the ongoing discussions regarding the potential state support and asked whether the discussions on this topic would be finalized before the submission deadline. ANA Luxembourg replied that this was the intention.
Final outcome of the consultation	In conclusion, the Belgian and Luxembourg NSAs decided to accept the financial plans of skeyes, MUAC and ANA to be included in the cost-base of the Belgian-Luxembourg en route charging zone for RP3, apart from the Cost of Capital of skeyes, which was adjusted by revising the assumptions used to calculate the return on equity and exclude the carry over related to the correction mechanism of 2020 and 2021 out of the asset base used to calculate the cost of capital. The discussions about potential additional public funding from the state of Luxembourg come to an agreement in November 2021.

Additional comments

#3 - Professional staff representative bodies

Stakeholder group composition	ACV-CSC, VSOA, TUEM
Dates of main meetings / correspondence	woensdag 18 augustus 2021
Main issues discussed	traffic risk sharing, level of costs and investments
Actions agreed upon	No specific actions were agreed upon.
Points of disagreement and reasons	Professional staff representative bodies stated that the use of a prognosis of traffic in general is not realistic. In the current circumstances, they estimate that the actual number will likely be lower. and that the system of risk-sharing is not appropriate. it was further stated that the current level of investments and recruitments is the result from the RP1 and RP2 cost savings, and that professional staff representative bodies had doubts about the added value of using consultants instead of hiring staff and the outsourcing of the ATCO training centre.
Final outcome of the consultation	In line with commission Implementing Regulation 2019/317, the STATFOR base forecast was included in the performance plan.

Additional comments

#4 - Airport operators	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments
Airport operators were not invited.

#5 - Airport coordinator	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments
Airport coordinators were not invited.

#6 - Other (specify)	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

1.3.2 - Belgium Terminal Stakeholder consultation

1.3.2.1 - Overall outcome of the consultation of stakeholders on the performance plan

Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan
Stakeholders questioned the rise in costs over the reference period. In particular, the number of ATCO-hirings together with the corresponding costs for training and the pre-retired ATCOs, the inclusion of the carry over related to the correction mechanism of 2020 and 2021 in the asset base and the assumptions used to calculate the return on equity. The Belgian NSA (BSA-ANS) decided to not include the carry over related to the correction mechanism of 2020 and 2021 in the asset base and revise the assumptions on the return on equity, resulting in a reduction of the cost of capital. At this moment, there is uncertainty on the evolution of traffic. The traffic scenario proposed is the STATFOR May 2021 scenario 2. It still remained to be seen whether the STATFOR October 2021 forecast will be included after the submission, depending on the development of the evolution of traffic. a new VVIP procedure was in place which would generate additional delay on Brussels Airport in specific meteorological conditions. BSA-ANS decided to include a delay-budget for this procedure in the target.

1.3.2.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	No	No comments were made on the use of the STATFOR May 2021 scenario 2 forecast.
Charging policy	Yes	In accordance with the third management contract between the State and skeyes, the State decides each year the part of the determined costs for EBBR terminal charging zone financed by the users and the part financed by other revenues. In 2020 and 2021, the Belgian state borne 24.97% of the total costs for EBBR but no decision has been taken yet for the period 2022-2024. BE NSA stated that it was the intention to spread the carry-over related to the correction mechanism of 2020 and 2021 over 7 years in accordance with art. 5(5) of commission Implementing Regulation 2020/1627. One stakeholder expressed concerns with regard to the effect this might have on the liquidity of skeyes.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	An asymmetric bonus/malus system was introduced, with a maximum bonus of 0.125% and a maximum penalty of 0.5%. BSA-Ans indicated that this parameters were interlinked with the inclusion of the VVIP-delay included in the currently proposed capacity target. the Airspace users supported the asymmetric scheme.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	Belgian Terminal incentive scheme will be based upon CRSTMP-delay only. There will be no modulation applied for unforeseen and significant changes. No comments were made
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	Proposed deadband was presented to the airspace users. No comments were made.
Establishment or modification of charging zones	No	No charging zones were modified.

Establishment of determined costs included in the cost base for charges	Yes	See also description of main points discussed during the consultation meeting: Airspace users expressed concerns about the cost levels and stated that the benefit of the activities and investments that will be generated by these costs are not always clear. The NSA interacted with skeyes to make sure all investments and activities are generated in a cost efficient way. However, the NSA has not reconsidered any of those with the objective of reducing costs.
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	Not applicable.
Where applicable, decision to apply the simplified charging scheme	No	Not applicable.
New and existing investments, and in particular new major investments, including their expected benefits	Yes	Airspace users questioned the level of investments of skeyes, and commented that the benefit of the investments was not demonstrated enough. Skeyes replied that a lot of equipment had to be replaced due to end-of-life and that synergies with BEL Defense were set up in order to mitigate the costs of the investements.

1.3.2.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	skeyes
Dates of main meetings / correspondence	woensdag 18 augustus 2021
Main issues discussed	skeyes requested to set an additional buffer of 0.05 minutes per delay per flight for RP3 due to the new VVIP procedure at Brussels Airport, which implies escort flight by the Federal Police helicopter that could hinder airport operations at bad VMC. Alternatively, should it be allowed by the Commission and PRB, excluding this procedure (which would fall under code P) out of the scope of the target would be allowed since skeyes has no influence on this specific procedure, skeyes requested to either receive an additional delay-budget
Actions agreed upon	all stakeholders agreed on the specificity of the procedure with a high degree of uncertainty. Airspace users and the airport operator requested that the negative effect of this procedure on the airport operation of EBBR would be limited to the absolute minimum.
Points of disagreement and reasons	skeyes highlighted that opting for a 7-year period for the carry-over of the underrecoverries might potentially raise liquidity issues should the forecasted traffic not materialise.
Final outcome of the consultation	BSA-ANS concluded to include the VVIP-procedure in the delay target.

Additional comments

#2 - Airspace Users	
Stakeholder group composition	IATA, Lufthansa Group, Brussels Airlines, Ryanair,KLM, TUI Fly
Dates of main meetings / correspondence	woensdag 18 augustus 2021
Main issues discussed	Cost-efficiency tartget for the Brussels Terminal charging zone, comprising the costs of skeyes (especially: investment level and cost of capital) and the NSA, as well as the traffic scenario and the capacity target with corresponding incentive scheme.
Actions agreed upon	It was agreed upon that skeyes would provide additional information on cost allocation for investments, cost of capital and staffing evolution.
Points of disagreement and reasons	Airspace users raised concerns about the cost evolution at skeyes during RP3. Specifically, questions were raised on the investment level and cost of capital. With regard to the investments, skeyes indicated that these were necessary due to end-of-life, and that where possible, synergies with BEL Defense were set up in order to mitigate the costs of the investements. Additionally, questions were raised on the return on equity used and the inclusion of the carry over related to the correction mechanism of 2020 and 2021 in the asset base. According to the airspace users, the percentage used should be lower and the underrecoverries should be excluded from the asset base. Concerning the capacity target, airspace users took note of the inclusion of the extra delay due to the VVIP delay procedure, requested that the negative effect of this procedure would be limited to tha absolute minimum, and supported the asymmetric incentive scheme. The NSA replied that the VVIP procedure was beyond skeyes managerial control.
Final outcome of the consultation	In conclusion, the Belgian NSAs decided to accept the financial plan of skeyes to be included in the cost-base of the Belgian Terminal charging zone for RP3, apart from the Cost of Capital, which was adjusted by revising the assumptions used to calculate the return on equity and exclude the carry over related to the correction mechanism of 2020 and 2021 out of the asset base used to calculate the cost of capital.

Additional comments
/

#3 - Professional staff representative bodies	
Stakeholder group composition	ACV-CSC, VSOA
Dates of main meetings / correspondence	woensdag 18 augustus 2021

Main issues discussed	traffic risk sharing, level of costs and investments
Actions agreed upon	No specific actions were agreed upon.
Points of disagreement and reasons	Professional staff representative bodies stated that the use of a prognosis of traffic in general is not realistic. In the current circumstances, they estimate that the actual number will likely be lower. and that the system of risk-sharing is not appropriate. it was further stated that the current level of investments and recruitments is the result from the RP1 and RP2 cost savings, and that professional staff representative bodies had doubts about the added value of using consultants instead of hiring staff and the outsourcing of the ATCO training centre.
Final outcome of the consultation	In line with commission Implementing Regulation 2019/317, the STATFOR base forecast was included in the performance plan.

Additional comments

#4 - Airport operators	
Stakeholder group composition	Brussels Airport Company
Dates of main meetings / correspondence	woensdag 18 augustus 2021
Main issues discussed	Cost-efficiency tartget for the Brussels Terminal charging zone, comprising the costs of skeyes (especially: investment level and cost of capital) and the NSA, as well as the capacity target with corresponding incentive scheme.
Actions agreed upon	No specific actions were agreed upon.
Points of disagreement and reasons	Airport operators questioned the level of investment and the cost allocation between en route and the different airports of which EBBR is the only one incorporated in the performance plan. Next to this, it was questioned whether flight cancellations were taken into account.
Final outcome of the consultation	It was clarified that no investments attributed to airports outside the scope of the performance plan would be chargeed to the airspace users within the EBBR charging zone.

Additional comments

#5 - Airport coordinator	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments
airport coordinators were not invited

#6 - Other (specify)	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

1.3.1 - Belgium-Luxembourg en route Stakeholder consultation

1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan

Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan
Stakeholders raised serious concerns on the rise in costs over the reference period, more specifically for skeyes and MUAC. State intervention from Luxembourg (NSA costs and Cost of Capital) to mitigate the rise was highly appreciated. All stakeholders agreed that inflation is an element which is difficult to control. skeyes indicated that several elements were causing the rise in costs: - the need to invest (combined with the necessary hirings to execute these investments) to assure business continuity and sufficient capacity levels in the future, - the age pyramid at skeyes, which had a triple effect: - a rise in costs for pre-retired ATCO's - a rise in staff costs due to the need to hire additional ATCO's - a rise in training costs - complexity of the Belgian airspace (see also Annex R) For MUAC, the rise of costs can be explained by the new Maastricht agreement, including a shift of costs from the general Eurocontrol towards the MUAC budget. Additionally, figures were adjusted to inflation. After the consultation, the Belgian state decided to intervene to mitigate the costs in 2023 and 2024. In 2023, the Belgian state will bear 0.5M€ of Part I of the Eurocontrol budget. In 2024, the Belgian state will bear 3M€ of Part I of the Eurocontrol budget. The Eurocontrol costs for the respective years included in the en route reporting tables are adjusted accordingly.

1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	No	The STATFOR June 2022 base scenario was proposed. Stakeholders were informed on the intention of the Belgian and Luxembourg NSAs to adjust the STATFOR June 2022 base scenario to reflect the change of the distance factor. No comments were received.
Charging policy	Yes	BE and LUX NSA stated that it was the intention to spread the carry-over related to the correction mechanism of 2020 and 2021 underrecoveries over 7 years in accordance with art. 5(5) of commission Implementing Regulation 2020/1627. Airspace users appreciated this.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	Not discussed as this was treated by the FABEC consultation held on the 2nd of September 2021.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	Not discussed as this was treated by the FABEC consultationheld on the 2nd of September 2021.
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	Not discussed as this was treated by the FABEC consultation held on the 2nd of September 2021.
Establishment or modification of charging zones	No	No charging zones were modified.
Establishment of determined costs included in the cost base for charges	Yes	See also description of main points discussed during the consultation meeting: Airspace users expressed concerns about the cost levels.
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	Not applicable

Where applicable, decision to apply the simplified charging scheme	No	Not applicable
New and existing investments, and in particular new major investments, including their expected benefits	Yes	Stakeholders stated that the cost allocation of the investments of skeyes is not clear, and difficult to identify even though the sharing keys for each investment separately were represented in the investment plan which was provided before the consultation.

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	skeyes, MUAC, ANA
Dates of main meetings / correspondence	Tuesday 28 June 2022
Main issues discussed	Revised cost-efficiency target for the Belgium-Luxembourg en route charging zone, comprising the costs of skeyes, (part of) MUAC, ANA and the NSAs, as well as the traffic scenario. Revised cost-efficiency for Belgium Terminal.
Actions agreed upon	No specific actions were agreed upon.
Points of disagreement and reasons	skeyes indicated that although the actual traffic in May 2022 was above the traffic prediction, this was not reflected in the June 2022 traffic, where the traffic evolution went back to the level of the STATFOR base scenario.
Final outcome of the consultation	In conclusion, the Belgian and Luxembourg NSAs decided to accept the revised financial plans of skeyes, MUAC and ANA to be included in the cost-base of the Belgian-Luxembourg en route charging zone for RP3. After the consultation, the Belgian state decided to intervene to mitigate the costs in 2023 and 2024. In 2023, the Belgian state will bear 0.5M€ of Part I of the Eurocontrol budget. In 2024, the Belgian state will bear 3M€ of Part I of the Eurocontrol budget. The Eurocontrol costs for the respective years included in the en route reporting tables are adjusted accordingly.

Additional comments

#2 - Airspace Users	
Stakeholder group composition	IATA, Lufthansa Group, Brussels Airlines, TUI Fly/BATA
Dates of main meetings / correspondence	Tuesday 28 June 2022
Main issues discussed	Cost-efficiency tartget for the Belgium-Luxembourg en route charging zone, comprising the costs of skeyes, (part of) MUAC, ANA and the NSAs, as well as the traffic scenario. The main topics discussed were: inflation, Financial plan of skeyes (especially: the cost evolution, skeyes' ATCO-training, investments planned and skeyes' staff increase), financial plan of MUAC (especially: increase in costs, pension scheme and the shift of costs from the general Eurocontrol to the MUAC budget) and financial plan of ANA Luxembourg (especially: staff evolution, investments and state support). Revised cost-efficiency for Belgium Terminal.
Actions agreed upon	It was agreed upon that skeyes would provide additional information on staffing evolution and FTE breakdown.
Points of disagreement and reasons	Airspace users recognized that the inflation is not under the control of the ANSPs. Airspace users raised concerns about the cost evolution at skeyes during RP3. Specifically, questions were raised on the investment level. Skeyes indicated that to assure business continuity, these were necessary due to end-of-life, and that where possible, synergies with BEL Defense were set up in order to mitigate the costs of the investments. With regard to MUAC, airspace users stated that the rise in costs raises concerns, although recognizing the effects of inflation and the commitment of MUAC to focus on investments that occurs the most benefit for the users. For ANA Luxembourg, airspace users questioned the level of ATCO-hirings, as the ab initio success rate was presented as a constraint. ANA Luxembourg replied that this elevated costs, while it was granted to execute the hirings by the government in order to assure a sufficient level of ATCO staff.
Final outcome of the consultation	In conclusion, the Belgian and Luxembourg NSAs decided to accept the revised financial plans of skeyes, MUAC and ANA to be included in the cost-base of the Belgian-Luxembourg en route charging zone for RP3. After the consultation, the Belgian state decided to intervene to mitigate the costs in 2023 and 2024. In 2023, the Belgian state will bear 0.5M€ of Part I of the Eurocontrol budget. In 2024, the Belgian state will bear 3M€ of Part I of the Eurocontrol budget. The Eurocontrol costs for the respective years included in the en route reporting tables are adjusted accordingly.

Additional comments

#3 - Professional staff representative bodies	
Stakeholder group composition	ACV-CSC
Dates of main meetings / correspondence	Tuesday 28 June 2022
Main issues discussed	traffic scenario, level of costs and investments, ATCO training
Actions agreed upon	No specific actions were agreed upon.
Points of disagreement and reasons	Professional staff representative bodies stated that the June 2022 STATFOR base forecast is most likely too optimistic. According to them, recovery will only take place at a lower pace. Furthermore, it was stated that the current costs were so high due to lack of staff in earlier periods, in combination with a halt in investments. Professional staff representative bodies had doubts about the added value of the outsourcing of the ATCO training centre.
Final outcome of the consultation	In line with commission Implementing Regulation 2019/317, the June 2022 STATFOR base forecast was included in the performance plan.

Additional comments

#4 - Airport operators	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments
Airport operators were not invited.

#5 - Airport coordinator	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments
Airport coordinators were not invited.

#6 - Other (specify)	
Stakeholder group composition	N/A
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

1.3 - Stakeholder consultation

1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan

Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan
Stakeholders requested to be informed of the compliance review report and consequently a summary of the results will be included in the annex 2 concerning the corrective measures. Stakeholders complained about the delay of the Belgium-Luxembourg final performance plan and noted that the plan is only finalized when the RP3 is almost finished. They expect a quicker delivery for RP4. Stakeholders requested clear rules on how must be managed revision of the performance plan cost for past years. Belgium will request the

1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	No	The STATFOR March 2023 base scenario was proposed. Stakeholders were informed on the intention of the Belgian and Luxembourg NSAs to adjust the STATFOR March 2023 base scenario to reflect the change of the distance factor. No comments were received.
Charging policy	Yes	BE and LUX NSA stated that it was the intention to spread the carry-over related to the correction mechanism of 2020 and 2021 underrecoveries over 7 years in accordance with art. 5(5) of commission Implementing Regulation 2020/1627. Airspace users appreciated this.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	BE and LUX NSA stated that they had no intention to deviate from the 0,5% maximum malus which was already proposed in the 2019 submission. No comments were received
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	No	Not discussed as this was treated by the FABEC consultationheld on the 2nd of September 2021.
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	Not discussed as this was treated by the FABEC consultation held on the 2nd of September 2021.
Establishment or modification of charging zones	No	No charging zones were modified.
Establishment of determined costs included in the cost base for charges	Yes	See also description of main points discussed during the consultation meeting: Airspace users expressed concerns about the cost levels and the future evolution in RP4
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	Not applicable
Where applicable, decision to apply the simplified charging scheme	No	Not applicable
New and existing investments, and in particular new major investments, including their expected benefits	Yes	See annex C

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	skeyes, MUAC, ANA
Dates of main meetings / correspondence	donderdag 26 oktober 2023
Main issues discussed	(revised) cost base and financial plans of skeyes, MUAC and ANA, savings and actions in relation to the findings of the Commission
Actions agreed upon	no specific actions were agreed
Points of disagreement and reasons	no specific points were mentioned
Final outcome of the consultation	no specific outcomes were expected

Additional comments

#2 - Airspace Users	
Stakeholder group composition	IATA, EBAA, Lufthansa Group, KLM
Dates of main meetings / correspondence	donderdag 26 oktober 2023
Main issues discussed	(revised) cost base and financial plans of skeyes, MUAC and ANA, savings and actions in relation to the findings of the Commission
Actions agreed upon	Airspace users would like to consult the compliance review: Belgium will add a summary of the results in the final performance plan
Points of disagreement and reasons	no specific points were mentioned
Final outcome of the consultation	A summary of the results of the compliance review is added in the Annex Z

Additional comments

#3 - Professional staff representative bodies	
Stakeholder group composition	ACV-CSC
Dates of main meetings / correspondence	donderdag 26 oktober 2023
Main issues discussed	(revised) cost base and financial plans of skeyes, MUAC and ANA, savings and actions in relation to the findings of the Commission
Actions agreed upon	no specific actions were agreed
Points of disagreement and reasons	Staff representative assessed the change from a FABEC performance plan to a national one as uncompliant with the regulation.
Final outcome of the consultation	no specific outcomes were expected

Additional comments

#4 - Airport operators	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#5 - Airport coordinator	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	

Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#6 - Other (specify)	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

1.4 - List of airports subject to the performance and charging Regulation

1.4.1 - Airports as per Article 1(3) (IFR movements ≥ 80 000)

ICAO code	Airport name	Charging Zone	IFR air transport movements			
			2016	2017	2018	Average
EBBR	Brussels	Belgium EBBR	218.120	232.719	229.957	226.932

1.4.2 Other airports added on a voluntary basis as per Article 1(4)

Number of airports	0		
ICAO code	Airport name	Charging Zone	Additional information

Additional comments
/

1.5 - Services under market conditions

Number of services under market conditions	0

1.6 - Process followed to develop and adopt a FAB Performance Plan

Description of the process
Not applicable

1.7 - Establishment and application of a simplified charging scheme

Is the State intending to establish and apply a simplified charging scheme for any charging zone/ANSP?	No

SECTION 2: INVESTMENTS

Annexes of relevance to this section

ANNEX E. INVESTMENTS

NOTE: The requirements as per Annex II, 2.2.(c) are addressed in item 4.1.2

2.1 - Investments - skeyes

2.1.1 - Summary of investments

Number of new major investments	4

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	**Determined costs** of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	ATM Next Generation	66.988.226	19.685.766	-	38.137	97.903	276.969	496.219	15 years	78%	22%	Phased entry into operations as of 2023
2	remote radio sites	11.791.765	7.647.669	11.755	35.502	96.879	170.983	692.819	15 years	80%	20%	2024
3	Wide Area Networking	8.576.318	4.441.710	225	32.390	91.549	349.730	782.941	8 years	87%	13%	2023
4	A-SMGCS 2 systeem EBBR	6.571.171	3.695.161	3.156	10.148	24.709	102.161	134.494	6 years software / 15 years hardware	0%	100%	2022
Sub-total of **new major investments** above (1)		93.927.480	35.470.307	15.135	116.178	311.040	899.843	2.106.473				
Sub-total **other new investments** (2)		194.245.251	67.228.451	1.220.208	1.429.440	1.427.657	1.191.720	1.245.265		77%	23%	
Sub-total **existing investments** (3)				13.836.587	11.813.707	11.242.118	12.617.575	14.954.387		77%	23%	
Total new and existing investments (1) + (2) + (3)		288.172.731	102.698.758	15.071.931	13.359.325	12.980.815	14.709.137	18.306.125				

** The total % enroute+terminal should be equal to 100%.*

2.1.2 - Detail of new major investments

NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives on new major investments.

Name of new major investment 1	***ATM Next Generation***					Total value of the asset	***66.988.226 €***
Description of the asset	The NextGen ATM program aims to define the future of the current ATM system to support the integration of civil and military ATM services and to improve capacity and operational efficiencies. The program includes the upgrade of the current ATM system to extend its lifetime until the modernisation of the system						
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Commission Implementing Regulation (EU) 2021/116 of 1 February 2021 on the establishment of the Common Project One supporting the implementation of the European Air Traffic Management Master Plan provided for in Regulation (EC) No 550/2004 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 409/2013 and repealing Commission Implementing Regulation (EU) No 716/2014					
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability
	1,1		3.1, 3.2	4,2		6,3	

Benefits for airspace users and results of the consultation of airspace users' representatives	The evolution of the ATM system will ensure business continuity, ensure compliance with current and future European requirements (e.g. CP1, SES2+) and improve the efficiency and capacity	
Joint investment / partnership	No	
Investment in ATM systems	Yes	
If investment in ATM system, type?	New system	The investment includes the renewal of the current system and the extension of the lifetime of the current system (Midlife upgrade) until the operational date of the new system
If investment in ATM system, Reference to European ATM Master Plan / PCP	PCP	AF 1.1, AF3.1, AF 3.2, AF 4.3, AF 6.3

Name of new major investment 2	***remote radio sites***					Total value of the asset		***11.791.765 €***
Description of the asset	This project focuses on improving the redundancy and resilience of the air-ground radio communication infrastructure (Chain A, B and C), and involves the installation of 18 "new" sites for Enroute and Approach. The project comprises two investments: Remote radio sites and the electronic equipment transmitting and receiving centre.							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No							
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
Level of impact of the investment	Network	Increased level of safety for airspace users as a result of improved communication service resilience, guaranteed business continuity of air navigation services through reduced traffic disruption.						
	Local	Increased level of safety for airspace users as a result of improved communication service resilience, guaranteed business continuity of air navigation services through reduced traffic disruption.						
	Non-performance							
Quantitative impact per KPA	Safety	Safety level is maintained in case of equipment failure (decrease risk of single point of failure.						
	Environment	N.A.						
	Capacity	Reduce risk of traffic disruption (traffic disruption due to system failure led to 52,920 minutes delay in 2015 and 7,442 minutes delay in 2018)						
	Cost Efficiency	N.A.						
Results of the consultation of airspace users' representatives	Airspace users' have been consulted on the investment plan of skeyes during the consultation meeting held on 26 October 2022. No specific comments on this investment were received.							
Joint investment / partnership	Yes	As part of the partnership between skeyes and Belgian Defense, new radiosite are installed whenever possible on military sites to avoid purchasing and equipping new plot of land						
Investment in ATM systems	No							
If investment in ATM system, type?	Click to select							
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select							

Name of new major investment 3	***Wide Area Networking***	Total value of the asset	***8.576.318 €***

Description of the asset	From mid 2022 onwards, skeyes' existing WAN (SDH network) will no longer be supported by the current Telco service provider, thus becoming obsolete. The creation of a new Wide Area Network (WAN) will support all skeyes operational and business critical processes and related IT systems. In particular, it will provide highly available, secure and scalable network connectivity to interconnect all skeyes locations (point of presence).							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No							
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
Level of impact of the investment	Network	Business continuity of air navigation services through reduced risk of data traffic disruption						
	Local	Cost reduction and efficiency gains through the use of a more efficient, scalable network.						
	Non-performance							
Quantitative impact per KPA	Safety	N.A.						
	Environment	N.A.						
	Capacity	Reduce risk of traffic disruption (traffic disruption due to system failure led to 52,920 minutes delay in 2015 and 7,442 minutes delay in 2018)						
	Cost Efficiency	Efficiency gains through the use of a more efficient and scalable network. The new WAN will be a major enabler for virtualization projects (ATM Next Gen and Digital Towers)						
Results of the consultation of airspace users' representatives	Airspace users' have been consulted on the investment plan of skeyes during the consultation meeting held on 26 October 2022. No specific comments on this investment were received.							
Joint investment / partnership	No							
Investment in ATM systems	No							
If investment in ATM system, type?	Click to select							
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select							

Name of new major investment 4	***A-SMGCS 2 systeem EBBR***				Total value of the asset		***6.571.171 €***	
Description of the asset	This project focuses on replacing the existing Advanced Surface Movement Guidance and Control (A-SMGCS) data fusion system, three Surface Movement Radars (SMR), and the MLAT system at Brussels Airport. The project comprises two investments: the A-SMGCS system and the cameras							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Commission Implementing Regulation (EU) 2021/116 of 1 February 2021 on the establishment of the Common Project One supporting the implementation of the European Air Traffic Management Master Plan provided for in Regulation (EC) No 550/2004 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 409/2013 and repealing Commission Implementing Regulation (EU) No 716/2014						
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
		2.1, 2.2, 2.3		4.2, 4.4				
Level of impact of the investment	Network							
	Local							
	Non-performance							
Quantitative impact per KPA	Safety							
	Environment							
	Capacity							
	Cost Efficiency							

Benefits for airspace users and results of the consultation of airspace users' representatives	Airspace users' have been consulted on the investment plan of skeyes during the consultation meeting held on 26 October 2022. No specific comments on this investment were received.	
Joint investment / partnership	No	
Investment in ATM systems	No	
If investment in ATM system, type?	Click to select	
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select	

2.1.3 - Other new and existing investments

2.1.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

The description and justification of the costs nature and benefit of other new and existing investments in fixed assets planned over RP3 are described in Annex E. Each planned investment has been categorised into three overarching categories:
- ATM enhancement
- CNS and MET enhancement
- Infrastructure enhancement

2.1.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	Click to select number of new other investments

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	**Determined costs** of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	

2.2 - Investments - MUAC

2.2.1 - Summary of investments

Number of new major investments	6

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	**Determined costs** of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	New Voice Communication System	6.939.000	6.939.000	663.020	706.133	698.362	690.383	682.310	8 to 15	100%		Q4-2017
2	MeDUSA (MUAC Dual System Architecture)	13.500.000	13.500.000	0	0	0	0	0	8 to 15	100%		Q4-2025
3	Back up Voice Communication System	8.700.000	8.700.000	0	0	0	0	0	8 to 15	100%		Q4-2027
4	Data Centre Modernisation	7.103.000	7.103.000	0	0	0	0	0	15 to 20	100%		Q2-2023
5	IOP-G programme - First deployment	21.000.000	21.000.000	0	0	0	0	0	8 to 15	100%		Q2-2029
6	PHOENIX - New ops building (previously called New ATCO Consoles project)	34.375.000	34.375.000	0	0	0	0	0	8 to 50	100%		Q4-2026
Sub-total of **new major investments** above (1)		91.617.000	91.617.000	663.020	706.133	698.362	690.383	682.310				
Sub-total **other new investments** (2)		36.509.000	36.509.000	0	549.900	1.207.900	638.890	2.543.438				
Sub-total **existing investments** (3)				8.581.777	6.267.967	5.228.738	4.740.827	4.132.352				
Total new and existing investments (1) + (2) + (3)		128.126.000	128.126.000	9.244.797	7.524.000	7.135.000	6.070.100	7.358.100				

** The total % enroute+terminal should be equal to 100%.*

2.2.2 - Detail of new major investments

NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives on new major investments.

Name of new major investment 1	***New Voice Communication System***					Total value of the asset	***6.939.000 €***
Description of the asset	ED-137 compliant VoIP Voice Communication System, including test system. The system supports the FABEC concept for inter-centre sectorisation.						
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No						
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability

Level of impact of the investment	Network	Very limited on the short term. Positive impact on the network will arise once VoiP has been implemented across all ANSPs in
	Local	None
	Non-performance	None
Quantitative impact per KPA	Safety	Current safety levels are maintained or improved. Improved radio coverage.
	Environment	No impact
	Capacity	The N-VCS can support more sectors than the old one and provides in addition more flexibility when switching from one sector
	Cost Efficiency	Reduced communication maintenance costs
Results of the consultation of airspace users' representatives	Covered in national consulation of BE, NL, GE and LUX. No specific comments were made.	
Joint investment / partnership	Yes	Common procurement with DSNA
Investment in ATM systems	Yes	
If investment in ATM system, type?	Replacement investment	
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	Replacement of the Voice System, supporting VoIP for ground telephone; implementation objective COM11.1

Name of new major investment 2	***MeDUSA (MUAC Dual System Architecture)***				Total value of the asset		***13.500.000 €***	
Description of the asset	The MUAC Dual System Architecture (MeDUSA) project will provide an upgraded Fallback/system, which will support the necessary operational requirements for a safe transition from Primary high capacity to Fallback sustained capacity. Upgraded Fallback CWP-HMI with additional functionalities on top of the currently existing ones : identical look and feel as the PRI-CWP, datalink and outgoing OLDI. The project is currently in the initiation phase.							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No							
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
Level of impact of the investment	Network	None						
	Local	Due to the similar HMI and features in both PRI and FLB, training effort will be less. In addition, the legacy fallback system is a						
	Non-performance	None						
Quantitative impact per KPA	Safety	The project is in the initiation phase. It is too early to quantify it's impact.						
	Environment	No direct impact						
	Capacity	Positive impact as a) MEDUSA ensures that primary system capacity at MUAC can grow and b) When operating under fallback						
	Cost Efficiency	No direct impact						
Results of the consultation of airspace users' representatives	Covered in national consulation of BE, NL, GE and LUX. No specific comments were made.							
Joint investment / partnership	No							
Investment in ATM systems	Yes							
If investment in ATM system, type?	Overhaul of existing system							
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The upgraded Fallback System will provide for a new Fallback CWP-HMI, as well as a replacement of the current MUAC Fallback Flight Server						

Name of new major investment 3	*Back up Voice Communication System*					Total value of the asset	*8.700.000 €*
Description of the asset	Replacement of the current BVCS system introduced in 2008						
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No						
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability
Level of impact of the investment	Network	None					
	Local	None					
	Non-performance	This is a replacement project, without direct impact on network or local performance.					
Quantitative impact per KPA	Safety	The project is in the initiation phase. It is too early to quantify it's impact.					
	Environment	No direct impact					
	Capacity	No direct impact					
	Cost Efficiency	With the migration to IP technology, the phase out of legacy telephony will start					
Results of the consultation of airspace users' representatives	Covered in national consulation of BE, NL, GE and LUX. No specific comments were made.						
Joint investment / partnership	No						
Investment in ATM systems	Yes						
If investment in ATM system, type?	Replacement investment						
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	Replacement of the Backup Voice System, supporting VoIP for ground telephone; implementation objective COM11.1					

Name of new major investment 4	*Data Centre Modernisation*					Total value of the asset	*7.103.000 €*
Description of the asset	The data Centre Modernisation project aims at the upgrade of the equipment rooms and their installations and facilities to the Uptime Institute TIER III level. Besides that, the project will deliver processes and tooling to efficiently plan the rack-space and administer the assets and their physical (network) interconnections.						
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No						
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability
Level of impact of the investment	Network	No					
	Local	No					
	Non-performance	The upgrade of the infrastructure is needed in order to ensure that the platform remains capable to support current and future IT					
Quantitative impact per KPA	Safety	Reduced risk of system interruptions					
	Environment	Improved energy consumption, fire protection and physical security					
	Capacity	Reduced risk of system interruptions					
	Cost Efficiency	No					

Results of the consultation of airspace users' representatives	Covered in national consulation of BE, NL, GE and LUX. No specific comments were made.	
Joint investment / partnership	No	
Investment in ATM systems	No	
If investment in ATM system, type?	Click to select	
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select	

Name of new major investment 5	***IOP-G programme - First deployment***				Total value of the asset		***21.000.000 €***	
Description of the asset	To comply with the Initial SWIM Implementing Rule 716/2014 of the Pilot Common Projects (PCP), MUAC is preparing the implementation of the Flight Object (FO), supported by the Blue SWIM Profile. The IOPG Programme comprises additional validations to complement the validations under SESAR1 & SESAR2020, the development and integration of the SWIM Node and Flight Object Manager (common project with iTEC) and the modifications to the legacy systems.							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes							
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
					Family 5-6-2			
Level of impact of the investment	Network							
	Local							
	Non-performance							
Quantitative impact per KPA	Safety							
	Environment							
	Capacity							
	Cost Efficiency							
Benefits for airspace users and results of the consultation of airspace users' representatives	Access to common flight data can result in improved coordination in user-preferred route environments, safety, robustness and concepts of operation. Costs saving through common development of the Blue SWIN Node and Flight Object Manager with iTEC.							
Joint investment / partnership	Yes							
Investment in ATM systems	Yes							
If investment in ATM system, type?	New system							
If investment in ATM system, Reference to European ATM Master Plan / PCP	PCP	AF#5,family 5-6-2						

Name of new major investment 6	***PHOENIX - New ops building (previously called New ATCO Consoles project)***	Total value of the asset	***34.375.000 €***
Description of the asset	New operational building, flexibly locatable in a brighter OPS Room, including new consoles designed to modern ergonomic standards, improved training, test and locat contingency infrastructure, refurbished training, test & contingency environment. The Study Phase has been approved by the MCG; the outcome of the study will be presented in the MCG of Spring 2022.		

The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No							
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
Level of impact of the investment	Network							
	Local	The new building will provide additional CWPs to handle more traffic.						
	Non-performance							
Quantitative impact per KPA	Safety	The project is in the initiation phase. It is too early to quantify it's impact.						
	Environment	Sustainability will be a high priority for the new OPS building						
	Capacity	Additional CWPs will allow for a higher capacity and support the future CONOPS.						
	Cost Efficiency	No impact						
Results of the consultation of airspace users' representatives	Covered in national consulation of BE, NL, GE and LUX. No specific comments were made.							
Joint investment / partnership	No							
Investment in ATM systems	No							
If investment in ATM system, type?	Click to select							
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select							

2.2.3 - Other new and existing investments

2.2.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

The **existing investments** with the highest significance in terms of operational and financial impact are : the MUAC building (9 M€ of depreciations over RP3), new FDPS which has been fully depreciated at the end of 2020 (3.7 M€ of depreciations in 2020), the data centre operations (3.1 M€ of depreciation over RP3), the Radio Direction Finder (1.2 M€ over RP3), the MUAC office Cloud operations OBS (1.1 M€ over RP3) and the BEEK transmitter station (0.6 M€ over RP3). The new investments with the highest significance are disclosed in section 2.7.1 .**Other new investment projects** includes among others , Maintenance of servers and workstations, the new Access Control system and increased automation in training (MUSE project).

2.2.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	3

#	Name of investment	Total value of the asset (capex or contractual leasing value)	Value of the assets allocated to ANS in the scope of the PP	**Determined costs** of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	

1	Data Centre operations	7.321.000	7.321.000	620.000	620.000	620.000	620.000	620.000	Obsolescence : replacement of servers and workstations NOTE: Althoughthe total value of this line is more than €5mln, the line covers a significant number of smaller repacement investments which are grouped here for convenience. Alle individual investments are well below the €5mln threshold.
2	New Access Control System	2.800.000	2.800.000				100.000	200.000	obsolescence of the existing access control system, acquire a new and state of the art access control system based on an integrated security platform which interconnects all required applications within an open architecture meeting the present regulations, expecting benefits are in user friendliness, IT security, capacity and possibilities of the new system, improvement of physical barries, futureproof and reducing of maintenance costs
3	Automated/remote ATCO training, self training and scoring (MUSE)	1.708.000	1.708.000					600.000	Improvement of the real time simulation environment at MUAC and from home leading to workload reduction, sel training for ab-initios

SECTION 3: PERFORMANCE TARGETS AND MEASURES FOR THEIR ACHIEVEMENT

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #x

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #x

3.4.3 - Pension assumptions

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

3.4.5 - Restructuring costs

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

3.5 - Additional KPIs / Targets

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

3.6.2 - Interdependencies and trade-offs between capacity and environment

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

3.6.4 - Other interdependencies and trade-offs

Annexes of relevance to this section

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)
ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)
ANNEX F. BASELINE VALUES (COST-EFFICIENCY)
ANNEX H. RESTRUCTURING MEASURES AND COSTS
ANNEX M. COST ALLOCATION
ANNEX J. OPTIONAL KPIs AND TARGETS
ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS
ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS
ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS
ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS
ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

SECTION 3.1: SAFETY KPA

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

a) Safety national performance targets

b) Detailed justifications in case of inconsistency between local and Union-wide safety targets

c) Main measures put in place to achieve the safety performance targets

Annexes of relevance to this section

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

3 - PERFORMANCE TARGETS AT LOCAL LEVEL

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

a) Safety performance targets

	Number of Air Traffic Service Providers	2

		2020A	2020	2021	2022	2023	2024
		Actual	Target	Target	Target	Target	Target
skeyes	Safety policy and objectives	*B*	B	C	C	C	C
	Safety risk management	*C*	C	C	C	D	D
	Safety assurance	*B*	B	B	B	C	C
	Safety promotion	*C*	C	C	C	C	C
	Safety culture	*B*	B	B	C	C	C
	Additional comments						

		2020A	2020	2021	2022	2023	2024
		Actual	Target	Target	Target	Target	Target
MUAC	Safety policy and objectives	*C*	C	C	C	C	C
	Safety risk management	*D*	D	D	D	D	D
	Safety assurance	*C*	C	C	C	C	C
	Safety promotion	*C*	C	C	C	C	C
	Safety culture	*C*	C	C	C	C	C
	Additional comments						

b) Detailed justifications in case of inconsistency between local and Union-wide safety targets

No inconsistency

** Refer to Annex O, if necessary.*

c) Main measures put in place to achieve the safety performance targets

There are different committees established within the FABEC as explained in the "FABEC Reference Guide", clearly highlighting the existing groups at ANSPs as well as Competent Authorities level and their responsibilities. For the KPA of Safety the ANSPs' committee installed is the Standing Committee Safety (SC-SAF) where all 7 ANSPs are represented.

On ANSPs level, a few measures for safety risk management were put in place.

Skeyes (Belgium) decided to put in place following measures:
• Safety culture assessment and promotion;
• Improvement of the integration of contractors into the SMS;
• Yearly Rehearsal and update of all emergency procedures;
• Management of improvements in safety that address key risks;
• Management of performance deviations and deficiencies from its operational risk baseline;
• Continuous improvement of the SMS through yearly conduct of internal SMS audits.

MUAC decided to put in place following measures:
• Improving traceability between safety requirements;
• Creating an overall MUAC dashboard to steer the KPIs, including the safety aspect;
• Providing input to the FABEC working groups (SRAP and SPM).
Furthermore, all FABEC ANSPs jointly decided to put in place following measures to show their common spirit and to work together even closer:
• Identification of deviations / gaps to the requirements described in the RP3 EoSM-questionnaire, if any, and implementation of remedial measures accordingly;
• Retrieval of a better common understanding between ANSPs and Competent Authorities of EoSM-questionnaire requirements, where necessary;
• Maintenance of a FABEC dashboard. This is kept up-to-date by the SPM working group reporting to the SC-SAF. A yearly aggregation of SMI, RI and EoSM results is done under the leadership of the DSNA and analysed both by SPM and SC-SAF. The publication on a website is foreseen in the near future.
Last mentioned measures emphasize the FABEC added value through an intense cooperation between the 7 ANSPs.

On the Competent Authority level, the compliance verification of Commission Implementing Regulation (EU) 2017/373 is considered an effective means by inspecting the current safety performance and thus also anticipating if a set target is endangered. As the EoSM results are directly linked to aforementioned regulation's compliance verification, this is clearly depicting an early indicator of EoSM maturity and its necessary improvement.

Furthermore, FABEC Competent Authorities meet regularly (three times a year) in a dedicated working group, the Safety Performance and Risk Coordination Task Force (SPRC TF), to gather Safety Performance data, to compare the ANSPs' performance among each other and to jointly determine whether and where catch-up demand is necessary. Additionally, the SPRC TF has established cooperation with the Standing Committee Safety (SC-SAF) to guarantee a holistic approach including all 7 FABEC ANSPs.

** Refer to Annex O, if necessary.*

SECTION 3.2: ENVIRONMENT KPA

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

a) Environment national performance targets

b) Detailed justifications in case of inconsistency between national targets and national reference values

c) Main measures put in place to achieve the environment performance targets

Annexes of relevance to this section

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

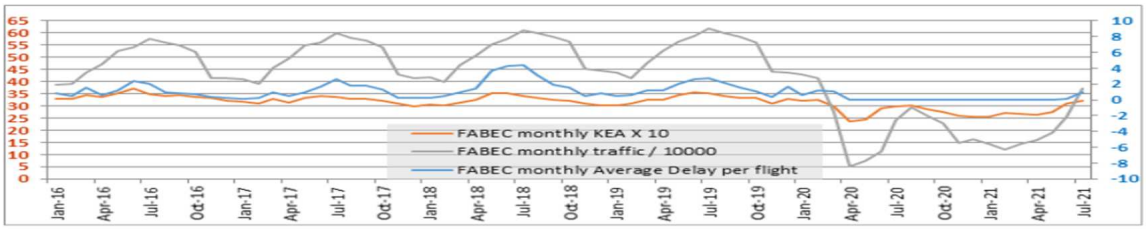
a) National environment performance targets

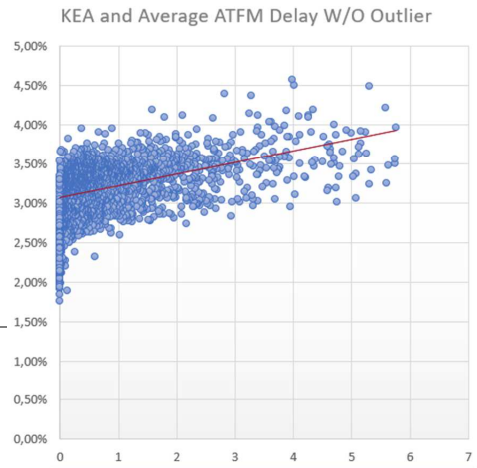
	2020A	2020	2021	2022	2023	2024
National reference values	-	n/a	3,10%	3,05%	3,00%	3,00%

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National targets	-	3,10%	3,05%	3,00%	3,00%

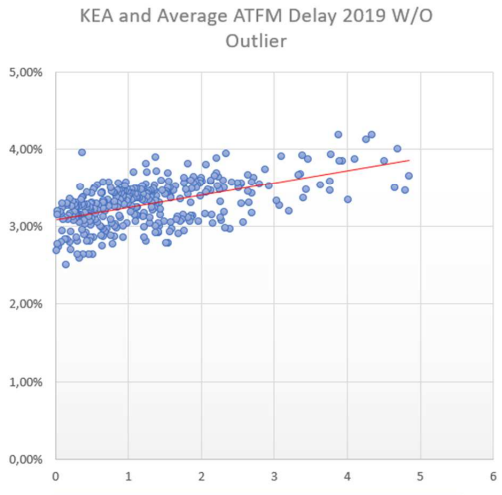
b) Detailed justifications in case of inconsistency between national targets and national reference values

Belgium is planning to reach the reference values. However, in line with earlier statements made by FABEC, Belgium wants to underline uncertainties of the achievement of strong correlation with delays. Though the Netherlands is also committed to achieve capacity reference values, current volatility in traffic evolution - and thus also uncertainties as far as bottlenecks and delays might endanger this goal.





Conclusion:
We can derive an equation as follows:
y = bo + B1x
KEA = 0,0309526553346238 +
0,00114880921312177.Average ATFM Delay



Conclusion:
We can derive an equation as follows:
y = bo + B1x
KEA = 0,0312888303131166 +
0,00121222756558709.Average ATFM Delay

In addition, Belgium continues to underline the limitations of the KPI HFE, with significant influential factors without (share of overflights as well as weather) or only within limited control of ANSPs and the civil aviation administration (military use of airspace). Furthermore, there are numerous situations where a good horizontal flight efficiency might not constitute the most CO2-efficient flight path (flying in non-optimal Flight Level or non-optimal wind-related flight paths, see https://www.eurocontrol.int/publication/eurocontrol-data-snapshot-14-horizontal-flight-efficiency). Also, from a network perspective, focussing on local HFE might have a negative impact (see also https://ansperformance.eu/library/pru-hfe.pdf) and thus Belgium advocates for a reassessment of the local level HFE and especially to reassess the necessity and benefit of considering contributions by individual ANSPs.

Apart from improvents on HFE, Belgium also stresses additional projects to reduce any negative environmental impact that are within the control of ANSPs. Thus, among others, projects to improve vertical flight efficiency during climb and decent (CCO/CDO), but also the MUAC project to reduce contrails at night, perceived to have a measurable impact on climate change should be valued. In addition, efforts of ANSPs to reduce noise pollution with a severly negative impact on the highly populated areas around airports does pose a priority of ANSPs that however result in trade-offs with horizontal flight efficiency and should thus be especially taken into account when assessing performance in the KPA Environment.

** Refer to Annex P, if necessary.*

c) Main measures put in place to achieve the environment performance targets

skeyes

Within skeyes airspace, reducing extra nautical miles to improve KEA is very challenging due to the limited size of the airspace, especially as the KEA indicator excludes the track flown within a range of 40 nm around the departure and arrival airport which limits KEA improvement for DEP or ARR flights.

Reducing track miles can be done at tactical level (direct routes, use of released military areas…) or by proposing better (shortest) routes to the airspace users (flight planning). The former campaign “Stick to your flight Plan” organized by the Network Manager in the summer of 2019 to deal with the capacity at network level during the summer was limiting skeyes’ possibilities for HFE improvement as no direct or shortcut could be given anymore. Should these measures be put in place during the remainder of RP3, any improvement at tactical level would not be expected. A better use of the military airspaces could also support HFE improvement but then again, this should not be limited by any potential eNM measures.

Another option is to improve flight planning by proposing shortest routes to the airspace users. FRA, which has been identified as an important enabler for HFE improvement by the PRB, is however out of scope of skeyes as it controls only the airspace below FL245.

Nevertheless, skeyes is actively contributing to the EU-wide environmental target and intends to reach the local contribution to the targets contained in the ERNIP. Skeyes therefore takes part in the following initiatives :
- the CIV-MIL AMC, co-located at skeyes premises, which aims at optimising the airspace management between CIV and MIL.
- an improved FUA at Belgian level - this initiative is currently steered by BCAA - in the form of a new Rolling UUP process. This R-UUP process allows for an increase in pre-tactical airspace releases giving Airspace Users more opportunities to flight plan shorter routes through released TRAs/TSAs. R-UUP process has been implemented and skeyes is moving from R-UUP to BB-AUP to Modular ASM.
- the Environmental Action plan currently developed by skeyes, in which the main pillar is addressing horizontal (and vertical) flight efficiency . The aim is, through an internal and an external consultation, to identify the initiatives that could potentially improve HFE within the skeyes AoR.

MUAC

MUAC has implemented free route airspace (FRA) 24/7 across its entire airspace. FRA offers airspace users more direct flight planning options, reducing fuel burn and emissions.

MUAC optimises airspace sectors to draw full benefit from free route airspace. On the AIRAC date 25 March 2021, MUAC successfully implemented a major overhaul of its airspace sector layout, which now better meets the European concept of free route airspace. The new airspace sector organisation is designed to better support higher traffic levels as soon as commercial schedules resume.Benefits include a reduction in flight planning restrictions and the creation of several shorter flight-plannable route options. The new sectorisation, with the alignment of flows and sector boundaries, also provides benefits for MUAC operations in terms of a reduction in airspace complexity and therefore enhanced capacity performance. Full acceptance of the measures and thus benefits are expected over the course of 2021, resulting in an improved and then maintained HFE.

After optimizing ATS-routes in 2020 MUAC has removed more than 100 network restrictions – the so-called Route Availability Document (RAD) measures - to improve flight planning options, making flights 'greener' by ensuring more direct routings.

The implementation of concept "CDR activation" to "Area activation" has been done which allows for a better predictability and traffic distribution between DECO and BSG sector groups. All routes are available for flight planning 24/7 and closed by FUA. A MUAC FUA cell has been created.

The rolling UUP trial and the F365+ trial have been taken over by the Booking Based AUP process to improve the planned usage and tactical availability of the military airspace reservations in Belgium

A full list of projects improving horinzontal flight efficiency within FABEC (including Belgium) and additional information might be found in the ERNIP Part 2 (https://www.eurocontrol.int/publication/european-route-network-improvement-plan-ernip-part-2). For further information on FRA development as well as Extended Arrival Management XMAN, please consult the FABEC-webpage under https://www.fabec.eu/strategy/operations.

SECTION 3.3: CAPACITY KPA

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

a) Capacity national performance targets

b) Detailed justifications in case of inconsistency between national targets and national reference values

c) Main measures put in place to achieve the target for en-route ATFM delay per flight

d) ATCO planning

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

a) Capacity national performance targets

b) Contribution to the improvement of the European ATM network performance

c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

Annexes of relevance to this section

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
National reference values	n/a	n/a	n/a	0,17	0,17	0,17

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National targets	n/a	n/a	0,17	0,17	0,17

	2020A	2020	2021	2022	2023	2024
Breakdown values	*Actual*	Value	Value	Value	Value	Value
skeyes contribution to Belgium target	*0,06*	*0,64*	*0,07*	0,12	0,13	0,12
MUAC contribution to Belgium target	*0,01*	*0,95*	*0,13*	0,14	0,14	0,14

NOTE: 2020 and 2021 targets for MUAC were set at overall MUAC level, through the draft FABEC RP3 performance plan. It is not feasible to adjust these targets retroactively.

Skeyes
skeyes contribution to RP3 FABEC capacity target is in line with reference values set by NM.

Current ATCO recruitment is set at full pace as well as training capacity, and aims at the largest extent possible to compensate the wave of retirement.

MUAC
MUAC's contribution to the RP3 FABEC capacity target is in line with the reference values set by the NM. The drop in traffic observed in 2020 and the slow recovery in 2021 are important factors in delay reduction.

While the volatility of traffic demand is expected to be very high over the coming years, MUAC is confident that there will be sufficient staffing and procedures in place to stay within the set targets, e.g. as a result of the 2019 ATCO social agreement and the 'minus counter' applied during low traffic in years 2020 and 2021, which helps to provides more ATCO hours in the later years of RP3.

b) Detailed justifications in case of inconsistency between national targets and national reference values

During RP1, and at the time of developing RP2 plans, traffic growth was lower than forecasts and its future was uncertain. As a result, the main focus of all stakeholders was on cost-efficiency, and ANSPs aimed to control costs, i.a. through reducing or delaying recruitments and investments. In reality, FABEC airspace - like the rest of Europe - has experienced unforeseen high traffic growth since 2015, as well as significant traffic shifts. FABEC ANSPs have reacted to this but measures required to increase capacity in a structural manner need time to be implemented and become effective (e.g. hiring and qualifying new ATCO need 3 to 5 years), investment and related operational changes for additional capacity also need several years and may imply provisional capacity reduction for training and safe commissioning purposes. During RP2, FABEC experienced high delays, while some major measures for capacity within FABEC will be implemented during RP3 - but take time to deliver.

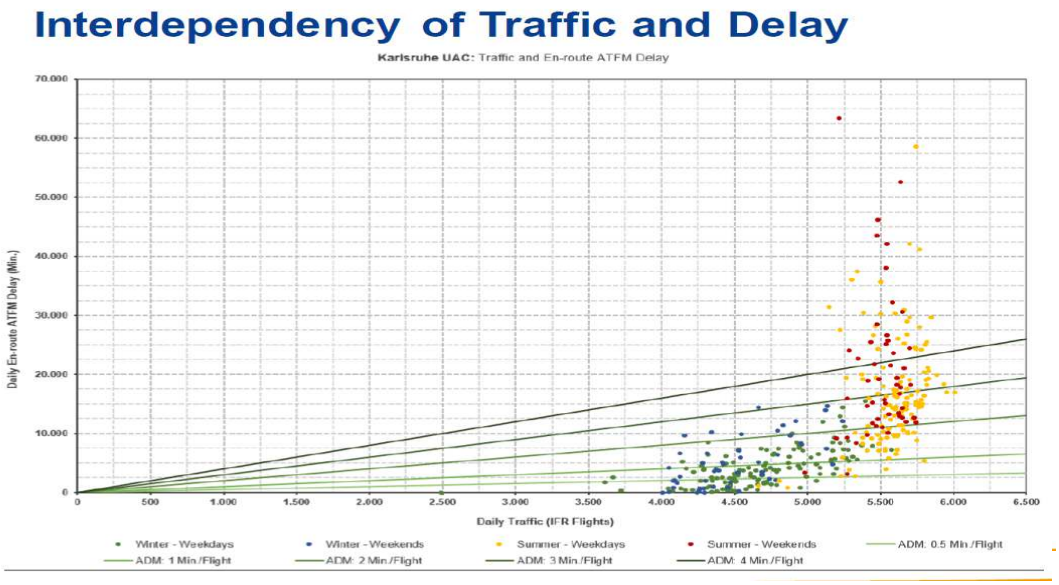
In the current context of the crisis and the resulting low taffic demand, ATCO training facilities were subject to COVID restrictions (where in some cases the maximum training capacity was already reached in some facilities). Licenced ATCOs were required to train high traffic load scenarios in simulators to keep proficiency, and on-the-job trainingspots for ab initio's were limited. As a result the capacity building measures were slowed down.

It is still expected that, In the next years, despite extensive efforts, some FABEC ACCs, including Belgian ACCs, could still be facing an imbalance between traffic and capacity (the targets are challenging and performance will also depend on the traffic evolution which is currently still very uncertain) or staffing issues. Although some good progress is being witnessed in some FABEC ACCs, measures enabling capacity to match the demand will be implemented during or till end RP3.

ANSPs already planned major capacity enhancement measures for RP3 to remedy this situation, including implementing global and local individual ACCs measures agreed with the NM (see list of main contributive measures below and detailed individual measures in the latest NOP 2022 – 2024 edition).

The main drivers such as ATCO hiring and training will progressively deliver benefits during and after the period.

Major uncertainties remain regarding further traffic development and volatility. It is important to consider that, if an ACC operates close to its capacity limits, minor variations in traffic levels can lead to significant changes in the amount of delay. The example below of Karlsruhe ACC, generated for traffic and delay of 2018, shows the exponential impact on delays of the traffic evolution. In some cases, even without more traffic in total, just a local traffic shift is enough to overload sectors and to create a large amount of delays.



Other uncertainties must also be considered, such as the delayed implementation of ATCO hiring plans, the success conversion rates of ab-initios, the relatively high number of upcoming retirements, the outcomes of the next national or local social agreements and, the continuation and local impact of eNM measures/ANSPs summer if implemented.

** Refer to Annex Q, if necessary.*

c) Main measures put in place to achieve the target for en-route ATFM delay per flight

Full set of detailed measures implemented by ANSPs and contributing to local capacity improvements will be listed in the European Network Operations Plan (NOP) 2022-2024 and updated in the Network Operations Plan 2022-2026 which elaboration work has now started. All ANSP capacity measures detailed in the NOP and in this performance plan and their impact on capacity provision, delay forecast, and target setting are based on values provided and calculated by the Network Manager and Eurocontrol in general. This is the case at national and ANSP level to ensure consistency: national and ANSP reference values are respectively calculated by NM at national and ANSP levels and consistent with the EU-wide capacity targets. As the national and ANSP targets strictly stick to the NM reference values, consistency is ensured as well. The capacity profile computed in the NOP – and all the proposed associated measures - are based on the high traffic scenario of the STATFOR Forecast published mid-October 2021 (future versions of the NOP will be updated according to future STATFOR publications, this could increase the gap between the capacity profiles and the PP). In case of assessment of the Performance Plan based on the NOP, due consideration shall be given to the differences between the traffic forecasts. The main measures providing capacity enhancement planned to be implemented by the ANSP to achieve the targets are described here under.

Regarding skeyes:
Within the framework of the e-NM measures, specific RAD restrictions have been created for skeyes in order to reduce the overall traffic complexity by strategically reducing the number of conflicting traffic streams.

A midlife upgrade of the CANAC2 ATM system is foreseen for 2024. During this upgrade limited impact on capacity is expected due to testing and validation activities.

The rationalization of infrastructure, systems and equipment will be increased during RP3 enhancing capacity by reinforcing business continuity and improving resilience.

A better application of FUA is enabled by the implementation in 2019 of the colocation of the Air Traffic Control Centre of Belgian Defence in skeyes ACC. In order to further enhance FUA in BE, a Rolling UUP Live Trial has been conducted during the summer of 2021, and R-UUP procedures have been implemented. Benefits are improved flight planning, increased flight efficiency including a positive impact on environment and more opportunities to plan higher capacities. In addition, a traffic complexity tool has been purchased. skeyes is moving from R-UUP to BB-AUP to Modular ASM.

Regarding MUAC:

To provide the necessary staffing, MUAC is taking several measures, including training of new staff, cross training of ATCOs, a new agreement with the social partners for mitigating measures and (further) scrutinizing of involvement of operational staff in developments. Furthermore, a study is undergoing to reduce the number of sectors open during the night. Since the traffic downturn, a deal has been agreed with the social partner that allows for some of the surplus ATCO shifts from 2020 and Q1 2021 to be deferred. These days can be used at zero addition cost in the rest of the RP3 period.

Furthermore, MUAC has taken an active part in developing measures at network level aimed at safeguarding or increasing throughput while decreasing delay. MUAC sees further opportunities in this area in improved and harmonized ASM. Also the exclusion of short-duration high-workload flights is under investigation. MUAC has also been active in using some of the surplus ATCO shifts in 2020/2021 to accelerate some airspace design projects that should also provide additional capacity as the recovery materialises. Looking further ahead, MUAC is working on post-OPS analysis and business intelligence as a means of further fine-tuning and optimising daily operations. This is expected to deliver some additional capacity, as well as avoiding ATFM delays due to overregulation.

At FABEC level:
Performance in Belgium should also be considered in relation to the added value of cooperation at FABEC level. FABEC collaboration with NM contributes to enhance capacity and prevent or mitigate delays through supporting the rolling seasonal NOP planning activities, eNM/ANSP summer measures. On top of FABEC ongoing airspace design initiatives, it was decided to set up a FABEC/NM Airspace Design Coordination Group (ADCG) which final goal is to define a Target Plan for implementation of a FABEC Optimized Airspace Structure, an optimum FABEC sectorisation, FRA cross-border operations and ATS route structure below FRA, in order to optimize all FABEC measures, make them consistent at network level and deliver the highest possible benefits of operations.

In general, it should be noted that capacity benefits and delay reductions expected from the ANSP initiatives listed in the ANSP capacity planning included in the latest NOP 2022-2024, have been taken into account in the NM delay forecast (where quantitative impact of ANSP capacity measures are calculated according to NM methodology at ACC, ANSP and FAB level and resulting delay forecast is computed). Those ANSP and ACC capacity profiles and exhaustive list of initiatives can be found for each FABEC country and relative ANSPs & ACCs in Annex 5 of the European Network Operations Plan 2022-2024 edition 2021.

** Refer to Annex Q, if necessary.*

d) ATCO planning

	Actual					Planning	
Brussels (EBBU ACC)	2018	2019	2020	2021	2022	2023	2024
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)	0,8	5	5	3,5	4	7	7
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)	4	12,3	2	2,3	4	4	4
Number of ATCOs in OPS planned to be operational **at year-end (FTEs)**	87,8	80,5	83,5	84,7	84,7	87,7	90,7

	Actual					Planning	
Maastricht (EDYY UAC)	2018	2019	2020	2021	2022	2023	2024
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)	6	1	4	14	14	15	14

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
	Actual	Target	Target	Target	Target	Target
National targets	*0,38*	1,82	1,08	1,08	1,08	1,08
Additional comments						

Airport level	***EBBR-Brussels***	*0,38*	1,82	1,08	1,08	1,08	1,08
	Airport contribution to national targets	EBBR is the only Belgian airport incorporated in the Performance Plan.					

b) Contribution to the improvement of the European ATM network performance

The ASMGCS system will be replaced during RP3 (NOVA data fusion software and MLAT), to continue ensuring improved terminal capacity at EBBR during deteriorated weather conditions.

High CRSTMP delay can be expected in some meteorological circumstances at EBBR during the application of new measures to escort VVIPs using a police helicopter (P cause, beyond ANSP managerial control).

** Refer to Annex Q, if necessary.*

c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

ATCO recruitment is set at full pace to compensate forecasted retirements and to manage forecasted traffic.

** Refer to Annex Q, if necessary.*

SECTION 3.4: COST-EFFICIENCY KPA

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #x

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

b) Information on the baseline values for the determined costs and the determined unit costs

c) Detailed justifications for the adjustments to the baseline values

d) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate

e) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS

f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #x

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

b) Information on the baseline values for the determined costs and the determined unit costs

c) Detailed justifications for the adjustments to the baseline values

d) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS

e) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of

3.4.3 - Pension assumptions

3.4.3.1 Total pension costs

3.4.3.2 Assumptions for the "State" pension scheme

3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme

3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

3.4.5 - Restructuring costs

3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3

3.4.5.2 Restructuring costs planned for RP3

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

a) Overall description of the measures necessary to achieve the en-route capacity targets for RP3, which induce additional costs

b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3

c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 by nature by ANSP

d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

Annexes of relevance to this section

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)
ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)
ANNEX F. BASELINE VALUES (COST-EFFICIENCY)
ANNEX H. RESTRUCTURING MEASURES AND COSTS
ANNEX M. COST ALLOCATION
ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS
ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

NOTE: The following requirements as per Annex II, 3.3 are addressed in the Annexes A and B:

Point 3.3 (d) on cost-allocation;
Point 3.3 (e) on the return on equity and cost of capital;

Point 3.3 (f) on assumptions for pension costs and interest on debt for other entities, inflation forecast and adjustments beyong IFRS;
Point 3.3 (g) on adjustments to the unit rates carried over from previous reference periods;
Point 3.3 (h) on costs exempt from cost-sharing;
Point 3.3 (k) reporting tables and additional informations.

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #1 - Belgium-Luxembourg

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

En route charging zone Name of the CZ	Baseline 2014 2014 B	Baseline 2019 2019 B	RP3 revised cost-efficiency targets (determined 2020-2024) 2020/2021 D	 2022 D	 2023 D	 2024 D	2024 D vs. 2014 B	2024 D vs. 2019 B
Total en route costs in nominal terms (in national currency)	180.282.820	217.686.422	442.197.853	250.216.368	262.099.700	252.086.165	39,8%	15,8%
Total en route costs in real terms (in national currency at 2017 prices)	**187.125.621**	211.278.970	**424.899.880**	**220.164.809**	**217.182.536**	**205.455.739**	**9,8%**	**-2,8%**
Total en route costs in real terms (in EUR2017) [1]	187.125.621	211.278.970	424.899.880	220.164.809	217.182.536	205.455.739	9,8%	-2,8%
YoY variation			101,1%	-48,2%	-1,4%	-5,4%		
Total en route Service Units (TSU)	2.288.106	2.537.599	2.241.977	2.107.529	2.404.046	2.560.026	11,9%	0,9%
YoY variation			-11,6%	-6,0%	14,1%	6,5%		
Real en route unit costs (in national currency at 2017 prices)	**81,78**	**83,26**	**189,52**	**104,47**	**90,34**	**80,26**	**-1,9%**	**-3,6%**
Real en route unit costs (in EUR2017) [1]	**81,78**	**83,26**	**189,52**	**104,47**	**90,34**	**80,26**	**-1,9%**	**-3,6%**
YoY variation			127,6%	-44,9%	-13,5%	-11,2%		

National currency	**EUR**
[1] Average exchange rate 2017 (1 EUR=)	**1,00**

b) Information on the baseline values for the determined costs and the determined unit costs

En route charging zone Name of the CZ	Baseline 2014 2014 B	Baseline 2019 2019 B	Actuals 2014 2014 A	Actuals 2019 2019 A	2014 Baseline adjustments	2019 Baseline adjustments
Total en route costs in nominal terms (in national currency)	180.282.820	217.686.422	155.716.192	199.494.828	24.566.628	18.191.595
Total en route costs in real terms (in national currency at 2017 prices)	187.125.621	211.278.970	161.485.138	193.678.302	25.640.483	17.600.668
Total en route costs in real terms (in EUR2017) [1]	187.125.621	211.278.970	161.485.138	193.678.302	25.640.483	17.600.668
Total en route Service Units (TSU)	2.288.106	2.537.599	2.362.038	2.619.592	-73.932	-81.993

c) Detailed justifications for the adjustments to the baseline values

c.1) Adjustments to the 2014 baseline value for the determined costs

Number of adjustments	10

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Cost base of ANA Luxembourg added	ANA Lux	ANSP	Staff	3.350.935	3.507.217	3.507.217
Description and justification of the adjustment						
In RP1, costs of ANA Luxembourg were not yet included in the cost base of BE-LUX. From RP2 (2015) onwards, this cost base was added. To make comparisons over years, this effect should be neutralized and the cost base of 2014 for ANA was added to the baseline value of 2014. The adjustment is mainly related to staff costs and other operating costs (+ depreciation, cost of capital)						

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Cost base of ANA Luxembourg added	ANA Lux	ANSP	Other operating	1.904.279	1.993.092	1.993.092

Description and justification of the adjustment
In RP1, costs of ANA Luxembourg were not yet included in the cost base of BE-LUX. From RP2 (2015) onwards, this cost base was added. To make comparisons over years, this effect should be neutralized and the cost base of 2014 for ANA was added to the baseline value of 2014.

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Cost base of ANA Luxembourg added	ANA Lux	ANSP	Depreciation	335.841	335.841	335.841
Description and justification of the adjustment						
In RP1, costs of ANA Luxembourg were not yet included in the cost base of BE-LUX. From RP2 (2015) onwards, this cost base was added. To make comparisons over years, this effect should be neutralized and the cost base of 2014 for ANA was added to the baseline value of 2014.						

Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Staff	10.544.101	11.035.860	11.035.860
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #5	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Other operating	1.476.982	1.545.866	1.545.866
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #6	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Depreciation	1.628.710	1.628.710	1.628.710
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #7	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Adjustment of cost base	MUAC	ANSP	Staff	3.840.289	4.019.394	4.019.394
Description and justification of the adjustment						

In EUROCONTROL, the remunerations of active staff are subject to an internal tax, while the pensions of retired staff are subject to national taxes in the countries were they reside. Pensioners receive a compensation for local income taxes, depending on where they live, to ensure all pensioners receive the same net pension. In 2005, the EUROCONTROL's Pension Fund was created whereby the pensions (amounts paid to the pensioners) are financed through this Fund (from employer and employee contributions) and the income tax compensation on pensions is financed on a pay as you go basis from the budget.

In 2016, an agreement was made between the 4 MUAC States and the other EUROCONTROL Member States whereby the 4 States were given more autonomy over MUAC while in exchange the pension tax compensation related to MUAC is progressively (over a period of 7 years from 2016 to 2022) borne by the 4 States. The agreements were embedded in Decision n°128 and n°129 of the Permanent Commission. In accordance with the Declaration of the National Contracting Parties to the Maastricht Agreement dated 19-04-2016, these costs have been included since 2016 in a Special Annex (to the general budget of EUROCONTROL) in a staggered approach (10% in 2016, 20% in 2017, 30% in 2018, 40% in 2019, 60% in 2020, 80% in 2021). These costs will be included at 100% in MUAC (Part III) General Budget and thus the MUAC Cost Base once the new Maastricht Agreement has been ratified.

In 2014, the total overall Eurocontrol tax compensation on pension and ancillary cost in 2014 was 38,326,507.28 €. The proportion for MUAC was 31.5 % or 12.072.849,79 EUR. The Belgian share within MUAC for 2014 was 30,8550%, the Luxembourg share within MUAC for 2014 was 0,9543%.

In order to provide for a baseline that makes future costs comparable to the situation in 2014, the MUAC cost base is adjusted accordingly.

Adjustment #8	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Adjustment of cost base	MUAC	ANSP	Other operating	1.908.558	1.997.570	1.997.570
Description and justification of the adjustment						
Under the same discussions between the 4 MUAC States and the 41 EUROCONTROL Member States, an agreement embedded in Decision n° 128 of the Permanent Commission was concluded as relates the allocation to Part III (MUAC) of the costs for support services delivered by other units of the Agency to MUAC. Similarly, the 4 states agreed to include these costs in a Special Annex (Part IV), in accordance with the Declaration of the National Contracting Parties to the Maastricht Agreement dated 19-04-2016. There is no progressive approach for these costs and they are supported directly at 100% by the 4 MUAC states. As from 2022 these costs will be included at 100% in MUAC (Part III) General Budget. In 2014, the HQ support costs amouted to 6.000.000 EUR, included by 100% into the MUAC Special Annex (Part IV); The Belgian share within MUAC for 2014 was 30,8550%, the Luxembourg share within MUAC for 2014 was 0,9543%. In order to provide for a baseline that makes future costs comparable to the situation in 2014, the MUAC cost base is adjusted accordingly.						

Adjustment #9	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
adjustment of cost base	MUAC/Eurocontrol	NSA/EUROCONTROL	Staff	-282.613	-282.613	-282.613
Description and justification of the adjustment						
the adjustment as described in #7 is deducted from the Eurocontrol cost base. 12.072.849,79 EUR was shifted from the Eurocontrol cost base towards the MUAC cost base. The Belgian share within Eurocontrol for 2014 was 2,2367%, the Luxembourg share within Eurocontrol for 2014 was 0,1042%. In order to provide for a baseline that makes future costs comparable to the situation in 2014, the Eurocontrol cost base is adjusted accordingly.						

Adjustment #10	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
adjustment of cost base	MUAC/Eurocontrol	NSA/EUROCONTROL	Other operating	-140.454	-140.454	-140.454
Description and justification of the adjustment						

the adjustment as described in #8 is deducted from the Eurocontrol cost base. 6.000.000 EUR was shifted from the Eurocontrol cost base towards the MUAC cost base. The Belgian share within Eurocontrol for 2014 was 2,2367%, the Luxembourg share within Eurocontrol for 2014 was 0,1042%. In order to provide for a baseline that makes future costs comparable to the situation in 2014, the Eurocontrol cost base is adjusted accordingly.

Total adjustments to the 2014 baseline value for the determined costs	**Costs nominal NC**	**Costs real NC**	**Costs EUR2017**
	24.566.628	**25.640.483**	**25.640.483**

c.2) Adjustments to the 2014 service units

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-3,13%	CRCO correction factor May 2019 (on 12 months)	-73.932

Other adjustment to the 2014 service units	No

Total adjustments to the 2014 service units	-73.932

c.3) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	11

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Staff	11.088.105	10.710.289	10.710.289
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Other operating	2.690.238	2.598.571	2.598.571
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Depreciation	1.037.099	1.037.099	1.037.099
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #4	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Adjustment of cost base	MUAC	ANSP	Staff	3.430.285	3.313.402	3.313.402
Description and justification of the adjustment						

In EUROCONTROL, the remunerations of active staff are subject to an internal tax, while the pensions of retired staff are subject to national taxes in the countries were they reside. Pensioners receive a compensation for local income taxes, depending on where they live, to ensure all pensioners receive the same net pension. In 2005, the EUROCONTROL's Pension Fund was created whereby the pensions (amounts paid to the pensioners) are financed through this Fund (from employer and employee contributions) and the income tax compensation on pensions is financed on a pay as you go basis from the budget.

In 2016, an agreement was made between the 4 MUAC States and the other EUROCONTROL Member States whereby the 4 States were given more autonomy over MUAC while in exchange the pension tax compensation related to MUAC is progressively (over a period of 7 years from 2016 to 2022) borne by the 4 States. The agreements were embedded in Decision n°128 and n°129 of the Permanent Commission. In accordance with the Declaration of the National Contracting Parties to the Maastricht Agreement dated 19-04-2016, these costs have been included since 2016 in a Special Annex (to the general budget of EUROCONTROL) in a staggered approach (10% in 2016, 20% in 2017, 30% in 2018, 40% in 2019, 60% in 2020, 80% in 2021). These costs will be included at 100% in MUAC (Part III) General Budget and thus the MUAC Cost Base once the new Maastricht Agreement has been ratified by all four States, which is assumed to happen before the end of 2021.

In 2019, the tax compensation amounted to 17.553.719 EUR, 40% of which were attributed to the MUAC special annex (EUROCONTROL Part IV) and 60% thereof to the EUROCONTROL General Budget (Part I); the Belgian share within MUAC for 2019 was 31,5912%, the Luxembourg share within MUAC for 2019 was 0,9770%.

In order to provide for a baseline that makes future costs comparable to the situation in 2019, the MUAC cost base is adjusted accordingly.

NOTE: due to the staggered approach, part of the adjustment was already included in the 2019 actual costs. Only the difference is reported here.

Adjustment #5	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Adjustment of cost base	MUAC	ANSP	Other operating	0	0	0
Description and justification of the adjustment						

Under the same discussions between the 4 MUAC States and the 41 EUROCONTROL Member States, an agreement embedded in Decision n° 128 of the Permanent Commission was concluded as relates the allocation to Part III (MUAC) of the costs for support services delivered by other units of the Agency to MUAC. Similarly, the 4 states agreed to include these costs in a Special Annex (Part IV), in accordance with the Declaration of the National Contracting Parties to the Maastricht Agreement dated 19-04-2016. There is no progressive approach for these costs and they are supported directly at 100% by the 4 MUAC states. As from 2022 these costs will be included at 100% in MUAC (Part III) General Budget.

In 2019, the HQ support costs amouted to 4.514.080 EUR, included by 100% into the MUAC Special Annex (Part IV); the Belgian share within MUAC for 2019 was 31,5912%, the Luxembourg share within MUAC for 2019 was 0,9770%.

In order to provide for a baseline that makes future costs comparable to the situation in 2019, the MUAC cost base is adjusted accordingly.

NOTE: This part was already included in the 2019 actual costs. It is still incorporated in the baseline in order to have a consistent approach among the MUAC states.

Adjustment #6	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
adjustment of cost base	Eurocontrol	NSA/EUROCONTROL	Staff	-176.871	-176.871	-176.871
Description and justification of the adjustment						

the adjustment as described in #4 is deducted from the Eurocontrol cost base.

In 2019, the tax compensation amounted to 17.553.719 EUR, 40% of which were attributed to the MUAC special annex (EUROCONTROL Part IV) and 60% thereof to the EUROCONTROL General Budget (Part I). only the part attributed to MUAC has to be adjusted for the Eurocontrol cost base. The Belgian share within Eurocontrol for 2019 was 2,3443%, the Luxembourg share within Eurocontrol for 2019 was 0,1747%.

In order to provide for a baseline that makes future costs comparable to the situation in 2019, the Eurocontrol cost base is adjusted accordingly.

Adjustment #7	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
adjustment of cost base	Eurocontrol	NSA/EUROCONTROL	Other operating	0	0	0
Description and justification of the adjustment						
the adjustment as described in #5 is deducted from the Eurocontrol cost base. 17.553.719 EUR was shifted from the Eurocontrol cost base towards the MUAC cost base. The Belgian share within Eurocontrol for 2019 was 2,3443%, the Luxembourg share within Eurocontrol for 2019 was 0,1747%. In order to provide for a baseline that makes future costs comparable to the situation in 2019, the Eurocontrol cost base is adjusted accordingly. NOTE: This part was already included in the 2019 actual costs. It is still incorporated in the baseline in order to have a consistent approach among the MUAC states.						

Adjustment #8	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change of allocation keys - effect on staff costs	ANA LUX	ANSP	Staff	139.218	134.475	134.475
Description and justification of the adjustment						
The revised allocation keys are based on the actual allocation keys, applicable for RP2, and reflect changes in the services provided and cost centres.						

Adjustment #9	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change of allocation keys - effect on other operating costs	ANA LUX	ANSP	Other operating	-5.394	-5.210	-5.210
Description and justification of the adjustment						
The revised allocation keys are based on the actual allocation keys, applicable for RP2, and reflect changes in the services provided and cost centres.						

Adjustment #10	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change of allocation keys - effect on depreciation costs	ANA LUX	ANSP	Depreciation	-6.583	-6.583	-6.583
Description and justification of the adjustment						
The revised allocation keys are based on the actual allocation keys, applicable for RP2, and reflect changes in the services provided and cost centres.						

Adjustment #11	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change of allocation keys - effect on cost of capital	ANA LUX	ANSP	Cost of capital	-4.502	-4.502	-4.502

Description and justification of the adjustment
The revised allocation keys are based on the actual allocation keys, applicable for RP2, and reflect changes in the services provided and cost centres.

Total adjustments to the 2019 baseline value for the determined costs	**Costs nominal NC**	**Costs real NC**	**Costs EUR2017**
	18.191.595	**17.600.668**	**17.600.668**

c.4) Adjustments to the 2019 service units

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-3,13%	CRCO correction factor May 2019 (on 12 months)	-81.993

Other adjustment to the 2019 service units	No

Total adjustments to the 2019 service units	-81.993

d) Description and justification of the consistency between local and Union-wide cost-efficiency targets

With the corrective measures taken, Belgium(-Luxembourg) reaches the requirements set in Commission Implementing Decision (EU) 2023/1336.

** Refer to Annex R, if necessary.*

e) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate under

Additional costs of measures necessary to achieve the capacity targets for RP3	Yes	Detailed in part 3.4.6 of the performance plan
Restructuring costs planned for RP3	No	

f) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS

Following the COVID crisis and the collapse of traffic, one-off cost-cutting measures have been taken by the ANSPs (recruitment freeze, revision of investment plans, revision of supplier contracts, etc.). However, these one-off measures will not lead to structural efficiency gains. In line with the Belgian Airspace Vision 2030, ANSPs active in Belgian airspace have taken various initiatives to improve efficiency in a structural way (civil-military integration, defragmentation of ATM systems, dynamic airspace use etc.).These long-term initiatives are being developed and deployed but the benefits will only be tangible in several years. (cf. annex R)

Subsequent to Commission implementing decision (EU) 2023/1336, corrective measures were taken and included in the 3.4.7 and annex Z.

** Refer to Annex R, if necessary.*

g) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification

BSA-ANS, the Belgian NSA, engaged to confirm whether the respective costs should be allocated to the respective cost bases within the context of the performance plan and verified the compliance of the cost base with the legal requirements. No findings were raised. In additon, an independent compliance review was performed that confirmed the allocation of the approach costs, which were deemed justifiable, independently auditable and hence considered in compliance with the relevant legislation.

** Refer to Annex U, if necessary.*

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #1 - Belgium EBBR

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Name of the CZ	Baseline 2019 2019 B	RP3 revised cost-efficiency targets (determined 2020-2024) 2020/2021 D	 2022 D	 2023 D	 2024 D	2024 D vs. 2019 B
Total terminal costs in nominal terms (in national currency)	**33.008.239**	69.520.910	38.337.098	42.394.614	43.636.875	**32,2%**
Total terminal costs in real terms (in national currency at 2017 prices)	**32.009.693**	**66.670.395**	**33.645.140**	**35.060.372**	**35.608.100**	**11,2%**
Total terminal costs in real terms (in EUR2017) [1]	**32.009.693**	**66.670.395**	**33.645.140**	**35.060.372**	**35.608.100**	**11,2%**
YoY variation		108,3%	-49,5%	4,2%	1,6%	
Total terminal Service Units (TNSU)	163.766	167.375	133.421	146.249	160.954 #	-1,7%
YoY variation		2,2%	-20,3%	9,6%	10,1%	
Real terminal unit costs (in national currency at 2017 prices)	**195,46**	**398,33**	**252,17**	**239,73**	**221,23**	**13,2%**
Real terminal unit costs (in EUR2017) [1]	**195,46**	**398,33**	**252,17**	**239,73**	**221,23**	**13,2%**
YoY variation		103,8%	-36,7%	-4,9%	-7,7%	

National currency	**EUR**
[1] Average exchange rate 2017 (1 EUR=)	**1,00**

b) Information on the baseline values for the determined costs and the determined unit costs

Terminal charging zone Name of the CZ	Baseline 2019 2019 B	Actuals 2019 2019 A	2019 Baseline adjustments
Total terminal costs in nominal terms (in national currency)	33.008.239	37.583.619	-4.575.379
Total terminal costs in real terms (in national currency at 2017 prices)	32.009.693	36.439.699	-4.430.006
Total terminal costs in real terms (in EUR2017) [1]	32.009.693	36.439.699	-4.430.006
Total terminal Service Units (TNSU)	163.766	163.766	0

c) Detailed justifications for the adjustments to the baseline values

c.1) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	3

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Staff	-3.436.418	-3.319.325	-3.319.325
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #2	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Other operating	-829.989	-801.708	-801.708
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Adjustment #3	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change in APP allocation key	skeyes	ANSP	Depreciation	-308.972	-308.972	-308.972
Description and justification of the adjustment						
Change in the allocation of the approach costs (see annex M for detailed explanation).						

Total adjustments to the 2019 baseline value for the determined costs	**Costs nominal NC**	**Costs real NC**	**Costs EUR2017**
	-4.575.379	**-4.430.006**	**-4.430.006**

c.2) Adjustments to the 2019 service units

Adjustment to the 2019 service units	No

d) Description and justification of the contribution of the the local targets to the performance of the European ATM network

See Annex R for main measures of skeyes.

** Refer to Annex R, if necessary.*

e) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS

See Annex R for main measures of skeyes.

** Refer to Annex R, if necessary.*

f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification

BSA-ANS, the Belgian NSA, engaged to confirm whether the respective costs should be allocated to the respective cost bases within the context of the performance plan and verified the compliance of the cost base with the legal requirements. No findings were raised. In additon, an independent compliance review was performed that confirmed the allocation of the approach costs, which were deemed justifiable, independently auditable and hence considered in compliance with the relevant legislation.

** Refer to Annex U, if necessary.*

3.4.3 - Pension assumptions

skeyes

3.4.3.1 Total pension costs (in nominal terms in '000 national currency)

Pension costs	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pension costs - TOTAL PENSION COST SKEYES*	20.798	22.172	42.970	23.666	24.426	26.352
En-route activity	14.422	15.365	29.787	16.316	17.615	18.993
Terminal activity (EBBR)	3.661	3.924	7.585	4.213	4.387	4.739
Terminal activity (Regional airports)	1.850	1.929	3.779	2.171	2.240	2.417
Other activities	865	954	1.819	966	184	203

* Includes the total pension cost at charge of skeyes, while determined pension cost is limited to the pension cost for the En route and EBBR terminal activity.

3.4.3.2 Assumptions for the "State" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many?	Yes-2

civil servants	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	45.718	48.554	94.272	50.665	53.522	57.819
Employer % contribution rate to this scheme	35%	35%		35%	35%	35%
Total pension costs in respect of this scheme	**16.001**	**16.994**	**32.995**	**17.733**	**18.733**	**20.237**
Number of employees the employer contributes for in this scheme	501	506		502	515	535

contractual employees	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	31.674	33.026	64.700	37.211	39.234	42.119
Employer % contribution rate to this scheme	8,86%	8,86%		8,86%	8,86%	8,86%
Total pension costs in respect of this scheme	**2.806**	**2.926**	**5.732**	**3.297**	**3.476**	**3.732**
Number of employees the employer contributes for in this scheme	389	392		416	420	447

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3
The State pension scheme in place is a "Pay-As-You-Go" scheme based on career duration and income earned - for civil servants, skeyes makes a contribution of 35% to the State for each civil servants - for contractual employees, skeyes makes a contribution of 8.86% to the State Regulations on pension are a prerogative of the Federal State The existing regulatory regime may be consulted on https://wwwsfpdfgovbe/fr/centre-de-connaissances/legislation skeyes has no information wether changes of those regulations are to be expected during RP3.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs
The pension cost "state pension scheme" is budgetted taking into account the current national pension regulations and the increase in pensionable payroll (increase in staff numbers and salary increase).

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users
The pension costs have been determined based on existing regulatory regime. Any unforeseen changes on the costs to be passed on to airspace users will be duly motivated.

3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many?	No

<Staff category name>	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	819	835	1.654	895	936	954
Employer % contribution rate to this scheme	14%	14%		14%	14%	14%
Total pension costs in respect of this scheme	**114**	**116**	**230**	**124**	**130**	**132**
Number of employees the employer contributes for in this scheme	4	4		4	5	5

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3
skeyes has a defined contribution pension scheme for members of the Executive Committee which are contractual employees Skeyes pays premiums to an insurance company under an extra group insurance contract.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

The pension cost "defined contribution pension scheme" is budgetted taking into account the current contract and an annual indexation.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users
The pension costs have been determined based on existing regime Any unforeseen changes on the costs to be passed on to airspace users will be duly motivated.

3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme (in nominal terms in '000 national currency)

Does the ANSP assume liability for meeting future obligations for the occupational "Defined benefits" scheme?	Yes
Is the occupational "Defined benefits" pension scheme funded?	Yes

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	33.944	35.474	69.418	36.316	38.298	41.165
Total pension costs in respect of this scheme	1.877	2.136	4.013	2.512	2.087	2.251
- in respect of regular pension costs	0	0	-	0	0	0
- in respect of non-recurring deficit repair	0	0	-	0	0	0
- reported as staff costs (in reporting tables)	1.877	2.136	4.013	2.512	2.087	2.251
- not reported as staff costs (in reporting tables): please use comment box	0	0	-	0	0	0
Actuarial assumptions						
% discount rate	Not available					
% projected increase in benefits						
% annual increase in salaries						
% expected return on plan assets						
Net funding surplus / deficit						
Number of employees the employer contributes for in this scheme	385	388		432	416	443

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3
skeyes has a defined benefit scheme for contractual staff members (excluding the Executive Committee) Skeyes pays premiums to an insurance company under an extra group insurance contract.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs
The pension cost "defined benefit pension scheme" is budgetted taking into account the current contract, evolution in contractual staff numbers and salary increases.

Where, in the Reporting Tables, some occupational "defined benefits" costs (e.g. interest expense related to pensions) are reported in other cost item(s) than staff costs, the cost item(s) should be indicated here below along with corresponding explanations.
Not applicable.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users
The pension costs have been determined based on existing regime Any unforeseen changes on the costs to be passed on to airspace users will be duly motivated.

3.4.3 - Pension assumptions

MUAC

3.4.3.1 Total pension costs (in nominal terms in '000 national currency)

Pension costs	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pension costs	12.805	13.562	26.367	35.410	37.830	40.067
En-route activity	12.805	13.562	26.367	35.410	37.830	40.067
Terminal activity			-			
Other activities			-			

3.4.3.2 Assumptions for the "State" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many?	No

<Staff category name>	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies						
Employer % contribution rate to this scheme						
Total pension costs in respect of this scheme						
Number of employees the employer contributes for in this scheme						

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3
MUAC does not have a "State" pension scheme.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users

3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many?	No

<Staff category name>	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies						
Employer % contribution rate to this scheme						
Total pension costs in respect of this scheme						
Number of employees the employer contributes for in this scheme						

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3
MUAC does not have a "defined contributions" pension scheme.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users

3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme (in nominal terms in '000 national currency)

Does the ANSP assume liability for meeting future obligations for the occupational "Defined benefits" scheme?	Yes
Is the occupational "Defined benefits" pension scheme funded?	Yes

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	163.014	167.049	330.063	197.297	207.720	215.899
Total pension costs in respect of this scheme	12.805	13.562	26.367	35.410	37.830	40.067
- in respect of regular pension costs			-			
- in respect of non-recurring deficit repair			-			
- reported as staff costs (in reporting tables)	12.805	13.562	26.367	35.410	37.830	40.067
- not reported as staff costs (in reporting tables): please use comment box			-			
Actuarial assumptions						
% discount rate						
% projected increase in benefits						
% annual increase in salaries						
% expected return on plan assets						
Net funding surplus / deficit			-			
Number of employees the employer contributes for in this scheme	750	750		750	750	750

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3

MUAC employees are eligible for membership in the EUROCONTROL defined benefit pension scheme. This scheme is the first and unique pillar for the employees. Contributions from the employees and the employer are paid to the EUROCONTROL pension fund. The pension costs reported in this section relates to 2 different elements : the employer contribution (expressed as a percentage of the basic salary -17.5% in 2021) and the tax compensation on pension. Following a decision from the MUAC Member States, this tax compensation on pensions is gradually recognised over RP3 as pension costs in the MUAC costbase. This explains the substantial increase of pension costs as from 2022.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

One of the main assumptions is the percentage of the employer contribution which is set at 17.5% of the basic salary in 2021. According to actuarial studies, this percentage is expected to increase up to 20% during RP3. Another assumption relating to the tax compensation on pension (accounted on a Pay as You Go basis) is the mortality and taxation pressure in the countries were pensioners reside.

Where, in the Reporting Tables, some occupational "defined benefits" costs (e.g. interest expense related to pensions) are reported in other cost item(s) than staff costs, the cost item(s) should be indicated here below along with corresponding explanations.

Not applicable.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users

Increase of pension age of ATCOs and non ATCO staff. Review of benefits. New HR policy limiting access to permanent contracts of employment.

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

skeyes

Select number of loans	3

Interest rate assumptions for loans financing the provision of air navigation services
(Amounts in nominal terms in '000 national currency)

Loan #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Federal holding investment company loan					
Remaining balance	2.500	2.510		2.520	2.530	2.540
Interest rate %	2,50%	2,50%		2,50%	2,50%	2,50%
Interest amount	63	63	125	63	63	64

Loan #2	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Eurocontrol loan for bridging the pandemic period: principal received in 2020 and last installment 03/22.					
Remaining balance	31.305	6.261		0	0	0
Interest rate %	1,50%	1,50%		1,50%	1,50%	1,50%
Interest amount	470	94	563	-	0	0

Loan #3	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Loans received from the belgian federal state in 2020 and 2021 to face liquidity issue due to the pandemic. The loan will be gradually reimbursed as from 2023.					
Remaining balance	20.000	130.000		130.000	87.500	45.000
Interest rate %	0,00%	0,00%		0,00%	0,00%	0,00%
Interest amount	0	0	-	0	0	0

Other loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description						
Remaining balance						
Average weighted interest rate %	-	-		-	-	-
Interest amount			-			

Total loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total remaining balance	53.805	138.771		132.520	90.030	47.540
Average weighted interest rate %	0,99%	0,11%		0,05%	0,07%	0,13%
Interest amount	532	157	689	63	63	64

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

MUAC

Select number of loans	4

Interest rate assumptions for loans financing the provision of air navigation services
(Amounts in nominal terms in '000 national currency)

Loan #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Bullet loans with KBC contracted in December 2020 for 60 million € up to 31 Dec 2027 at variable rate (IRS Swap Curve + 0.4%)					
Remaining balance	60.000	60.000		60.000	60.000	60.000
Interest rate %	0,40%	0,40%		0,40%	0,40%	0,40%
Interest amount	0	240	240	240	240	240

Loan #2	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Loan with KBC contracted in 2017 for 40 million € at variable rate (EURIBOR 1 to 9 months + 0.40%) maturing in December 2025					
Remaining balance	25.000	20.000		15.000	10.000	5.000
Interest rate %	0,40%	0,40%		0,40%	0,40%	0,40%
Interest amount	120	100	220	80	60	40

Loan #3	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Loan with BNP contracted in 2017 for 30 million € at variable rates (EURIBOR + 0.40%) maturing in Decmber 2025					
Remaining balance	18.750	15.000		11.250	7.500	3.750
Interest rate %	0,40%	0,40%		0,40%	0,40%	0,40%
Interest amount	90	75	165	60	45	30

Loan #4	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Loan with KBC contracted in 2014 for 70 million € at variable rate (EURIBOR 1 to 9 months +0.58%) maturing in December 2022					
Remaining balance	17.500	8.750				
Interest rate %	0,58%	0,58%				
Interest amount	152	102	254			

Other loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description						
Remaining balance						
Average weighted interest rate %	-	-		-	-	-
Interest amount			-			

Total loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total remaining balance	121.250	103.750		86.250	77.500	68.750
Average weighted interest rate %	0,30%	0,50%		0,44%	0,45%	0,45%
Interest amount	362	517	879	380	345	310

3.4.5 - Restructuring costs

3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3

Restructuring costs from previous reference periods approved by the European Commission?	No

3.4.5.2 Restructuring costs planned for RP3

Restructuring costs foreseen for RP3?	No

Additional comments

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

Additional costs of measures necessary to achieve the capacity targets for RP3?	Yes
If yes, number of **en route** charging zones concerned	1

Belgium-Luxembourg

a) Overall description of the measures necessary to achieve the en-route capacity targets for RP3, which induce additional costs

skeyes:
To prepare for the expected resumption of air traffic during RP3, skeyes must ensure its ATCO capacity is maintained at appropriate levels. Skeyes has an aging ATCO population, resulting in a large number of ATCOs reaching pre-retirement age during RP3 and RP4. To compensate, additional ATCOs shall be recruited and trained to ensure skeyes operational capacity is retained. Furthermore, skeyes intends to replace its ATM system with a single, integrated and harmonised airspace management system with MUAC and BEL DEF to support the integration of civil and military ATM services and to improve capacity and operational efficiencies.

MUAC:
In 2019, an agreement was closed on new general conditions on employment, which increases ATCO availability in order to mitigate the gap between staff availability and traffic demand. In addition, and to provide a structural solution, additional ATCOs were hired who consequently also needed to be trained, causing an additional training cost.

The PABI project aims to optimize further the planning of daily operations.
The Manpower planning system-tool aims at creating a more advanced rostering system.

For all MUAC-related measures, only costs attributable to Belgium and Luxembourg are included.

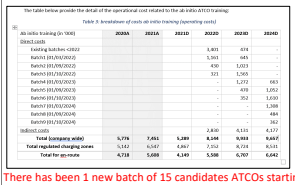
b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3

Number of capacity measures, which induce additional costs	7

Measure #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	3.067	4.016	7.083	7.152	9.756	9.912

Description and justification of the additional determined costs of the measure

(skeyes) To prepare for the expected resumption of air traffic during RP3, skeyes must ensure its ATCO capacity is maintained at appropriate levels.
skeyes has an aging ATCO population, resulting in a large number of ATCOs reaching pre-retirement age during RP3.
Consequently, in order to compensate, additional ATCOs shall be recruited and trained to ensure a sustainable capacity. The additional costs reflected within measure #1 amounts to 9.9 million euros in 2024.
The amounts supra has been updated following the compliance review and represent the external cost of initital certification training **as well as salary costs** for new ATCO in order to replace departing ATCO's ; These amounts do not include the costs of recruitment campaigns, entrance exams and related administrative costs.
The table below provide the detail of the operational cost related to the ab initio ATCO training:



The table below provide the detail of the operational cost related to the ab initio ATCO training:

Table 3: breakdown of costs ab initio training (operating costs)

Ab initio training (in '000)	2020A	2021A	2021D	2022D	2023D	2024D
Direct costs						
Existing batches <2022				3,401	674	-
Batch1 (01/03/2022)				1,565	645	-
Batch2 (01/09/2022)				430	1,023	-
Batch3 (01/10/2022)				121	1,565	-
Batch4 (01/03/2023)				-	1,272	663
Batch5 (01/09/2023)				-	478	1,053
Batch6 (01/10/2023)				-	352	1,030
Batch7 (01/03/2024)				-	-	1,388
Batch8 (01/09/2024)				-	-	484
Batch9 (01/10/2024)				-	-	362
Indirect costs				2,830	4,131	4,177
Total (company wide)	**5,779**	**7,451**	**5,289**	**8,346**	**9,933**	**9,667**
Total regulated charging zones	5,142	6,547	4,867	7,352	8,724	8,531
Total for en-route	**4,718**	**5,688**	**4,149**	**5,508**	**6,707**	**6,642**

There has been 1 new batch of 15 candidates ATCOs starting in 2020 and 3 new batches totalling 32 candidate ATCOs starting in 2021. The determined training costs are based on the assumption of 3 new batches of 14 candidates ATCOs in 2022, 2023 and 2024. Training costs in a given year include training costs of the new ATCO batches as well as those initiated in prior years.
The operational cost of training to maintain the ATCO capacity at an appropriate level for en-route amounts to 6.6 million euros in 2024.
The table below provides the detail of the staff cost related to RP3 recruitments (ab-initio and ACS-TCL trainees):

Staff costs	2020A	2021A	2021D	2022D	2023D	2024D
Ab initio students company wide	2,046	1,363	1,328	2,419	2,314	2,229
Ab initio students for en-route	1,482	984	957	1,745	1,668	1,607
ACS-TCL students company wide	225	13	123	379	1,381	1,663
ACS-TCL students for en-route	225	13	123	379	1,381	1,663
Total (company wide)	**2,271**	**1,377**	**1,451**	**2,798**	**3,695**	**3,893**
Total for en-route	**1,707**	**997**	**1,081**	**2,124**	**3,049**	**3,270**

Measure #2	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	0	1.380	1.380	1.971	1.482	1.657

Description and justification of the additional determined costs of the measure

With the ATM NextGen Program, skeyes intends to modernize its ATM system to support the integration of civil and military ATM services and to improve capacity and operational efficiencies.
The first phase of the modernization program is a second midlife upgrade (MLU2) of the current system in 2023-2024 to secure the service provision during the transition until the effective deployment of the second phase. MLU2 consists of a technical upgrade and a functional upgrade. The aim of the technical upgrade is to replace the hardware of all the main systems and sub-systems, virtualise certain components, improve the technical architecture, in particular by strengthening cyber security, and convert the obsolete 32-bit software into a more recent 64-bit version. The purpose of the functional update is to carry out three adaptations (ECP - Engineering Change Proposal) required to comply with regulations, security recommendations and necessary operational changes. The second midlife upgrade entered in the deployment phase and is on track for a commissioning in 2024.
The second phase of the modernization program is to deploy a future-proofed ATM system to comply with European regulations, to support the integration of civil and military ATM services and to implement the last technical and operational standards to improve our service provision. The second phase will be deployed at the end of RP4. In 2021, skeyes signed an agreement with Eurocontrol MUAC and Belgian Defence for the development of a single system (SAS3). After one year of definition phase, it appears that the risks of the project in terms of scope, planning and budget were too high for skeyes. Therefore, the project has been put on hold. skeyes is currently in discussion with Belgian Defence to define the best way forward for the modernisation of the system to be commissioned in 2028.
The investment costs for the period are based on the price and payment milestone in the contract with the supplier for the technical and functional upgrade.

The operational costs for the period are based on the study costs and external support (Program and project management, engineering support, ATM architecture support…) planned for the period. These cost are directly linked to the modernisation of the ATM system and are not related to the normal operation. These cost were accepted by the Commission for other ANSP (e.g. the cost of 4flight and Coflight in France include depreciation, cost of capital and other operating costs directly related to these investments and were retained as necessary to achieve the capacity targets for RP3). The operational costs does not include the cost of the maintenance contract with the supplier.
The amounts supra has been updated following the compliance review.

Measure #3	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	2.234	2.900	5.133	3.204	3.316	3.398

Description and justification of the additional determined costs of the measure

(MUAC) **GCE Package** : The measure aims to increase ATCO availability in order to mitigate the gap between staff availability and traffic demand. Key measures of the proposal include: an increase in annual working time for newly recruited ATCO staff; the replacement of stand-by shifts (where staff are off duty but on call) by flex shifts (where the shifts have to be worked within a certain time window); the possibility to contract additional working days for staff currently in post; more flexible working time planning on an annual basis; the possibility to transfer leave days to a lifetime working time account, freeing up additional working days in the short to medium term; the possibility to increase working time with the consent of the ATCO, including extension of the retirement age to 60 years; and an increase in the basic salary scales of O grades by 10.75% over a two-year period.

Measure #4	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	359	494	853	51		

Description and justification of the additional determined costs of the measure

(MUAC) **Post-OPS Analysis and BI (PABI):** the scope of this project consists of enhancing the Post-OPS Analysis process and tooling at MUAC, in order to further optimise the planning of daily operations, and in this context to develop Business Intelligence facilities that not only allows the efficient creation of KPI monitoring and reporting workflows and dashboards, but also allows users to perform data mining in a self-service manner.
The additional insights gained from properly consolidated MUAC performance data will improve the cost-efficiency not only of the ATM operations directly, but also of the ATM system and operational concepts development strategies, thereby securing the stability and long-term sustainability of MUAC services.n accordance with OPS ATFCM requirements timeline, PABI is estimated to provide a slight amount of additional capacity and some CRSTMP delay reduction by avoiding over-regulation, and a better determination of the necessary amount of excess ATCOs to cover the unforeseen.

Measure #5	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	3.111	2.970	6.080	3.267	3.273	3.402

Description and justification of the additional determined costs of the measure
(MUAC) **ab initio recruitment:** Following a prolonged stoppage of all ab-initio recruitment after the financial crisis in 2007, MUAC identified the need to re-start the recruitment process in order to cope with the expected outflow of ATCOs to retirement. Prior to this, the decision to outsource the initial training from IANS in Luxembourg to ENAC in Toulouse had already been taken. the costs presented above include the staff costs for the ab initio's, sim pilots needed for their training, as well as the cost for their initial training at ENAC.

Measure #6	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	0	160	160	704	1.988	2.418
Description and justification of the additional determined costs of the measure						
(MUAC) **additional ATCOs needed for the Brussels sector:** due to an underrecruitment in the past, the number of ATCOs allocated to the Brussels sector will rise substantially (from 106 to 119 ATCOs) over RP3. Together with the earlier mentioned (MUAC-wide) GCE package, this will provide additional capacity within the MUAC AoR over Belgium and Luxembourg. As only around 90% (percentage varies slightly each year) of the costs of the Brussels sector are attributed to Belgium and Luxembourg, only this part is reflected here.						

Measure #7	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	198	189	387	205	204	102
Description and justification of the additional determined costs of the measure						
(MUAC) **Manpower Planning System:** the aim of the project is to develop top down a new state-of-the-art tool, called the Manpower Planning Suite (MPS). The first two stages of the project focus on a new framework and a modernised Roster Tool. In next stages the other MPS tools will be developed based on the same framework. The new MPS will be an enabler to incorporate new operational requirements that are difficult or impossible to implement with the current design of the data model and tools. Migration of the manpower planning tools will allow for 24/7 service provision.						

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total additional costs of measures ('000 national currency)	8.968	12.109	21.077	16.553	20.018	20.889

c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 by nature by ANSP

Additional costs of measures necessary to achieve the capacity targets for RP3
(nominal terms in '000 national currency)

Belgium-Luxembourg	2020D	2021D	2020/2021D	2022D	2023D	2024D
Staff			-		3.049	3.270
of which, pension costs			-			
Other operating costs	3.067	5.396	8.463	9.123	7.938	7.873
Depreciation			-		13	13
Cost of capital			-		238	413
Exceptional items			-			
Total additional costs of measures	3.067	5.396	8.463	9.123	11.238	11.569

Belgium-Luxembourg	2020D	2021D	2020/2021D	2022D	2023D	2024D
Staff	4.390	5.139	9.529	6.253	7.649	8.280
of which, pension costs	359	435	793	504	617	668
Other operating costs	1.511	1.574	3.085	1.177	1.132	1.040
Depreciation			-			
Cost of capital			-			
Exceptional items			-			
Total additional costs of measures	5.901	6.713	12.614	7.430	8.780	9.320

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total additional costs of measures ('000 national currency)	8.968	12.109	21.077	16.553	20.018	20.889

Additional comments
(skeyes) The costs of measure 1 and 2 presented above allow the achievement of the performance targets in the key performance area of capacity amounts to 11.6 million euros in 2024. These amounts do not include the costs of recruitment campaigns, entrance exams and related administrative costs.

d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

(skeyes) Together with the replacement of end of life equipments, the recruitment and training of new ATCO and the ATM next gem are mandatory to safeguard business continuity and capacity over RP3. This is developed more in depth in the annexes E and R.

CORRECTIVE MEASURES

** Complement with detailed explanations in Annex Z.*

SECTION 3.5: ADDITIONAL KPIS / TARGETS

3.5 Additional KPIs / Targets

Annexes of relevance to this section

ANNEX J. OPTIONAL KPIs AND TARGETS

3.5 - Additional KPIs / Targets

Number of additional KPIs	Click to select number of additional KPIs

SECTION 3.6: DESCRIPTION OF KPAS INTERDEPENDENCIES AND TRADE-OFFS INCLUDING THE ASSUMPTIONS USED TO ASSESS THOSE TRADE-OFFS

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

a) Do the measures to reach the targets in the different KPAs require changes in the ANSP functional system that have safety implications? If yes, which mitigation measures are put in place?
Other KPAs may require changes directly impacting the ANSP functional system. Some changes have already been identified e.g. new procedures for greener routes or modernization of systems to comply with Common Project 1 (CP1) requirements (KPA environment), additional changes may be identified at a later stage. Improving and maintaining a mature SMS (for example human resources / staff requirements) does also have an indirect impact on other KPAs (especially KPA cost efficiency). An important effort is required to train, maintain and operate experience feedback mechanisms (investigators, local and corporate safety committees, automatic loss of separation detection tools, improved runway alerting systems like ASMGCS) as well as functional system changes' analysis (development of safety barrier models etc.). In all cases, changes are subject to Commission Implementing Regulation (EU) 2017/373 including its detailed requirements for changes to the functional system. On the ANSPs level, the current safety management processes requested by aforementioned Common Requirements do ensure that safety levels are not compromised when implementing airspace changes or changes to the ATM/ANS functional system. Changes to the ATM/ANS functional system could be required to reach the targets in the different KPAs. A mitigation layer exists as these changes will require approval from the Competent Authorities. Furthermore, changes might also be necessary on the organisational level (i.e. safety training or safety culture initiatives). On the Competent Authority level, the changes to the ANSP functional system are closely supervised. The precise changes' scope as well as interfaces are challenged during this process to ensure that all essential information is available to avoid any unacceptable safety implications right from the start of the change management procedure. The combination of changes due to measures to reach the targets in the different KPAs may not have any negative safety implication and overall safety should improve in line with the safety targets. Furthermore, change management procedures and any change thereto require prior approval by the

b) What are the main assumptions used to assess the interdependencies between safety and other KPAs?
Safety constitutes the highest priority and its attainment cannot be compromised by adverse interdependencies with other key performance areas. Thus, it is always part of any other KPA's consideration. The achievement of an acceptable level of safety has the highest priority. Safety will naturally be balanced with other strong requirements linked to environment, production pressure and finances. In all change paths undertaken, this balance is addressed and ensured to guarantee that this balance stays acceptable. Sometimes this leads to a non-acceptance of change proposals, based on one of these requirements. ANSPs have a safety target for their operations, that, if quantifiable, helps to establish a bottom line for safety. On the Competent Authority level, the mitigation measures described in a) address the assumptions used to

c) What metrics, other than those indicators described in the Regulation, are you monitoring during RP3 to ensure targets in the KPAs of capacity , environment, and cost-efficiency are not degrading safety?

ANSPs have defined own (K)PIs to monitor their performance by means of other ad-hoc and flexible indicators than those described in Commission Implementing Regulation (EU) 2019/317. These are also crossing the KPAs to highlight the interface and interdependency between safety and other KPAs. At FABEC level, ANSPs have a dashboard including safety data as well as lagging and leading indicators. For instance: there is an indicator that monitors the number of runway crossings at a certain crossing to ensure achieving the safety objective(s). These indicators could typically indicate production pressure. Similarly, there are parameters for the driving direction of runway inspections, separation on final, etc. Besides, there is a common FABEC dashboard which is kept up-to-date by the SPM working group reporting to the SC-SAF. A yearly aggregation of SMI, RI and EoSM results is done under the leadership of the DSNA and analysed both by SPM and SC-SAF. The publication on a website is foreseen in the near future.
Moreover, FABEC ANSPs also hold performance board meetings to monitor indicators relevant to their Integrated Safety Management System (Safety, Security, Quality, Environment). Indicators, issues and possible trade-offs are discussed, explained and sorted out by board members under the leadership of the ANSPs' management.

d) Do targets allow trade-offs in operational decision making to managing resource shortfalls in order to preserve safety performance? Do targets restrict the release of staff for safety activities, such as training?
In terms of resources normally the operational staff is the bottleneck. Of course, the acceptable safety performance is priority 1, second is safety training, third is the change management of changes to the functional ATM system(s). No non-safety target will be able to restrict safety or safety activities. Operational safety trade-offs (day to day operations at unit level) are very different in nature and content to safety performance trade-offs at organisational level. Operational safety is the main driver but consequences of corporate decision making is also tracked and monitored. Specific processes are required to manage the operational HR's needs that must be maintained independent of the different size of FABEC ANSPs.

e) Has the State reviewed the ANSP financial and personnel resources that are needed to support safe ATC service provision through safety promotion, safety improvement, safety assurance and safety risk management after changes introduced to achieve targets in other KPAs? Please, explain.
The FABEC ANSPs, included those active in the airspace of Belgium, have committed themselves by declaring to have sufficient resources to perform the required safety activities in their day-to-day operations. The NSA oversee the financial and personnel plan to ensure all necessary activities are carried out. On the Competent Authority level, the Safety Management System's components as described in Commission Implementing Regulation (EU) 2017/373, Part-ATS, ATS.OR.200 are subject to the ongoing oversight. These are: Safety policy and objectives, safety risk management, safety assurance and safety promotion. Besides, the Management System requirements for ATS providers laid down in Commission Implementing Regulation (EU) 2017/373 Part.ATM/ANS and Part.PERS are strictly overseen by the Competent Authority. These include, but are not limited to, the following aspects: providing appropriate human and financial resources by the senior management, ensuring sufficient resources allocated to the compliance monitoring function and safety manager function, allocation of appropriate resources to achieve the planned safety performance by the safety review board, appropriate resources covered in the Stress Management and Fatigue Management policies. Apart from this, the Competent Authority supervises the annual plan, the resulting annual report and the (5 years) business plan to ensure that financial and personnel resources are dealt with proportionally.

3.6.2 - Interdependencies and trade-offs between capacity and environment

The interdependency between capacity and environment is most clearly illustrated at FABEC level. Following traffic increases, the FABEC KEA indicator increased between 2014 and 2016. From 2017 onwards the KEA performance has stabilised as a balance has occurred between continued strong traffic growth and the introduction of operational changes such as FRA, but this may also be related to a change in the KEA calculation method. In 2020 KEA has decreased with the massive drop of traffic as from the ourbreak of the COVID-19 pandemic.

KEA achievements are clearly influenced by traffic level and volatility (the yearly profile is clearly influenced by seasonality and number of flights). ATCOs can offer more direct routing with low traffic and facing no capacity issues. Nevertheless, with the capacity and staffing issues incurred by FABEC ANSPs in the core area, delays i

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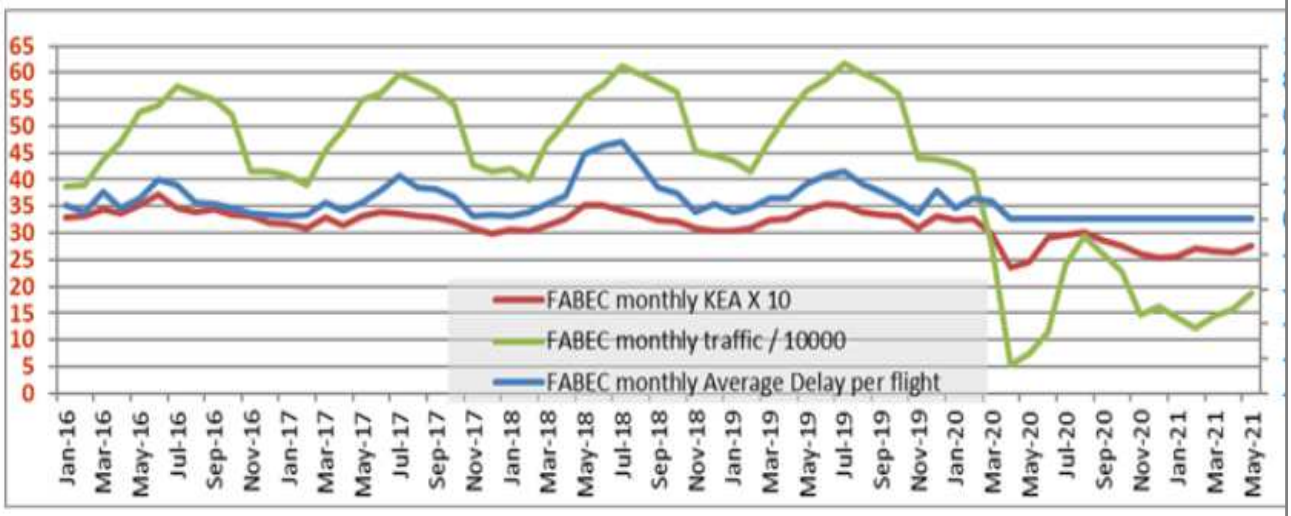


In addition NM summer initiatives introduced as from 2018 summer introduced massive rerouting which have

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

As it has been described in chapter 3.3.1, main capacity improvements during RP3 and following RP4 will be provided through measures such as:

- Implementation new ATM systems or upgrades of legacy systems enabling new concepts of operations or introducing new ATC tools (ATM NextGen);

- ATCO hiring plans;

- More flexible rostering and new working conditions for ATCO.

These measures have an impact on the costs bases of ANSP: on staff costs for additional recruitments or social agreements, on depreciation costs and costs of capital regarding new investments.

Individual ANSPs' detailed interdependencies between cost-efficiency and capacity are addressed in chapter 3.4 and in Annex R & S of this performance plan.

3.6.4 - Other interdependencies and trade-offs

Regarding Environment performance, capacity is not the only performance area influencing KEA achievement; many other factors, some of them out of the full scope of responsability of ANSPs, can impact a good flight efficiency.

Among the main factors can be listed:

- Further implementation of FUA in the airspaces most affected by military activities is expected to bring a certain improvement of flight efficiency. However, the current ERNIP edition includes only a few project (out of around 300) focusing on FUA improvement. In addition, benefits from FUA implementation will only be significantly perceivable if the level of military activity/training will remain unchanged in the years to come. Increase of military activity has an impact on flight efficiency. Nevertheless, FABEC has set up a FUA harmonization and implementation initiative with its ANSPs through a permanent joint CIV-MIL task-force.

- Weather has been becoming more extreme and unpredictable; and so has its impact on air traffic (to reflect the real situation the TMA cylinder should be extended from 40NM to 200NM, therefore excluding the constraints set for arrival and departure from the calculation of en-route flight efficiency).

- Structure of the traffic: more overflights automatically means a better HFE. FABEC area, however, contains the busiest European airports (FRA, CDG, AMS), and Heathrow in close proximity.
- In contrast to the aim to minimise emissions, Airspace users are not obliged to fly the shortest route. One example of a reason why they might not do this is when longer but cheaper route is available due to different unit rates across Europe. Neither are they obliged to provide a reason for not flying the shortest route. In addition the new En Route charging calculation according to actual flown route could have an impact on Airspace users choice regarding routes, which will influence flight-efficiency in a magnitude which is still unknown.
- The NM and the ANSPs have optimized their operations with respect to rolling UUP and Procedure 3, bringing more flexibility and more options for AOs to fly shorter routes. Unfortunately, the major part of AOs are not able to seize these opportunities because they file their flight plans more than 6-7 hours in advance. As a consequence, when a TRA is released only 3 hours in advance, they are not able to update their flight plans. As long as the flown track follows the flight plan trajectory, this lack of AOs' reactivity has a negative impact on flight efficiency and potentially on capacity (for instance if several flight plans are filed in a region with a capacity bottleneck whereas if these flight plans were updated, the corresponding flights would be rerouted outside this area).

More in general, we note that the performance scheme does not cover all KPAs and indicators that are relevant to ANS performance, and indeed to air transport as a whole. Performance areas such as security, sustainability, business continuity, etc are also important, and activities undertaken to address performance in these areas can affect performance in relation to the KPIs and targets included in this plan, e.g. improving security will come at a cost. Similarly, within the KPAs of safety, capacity, environment and cost efficiency there are (both local and European) issues or priorities that require action even without target setting - compare the PIs included in the performance and charging regulation. As an example, it may be necessary to invest in detecting and/or preventing runway incursions or airspace infringements. This will also affect cost efficiency but it will not contribute to meeting any of the targets in this plan.

SECTION 4: CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

Annexes of relevance to this section

ANNEX N. CROSS-BORDER INITIATIVES

4.1 - Cross-border initiatives and synergies

4.1.1 - Planned or implemented cross-border initiatives at the level of ANSPs

Number of cross-border initiatives	10

Initiative #1	
Name	Collaboration for Flight Object Interoperability (FO IOP)
Description	Maastricht Upper Area Control Centre (MUAC), DFS and LVNL will jointly develop components that will enable interoperability between their respective Air Traffic Management systems and help deliver a Single European Sky.
Expected performance benefits	CAP+ CEF+

Initiative #2	
Name	The 14 ACCs of FABEC are internally benchmarked with the focus on sector level capacity
Description	The study explorers factors influencing capacity provision at all 14 FABEC ACCs. In contrast to available benchmark reports this is done on a unusual detailed level and unusual large data set. Local supervisors, ATCOs and ATFM experts along with FABEC performance experts analyse the operational environment, the technical environment as well as staff planning routines to provide a deeper understanding of performance differences and to identify and exchange best practices.
Expected performance benefits	CAP+

Initiative #3	
Name	Framework for Cross-Border Business Continuity / Contingency
Description	Establish the appropriate framework at FABEC level supporting the development of cross-border business continuity or contingency procedures. FABEC ANSPs will check the requirements to support each other with bilateral arrangements in case of outages of an ACC (e.g. frequency outage, power failure, etc.). Some procedures are already in place. Langen ACC can deliver/ take over traffic at the border directly to/ from Liège Approach in case of an outage at Brussels ACC. The same is done with DSNA and Charleroi Approach.
Expected performance benefits	SAF+ CAP+ CEF+ ENV+

Initiative #4	
Name	Harmonisation of regulator framework for unmanned aircraft systems
Description	Initiative to harmonise separation standards to unmanned aircraft systems (UAS/ drones). In the framework of the initiative any kind of factors are analysed that may impair safety and operational performance. The objective is to avoid procedure diversification within FABEC and prepare a consolidated regulatory approach.
Expected performance benefits	CEF+

Initiative #5	
Name	RAD Optimisation Workshops
Description	The Route Availability Document (RAD) is a common reference document containing the policies, procedures and description for route and traffic orientation. The RAD is part of the European Route Network Improvement Plan (ERNIP). It also includes route network and free route airspace utilisation rules and availability. The RAD is also an Air Traffic Flow and Capacity Management (ATFCM) tool that is designed as a sole-source flight-planning document, which integrates both structural and ATFCM requirements, geographically and vertically. FABEC's CRM group organises regular meetings to optimise and harmonise the documents. Airspace users, NM representatives and FABEC's RAD coordinators optimise and harmonise RAD restrictions and increase understanding on users side.
Expected performance benefits	CAP+ ENV+

Initiative #6	
Name	FABEC Joint States/ ANSPs FUA Task Force
Description	The Task Force of State and ANSP experts, referred to as the joint FUA Task Force (JTF), supports the work of the Airspace Committee in developing an harmonised application of the ASM/FUA concepts within FABEC and in providing guidance to FABEC ANSPs on an harmonised application of FUA Level 2 and Level 3. The tool sub-group is focussing on the usage of available tools. The JTF is established with the general objectives of providing ASM/ FUA expertise to the AC and performing tasks for the AC in the area of ASM/FUA, with the end goal to develop proposals for the harmonisation of the application of ASM/ FUA concept at all three levels, in order to enhance airspace utilisation and contribute to performance and network improvements in particular in the FABEC core area and in cross-border areas of the FABEC airspace.
Expected performance benefits	CAP+ ENV+

Initiative #7	
Name	FABEC/Network Manager Airspace Design Coordination Group (FABEC/NM ADCG)

Description	For the mid-term, the NM Action Plan aims to tackle existing bottlenecks, address future capacity, and flight efficiency challenges, with a renewed airspace structure, in particular for the FABEC. The Airspace Design Coordination Group (ADCG) has been set up with the objective to make the link between the FABEC States and ANSPs bodies/structures (AC, SC OPS and ODG) and the NM RNDSG in charge of conducting the airspace study, on a seamless approach basis regardless of national borders. The new airspace structure will address current and future structural airspace bottlenecks and will include the new airspace requirements, which had to been declared by the States no later than May 2019. The implementation plan was postponed several times due to the COVID crisis but all potential projects are now included in the 'Airspace Catalogue', as annex to ERNIP part 2, even though with a status 'proposed'.
Expected performance benefits	CAP+ ENV+

Initiative #8	
Name	The Cooperative Optimisation of Boundaries, Routes and Airspace (COBRA)
Description	The two upper area control centres in Karlsruhe (DFS) and Maastricht (Eurocontrol) have completed an initiative to optimise the transfer of flights at the boundary of their areas of responsibility. The project is developing measures in the Central, East and West modules for the adjacent sectors along the geographical borders between Germany, Belgium, Luxembourg and France. The objective of the planned modifications is to reduce the complexity of air traffic in these airspaces for controllers. This will in turn optimise workflows, which will increase safety and airspace capacity as well as shorten the routes.
Expected performance benefits	SAF+ CAP+ ENV+

Initiative #9	
Name	Extended Arrival Management (XMAN)
Description	With the need to focus on activities which are directly answering current operational needs and the heavy constraints which the still ongoing COVID-19 crisis imposes on all ANSPs, FABEC ANSPs were forced to re-prioritise their FABEC XMAN Activities. As it remains an important initiative for when traffic recovers, most ANSPs continue with implementation as planned or with minor postponement. The maximum benefit for Airlines is therefore still expected to be substantial.
Expected performance benefits	CAP+ ENV+ CEF+

Initiative #10	
Name	Free Route Airspace (FRA)
Description	The project work on Direct Routings and Free Route is in a rolling status with a yearly update of the implementation report and implementation plan. The four involved FABEC ANSPs (MUAC, DFS, DSNA and Skyguide) will have FRA 24h by end 2025. Additional FRA improvements are also planned with several cross border operations for e.g. Karlsruhe/Munich/Zurich, Karlsruhe/MUAC, Karlsruhe/Vienna and Geneva/Zurich. MUAC has implemented 23/7/365 FRA several years ago and is now working on cross border free routes with a number of neighbouring ANSPs.
Expected performance benefits	CAP+ ENV+

Additional comments
Within FABEC, States are focusing their work in order to ensure that FABEC airspace management aims at supporting both the performance of operations within FABEC airspace, in particular defined RP3 targets, and the Military Mission Effectiveness achievement. The functional airspace block worked as facilitator for not just the abovementioned larger undertakings but also to many more smaller initiatives. Many initiatives are born when the CEOs, OPS directors, technical directors, the Head of ACC group or performance experts plan jointly future performance in their regular meetings. Studies, tests and deployment then, usually starts with one or two collaborating ANSPs and if successful are joined by the FABEC partners. FABEC offers a more comprehensive picture on Operational planning on this site: https://www.fabec.eu/opmap/

4.1.2 - Investment synergies achieved at FAB level or through other cross-border initiatives

Details of synergies in terms of common infrastructure and common procurement
Generally speaking, it has to be noted that the financial impact of such common procurement or common infrastructure is hard to determine as soon as an alliance starts to act. Practically, on a yearly basis, within FABEC SC TECH SYS collects the investment plans for CNS equipment of the FABEC partners in order to investigate possibilities for a common procurement. This already resulted in cooperation between FABEC partners on many technical projects and investment synergies are achieved. Such technical synergies are listed in chapter 4.1.1 above.

4.2 - Deployment of SESAR Common Projects

4.2.1 - Common Project One (CP1)

CP1 ATM Functionality (CP1-AF) / Sub functionality (CP1-s-AF)	Recent and expected progress
CP1-AF1 - Extended AMAN and Integrated AMAN/DMAN in High-Density TMAs	
CP1-s-AF1.1 AMAN extended to en-route airspace	Ref. MPL3 Objectives ATC15.1 & ATC15.2: The existing basic AMAN will be upgraded/replaced during the midlife upgrade of the ATM system (planned in 2024) in order to prepare extended AMAN operations. The information exchange and bilateral working arrangements with adjacent centres
CP1-s-AF1.2 AMAN/DMAN Integration	n/a
CP1-AF2 - Airport Integration and Throughput	
CP1-s-AF2.1 DMAN synchronised with predeparture sequencing	DMAN synchronised with predeparture sequencing is already in operational use for several years. Ref. MPL3 Objective AOP05: Airport CDM has been implemented in 2008 and extended to cater for adverse conditions in 2013. Electronic Flight Strips are already in use since the early 2000s.
CP1-s-AF2.2.1 Initial airport operations plan (iAOP)	Ref. MPL3 Objective AOP11: Implementation of initial AOP is achieved via a dedicated CINEA funded project (joinly with Brussels Airport Company). In the first half of 2021, updates were performed to the operational exchange of flight and MET data, and thereby ensuring full compliancy with the CP1 requirements for ANSPs.
CP1-s-AF2.2.2 Airport operations plan (AOP)	updates od iAOP were performed during the first half of 2021, ensuring full compliancy with CP1 requirements
CP1-s-AF2.3 Airport safety nets	Ref. MPL3 Objective AOP11 (as well as AOP04.1 & AOP04.2): A-SMGCS Levels 1 & 2 and enhanced safety nets are fully implemented since 2016.
CP1-AF3 - Flexible Airspace Management and Free Route Airspace	
CP1-s-AF3.1 Airspace management and advanced flexible use of airspace	Ref. MPL3 Objectives AOM19.1 & AOM19.2 & AOM19.3 & AOM19.4: - LARA tool implemented and used to introduce civil booking since 07 March 2013. - Improvements to planning and allocation of airspace booking are ongoing. - Implementation of ASM Management of Real-Time Airspace Data is ongoing. - Implementation of full Rolling ASM/ATFCM Process and ASM Information Sharing is ongoing. - Management of Pre-defined Airspace Configurations: A number of pre-defined Airspace configurations (e.g. MIL on/off) are already operational. A project to define additional configurations has been initiated with MIL partners.
CP1-s-AF3.2 Free route airspace	The required connectivity between FRA and TMAs is ensured by skeyes by implementing specific (direct) routes.
CP1-AF4 - Network Collaborative Management	
CP1-s-AF4.1 Enhanced short-term ATFCM measures	Ref. MPL3 Objective FCM04.2: Implementation of STAM Phase 2 measures depends on the progress made at the side of Eurocontrol/Network Manager as this is done through the NM platform. The STAM measures will also make use of the information of the local traffic complexity tool, which is expacted to be operationally implemented by end 2021.
CP1-s-AF4.2 Collaborative NOP	Ref. MPL3 Objective INF08.1: A SWIM study was launched in 2020 resulting in the approval of a SWIM project, including budget and resources. It is planned to have SWIM implemented by the target date of CP1 (31/12/2025).
CP1-s-AF4.3 Automated support for traffic complexity assessment	Ref. MPL3 Objective FCM06: A local traffic complexity tool is being implemented. It is expected to become operational by end 2021.
CP1-s-AF4.4 AOP/NOP integration	Additional data/information exchange requirements (on top of those foreseen in the implementation of 'Collaborative NOP') are expected to be discussed with Brussels Airport Company jointly with discussions in relations to the implementation of extended AOP. Target date of this Sub-AF is December 2027 so beyond RP3
CP1-AF5 - SWIM	
CP1-s-AF5.1 Common infrastructure components	Ref. MPL3 Objective COM12: New PENS implemented operationally in 2020. Participation to the CINEA funded common SWIM PKI project (led by Eurocontrol).
CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	Ref. MPL3 Objective INF08.1: A SWIM study was launched in 2020 resulting in the approval of a SWIM project, including budget and resources. It is planned to have SWIM implemented by the target date of CP1.

CP1-s-AF5.3 Aeronautical information exchange	Ref. information in relation to AF5.2. In addition: AIXM format is already in use for the majority of the AIM data (including the information for the EAD).
CP1-s-AF5.4 Meteorological information exchange	Ref. information in relation to AF5.2. In addition: IWXXM for the legacy ICAO messages (e.g. METAR, TAF & SIGMET) has been implemented in 2017.
CP1-s-AF5.5 Cooperative network information exchange	Ref. information in relation to AF5.2. In addition: a number of B2B services from the Network Manager are already implemented.
CP1-s-AF5.6 Flight information exchange (yellow profile)	Ref. information in relation to AF5.2.
CP1-AF6 - Initial Trajectory Information Sharing	
CP1-s-AF6.1 Initial air-ground trajectory information sharing	n/a for skeyes - ref. information from MUAC
CP1-s-AF6.2 Network Manager trajectory information enhancement	n/a for skeyes - ref. information from MUAC
CP1-s-AF6.3 Initial trajectory information sharing ground distribution	n/a for skeyes - ref. information from MUAC

4.3 - Change management

Change management practices and transition plans for the entry into service of major airspace changes or for ATM system improvements, aimed at minimising any negative impact on the network performance
MUAC Depending on its size, risk and/or exposure, a change may be managed as a project. In such a case, Strategy & Performance Management triggers the project initiation by an approved Idea Sheet (IDS), committing resources for this first stage, and approves the Project Management Plan (PMP) to allocate the necessary resources for the project execution. In the event that a technical change (internally or externally triggered) would risk a negative impact on the network, the aim is to minimize the impact on Network Performance. For the vast majority of changes, the goal is always for airspace changes to have a positive network impact.
Skeyes In the context of major changes to the functional systems (such as ATM system upgrades), skeyes identify all the necessary elements towards this change in a dedicated change management project. Aim is to have limited impacts on operational traffic, even during the transition phase of the change. Amongst others, skeyes will assess all the changes and impacts to different functional systems generated by this change. The internal safety management procedures will be followed, as will be the case for the risk assessment. The change is submitted for approval to the Belgian Supervisory Authority. With respect to different assessments, the human factors aspect (operational and technical staff) will be covered as well. The necessary elements to timely train operational and technical staff will be foreseen through a dedicated training project. Operational and technical staff will extensively participate - from the beginning - in the program in order to guarantee user requirements are correctly implemented in the change

SECTION 5: TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

Annexes of relevance to this section

ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING
ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES
ANNEX K. OPTIONAL INCENTIVE SCHEMES

5.1 - Traffic risk sharing

5.1.1 Traffic risk sharing - En route charging zones

Belgium-Luxembourg			Traffic risk-sharing parameters adapted?			no
			Service units lower than plan		Service units higher than plan	
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

5.1.2 Traffic risk sharing - Terminal charging zones

Belgium EBBR			Traffic risk-sharing parameters adapted?			no
			Service units lower than plan		Service units higher than plan	
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

5.2 - Capacity incentive schemes

5.2.1 - Capacity incentive scheme - Enroute

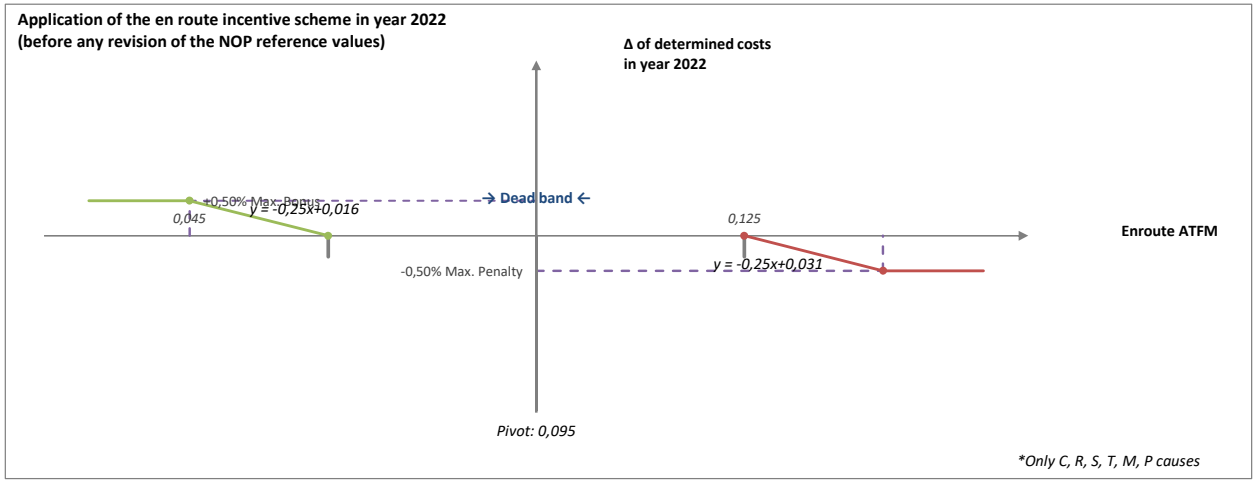
5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute

Enroute	Expressed in	Value
Dead band Δ	fraction of min	±0,030 min
Max bonus (≤2%)	*% of DC*	0,50%
Max penalty (≥ Max bonus)	*% of DC*	0,50%
The pivot values for RP3 are	modulated	CRSTMP

skeyes

		2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)				0,12	0,13	0,12
Alert threshold (Δ Ref. value in fraction of min)				±0,050	±0,050	±0,050
Performance Plan targets (mins of ATFM delay per flight)				0,12	0,13	0,12
Pivot values for RP3 (mins of ATFM delay per flight)*				0,10	0,10	0,10
Financial advantages / disadvantages	Dead band range			[0,065-0,125]	[0,073-0,133]	[0,065-0,125]
	Bonus sliding range			[0,045-0,065]	[0,053-0,073]	[0,045-0,065]
	Penalty sliding range			[0,125-0,145]	[0,133-0,153]	[0,125-0,145]

** When modulation applies, these figures are only indicative as they will be updated annually on the basis of the November n-1 NOP and the methodology described in 5.2.1.2.a2 below. The pivot values for year n have to be notified to the EC by 1 January n.*



5.2.1.2 Rationale and justification - Enroute

Indicate which of the principles below will be applied for the modulation of the pivot values for the whole RP3:	
a) In order to enable significant and unforeseen changes in traffic to be taken into account:	
a.1) The pivot value for year n IS the reference value from the November release of year n-1 of the NOP.	No
a.2) The pivot value for year n is informed by the November release of the year n-1 of the NOP and calculated according to the following principles and formulas:**	No
b) The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. If yes, provide below a justification for this decision and an explanation of how the pivot values are calculated.	Yes

The incentive scheme for the en route ATFM delay per flight KPI has been established in accordance with the requirements of Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky as well as Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exeptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to the COVID-19 pandemic.
The incentive scheme is based on the en route ATFM delay causes related to the codes C, R, S, T, M and P of the ATFCM user manual. It had already been decided in a FABEC context to focus on these delay causes in RP2 because ANSPs are supposed to be responsible for them and can influence them; though the reason for respective ATFM-delay might be considered irrelevant by the airspace users, Belgium is convinced that rewarding or penalising ANSPs for performance that is outside their influence does not incentivise good ANSP performance and might - in case of e.g. good weather - lead to windfall bonuses for ANSPs.
In order to assure the correct application of the ATFM-coding, Belgium, in collaboration with the other FABEC states continue to apply a post-operation procedure, checking the correct application yearly on a sample basis.
Considering the ratio of en route ATFM delay CRSTMP causes, the average CRSTMP-share of RP2 has been used.

*** Refer to Annex I, if necessary.*

5.2 - Capacity incentive schemes

5.2.1 - Capacity incentive scheme - Enroute

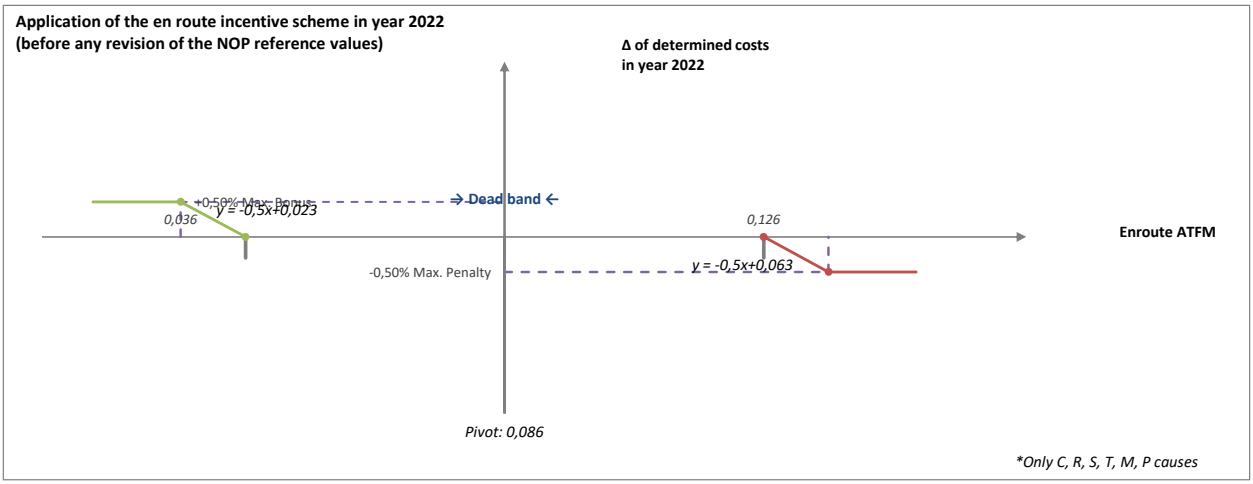
5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute

Enroute	Expressed in	Value
Dead band Δ	fraction of min	±0,040 min
Max bonus (≤2%)	*% of DC*	0,50%
Max penalty (≥ Max bonus)	*% of DC*	0,50%
The pivot values for RP3 are	modulated	CRSTMP

MUAC

		2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)				0,14	0,14	0,14
Alert threshold (Δ Ref. value in fraction of min)				±0,050	±0,050	±0,050
Performance Plan targets (mins of ATFM delay per flight)				0,14	0,14	0,14
Pivot values for RP3 (mins of ATFM delay per flight)*				0,086	0,086	0,086
Financial advantages / disadvantages	Dead band range			[0,046-0,126]	[0,046-0,126]	[0,046-0,126]
	Bonus sliding range			[0,036-0,046]	[0,036-0,046]	[0,036-0,046]
	Penalty sliding range			[0,126-0,136]	[0,126-0,136]	[0,126-0,136]

** When modulation applies, these figures are only indicative as they will be updated annually on the basis of the November n-1 NOP and the methodology described in 5.2.1.2.a2 below. The pivot values for year n have to be notified to the EC by 1 January n.*



5.2.1.2 Rationale and justification - Enroute

Indicate which of the principles below will be applied for the modulation of the pivot values for the whole RP3:	
a) In order to enable significant and unforeseen changes in traffic to be taken into account:	
a.1) The pivot value for year n IS the reference value from the November release of year n-1 of the NOP.	No
a.2) The pivot value for year n is informed by the November release of the year n-1 of the NOP and calculated according to the following principles and formulas:**	No
b) The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. If yes, provide below a justification for this decision and an explanation of how the pivot values are calculated.	Yes

The incentive scheme for the en route ATFM delay per flight KPI has been established in accordance with the requirements of Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the single European sky as well as Implementing Regulation (EU) 2020/1627 of 3 November 2020 on exeptional measures for the third reference period (2020-2024) of the single European sky performance and charging scheme due to the COVID-19 pandemic.
The incentive scheme is based on the en route ATFM delay causes related to the codes C, R, S, T, M and P of the ATFCM user manual. It had already been decided in a FABEC context to focus on these delay causes in RP2 because ANSPs are supposed to be responsible for them and can influence them; though the reason for respective ATFM-delay might be considered irrelevant by the airspace users, Belgium is convinced that rewarding or penalising ANSPs for performance that is outside their influence does not incentivise good ANSP performance and might - in case of e.g. good weather - lead to windfall bonuses for ANSPs.
In order to assure the correct application of the ATFM-coding, Belgium, in collaboration with the other FABEC states continue to apply a post-operation procedure, checking the correct application yearly on a sample basis.
Considering the ratio of en route ATFM delay CRSTMP causes, the average CRSTMP-share of RP2 has been used.

*** Refer to Annex I, if necessary.*

5.2.2 - Capacity incentive scheme - Terminal

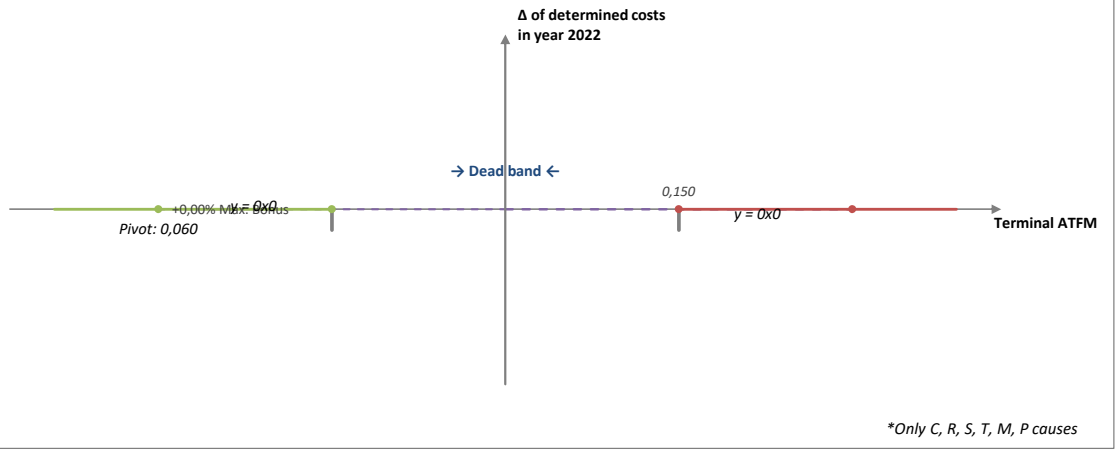
5.2.2.1 Parameters for the calculation of financial advantages or disadvantages - Terminal

Terminal	Expressed in	Value
Dead band Δ	%	±25%
Bonus/penalty range (% of pivot value)	%	±50%
Max bonus	% of DC	0,125%
Max penalty	% of DC	0,50%
The pivot values for RP3 are	modulated	

		2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)				1,08	1,08	1,08
Bonus/penalty range Δ (in fraction of min)				±0,060	±0,060	±0,060
Pivot values for RP3 (mins of ATFM delay per flight)*				0,12	0,12	0,12
Financial advantages / disadvantages	Dead band range			[0.09-0.15]	[0.09-0.15]	[0.09-0.15]
	Bonus sliding range			[0.06-0.09]	[0.06-0.09]	[0.06-0.09]
	Penalty sliding range			[0.15-0.18]	[0.15-0.18]	[0.15-0.18]

** When modulation applies, these figures are only indicative as they will be updated annually on the basis of the methodology described in 5.2.1.2.a below. The pivot values for year n have to be notified to the EC by 1 January n.*

Application of the terminal incentive scheme



**Only C, R, S, T, M, P causes*

5.2.2.2 Rationale and justification - Terminal

Explain how the bonus and penalties are going to be apportioned between the different terminal charging zones and ANSPs providing services in each of them**
There is only one Terminal charging zone included in the Performance Plan for Belgium, namely EBBR. Skeyes is the sole service provider.

*** Refer to Annex I, if necessary.*

Indicate which of the principles below will be applied for the modulation of the pivot values for the whole RP3:	
a) The pivot value for year n is modulated in order to enable significant and unforeseen changes in traffic to be taken into account and is based on the principles explained below:**	No
b) The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. If yes, provide below a justification for this decision and an explanation of how the pivot values are calculated.	Yes
ANSPs can only be held accountable for delay attributed for CRSTMP-causes. Therefore, the incentive scheme should be only applicable to these causes. The CRSTMP ratio has been calculated based on the average ratio CRSTMP/all causes of the last 5 years (2014-2018). This gave a CRSTMP ratio of 11,11%.	

*** Refer to Annex I, if necessary.*

5.3 - Optional incentives

Total maximum bonus for all optional incentives (≤2%):	0,0%	Total maximum penalty for optional incentives (≤4%):	0,0%

Number of optional incentives	Click to select

SECTION 6: IMPLEMENTATION OF THE PERFORMANCE PLAN

6 - IMPLEMENTATION OF THE PERFORMANCE PLAN

6.1 Monitoring of the implementation plan

Description of the processes put in place by the NSA to monitor the implementation of the Performance Plan including the yearly monitoring of all KPIs and PIs defined in Annex I of the Regulation and a description of the data sources
Monitoring processes exist at FABEC and national level, and vary between different KPAs. Capacity and environment performance is reported by the FABEC ANSPs' Performance Management Group (PMG) on a monthly basis. Reports are presented to the States' Financial and Performance Committee (FPC) which meets approximately 6 times per year. Additionally, quarterly or six-monthly meetings are held at national level with the two ANSPs. A monthly performance dashboard is in place at MUAC. Monitoring of the safety KPI is limited to the annual monitoring process described below. Monitoring of PIs is done at national level. Monitoring of cost efficiency and investments is performed at national level. For the annual monitoring process, Belgium will continue to cooperate and coordinate in the FABEC context. FABEC has continued to use the process applied during RP2. The process is performed under the responsibility of the FPC: - the FABEC ANSPs' Performance Management Group (PMG) on gathering operational performance information (capacity, environment) - the FABEC States' Safety Performance and Risk Coordination (SPRC) Task Force and the ANSPs' focal points for EoSM for gathering and verifying safety performance data; If necessary, the ANSPs' Standing Committee on Safety will be consulted - national NSAs for information on costs and investments In all areas, identification of the main drivers for performance and in particular for deviations from planned performance will be part of the monitoring process.

6.2 Non-compliance with targets during the reference period

Description of the processes put in place and measures to be applied by the NSA to address the situation where targets are not reached during the reference period
In Belgium, the regular budget planning and annual reporting processes are used to monitor and verify the compliance with cost efficiency targets. Equally, the annual monitoring report on investments and cost-efficiency is used for this process.
Union-wide safety targets for the end of RP3 i.e. 2024 given by Commission implementing decision (EU) 2021/891 of 2 June 2021 are always born in mind by NSAs through the yearly monitoring process. The ANSPs individual targets for 2021-2023 are checked every year within the NSA assessment of the ANSPs self-assessment. Subject matter experts gather data during January each year and will counteract instantly in case an intermediate target is not reached and thus a non-compliance identified. For that purpose close cooperation between NSAs (SPRC TF / NSAC) and ANSPs (SC-SAF) at FABEC level has been established. For capacity and environment performance, in addition to the national process, FABEC has developed the 'OPS performance process' which requires ANSPs to propose measures to improve performance if performance is not in line with targets. Remedial measures are initially proposed to the FPC, which will assess the proposals and provide advice to the FABEC Council to either accept the proposed remedial measures or request further improvements.

7 - ANNEXES

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)
    ANNEX A.x - En route Charging Zone #x
ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)
    ANNEX B.x - Terminal Charging Zone #x
ANNEX C. CONSULTATION
ANNEX D. LOCAL TRAFFIC FORECASTS
ANNEX E. INVESTMENTS
ANNEX F. BASELINE VALUES (COST-EFFICIENCY)
ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING
ANNEX H. RESTRUCTURING MEASURES AND COSTS
ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES
ANNEX J. OPTIONAL KPIs AND TARGETS
ANNEX K. OPTIONAL INCENTIVE SCHEMES
ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME
ANNEX M. COST ALLOCATION
ANNEX N. CROSS-BORDER INITIATIVES
ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS
ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS
ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS
ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS
ANNEX S. INTERDEPENDENCIES
ANNEX T. OTHER MATERIAL
ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE
ANNEX Z. CORRECTIVE MEASURES*
** Only as per Article 15(6) of the Regulation*