PRB | Performance review body of the single european sky

Performance Review Body Monitoring Report

SES RP3 - 2023

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Performance Review Body of the Single European Sky | Rue de la Fusée 96, Office 50.659, 1130 Brussels
Office Telephone: +32 (0)2 234 7824 | cathy.mannion@prb.eusinglesky.eu | prb-office@prb.eusinglesky.eu | eu-single-sky.transport.ec.europa.eu

TABLE OF CONTENTS

1 OVERVIEW

1.1 Contextual information

No of ACCs 49

No of airports in the scope of the performance plan:

- **≥80'K** 42
- **<80'K** 103

Share en route / terminal costs 2023 83% / 17%

En route charging zone(s) 29

Terminal charging zone(s) 26

No of main ANSPs 29

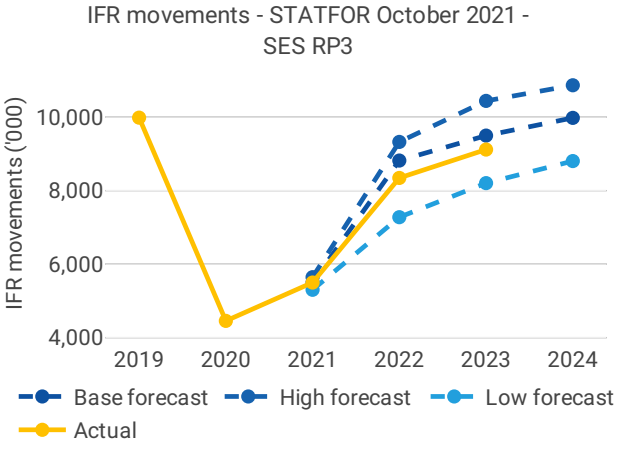
No of other ANSPs 14

No of MET Providers 26

1.2 Main PRB findings - 2023

Air traffic management in Europe in 2023 saw traffic growth continue to recover following the COVID-19 downturn (+9% compared to 2022, remaining 9% below traffic movements in 2019) and continued to be impacted by Russia's ongoing war of aggression against Ukraine. Overall, safety management performance has remained strong. While a number of Member States have experienced some degradation, RP3 targets can still be met by the end of 2024 if attention is focused on ensuring that the necessary measures are implemented. In a now all too familiar pattern, Union-wide capacity performance continues to deteriorate. A number of Member States have not implemented sufficient capacity measures to meet air traffic demand, despite traffic remaining 4% below the traffic forecast for 2023 (STATFOR October 2021 forecast). For some Member States, this lack of much needed capacity has occurred despite requesting, and being granted, deviations from the cost efficiency targets in order to invest in additional measures to achieve capacity targets. Most of these Members States have incurred lower actual costs compared to planned and only a minority achieved their 2023 en route capacity targets. This means that airspace users are incurring the costs of both increased delays and higher unit rates for the capacity that has not been provided. This poor Union-wide capacity performance has a direct knock-on effect on the lack of achievement of the Union-wide environment target. Airspace users have had to fly longer routes and burn more fuel (at additional cost) to mitigate the effect of congested airspace.

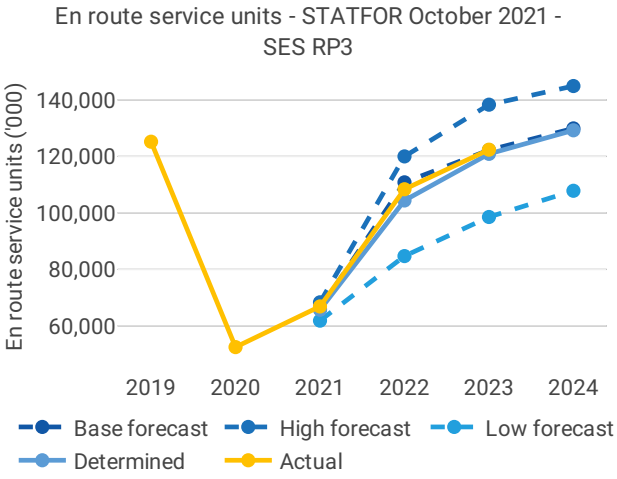
1.3 Traffic (SES RP3 area)



• 9,117K IFR movements were recorded in 2023 at SES level, +9% compared to 2022 (8,345K).

• Actual 2022 IFR movements represent 91% of the actual 2019 level (9,985K).

• Some ANSPs experienced unexpected and significant higher growth in traffic compared to the EU average (due to the impact of geopolitical events such as the Russia's war of aggression against Ukraine). At the same time, other ANSPs have yet to achieve the same levels of traffic as experienced in 2019.



• 122,491K service units were recorded in 2023 at SES level, +13% compared to 2022 (108,508K).

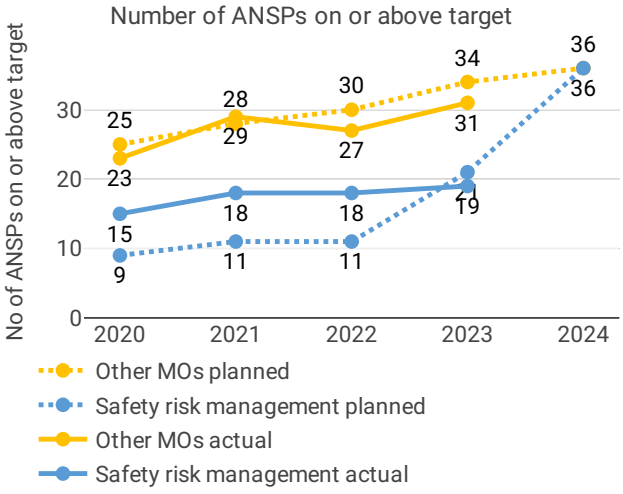
• Actual 2023 service units were +1.2% above the plan (120,905K).

• Actual 2023 service units represent 98% of the actual 2019 level (125,158K).

• At Union-wide level, service units continue to increase more quickly than movements. This leads to revenue for many ANSPs growing faster than the workload generated by additional movements. However, this is not uniform across all Member States, with a number of Member States experiencing the opposite.

• Some ANSPs experienced unexpected and significant higher growth in traffic compared to the EU average (due to the impact of geopolitical events such as the Russia's war of aggression against Ukraine). At the same time, other ANSPs have yet to achieve the same levels of traffic as experienced in 2019.

1.4 Safety (SES RP3 area)

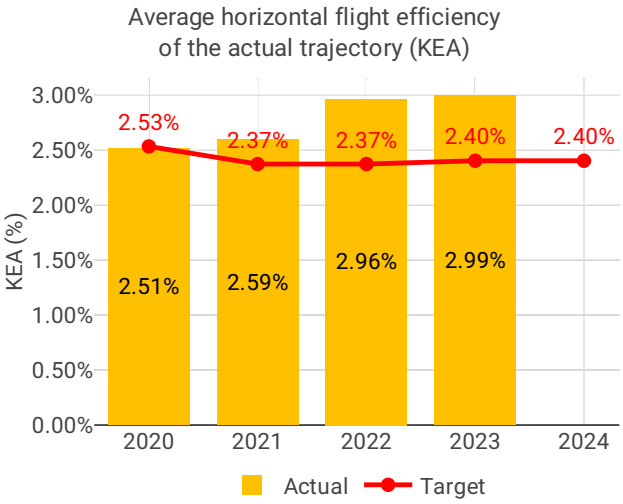


• 18 ANSPs achieved the RP3 targets for the effectiveness of safety management for all Management Objectives (one year before the end of RP3). The remaining 18 ANSPs can still meet the targets by the end of RP3, but will need to ensure measures are implemented. The risk that ANSPs will not meet the target has increased.

• Safety levels, measured through the safety PIs on occurrences, continue to improve with Union-wide rates of runway incursions and separation minima infringements decreasing again in 2023.

• The rate of accidents and serious incidents with ANS contribution continued to decrease, remaining in line with the trend over the past ten years.

1.5 Environment (SES RP3 area)

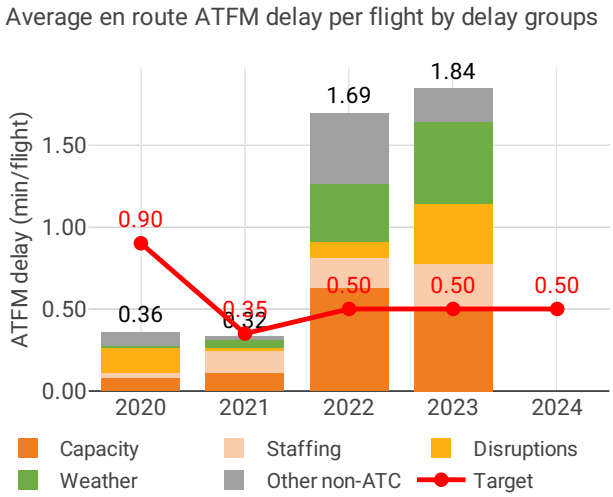


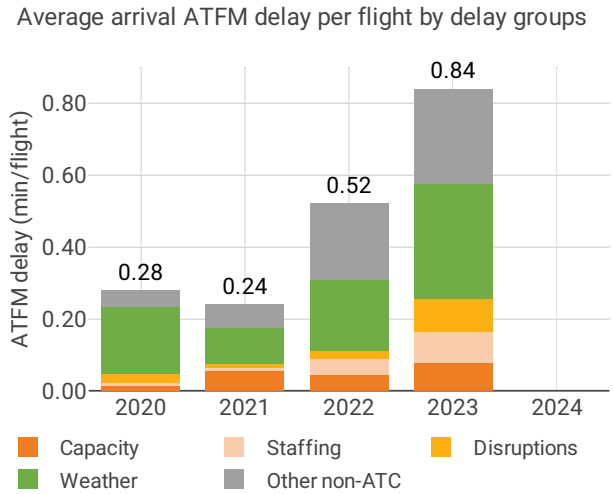
• The Union-wide horizontal flight efficiency (KEA) performance target was not achieved in 2023 (2.99% compared to the target of 2.40%) and performance was at the worst level since 2016. 25 Member States did not achieve their national targets.

• 2023 marked the first full year of the effects of Russia's war of aggression against Ukraine on environmental performance, which is reflected in the KEA score being 2.99% in 2023 compared to 2.96% in 2022.

• For terminal airspace, both additional ASMA (arrival sequencing and metering area) time and additional taxi-out time increased. Combined, this shows a +5% increase compared to 2022, mainly driven by taxi-out performance. However, it is worth noting that performance remains better than 2019 levels.

1.6 Capacity (SES RP3 area)





• The actual Union-wide average en route ATFM delay was 1.84 minutes per flight in 2023, 1.34 minutes per flight higher than the Union-wide target, and higher than in 2019, despite fewer IFR movements during the year. Note that traffic distribution was uneven across the network, impacting on ANSPs in different ways. For some ANSPs, this exacerbated existing capacity problems.

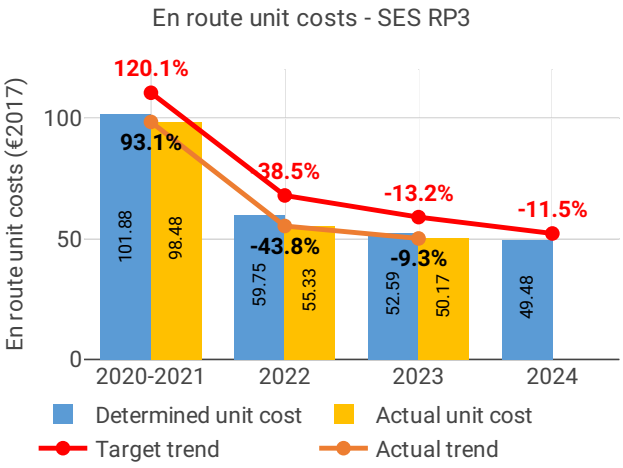
• 13 Member States did not achieve their local targets, indicating that some ANSPs still have unresolved capacity issues. Adverse weather also contributed significantly to en route ATFM delays in 2023.

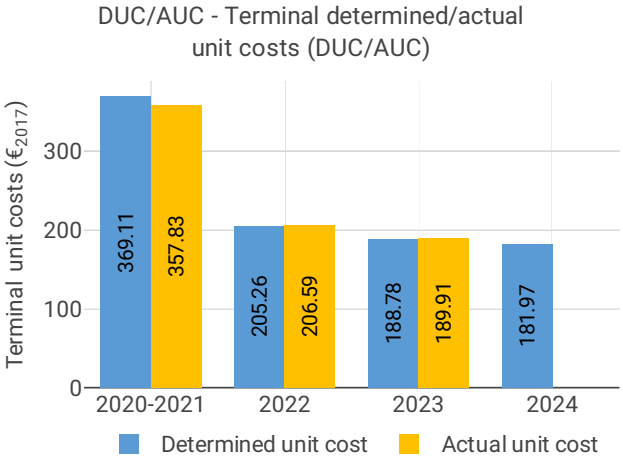
• Six out of the 13 Member States which did not achieve capacity targets experienced double-digit traffic growth compared to 2022. Conversely, four Member States did not achieve their capacity targets even though traffic demand remained at or significantly below the forecasted level on average.

• Terminal capacity performance deteriorated compared to 2022 by 60% mostly due to disruptions, adverse weather, and non-ATC problems at airports. All-cause departure delays were 19.23 minutes per flight, 0.2 minutes per flight higher than in 2022.

• ANSPs and Member States must focus on delivering continuous capacity improvements in 2024 and during RP4 to catch up with traffic recovery and accommodate future traffic growth.

1.7 Cost-efficiency (SES RP3 area)





• In 2023, the real en route actual unit cost (AUC) Union-wide was -4.6% lower than the determined unit cost (DUC). En route actual costs were -3.4% below determined costs, while actual service units were +1.2% higher than the determined service units.

• The decrease in actual costs compared to plan was mainly attributable to staff costs and depreciation. Many ANSPs have not implemented their ATCO and investment plans and have not achieved their capacity targets.

• The en route actual unit cost for airspace users (AUCU) was +7.9% higher than the DUC (nominal), mainly due to the application of the 2023 inflation adjustment (where the weighted average actual index was +11% higher than the determined figure).

2 SAFETY - SES RP3

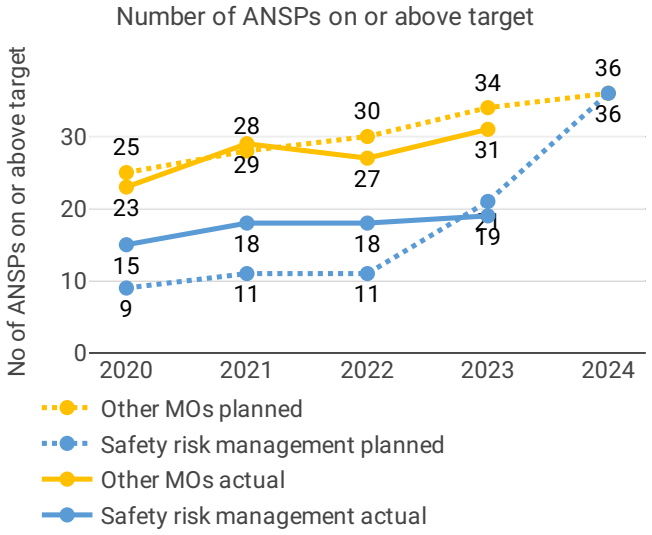
2.1 PRB monitoring

• 18 ANSPs achieved the RP3 targets for the effectiveness of safety management for all Management Objectives (one year before the end of RP3). The remaining 18 ANSPs can still meet the targets by the end of RP3, but will need to ensure measures are implemented. The risk that ANSPs will not meet the target has increased.

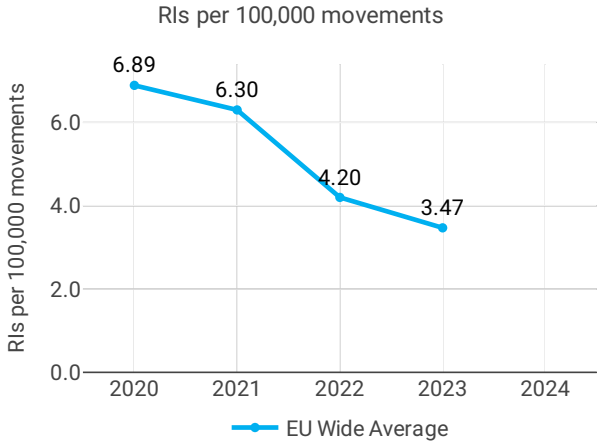
• Safety levels, measured through the safety PIs on occurrences, continue to improve with Union-wide rates of runway incursions and separation minima infringements decreasing again in 2023.

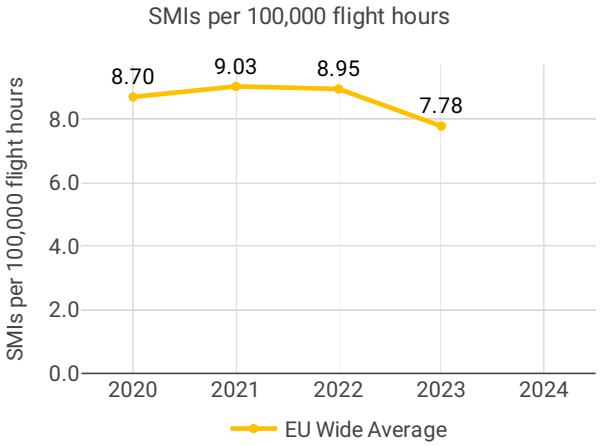
• The rate of accidents and serious incidents with ANS contribution continued to decrease, remaining in line with the trend over the past ten years.

2.2 Actual versus planned number of ANSPs achieving the level of the EoSM targets for RP3 ahead of 2024



2.3 Occurrences - Rate of runway incursions (RIs) (PI#1) & Rate of separation minima infringements (SMIs) (PI#2)





3 ENVIRONMENT - SES RP3

3.1 PRB monitoring

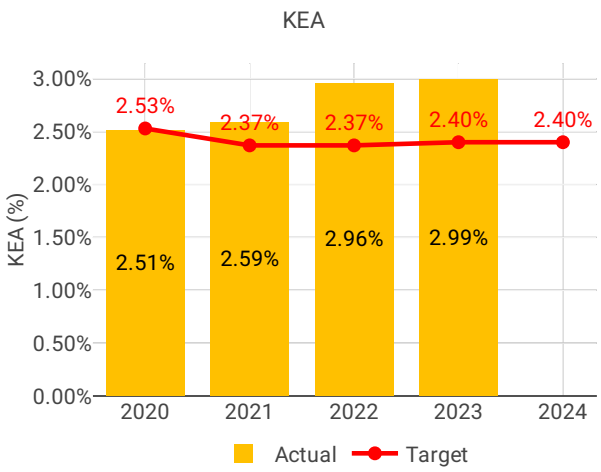
• The Union-wide horizontal flight efficiency (KEA) performance target was not achieved in 2023 (2.99% compared to the target of 2.40%) and performance was at the worst level since 2016. 25 Member States did not achieve their national targets.

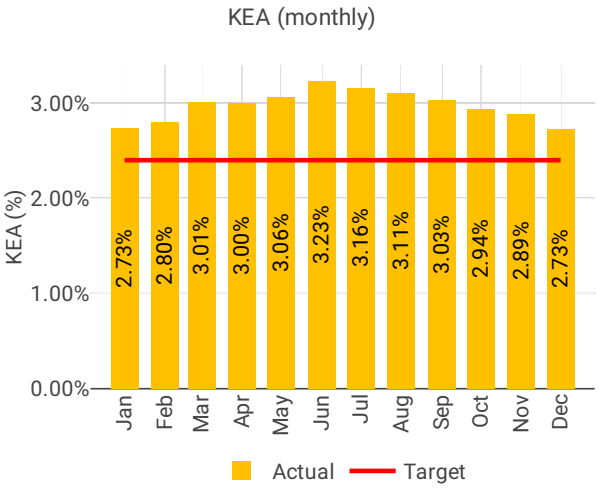
• 2023 marked the first full year of the effects of Russia's war of aggression against Ukraine on environmental performance, which is reflected in the KEA score being 2.99% in 2023 compared to 2.96% in 2022.

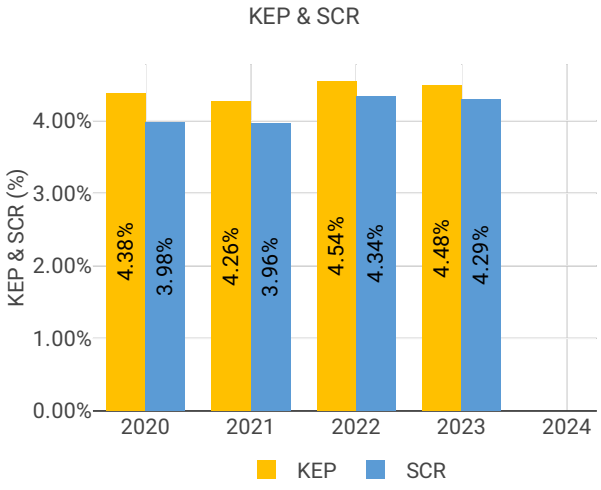
• For terminal airspace, both additional ASMA (arrival sequencing and metering area) time and additional taxi-out time increased. Combined, this shows a +5% increase compared to 2022, mainly driven by taxi-out performance. However, it is worth noting that performance remains better than 2019 levels.

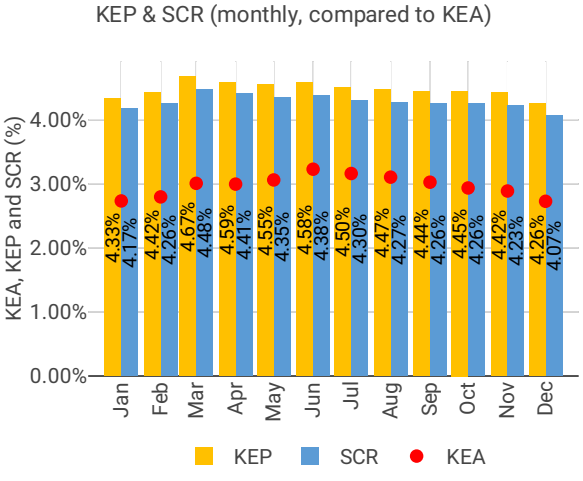
3.2 En route performance

3.2.1 Horizontal flight efficiency of the actual trajectory (KEA) (KPI#1), of the last filed flight plan (KEP) (PI#1) & shortest constrained route (SCR) (PI#2)









3.2.2 Summary of performance at local level

KEA (%)		
State	Target	Actual
Austria	1.96	2.16 ✗
Belgium	3.00	3.60 ✗
Bulgaria	2.25	3.43 ✗
Croatia	1.46	1.57 ✗
Cyprus	3.84	4.75 ✗
Czech Republic	2.05	2.64 ✗
Denmark	1.14	1.47 ✗
Estonia	1.22	6.57 ✗
Finland	0.88	3.44 ✗
France	2.83	3.34 ✗
Germany	2.30	2.72 ✗
Greece	1.92	2.28 ✗
Hungary	1.49	2.16 ✗
Ireland	1.13	1.44 ✗
Italy	2.67	3.11 ✗
Latvia	1.25	7.99 ✗
Lithuania	1.92	13.16 ✗
Malta	1.80	1.59 ✓
Netherlands	2.62	4.59 ✗
Norway	1.55	1.58 ✗
Poland	1.65	1.51 ✓
Portugal	1.80	3.64 ✗
Romania	2.05	1.84 ✓
Slovakia	2.13	1.79 ✓
Slovenia	1.55	3.27 ✗
Spain	3.08	2.26 ✓
Sweden	1.05	4.48 ✗
Switzerland	3.95	1.32 ✓

4 CAPACITY - SES RP3

4.1 PRB monitoring

• The actual Union-wide average en route ATFM delay was 1.84 minutes per flight in 2023, 1.34 minutes per flight higher than the Union-wide target, and higher than in 2019, despite fewer IFR movements during the year. Note that traffic distribution was uneven across the network, impacting on ANSPs in different ways. For some ANSPs, this exacerbated existing capacity problems.

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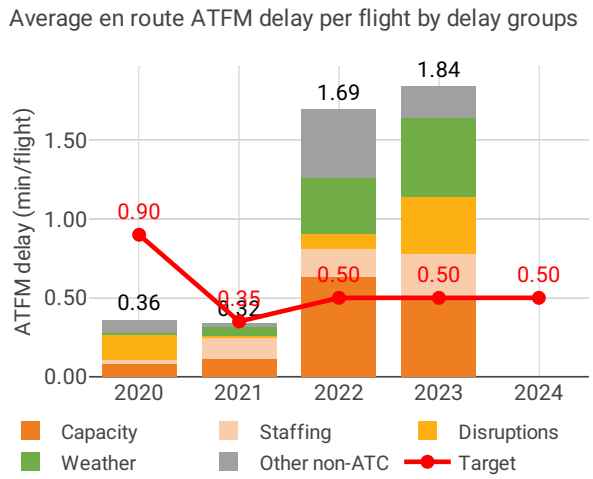
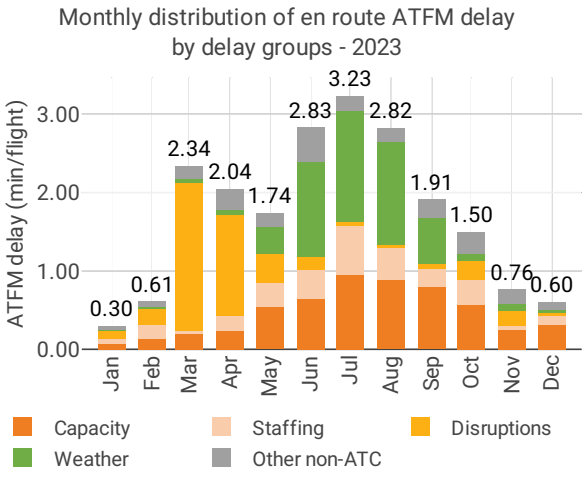
• Terminal capacity performance deteriorated compared to 2022 by 60% mostly due to disruptions, adverse weather, and non-ATC problems at airports. All-cause departure delays were 19.23 minutes per flight, 0.2 minutes per flight higher than in 2022.

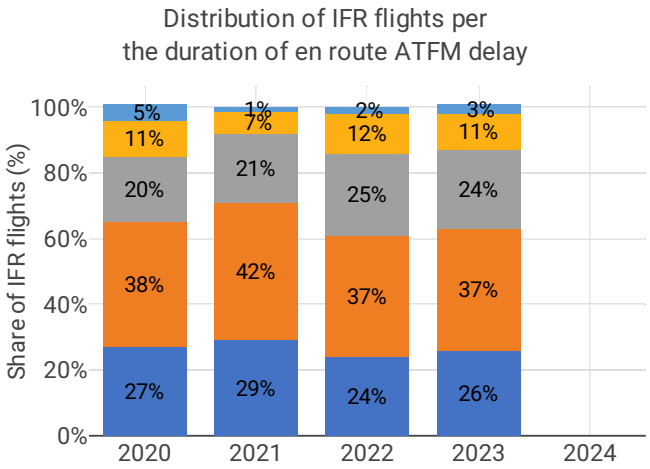
• ANSPs and Member States must focus on delivering continuous capacity improvements in 2024 and during RP4 to catch up with traffic recovery and accommodate future traffic growth.

4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)





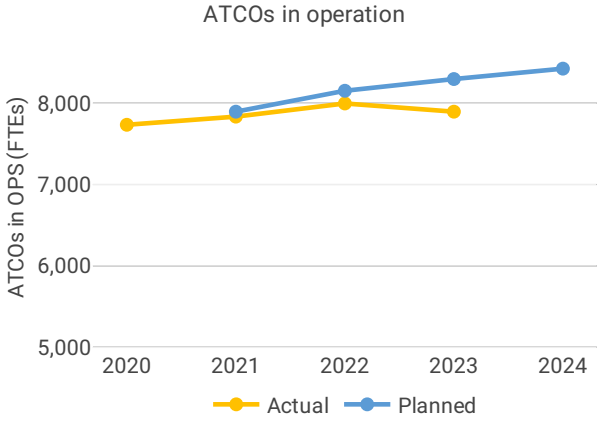


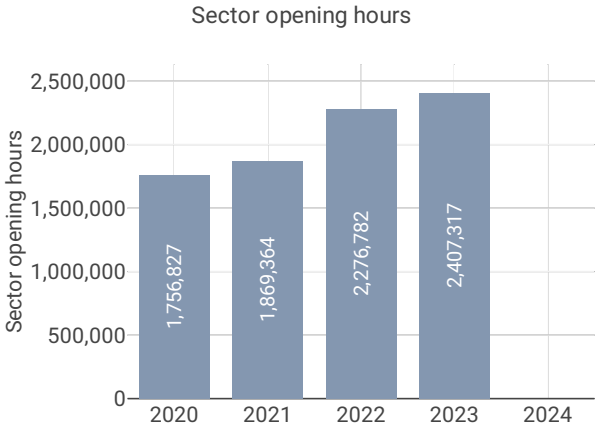
4.2.2 Summary of performance at local level

En route delay (min/flight)

State	Target	Actual
Austria	0.17	0.12 ✓
Belgium	0.17	0.18 ✗
Bulgaria	0.07	0.06 ✓
Croatia	0.17	0.43 ✗
Cyprus	0.15	0.04 ✓
Czech Republic	0.11	0.09 ✓
Denmark	0.06	0.10 ✗
Estonia	0.03	0.00 ✓
Finland	0.05	0.00 ✓
France	0.25	2.13 ✗
Germany	0.27	1.93 ✗
Greece	0.15	0.83 ✗
Hungary	0.11	0.81 ✗
Ireland	0.03	0.02 ✓
Italy	0.11	0.14 ✗
Latvia	0.03	0.00 ✓
Lithuania	0.02	0.00 ✓
Malta	0.01	0.00 ✓
Netherlands	0.14	0.06 ✓
Norway	0.11	0.03 ✓
Poland	0.12	0.20 ✗
Portugal	0.13	0.48 ✗
Romania	0.04	0.16 ✗
Slovakia	0.08	0.03 ✓
Slovenia	0.09	0.03 ✓
Spain	0.19	0.47 ✗
Sweden	0.08	0.01 ✓
Switzerland	0.19	0.13 ✓

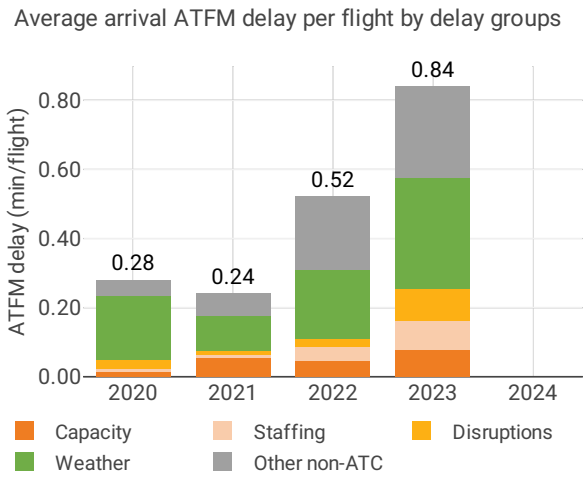
4.2.3 Other indicators

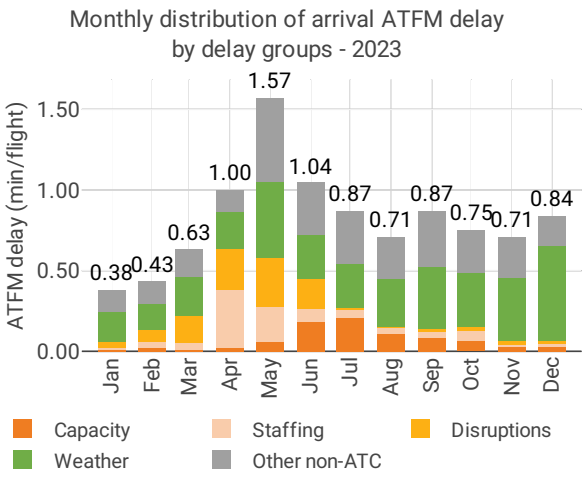




4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)



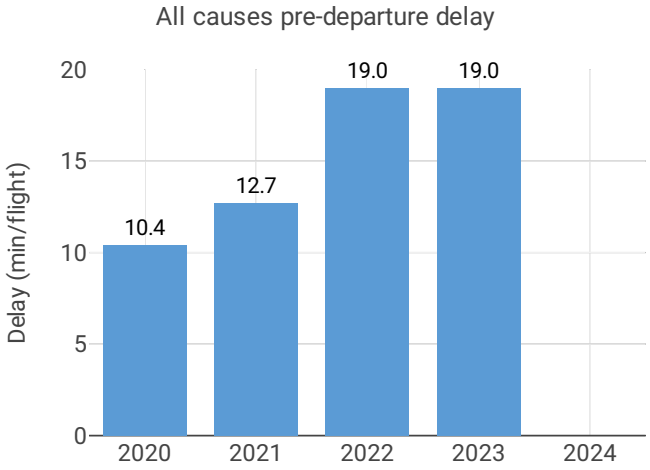


4.3.2 Summary of performance at local level

Arrival delay (min/flight)

State	Target	Actual
Austria	0.84	0.30 ✓
Belgium	1.08	0.43 ✓
Bulgaria	NA	
Croatia	NA	
Cyprus	NA	
Czech Republic	0.40	0.07 ✓
Denmark	0.10	3.09 ✗
Estonia	0.00	0.00 ✓
Finland	0.32	0.14 ✓
France	0.40	0.70 ✗
Germany	0.45	0.54 ✗
Greece	0.40	3.24 ✗
Hungary	0.05	0.02 ✓
Ireland	0.20	0.30 ✗
Italy	0.33	0.15 ✓
Latvia	0.02	0.00 ✓
Lithuania	NA	
Luxembourg	0.05	1.36 ✗
Malta	0.01	0.00 ✓
Netherlands	1.60	2.42 ✗
Norway	0.50	0.16 ✓
Poland	0.24	0.19 ✓
Portugal	2.28	2.59 ✗
Romania	0.39	0.00 ✓
Slovakia	NA	
Slovenia	NA	
Spain	0.57	0.70 ✗
Sweden	0.15	0.30 ✗
Switzerland	1.28	1.50 ✗

4.3.3 Other terminal performance indicators (PI#1-3)



5 COST-EFFICIENCY - SES RP3

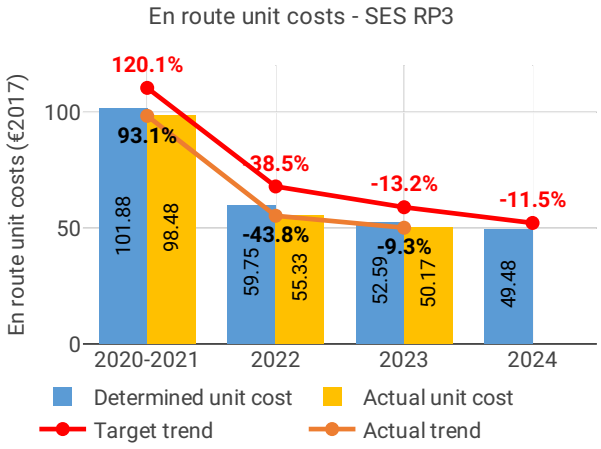
5.1 PRB monitoring

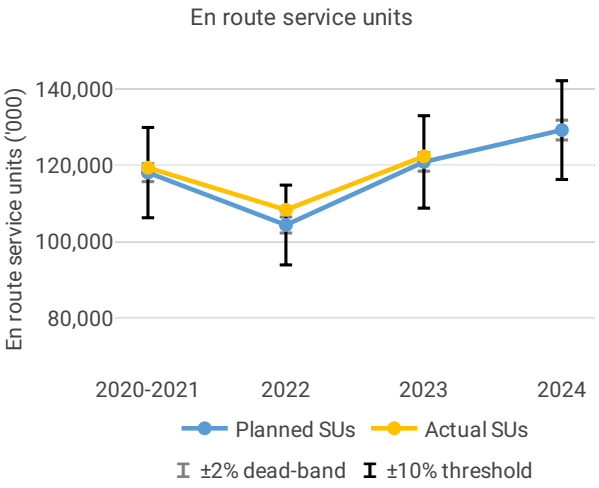
• In 2023, the real en route actual unit cost (AUC) Union-wide was -4.6% lower than the determined unit cost (DUC). En route actual costs were -3.4% below determined costs, while actual service units were +1.2% higher than the determined service units.

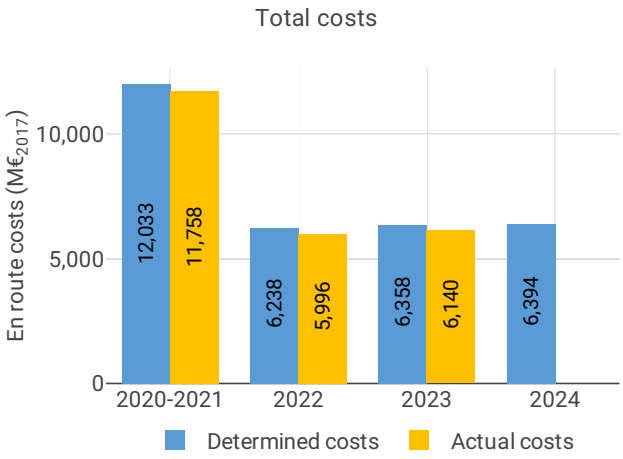
• The decrease in actual costs compared to plan was mainly attributable to staff costs and depreciation. Many ANSPs have not implemented their ATCO and investment plans and have not achieved their capacity targets.

• The en route actual unit cost for airspace users (AUCU) was +7.9% higher than the DUC (nominal), mainly due to the application of the 2023 inflation adjustment (where the weighted average actual index was +11% higher than the determined figure).

5.2 En route charging zone



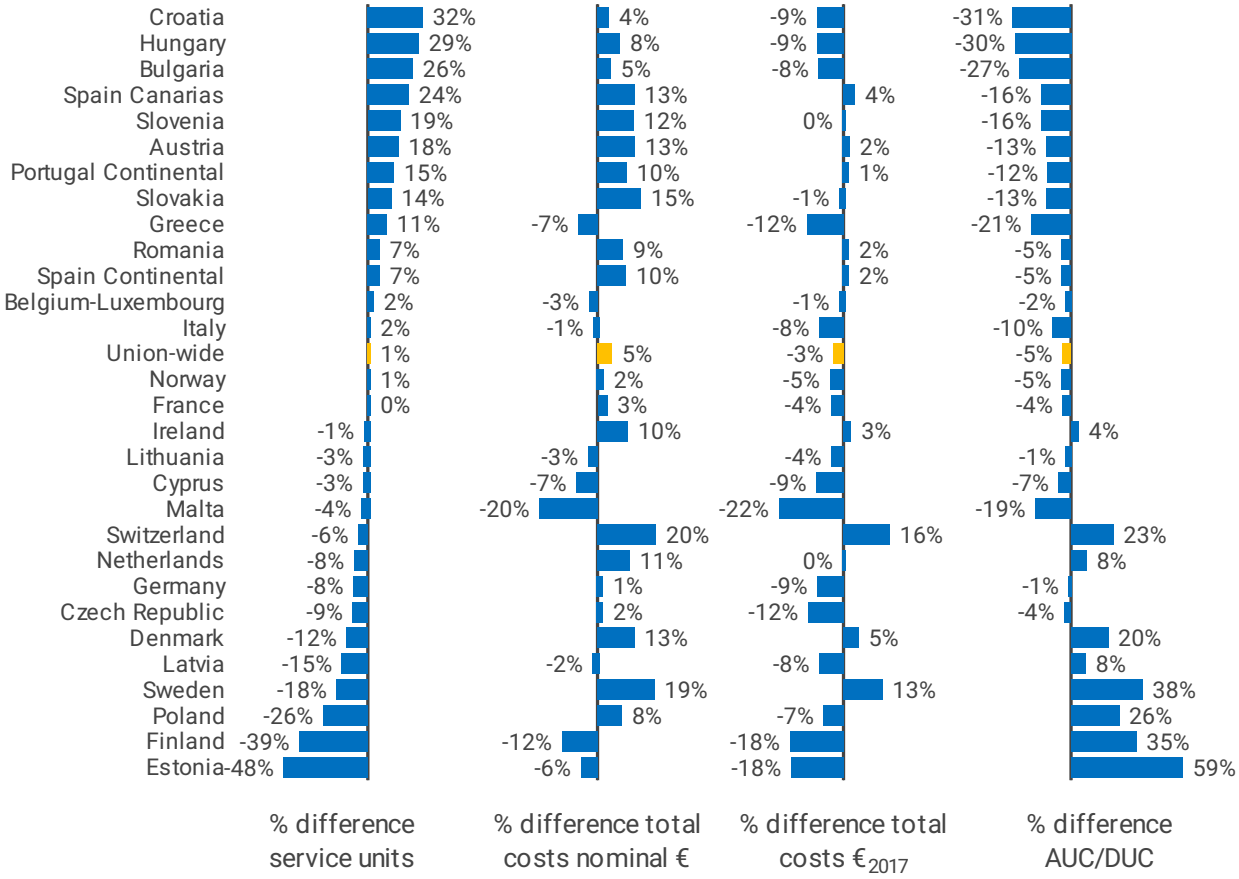




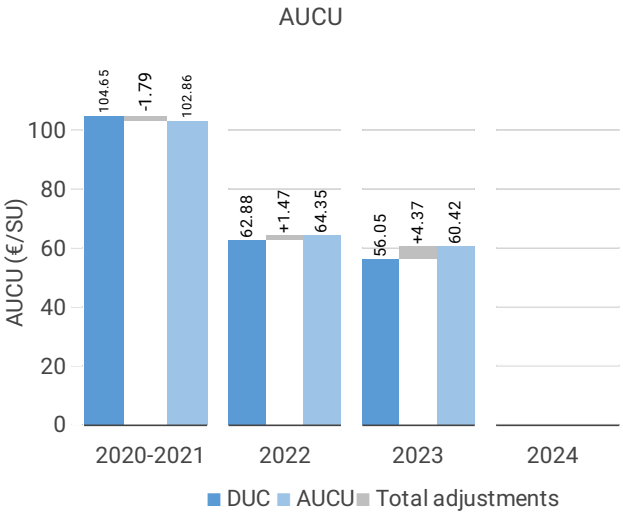
Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	12,238	6,721	7,204	NA
Determined costs	12,476	6,632	6,861	6,988
Difference costs	-238	88	342	NA

5.2.1 Summary of performance at local level

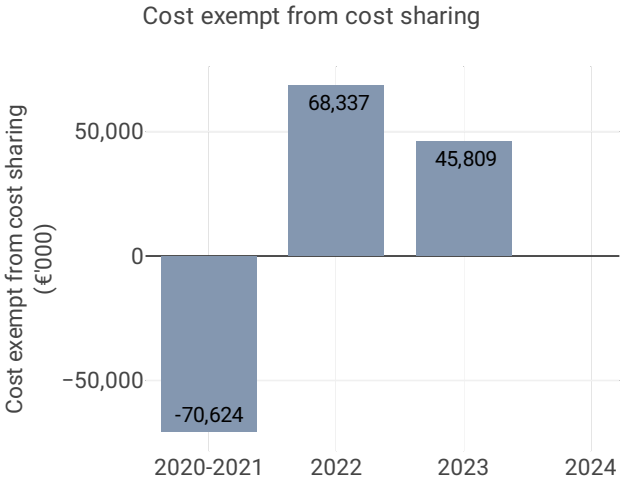


5.2.2 Actual unit cost incurred by the users (AUCU) (PI#1)



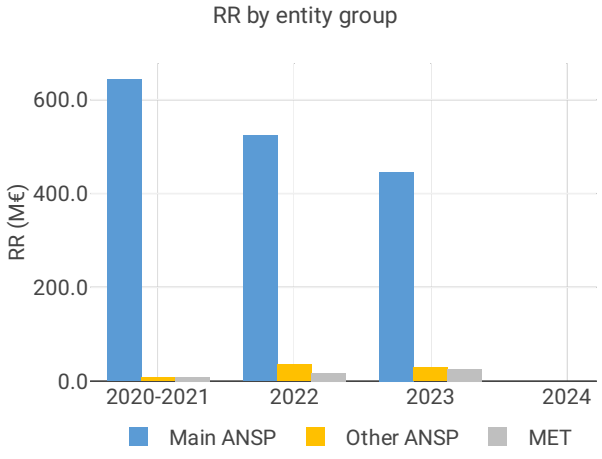
AUCU components (€/SU) – 2023

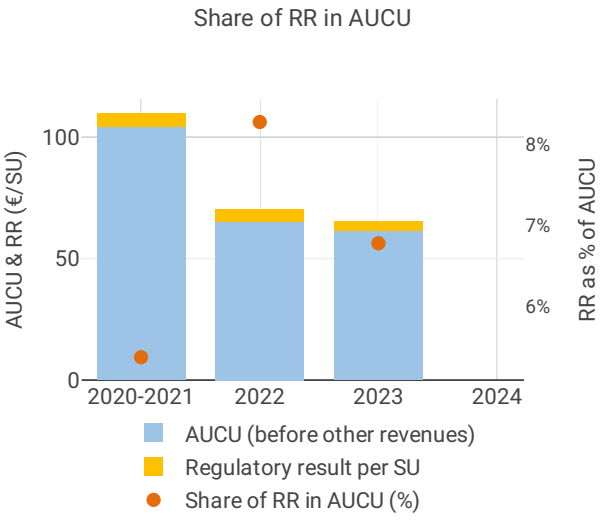
Components of the AUCU in 2023	€/SU
DUC	**56.05**
Inflation adjustment	4.99
Cost exempt from cost-sharing	0.37
Traffic risk sharing adjustment	-0.08
Traffic adj. (costs not TRS)	-0.07
Finantial incentives	-0.02
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-0.82
Application of lower unit rate	0.00
Total adjustments	4.37
AUCU	**60.42**
AUCU vs. DUC	**+8.0%**

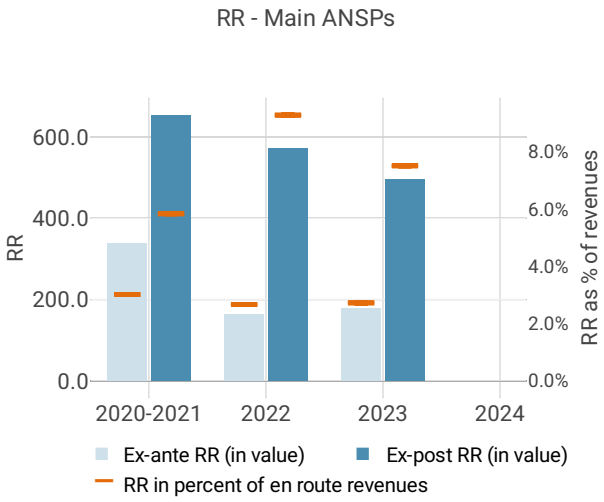


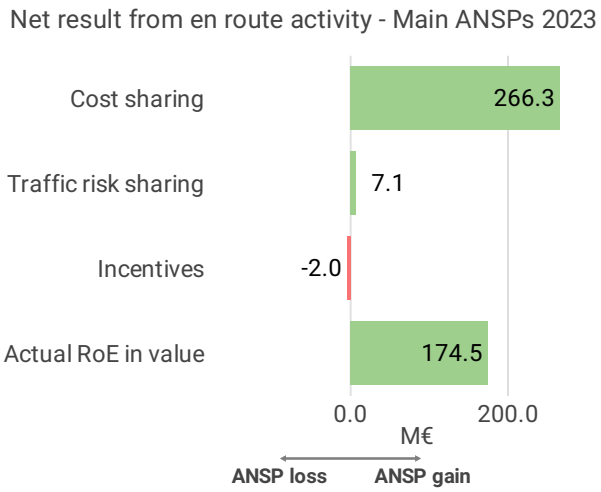
Cost exempt from cost sharing by item - 2023	€'000	€/SU
New and existing investments	-32,867	-0.27
Competent authorities and qualified entities costs	4,938	0.04
Eurocontrol costs	26,798	0.22
Pension costs	40,020	0.33
Interest on loans	5,819	0.05
Changes in law	1,102	0.01
Total cost exempt from cost risk sharing	**45,809**	**0.37**

5.2.3 Regulatory result (RR)






RR - Main ANSPs
600.0
400.0
200.0
0.0
RR
8.0%
6.0%
4.0%
2.0%
0.0%
RR as % of revenues
2020-2021
2022
2023
2024
Ex-ante RR (in value)
Ex-post RR (in value)
RR in percent of en route revenues


Net result from en route activity - Main ANSPs 2023
Cost sharing
266.3
Traffic risk sharing
7.1
Incentives
-2.0
Actual RoE in value
174.5
0.0
200.0
M€
ANSP loss
ANSP gain