



Performance Review Body Monitoring Report

SES RP3 - 2021

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1 OVERVIEW

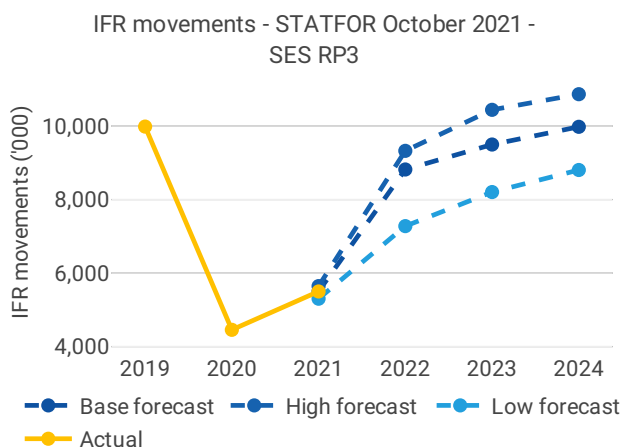
1.1 Contextual information

No of ACCs	49	Share en route / terminal costs 2021	83% / 17%	No of main ANSPs	29
No of airports in the scope of the performance plan:		En route charging zone(s)	29	No of other ANSPs	14
• ≥80'K	42	Terminal charging zone(s)	26	No of MET Providers	26
• <80'K	103				

1.2 Main PRB findings - 2021

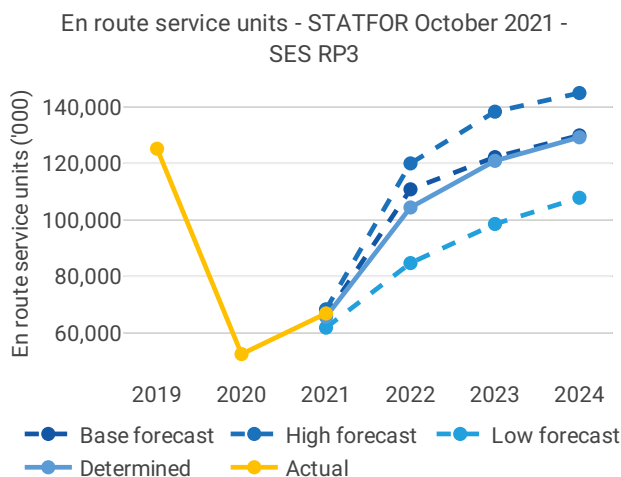
During the second year of the pandemic, ANSPs continued to react in different ways to the uncertainties and changing travel restrictions impacting air traffic. In 2021, ANSPs of the Member States handled about half of the number of flights compared to 2019 with some areas facing steep increases during the summer months. Unfortunately, once again, ANSPs were often not able to meet demand, not only causing delays but also extending horizontal flight routes, taxi times and time spent in terminal areas. Lack of money cannot explain this underperformance: ANSPs (overall) spent less money than foreseen in their performance plans. Those Member States with a substantial underspend should actively monitor ongoing actual versus planned expenditure and, where appropriate, lower their unit rate in 2023 to return unspent money.

1.3 Traffic (SES RP3 area)



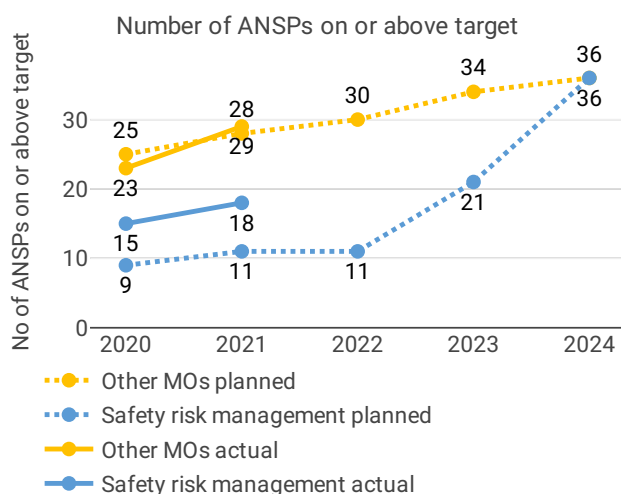
- 5,499K IFR movements were recorded in 2021 at SES level, +23% compared to 2020 (4,456K).

- Actual 2021 IFR movements represent 55% of the actual 2019 level (9,985K).



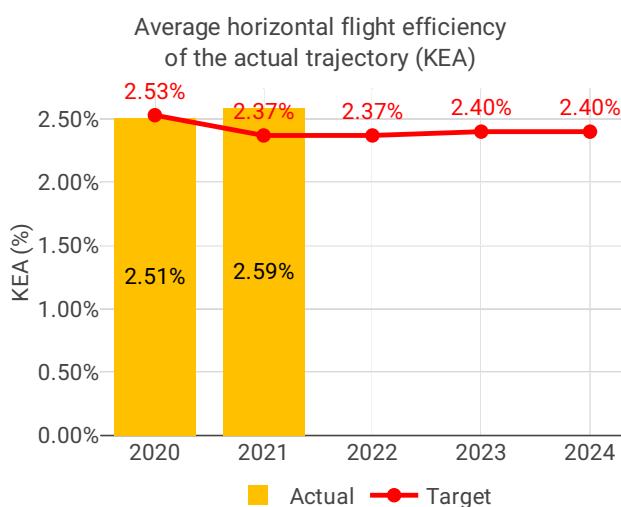
- 66,893K service units were recorded in 2021 at SES level, +27% compared to 2020 (52,500K).
- Actual 2021 service units were +2.1% above the plan (65,613K).
- Actual 2021 service units represent 54% of the actual 2019 level (125,158K).

1.4 Safety (SES RP3 area)



- Safety levels overall remained as before COVID-19.
- 17 ANSPs already achieved the RP3 targets for the effectiveness of safety management for all management objectives (two years before the end of RP3). The remaining 12 ANSPs are expected to meet them by the end of RP3.
- The rate of accidents and incidents remained in line with the trend over the past 10 years, continuously decreasing.

1.5 Environment (SES RP3 area)



- Despite the enduring low traffic levels, Union-wide horizontal flight efficiency (KEA) performance targets were not achieved in 2021. 16 Member States did not achieve their national reference values.
- Horizontal flight efficiency deteriorated with increasing traffic (still far below 2019 levels) and the rerouting of flights around the airspace of Belarus (from May 2021) and eastern Ukraine. The results for 2021 demonstrate that environmental performance depends on sufficient capacity and airspace availability.

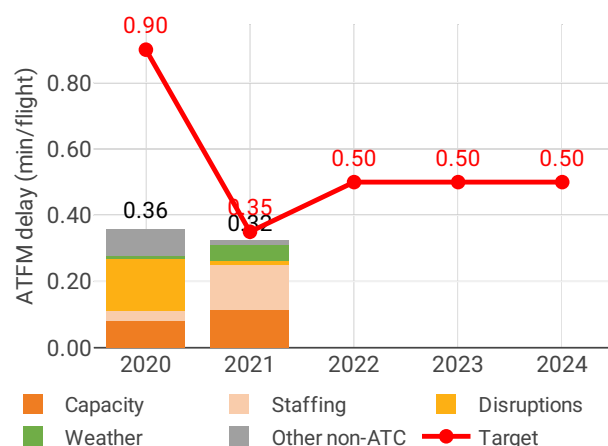
• Most Member States should have been able to meet the targets because of lower traffic, practically no capacity hotspots and fewer restrictions network disruptions (strikes).

- Performance in the terminal area improved. Aircraft spent less additional time per flight in the terminal area (ASMA time), but additional taxi-out time increased compared to 2020. When comparing to 2019, the performance was much better (42% improvement).

- In 2021, continuous descent operations performance slightly worsened (-2.2%) compared to 2020, but remained better than in 2019.
- The challenge for ANSPs and airports will be to achieve the performance targets as traffic grows and congestion returns.

1.6 Capacity (SES RP3 area)

Average en route ATFM delay per flight by delay groups

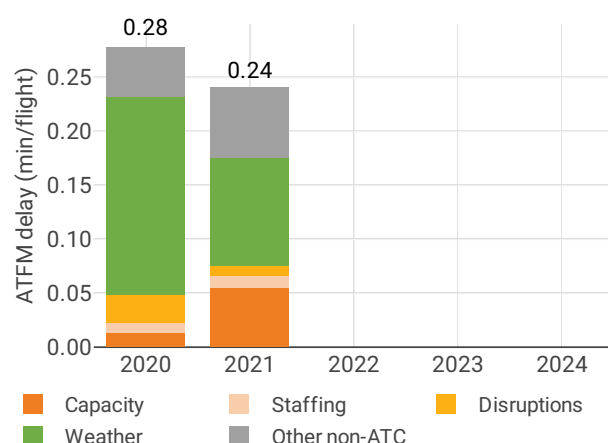


- ANSPs reached the en route capacity targets in 2021 due to lower traffic. Overall, ANSPs provided sufficient capacity to keep delays to the target (0.32 delay minutes per flight).

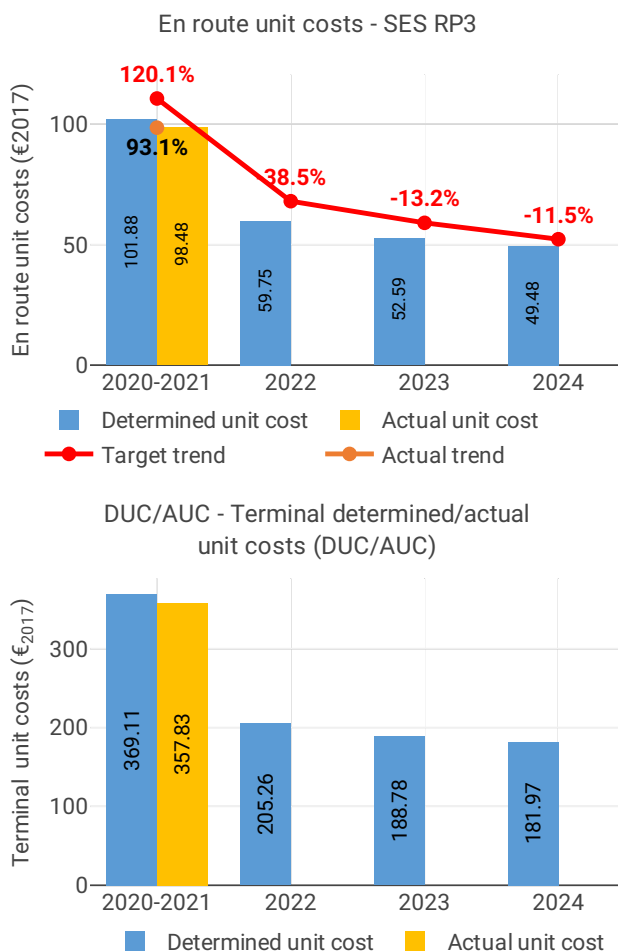
- Terminal capacity performance (arrival ATFM delay per flight) improved compared to 2020, despite increased traffic. However, the all-cause departure delay increased by more than 20% and amounted to over 12 minutes per flight.

- The results of 2021 indicate that many ANSPs will not be able to provide the capacity needed to cope with higher traffic. Operational efficiency of capacity provision deteriorated further in 2021 compared to 2020, a trend which will have to be reversed in the remaining years of RP3.

Average arrival ATFM delay per flight by delay groups



1.7 Cost-efficiency (SES RP3 area)



- In 2020/2021, Member States met the en route cost-efficiency Union-wide target.

- Union-wide en route actual costs in 2020/2021 were -2.3% below determined costs, while service units were +1.1% higher than planned. The discrepancy in costs is concerning, because Member States submitted their performance plans for 2021 in October of that year, and at a time they knew the actuals of more than half of 2021. Member States should have been able to plan their determined cost more accurately.

- The en route actual unit cost for airspace users (AUCU) has been -2.4% lower than the determined unit cost.

- The actual values of 2021 enable the calculation of the revenue gap ANSPs incurred during 2020/2021. The amount equals 5.6B €2017, which will be spread as an increase in the unit rates over five to seven years.

2 SAFETY - SES RP3

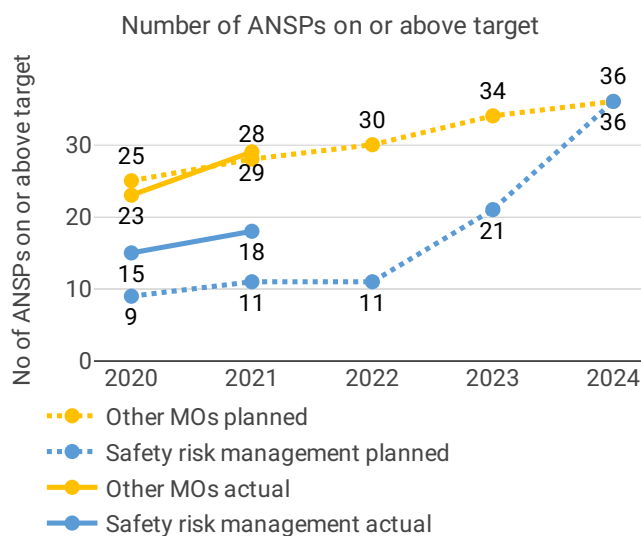
2.1 PRB monitoring

- Safety levels overall remained as before COVID-19.

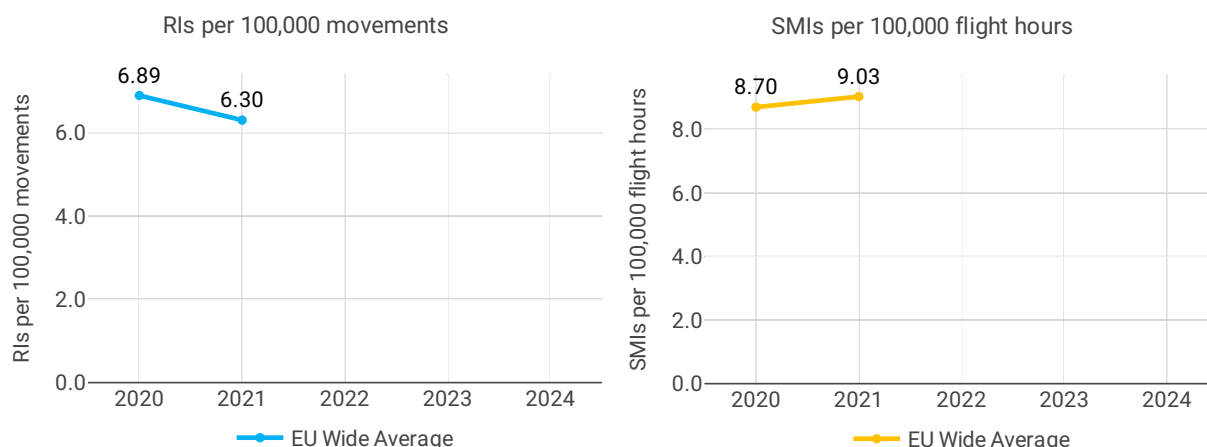
- 17 ANSPs already achieved the RP3 targets for the effectiveness of safety management for all management objectives (two years before the end of RP3). The remaining 12 ANSPs are expected to meet them by the end of RP3.

- The rate of accidents and incidents remained in line with the trend over the past 10 years, continuously decreasing.

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

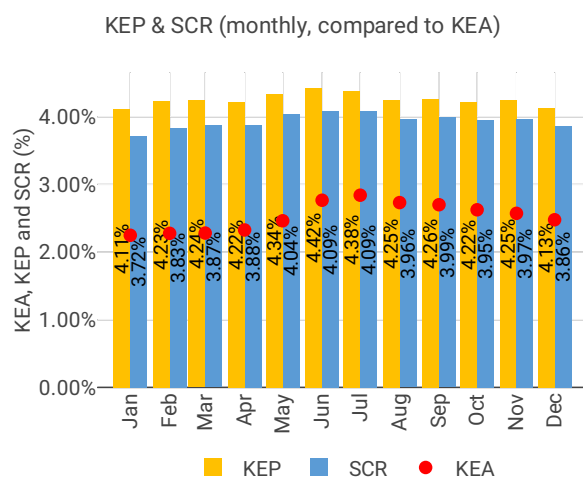
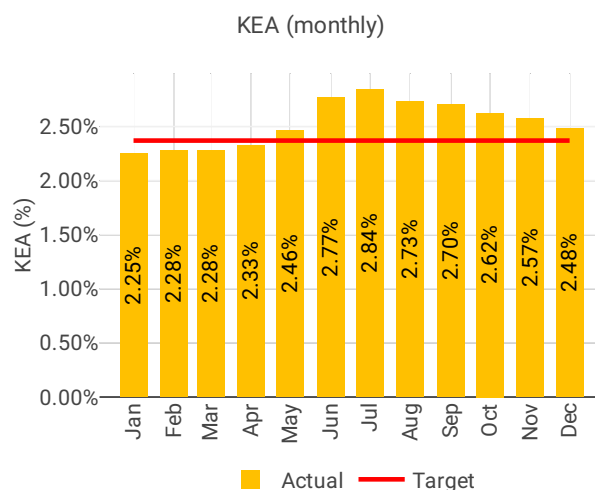
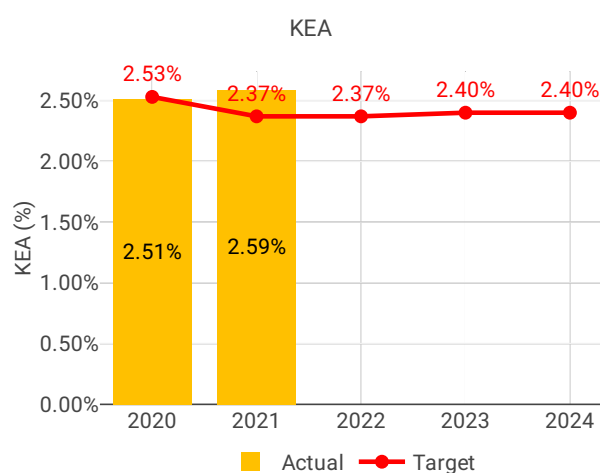
3.1 PRB monitoring

- Despite the enduring low traffic levels, Union-wide horizontal flight efficiency (KEA) performance targets were not achieved in 2021. 16 Member States did not achieve their national reference values.
- Horizontal flight efficiency deteriorated with increasing traffic (still far below 2019 levels) and the rerouting of flights around the airspace of Belarus (from May 2021) and eastern Ukraine. The results for 2021 demonstrate that environmental performance depends on sufficient capacity and airspace availability.
- Most Member States should have been able to meet the targets because of lower traffic, practically no capacity hotspots and fewer restrictions network disruptions (strikes).
- Performance in the terminal area improved. Aircraft spent less additional time per flight in the terminal area (ASMA time), but additional taxi-out time increased compared to 2020. When comparing to 2019, the performance was much better (42% improvement).
- In 2021, continuous descent operations performance slightly worsened (-2.2%) compared to 2020, but remained better than in 2019.

- The challenge for ANSPs and airports will be to achieve the performance targets as traffic grows and congestion returns.

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	1.92 ✓
Belgium	3.10	3.57 ✗
Bulgaria	2.25	2.52 ✗
Croatia	1.46	1.34 ✓
Cyprus	3.84	4.50 ✗
Czech Republic	2.05	2.06 ✗
Denmark	1.14	1.10 ✓
Estonia	1.22	1.46 ✗
Finland	0.88	0.88 ✓
France	2.92	3.25 ✗
Germany	2.31	2.32 ✗
Greece	2.00	2.55 ✗
Hungary	1.50	1.68 ✗
Ireland	1.13	1.02 ✓
Italy	2.67	2.83 ✗
Latvia	1.25	1.63 ✗
Lithuania	1.93	3.04 ✗
Malta	1.82	3.13 ✗
Netherlands	2.63	2.76 ✗
Norway	1.55	1.37 ✓
Poland	1.65	2.37 ✗
Portugal	1.80	1.69 ✓
Romania	2.10	2.26 ✗
Slovakia	2.15	2.34 ✗
Slovenia	1.55	1.52 ✓
Spain	3.08	3.32 ✗
Sweden	1.05	1.05 ✓
Switzerland	3.95	3.90 ✓

4 CAPACITY - SES RP3

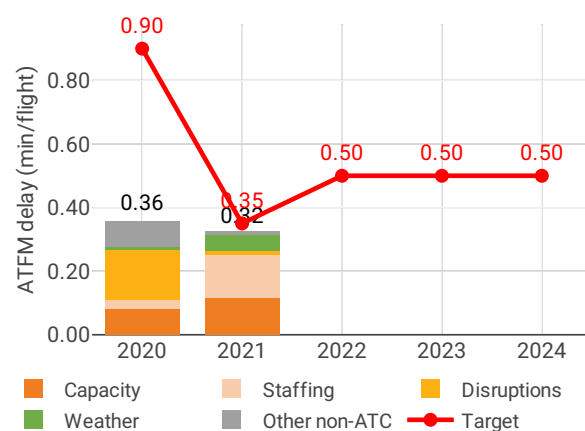
4.1 PRB monitoring

- ANSPs reached the en route capacity targets in 2021 due to lower traffic. Overall, ANSPs provided sufficient capacity to keep delays to the target (0.32 delay minutes per flight).
- Terminal capacity performance (arrival ATFM delay per flight) improved compared to 2020, despite increased traffic. However, the all-cause departure delay increased by more than 20% and amounted to over 12 minutes per flight.
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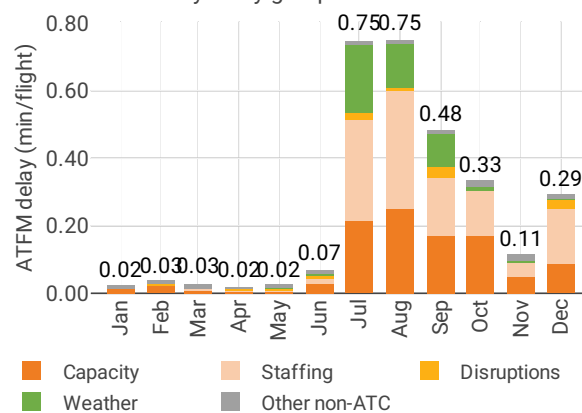
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

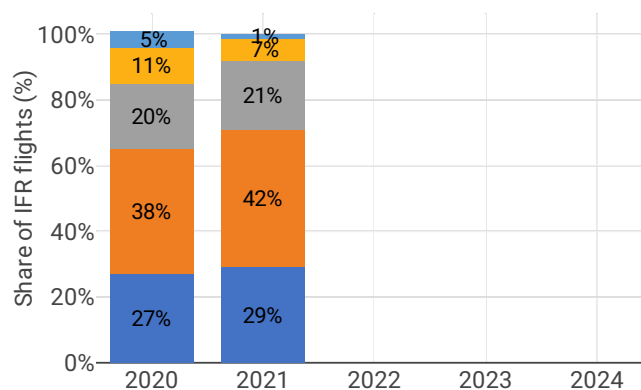
Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2021



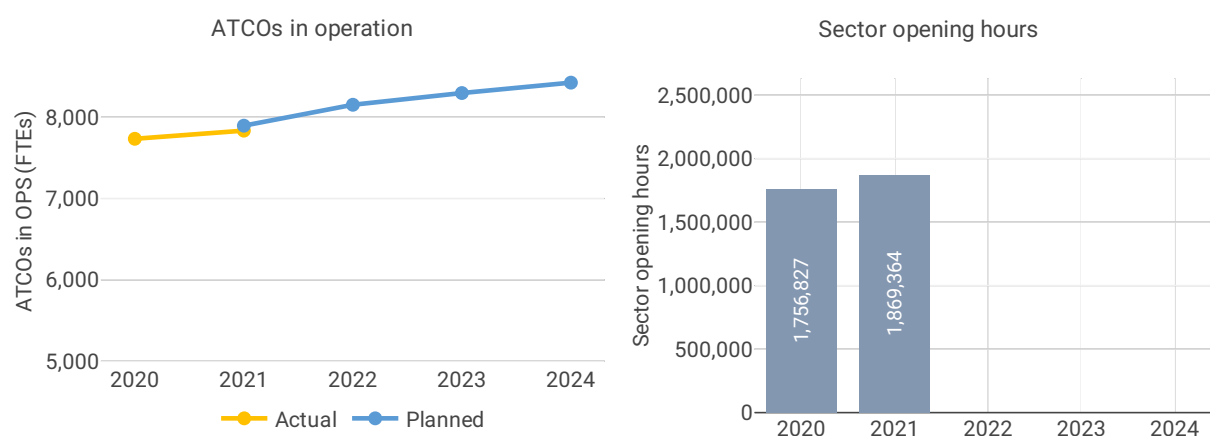
Distribution of IFR flights per the duration of en route ATFM delay



4.2.2 Summary of performance at local level

En route delay (min/flight)		
State	Target	Actual
Austria	0.10	0.00 ✓
Belgium	0.07	0.01 ✓
Bulgaria	0.04	0.00 ✓
Croatia	0.09	0.07 ✓
Cyprus	0.10	0.00 ✓
Czech Republic	0.06	0.01 ✓
Denmark	0.03	0.00 ✓
Estonia	0.01	0.00 ✓
Finland	0.03	0.00 ✓
France	0.18	0.46 ✗
Germany	0.22	0.24 ✗
Greece	0.32	0.43 ✗
Hungary	0.06	0.01 ✓
Ireland	0.01	0.00 ✓
Italy	0.07	0.05 ✓
Latvia	0.01	0.00 ✓
Lithuania	0.01	0.00 ✓
Malta	0.01	0.00 ✓
Netherlands	0.14	0.07 ✓
Norway	0.06	0.00 ✓
Poland	0.07	0.07 ✓
Portugal	0.09	0.07 ✓
Romania	0.02	0.00 ✓
Slovakia	0.05	0.00 ✓
Slovenia	0.05	0.00 ✓
Spain	0.12	0.09 ✓
Sweden	0.05	0.00 ✓
Switzerland	0.12	0.05 ✓

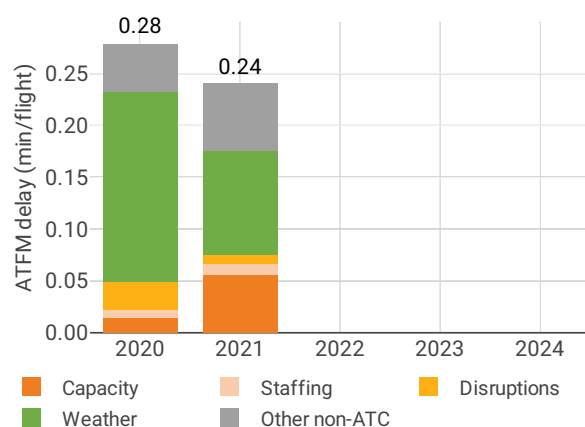
4.2.3 Other indicators



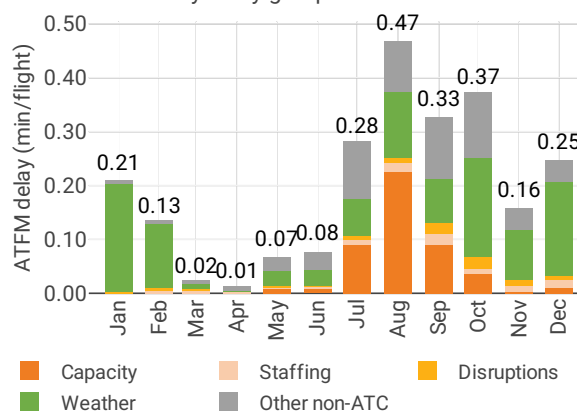
4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)

Average arrival ATFM delay per flight by delay groups



Monthly distribution of arrival ATFM delay by delay groups - 2021

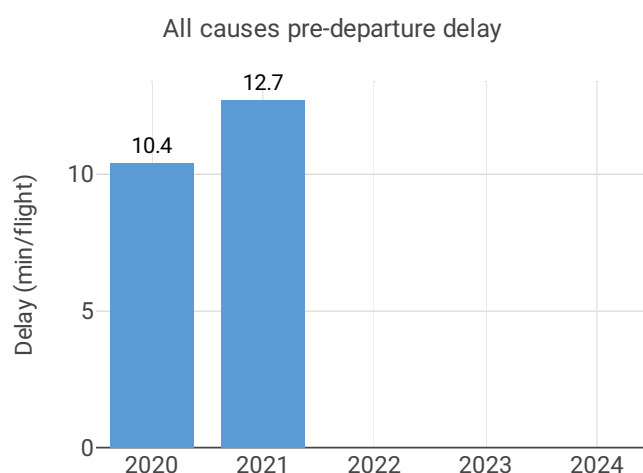


4.3.2 Summary of performance at local level

Arrival delay (min/flight)

State	Target	Actual
Austria	0.47	0.11 ✓
Belgium	1.08	0.04 ✓
Bulgaria	NA	
Croatia	NA	
Cyprus	NA	
Czech Republic	0.40	0.01 ✓
Denmark	0.10	0.02 ✓
Estonia	0.00	0.00 ✓
Finland	0.21	0.10 ✓
France	0.40	0.23 ✓
Germany	0.45	0.28 ✓
Greece	0.90	1.63 ✗
Hungary	0.05	0.00 ✓
Ireland	0.25	0.01 ✓
Italy	0.41	0.03 ✓
Latvia	0.02	0.02 ✓
Lithuania	NA	
Luxembourg	0.12	0.14 ✗
Malta	0.01	0.01 ✓
Netherlands	1.40	0.54 ✓
Norway	0.50	0.01 ✓
Poland	0.02	0.00 ✓
Portugal	0.90	0.58 ✓
Romania	0.50	0.00 ✓
Slovakia	NA	
Slovenia	NA	
Spain	0.44	0.19 ✓
Sweden	0.05	0.00 ✓
Switzerland	1.03	0.37 ✓

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

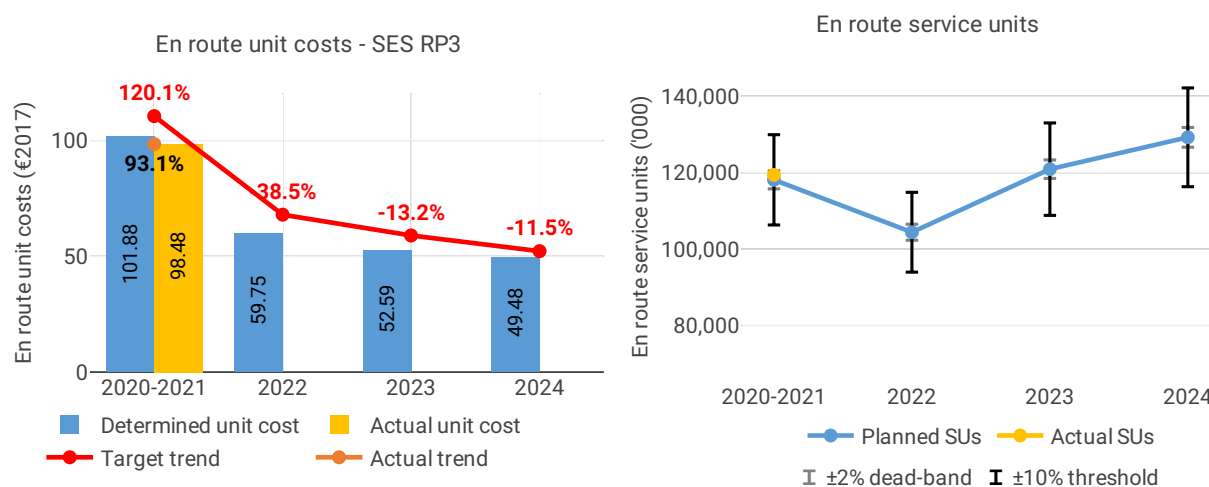


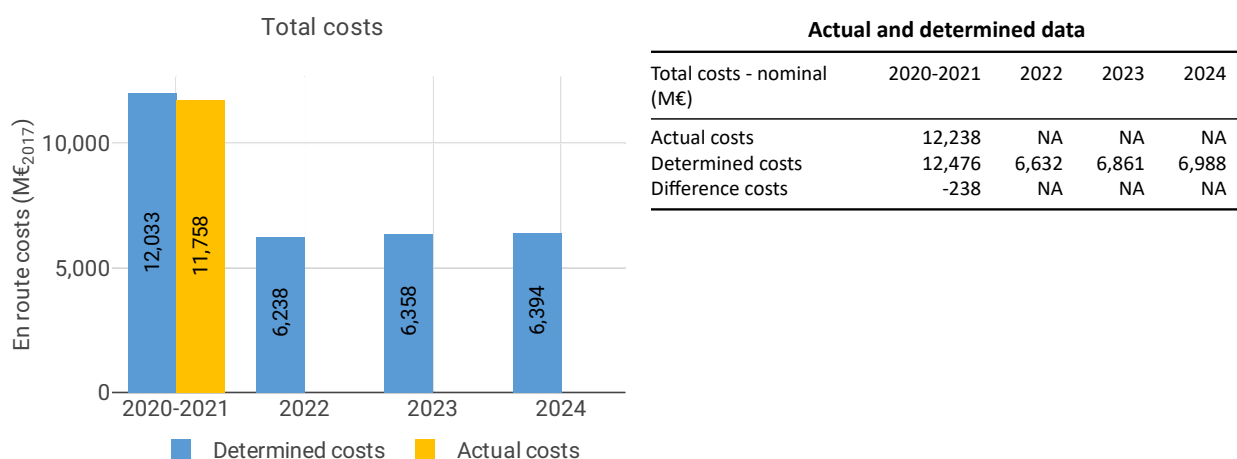
5 COST-EFFICIENCY - SES RP3

5.1 PRB monitoring

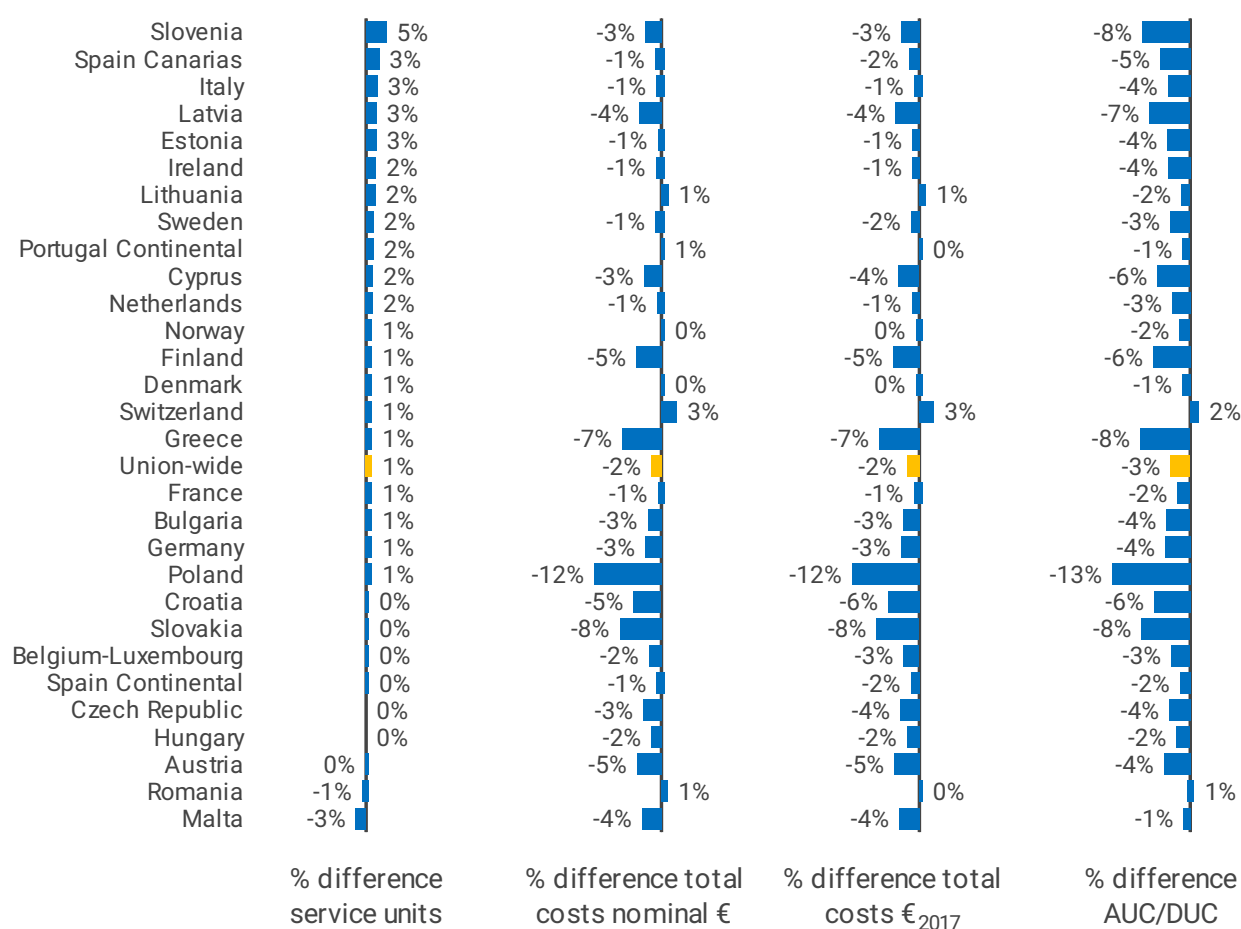
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- Union-wide en route actual costs in 2020/2021 were -2.3% below determined costs, while service units were +1.1% higher than planned. The discrepancy in costs is concerning, because Member States submitted their performance plans for 2021 in October of that year, and at a time they knew the actuals of more than half of 2021. Member States should have been able to plan their determined cost more accurately.
- The en route actual unit cost for airspace users (AUCU) has been -2.4% lower than the determined unit cost.
- The actual values of 2021 enable the calculation of the revenue gap ANSPs incurred during 2020/2021. The amount equals 5.6B €2017, which will be spread as an increase in the unit rates over five to seven years.

5.2 En route charging zone

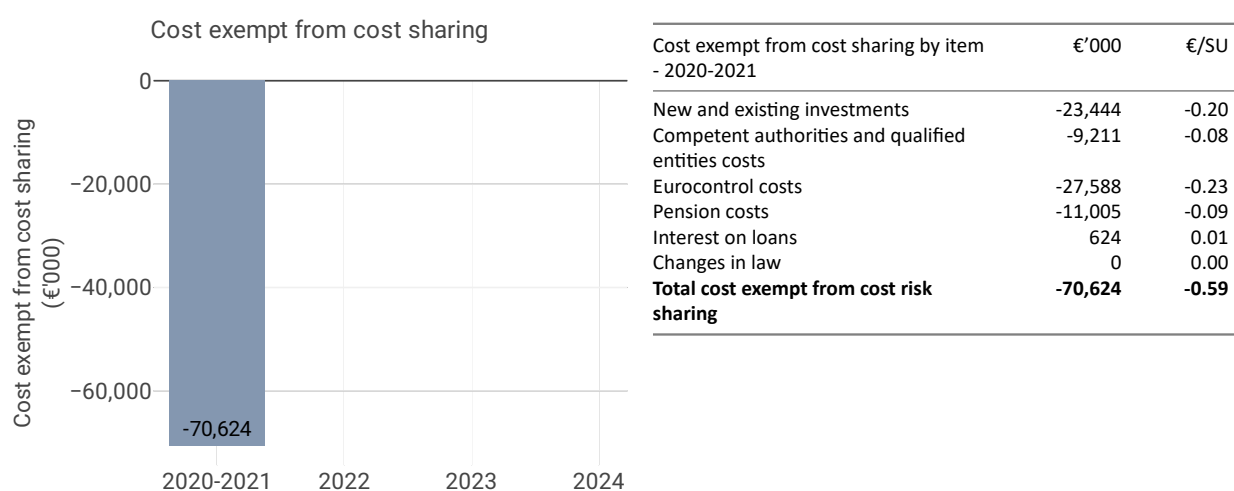
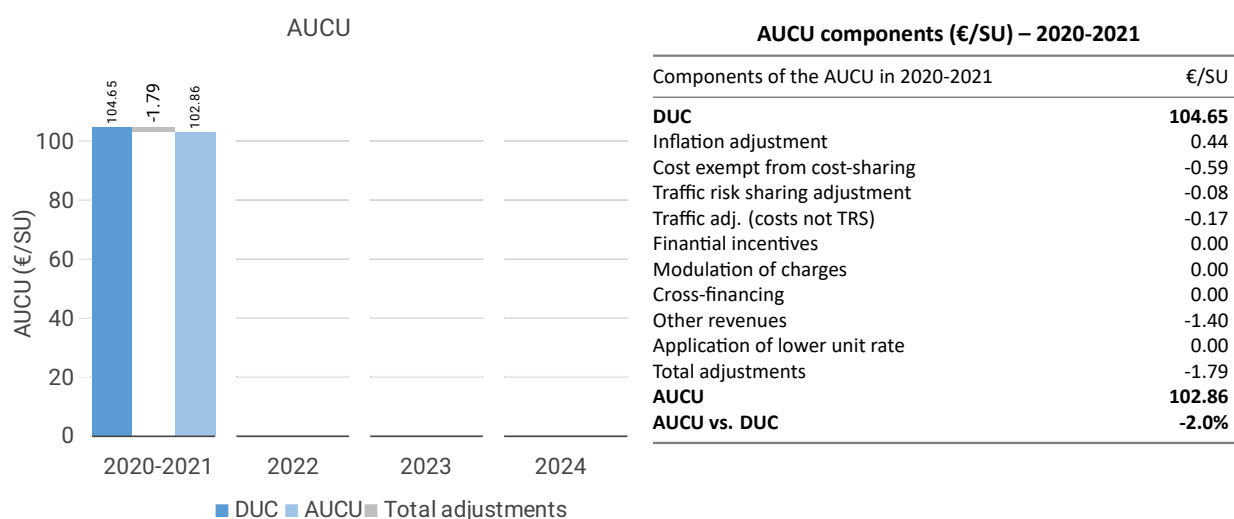




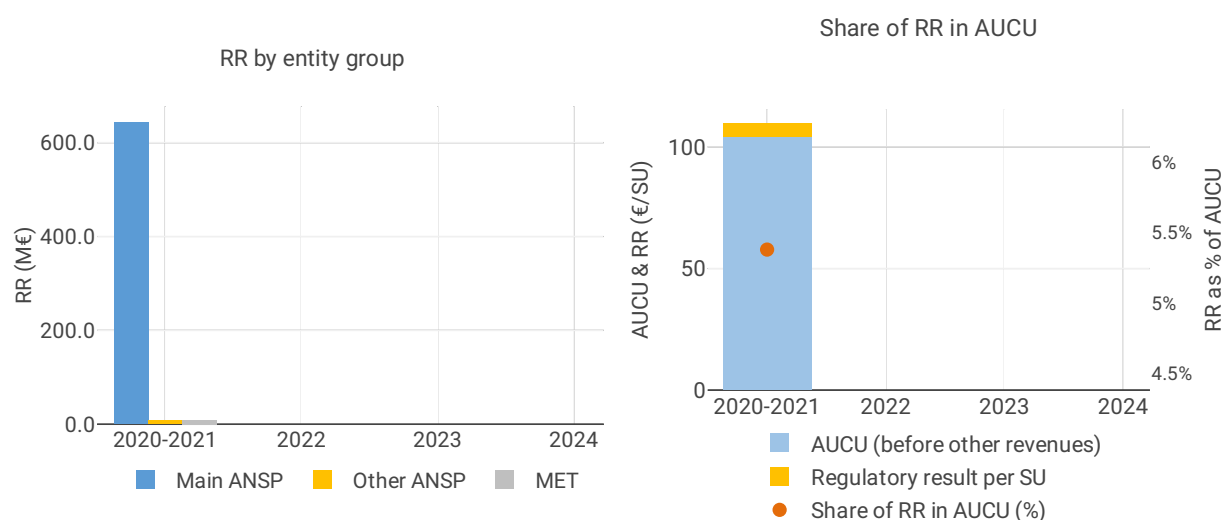
5.2.1 Summary of performance at local level



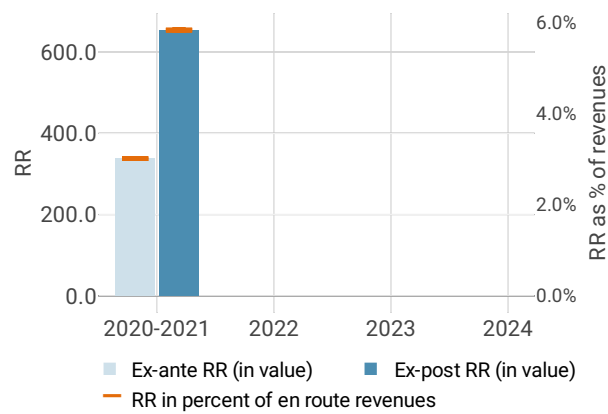
5.2.2 Actual unit cost incurred by the users (AUCU) (PI#1)



5.2.3 Regulatory result (RR)



RR - Main ANSPs



Net result from en route activity - Main ANSPs 2020-2021

