



Performance Review Body Monitoring Report

Estonia - 2021

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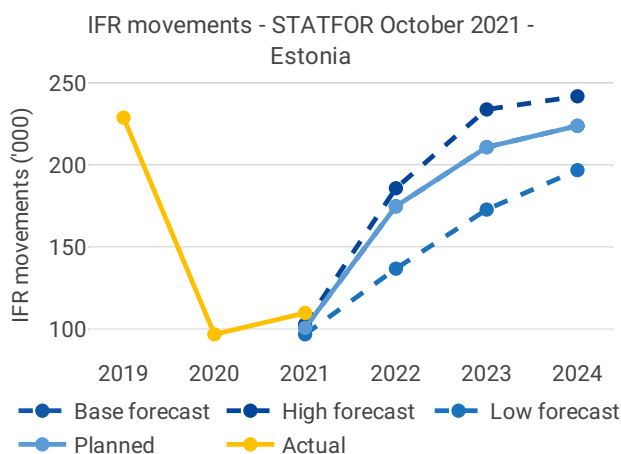
1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/771 of 13 April 2022

List of ACCs	1	Exchange rate (1 EUR=)		Main ANSP	
Tallinn ACC		2017: 1 EUR		• EANS	
		2021: 1 EUR			
No of airports in the scope of the performance plan:		Share of Union-wide:		Other ANSPs	
• ≥80'K	0	• traffic (TSUs) 2021	0.7%	–	
• <80'K	2	• en route costs 2021	0.4%	MET Providers	
		Share en route / terminal costs 2021	92% / 8%	–	
		En route charging zone(s)			
		Estonia			
		Terminal charging zone(s)			
		Estonia			

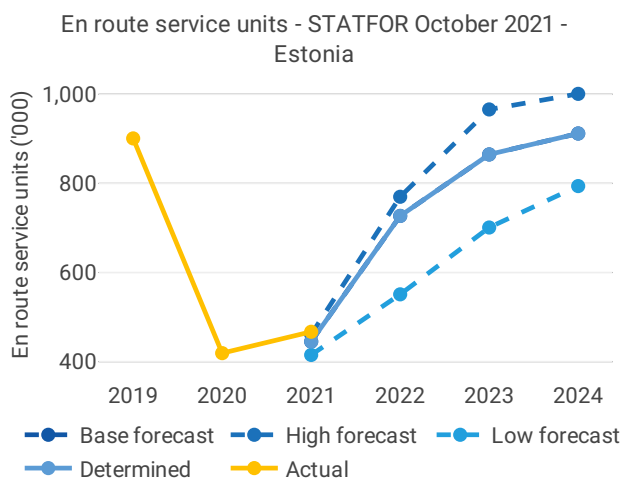
1.2 Traffic (En route traffic zone)



- Estonia recorded 110K actual IFR movements in 2021, +13% compared to 2020 (97K).

- Actual 2021 IFR movements were +9.0% above the plan (101K).

- Actual 2021 IFR movements represent 48% of the actual 2019 level (229K).



- Estonia recorded 467K actual en route service units in 2021, +12% compared to 2020 (419K).

- Actual 2021 service units were +5.0% above the plan (445K).

- Actual 2021 service units represent 52% of the actual 2019 level (901K).

1.3 Safety (Main ANSP)

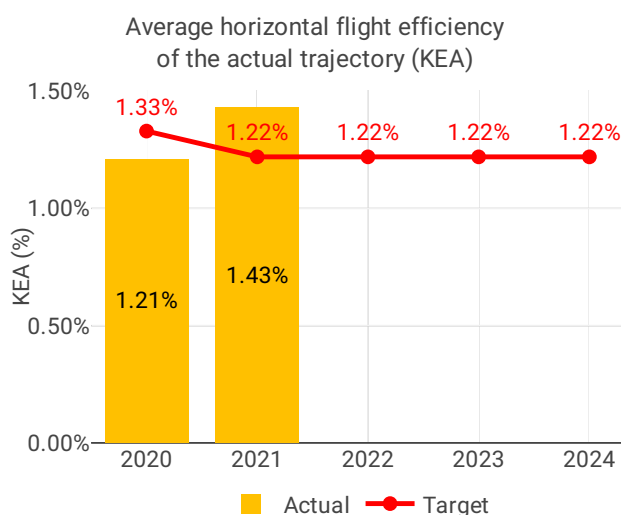


- In 2021, Estonia continued demonstrating good safety performance. EANS has already achieved the EoSM target levels and additional improvements coming from the implementation of Regulation (EU) 2017/373 are foreseen.

- Estonia recorded an increase of the rate of runway incursions per movement. The rate of separation minima infringements per flight hour decreased in 2021. Both rates are above the Union-wide average rates. The NSA closely monitors the rate of occurrences and assesses the effectiveness of implemented measures.

- EANS should improve its safety management by implementing automated safety data recording systems.

1.4 Environment (Member State)



- Estonia's KEA performance of 1.43% is almost identical to 2019. The target was 1.22%, which means Estonia did not contribute positively towards achieving the Union-wide target.

- The NSA states that Estonia has cross-border free route airspace with NEFAB + DK-SE FAB and the overflying traffic is as direct as possible.

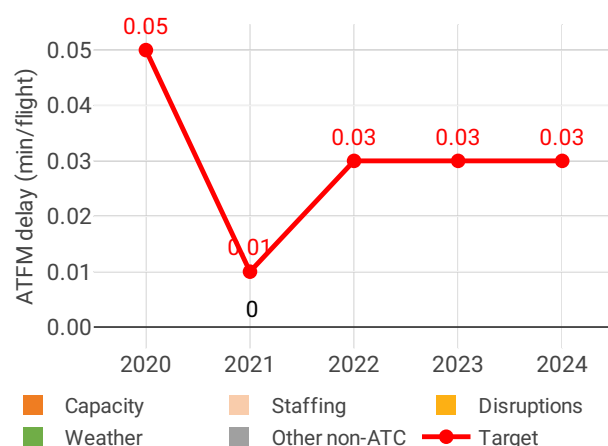
- SCR is at the worst levels since 2017 and the KEP parameter is the second worst since 2017.

- The share of CDO flights has worsened since 2020 and is the lowest since 2017.

- Additional time in terminal airspace remained the same as for 2020, however, additional taxi out time increased by 21%.

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups

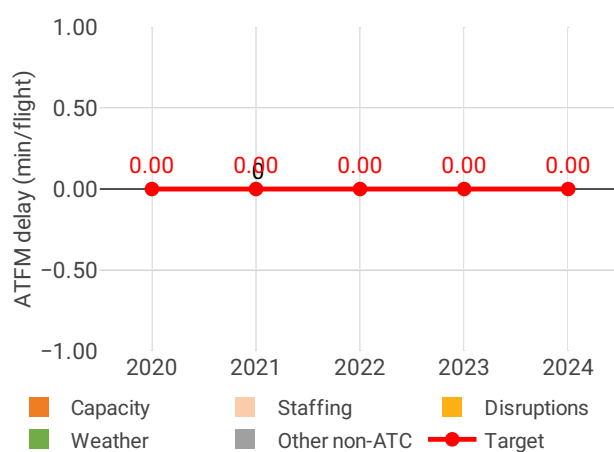


- Estonia registered zero minutes of average en route ATFM delay per flight during 2021, thus meeting the local breakdown value of 0.01.

- En route ATFM delays in Estonia were also zero on average during the past years.

- Traffic recovery in Estonia has been slower than in many other Member States (also due to non-COVID-19 related issues) and 2019 traffic levels are not likely to be reached during RP3. A slight increase in the number of ATCOs in OPS is planned by the end of RP3 with no capacity related delays envisaged.

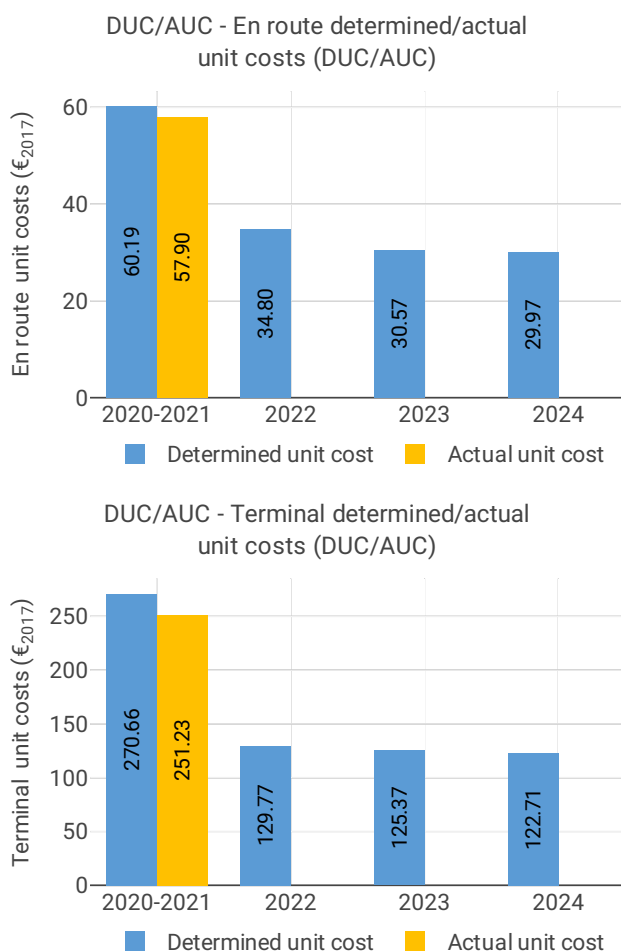
Average arrival ATFM delay per flight by delay groups



- The yearly total of sector opening hours in Tallinn ACC was 8,768, showing a 8.5% decrease compared to 2020. Sector opening hours are 30.5% below 2019 levels.

- Tallinn ACC registered 12.00 IFR movements per one sector opening hour in 2021, being 30.5% below 2019 levels.

1.6 Cost-efficiency (En route/Terminal charging zone(s))



- The en route 2020/2021 actual unit cost of Estonia was 57.90 €2017, -3.8% lower than the determined unit cost (60.19 €2017). The terminal actual unit cost was 251.23 €2017, -7.2% lower than the determined unit cost (270.66 €2017).

- The en route 2021 actual service units (467K) were +5.0% higher than determined (445K).

- In 2021, actual total costs were -0.7 M€2017 lower (-2.6%) than determined. The main driver was the reduction of other operating costs (-0.9 M€2017, or -12%) due to the implementation of extensive cost-cutting on travelling, rental, and training expenses.

- EANS spent 6.4 M€2017 in 2021 related to costs of investments, +8.4% higher than determined (5.9 M€2017) mainly due to significantly higher share of financing through equity than planned.

- The en route actual unit cost incurred by users in 2020/2021 was 60.50€, while the terminal actual unit cost incurred by users was 209.52€.

2 SAFETY - ESTONIA

2.1 PRB monitoring

- In 2021, Estonia continued demonstrating good safety performance. EANS has already achieved the EoS target levels and additional improvements coming from the implementation of Regulation (EU) 2017/373 are foreseen.

- Estonia recorded an increase of the rate of runway incursions per movement. The rate of separation minima infringements per flight hour decreased in 2021. Both rates are above the Union-wide average rates. The NSA closely monitors the rate of occurrences and assesses the effectiveness of implemented measures.

- EANS should improve its safety management by implementing automated safety data recording systems.

2.2 Effectiveness of Safety Management (EoSM) (KPI#1)



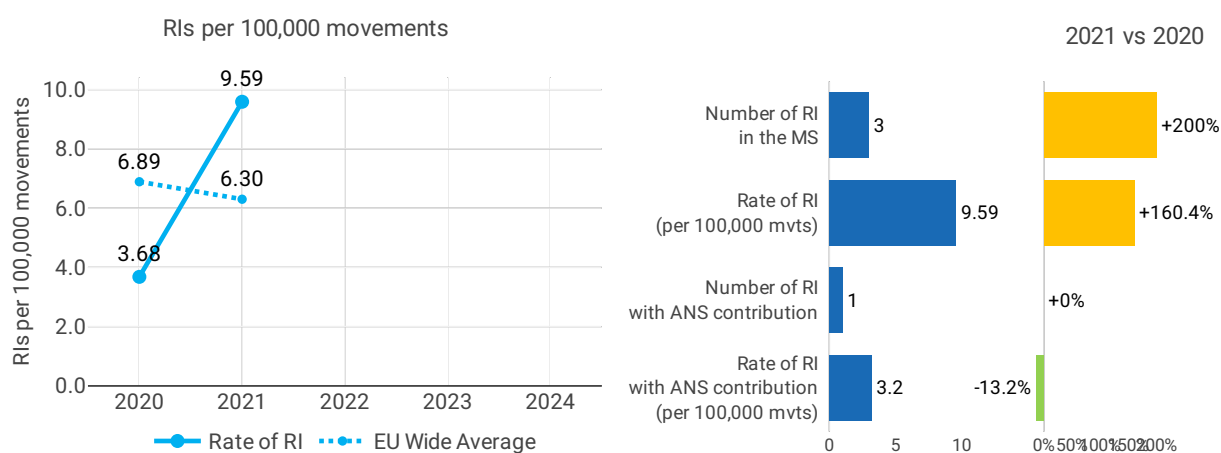
Focus on EoSM

All five EoSM components of the ANSP meet, or exceed, already the 2024 target level. Maturity has slightly improved with respect 2020.

Detailed information on Safety performance monitoring for the year 2021 are included in Performance Review Body Monitoring Report 2021, Annex III – Safety report

2.3 Safety occurrences

2.3.1 Rate of runway incursions (RIs) (PI#1)



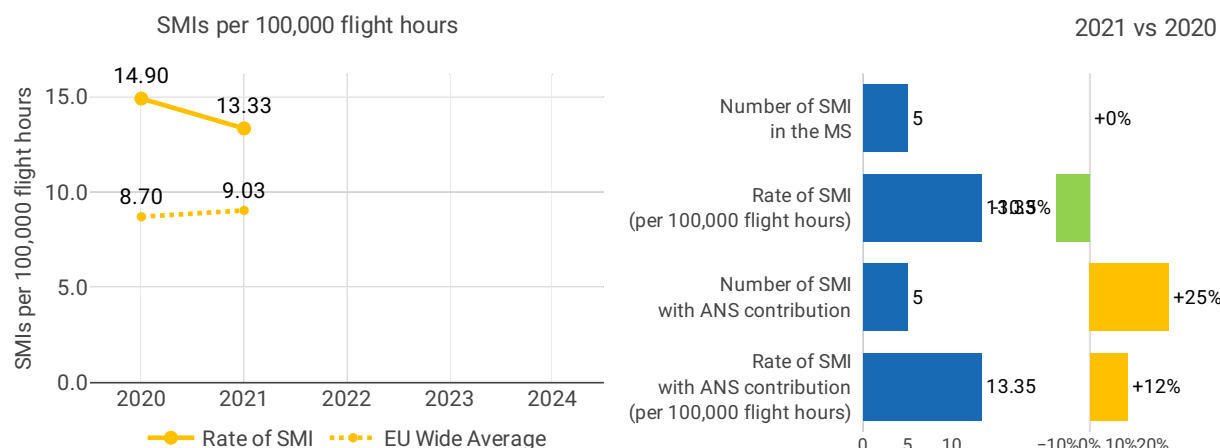
Rate of RIs per 100,000 airport movements - Estonia

#	Airport name	APT movements	Number of RI	Rate RI per 100,000
1	Tallinn	25,205	0	0.00
2	Tartu	6,075	1	16.46

Focus on runway incursions

Detailed information on Safety performance monitoring for the year 2021 are included in Performance Review Body Monitoring Report 2021, Annex III – Safety report

2.3.2 Rate of separation minima infringements (SMIs) (PI#2)



Rate of SMI with ANS contribution per 100,000 flight hours

#	ANSP	Flight hours					Number of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	EANS	33,558	37,464	NA	NA	NA	4	5	NA	NA	NA

#	ANSP	Rate of SMI per 100,000 flight hours					% variation in rate of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	EANS	11.9	13.3	NA	NA	NA	NA	+12%	NA	NA	NA

Focus on separation minima

Detailed information on Safety performance monitoring for the year 2021 are included in Performance Review Body Monitoring Report 2021, Annex III – Safety report

2.3.3 Quality of occurrences reporting

Detailed information on Safety performance monitoring for the year 2021 are included in Performance Review Body Monitoring Report 2021, Annex III – Safety report

2.4 Use of automated safety data recording system (ASDRS) (PI#3)

2021	
For RIs	For SMIs
X	X

Detailed information on Safety performance monitoring for the year 2021 are included in Performance Review Body Monitoring Report 2021, Annex III – Safety report

3 ENVIRONMENT - ESTONIA

3.1 PRB monitoring

- Estonia's KEA performance of 1.43% is almost identical to 2019. The target was 1.22%, which means Estonia did not contribute positively towards achieving the Union-wide target.

- The NSA states that Estonia has cross-border free route airspace with NEFAB + DK-SE FAB and the over-flying traffic is as direct as possible.
- SCR is at the worst levels since 2017 and the KEP parameter is the second worst since 2017.
- The share of CDO flights has worsened since 2020 and is the lowest since 2017.
- Additional time in terminal airspace remained the same as for 2020, however, additional taxi out time increased by 21%.

3.2 En route performance

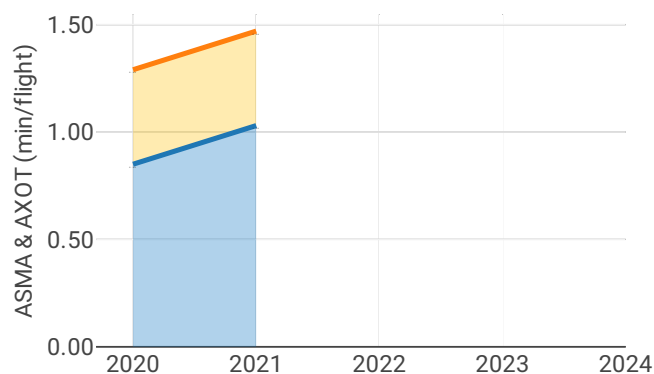
3.2.1 Horizontal flight efficiency of the actual trajectory (KEA) (KPI#1), of the last filed flight plan (KEP) (PI#1) & shortest constrained route (SCR) (PI#2)



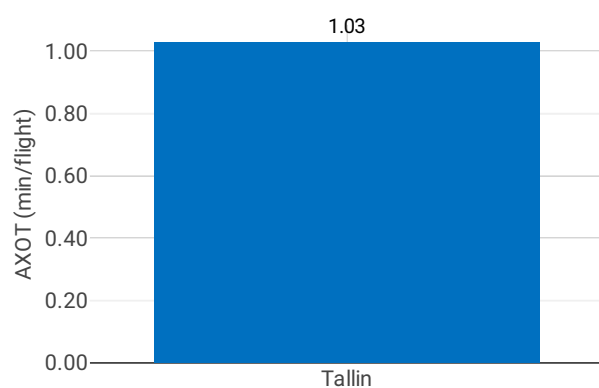
3.3 Terminal performance

3.3.1 Additional taxi-out time (AXOT) (PI#3) & Arrival Sequencing and Metering Area (ASMA) time (PI#4)

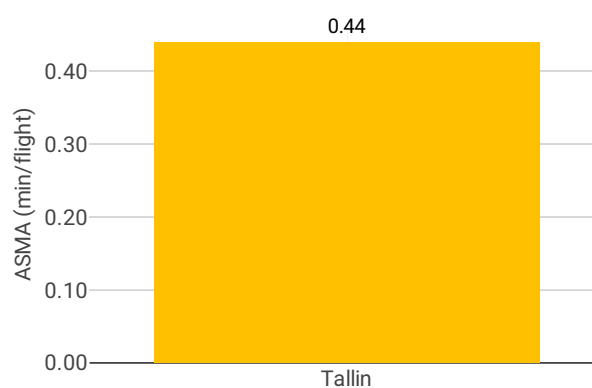
ASMA & AXOT



AXOT, main airport(s) - 2021



ASMA, main airport(s) - 2021



Focus on ASMA & AXOT

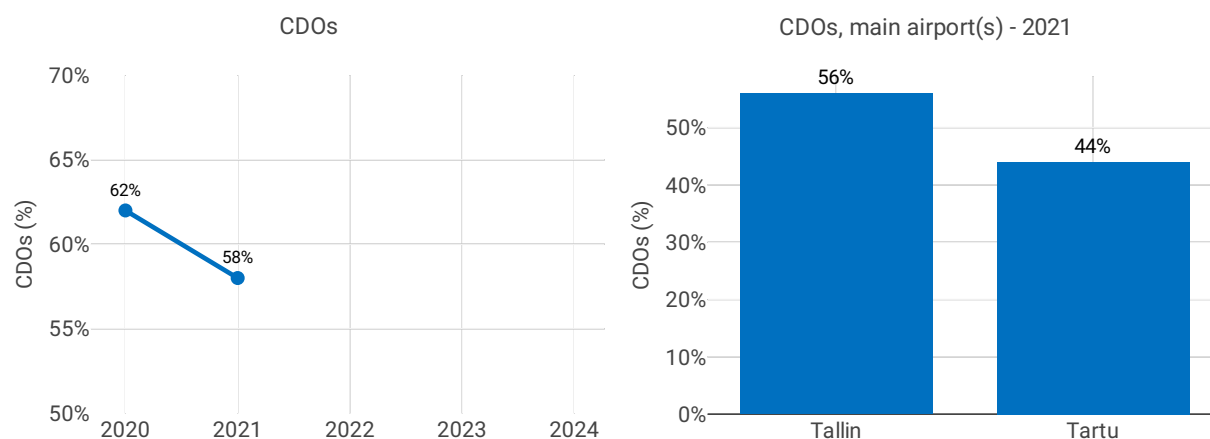
AXOT

This indicator is not monitored for airports below 80 000 IFR movements average during the 2016-2018 period, so it is not monitored for any airport in this state.

ASMA

This indicator is not monitored for airports below 80 000 IFR movements average during the 2016-2018 period, so it is not monitored for any airport in this state.

3.3.2 Share of arrivals applying continuous descent operations (CDOs) (PI#5)

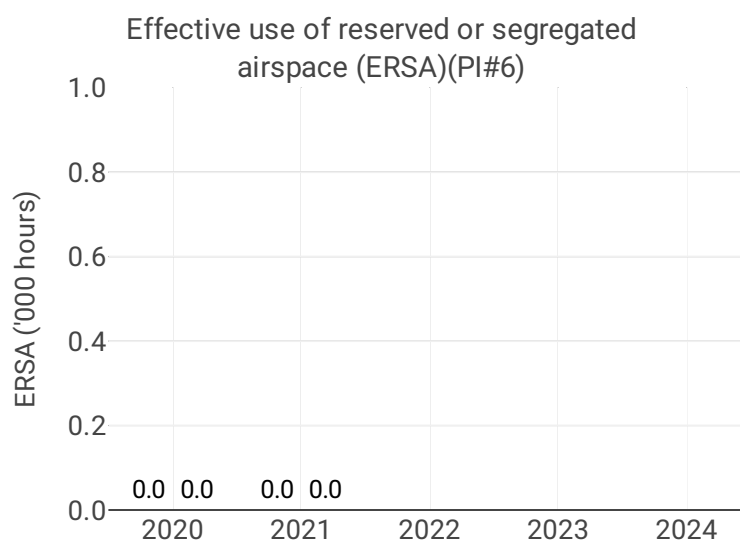


Focus CDOs

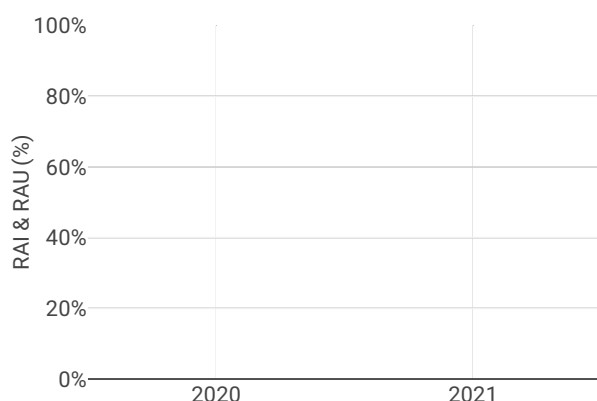
The shares of CDO flights have significantly decreased (EETN: -4.8 percentage points; EETU: -25.2 percentage points) but are still well above the overall RP3 value in 2021 (30.5%) and in the higher range of all observed values in 2021.

Airport Name	Airport level														
	Additional taxi-out time (PI#3)					Additional ASMA time (PI#4)					Share of arrivals applying CDO (PI#5)				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Tallin	0.85	1.03	NA	NA	NA	0.44	0.44	NA	NA	NA	61%	56%	NA	NA	NA
Tartu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70%	44%	NA	NA	NA

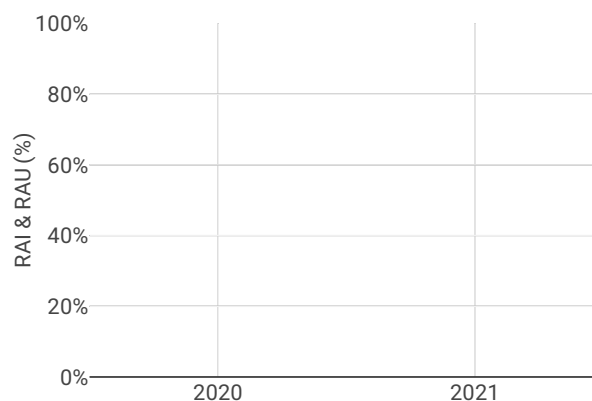
3.4 Civil-Military dimension



RAI & RAU via available conditional routes (PIs#7 & 8)



RAI & RAU via available restricted and segregated airspace (PIs#7 & 8)



Focus on Civil-Military dimension

Update on Military dimension of the plan

No update provided.

Military - related measures implemented or planned to improve capacity

No impact of MIL dimension on the capacity KPA. The planning of airspace use at pre-tactical level is done via the civil/military joint unit Airspace Management Cell (AMC).

Initiatives implemented or planned to improve PI#6

No data available.

Initiatives implemented or planned to improve PI#7

No data available.

Initiatives implemented or planned to improve PI#8

No data available.

4 CAPACITY - ESTONIA

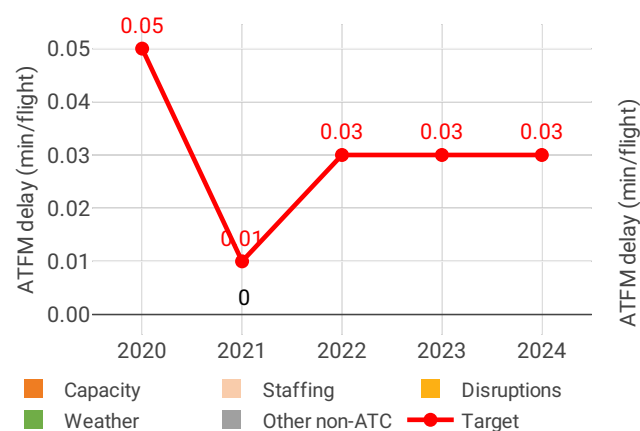
4.1 PRB monitoring

- Estonia registered zero minutes of average en route ATFM delay per flight during 2021, thus meeting the local breakdown value of 0.01.
- En route ATFM delays in Estonia were also zero on average during the past years.
- Traffic recovery in Estonia has been slower than in many other Member States (also due to non-COVID-19 related issues) and 2019 traffic levels are not likely to be reached during RP3. A slight increase in the number of ATCOs in OPS is planned by the end of RP3 with no capacity related delays envisaged.
- The yearly total of sector opening hours in Tallinn ACC was 8,768, showing a 8.5% decrease compared to 2020. Sector opening hours are 30.5% below 2019 levels.
- Tallinn ACC registered 12.00 IFR movements per one sector opening hour in 2021, being 30.5% below 2019 levels.

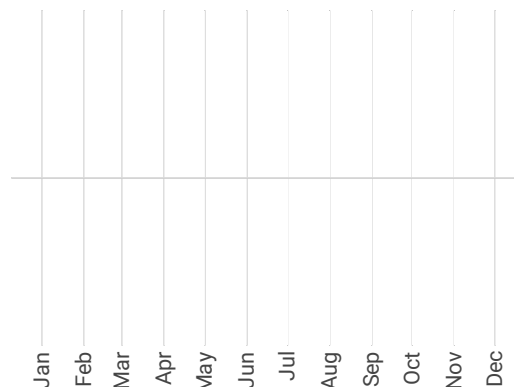
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

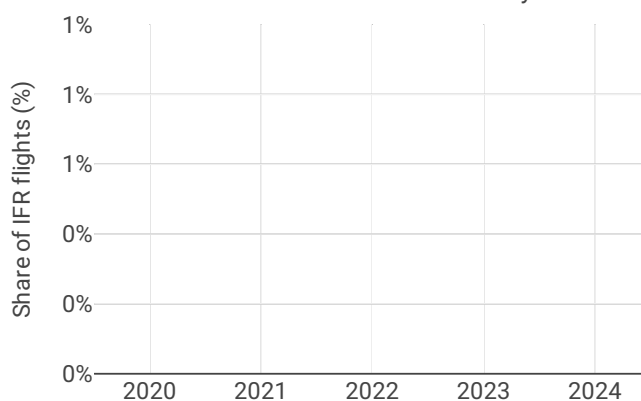
Average en route ATFM delay per flight by delay groups



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



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



Focus on en route ATFM delay

Summary of capacity performance

Estonia experienced an increase in traffic from 96k flights in 2020 to 109k flights in 2021, with zero ATFM delay. However, traffic levels were still substantially below the 227k flights in 2019.

NSA's assessment of capacity performance

En route capacity target set in the draft RP3 performance plan has been met for 2021.

Monitoring process for capacity performance

Review of the actual values from the NM dashboard.

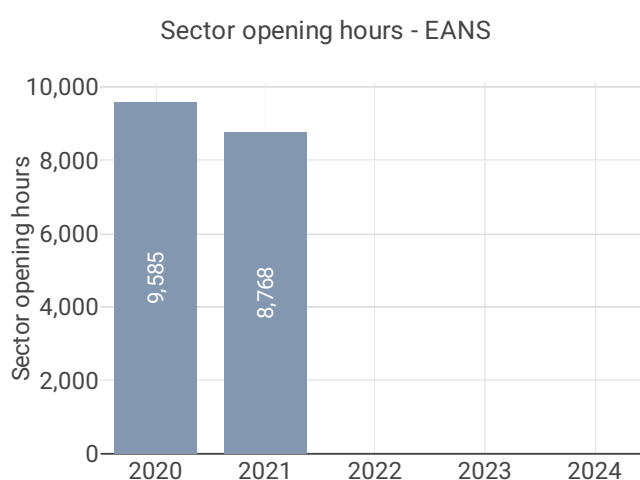
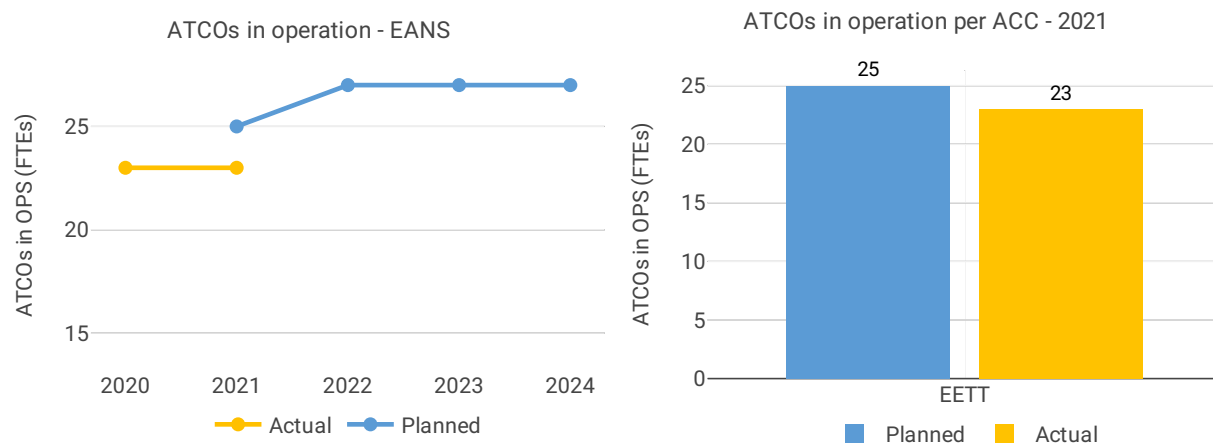
Capacity planning

No data available.

Application of Corrective Measures for Capacity (if applicable)

No data available.

4.2.2 Other indicators

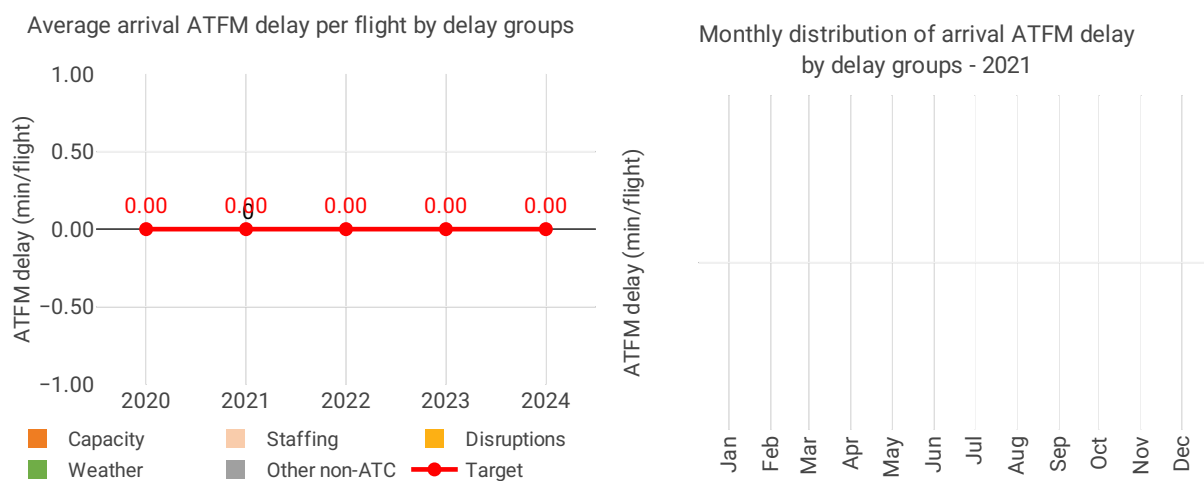


Focus on ATCOs in operations

N/A

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)



Focus on arrival ATFM delay

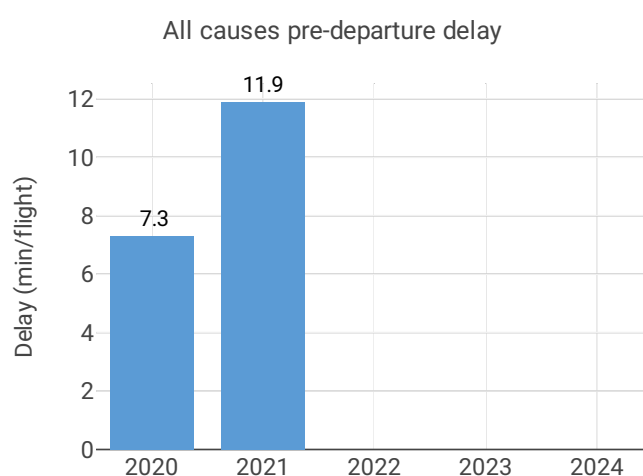
Estonia identified two airports, Tallinn and Tartu, as subject to RP3 monitoring. In accordance with IR (EU) 2019/317 and the traffic figures at these 2 airports, pre-departure delays are not monitored and the capacity performance focuses on arrival ATFM delays and slot adherence. Traffic at these Estonian airports in 2021 was 48% lower than in 2019.

Like in 2020, no arrival ATFM delays were observed in the entire 2021 at these two airports and there were only a few regulated departures with a slot adherence of 98.2%.

No arrival ATFM delay was observed at the Estonian airports (Tallinn and Tartu) in 2021.

The provisional national target on arrival ATFM delay in 2021 was met. In accordance with Article 3 (3) (a) of Implementing Regulation (EU) 2020/1627: The incentive scheme shall cover only the calendar years 2022 to 2024.

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



Airport level										
Airport name	Avg arrival ATFM delay (KPI#2)					Slot adherence (PI#1)				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Tallin	NA	NA	NA	NA	NA	98.5%	98.2%	NA%	NA%	NA%
Tartu	NA	NA	NA	NA	NA	NA	NA	NA%	NA%	NA%

Airport name	ATC pre departure delay (PI#2)					All causes pre departure delay (PI#3)				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Tallin	0.01	0.02	NA	NA	NA	7.3	11.9	NA	NA	NA
Tartu	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Focus on performance indicators at airport level

ATFM slot adherence

Only Tallinn had regulated departures in 2021, mainly as of July. Tallinn's ATFM slot compliance was 98.2%, very similar to the performance in 2020 (98.5%) which in fact corresponds with only 5 departures: 1 departing early and 4 departing late with respect to the STW in the entire 2021.

ATC pre-departure delay

This indicator is not monitored for airports below 80 000 IFR movements annual average during the 2016-2018 period, so it is not monitored for any airport in Estonia.

All causes pre-departure delay

This indicator is not monitored for airports below 80 000 IFR movements annual average during the 2016-2018 period, so it is not monitored for any airport in Estonia.

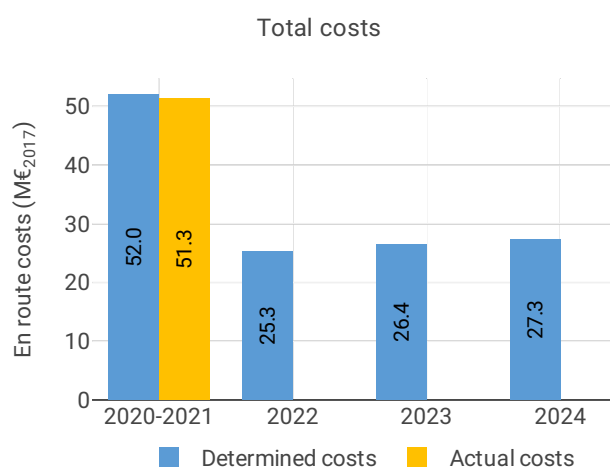
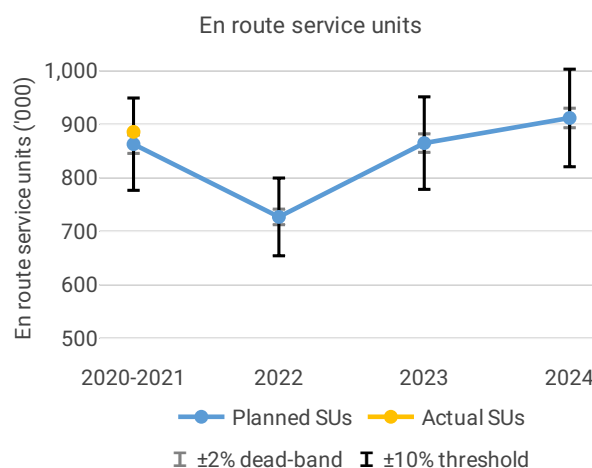
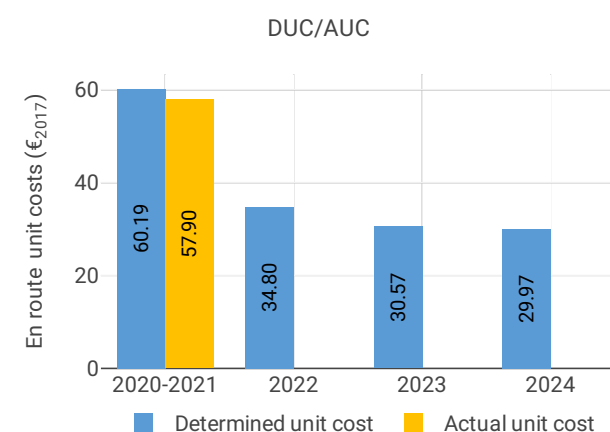
5 COST-EFFICIENCY - ESTONIA

5.1 PRB monitoring

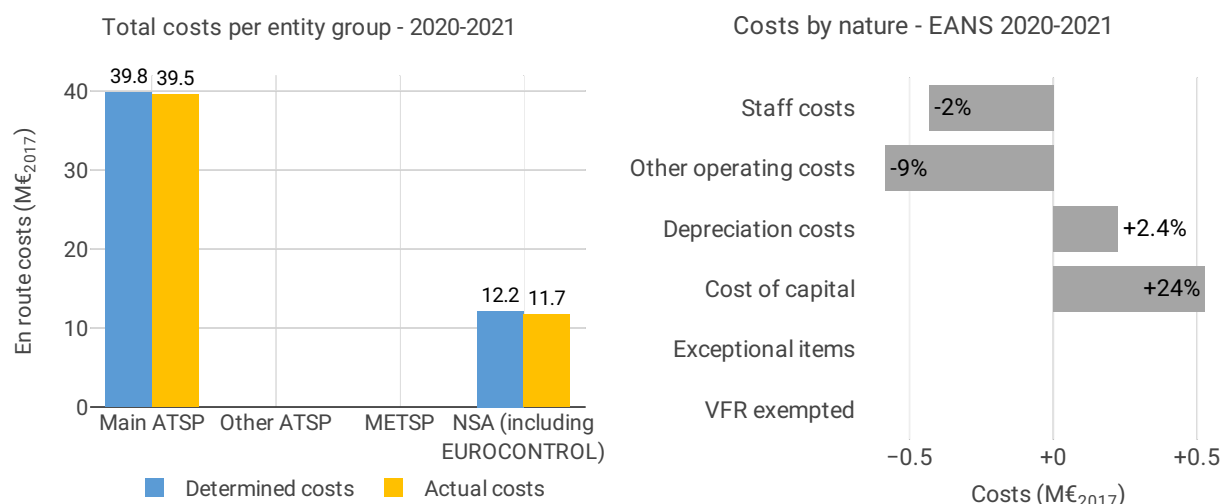
- The en route 2020/2021 actual unit cost of Estonia was 57.90 €2017, -3.8% lower than the determined unit cost (60.19 €2017). The terminal actual unit cost was 251.23 €2017, -7.2% lower than the determined unit cost (270.66 €2017).
- The en route 2021 actual service units (467K) were +5.0% higher than determined (445K).
- In 2021, actual total costs were -0.7 M€2017 lower (-2.6%) than determined. The main driver was the reduction of other operating costs (-0.9 M€2017, or -12%) due to the implementation of extensive cost-cutting on travelling, rental, and training expenses.
- EANS spent 6.4 M€2017 in 2021 related to costs of investments, +8.4% higher than determined (5.9 M€2017) mainly due to significantly higher share of financing through equity than planned.
- The en route actual unit cost incurred by users in 2020/2021 was 60.50€, while the terminal actual unit cost incurred by users was 209.52€.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)



Actual and determined data				
Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	53	NA	NA	NA
Determined costs	54	27	28	30
Difference costs	0	NA	NA	NA
Inflation assumptions	2020-2021	2022	2023	2024
Determined inflation rate	NA	2.5%	2.1%	1.9%
Determined inflation index	NA	110.4	112.7	114.8
Actual inflation rate	NA	NA	NA	NA
Actual inflation index	NA	NA	NA	NA
Difference inflation index (p.p.)	NA	NA	NA	NA



Focus on unit cost

AUC vs. DUC

In the combined year 2020-2021, the AUC was lower than the planned DUC (by -3.8%, or -2.29€2017). This results from the combination of higher than planned TSUs (+2.6%) and lower than planned en route costs in real terms (by -1.3%, or -0.7 M€2017).

En route service units

The difference between actual and planned TSUs (+2.6%) falls outside the $\pm 2\%$ dead band, but does not exceed the $\pm 10\%$ threshold foreseen in the traffic risk sharing mechanism. The resulting gain of additional en route revenues is therefore shared between the ATSP and the airspace users, with the ATSP (EANS) retaining an amount of +0.9 M€2017.

En route costs by entity

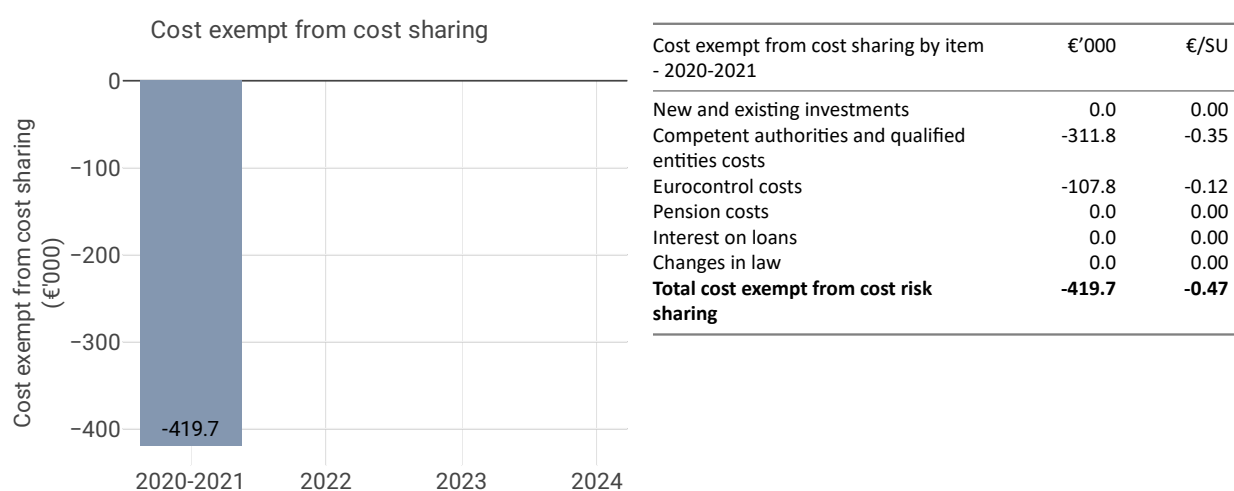
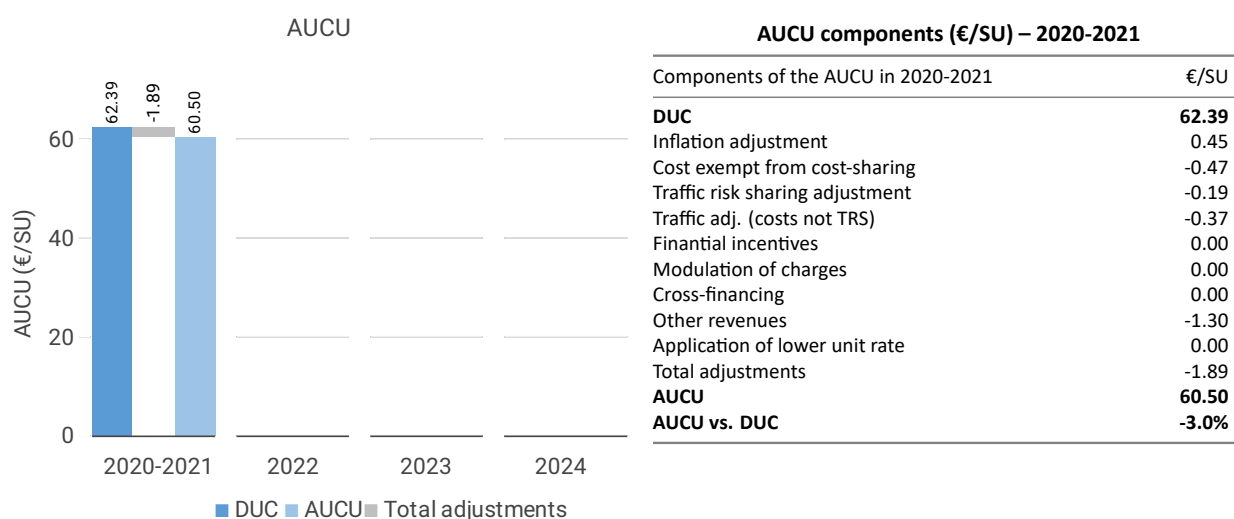
Actual real en route costs for 2020-2021 are -1.3% (-0.7 M€2017) lower than planned. This result is driven by the main ANSP, EANS (-0.7%, or -0.3 M€2017) and the NSA/EUROCONTROL costs (-3.5%, or -0.4 M€2017).

En route costs for the main ANSP at charging zone level

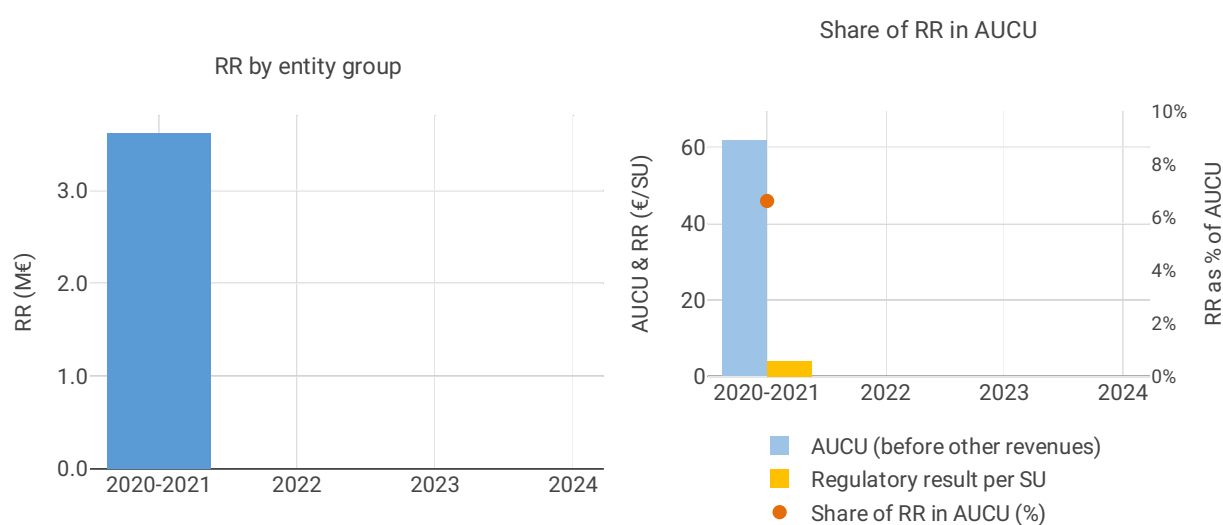
Lower than planned en route costs in real terms for EANS in 2020-2021 (-0.7%, or -0.3 M€2017 lower) results from:

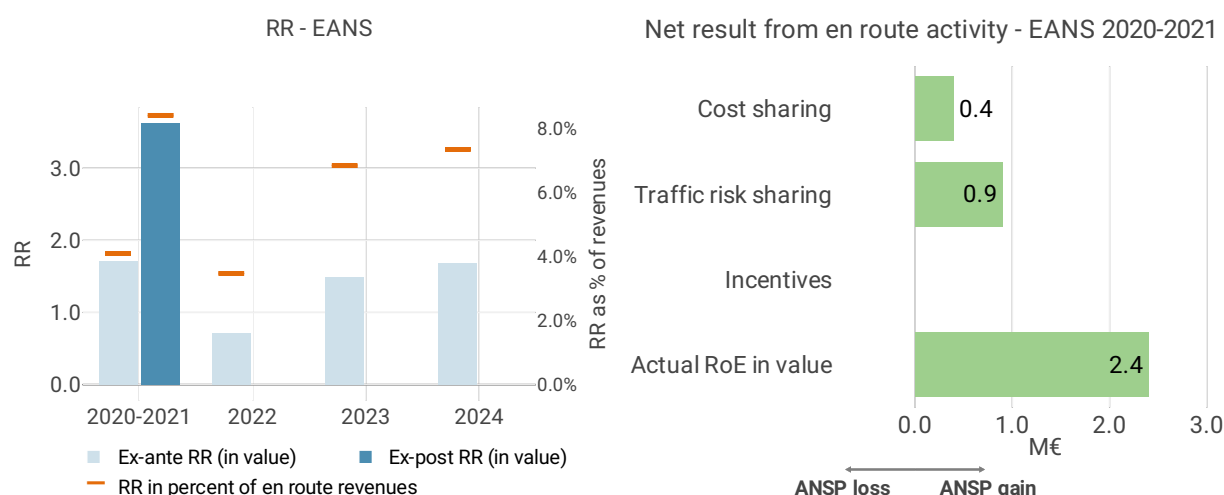
- lower staff costs (-2.0%);
- lower other operating costs (-9.0%), due to implementation extensive cost-cutting measures to reduce losses. Travelling expenses, rental expenses (especially communication service rental costs) and training expenses were lower than planned and other cost items were cut where possible;
- higher depreciation (+2.4%), due to taking some fixed assets into operation earlier than planned;
- higher cost of capital (+24.0%), resulting from the approval of an additional shareholder investment in equity, leading to higher cost of capital, although the rate of return on equity remained unchanged.

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



5.2.3 Regulatory result (RR)





Focus on regulatory result

EANS net gain on en route activity in the Estonia charging zone in the combined year 2020-2021

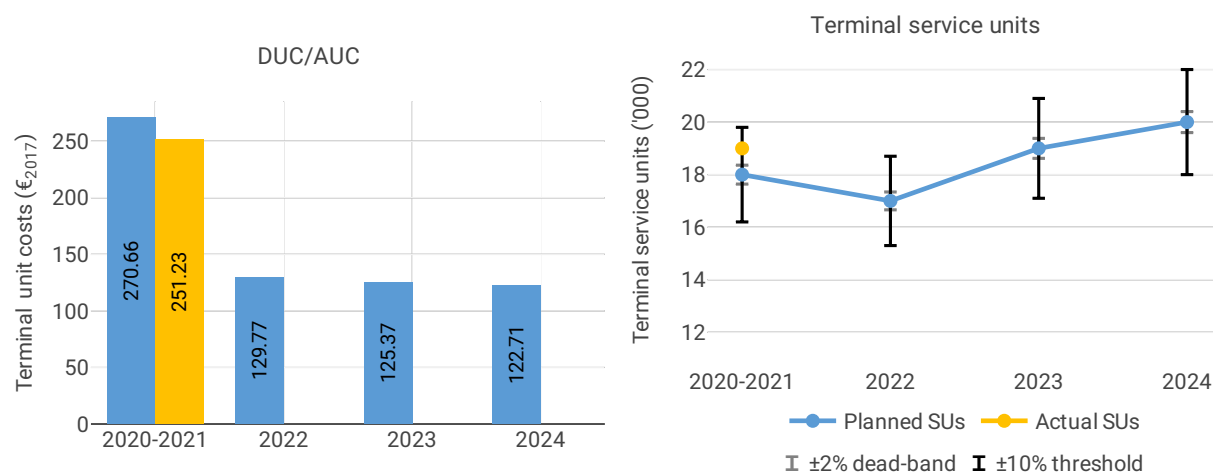
EANS's net gain amounts to +1.3 M€, as a combination of a gain of +0.4 M€ arising from the cost sharing mechanism and a gain of +0.9 M€ arising from the traffic risk sharing mechanism.

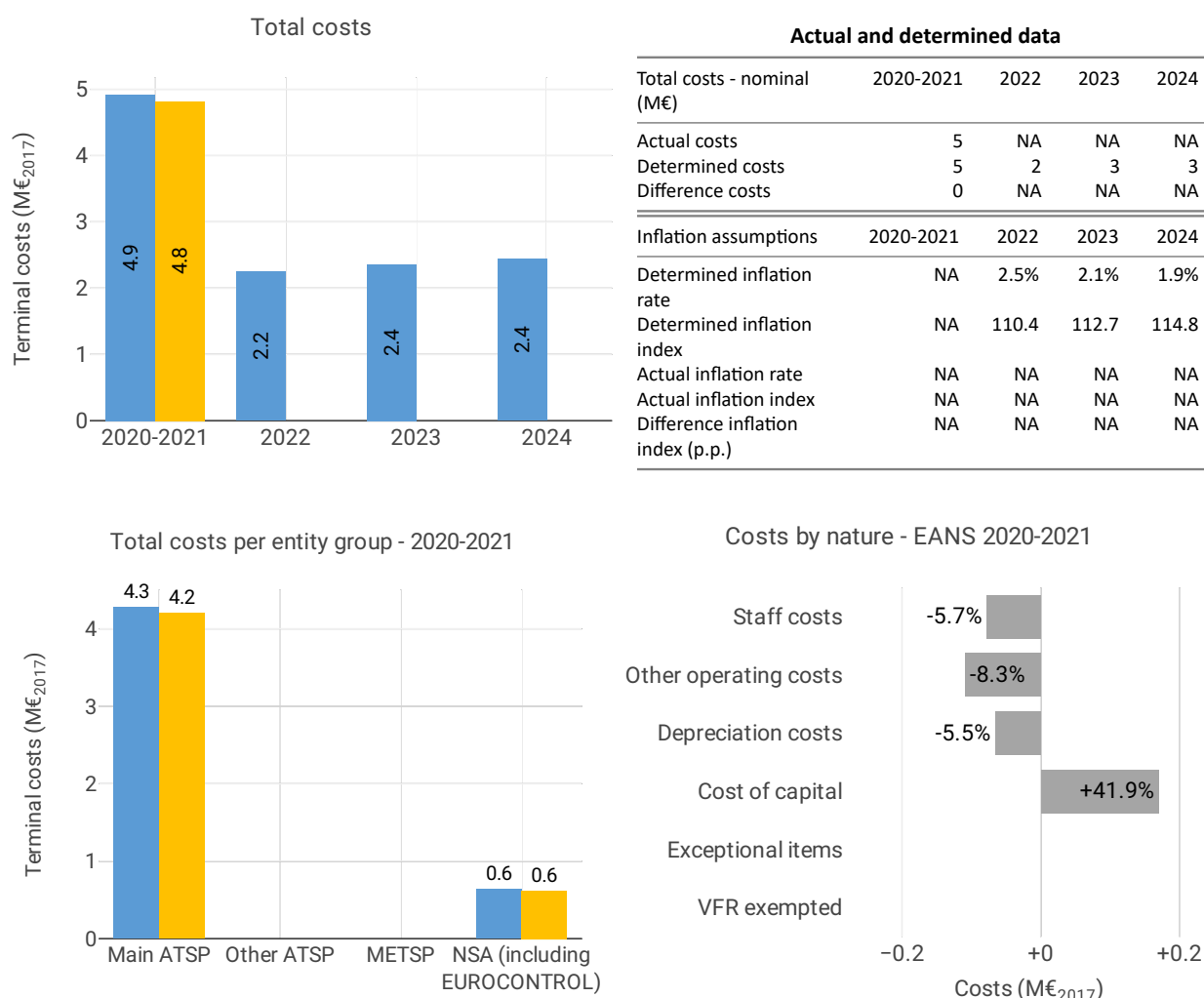
EANS overall regulatory results (RR) for the en route activity

Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+1.3 M€) and the actual RoE (+2.4 M€) amounts to +3.6 M€ (8.4% of the en route revenues). The resulting ex-post rate of return on equity is 11.2%, which is higher than the 7.3% planned in the PP.

5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)





Focus on unit cost

AUC vs. DUC

In the combined year 2020-2021, the terminal AUC was -7.2% (or -19.44€2017) lower than the planned DUC. This results from the combination of higher than planned TNSUs (+5.6%) and lower than planned terminal costs in real terms (-2.0%, or -0.1 M€2017).

Terminal service units

The difference between actual and planned TNSUs (+5.6%) falls outside the $\pm 2\%$ dead band, but does not exceed the $\pm 10\%$ threshold foreseen in the traffic risk sharing mechanism. The resulting gain of additional terminal revenues is therefore shared between the ATSP and the airspace users, with the ATSP (EANS) retaining an amount of +0.1 M€2017.

Terminal costs by entity

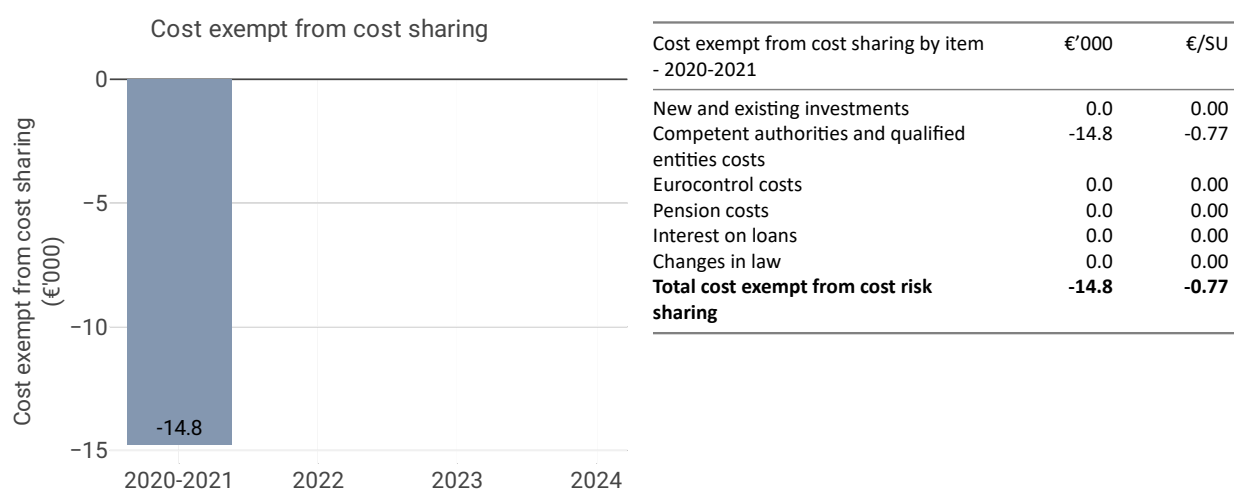
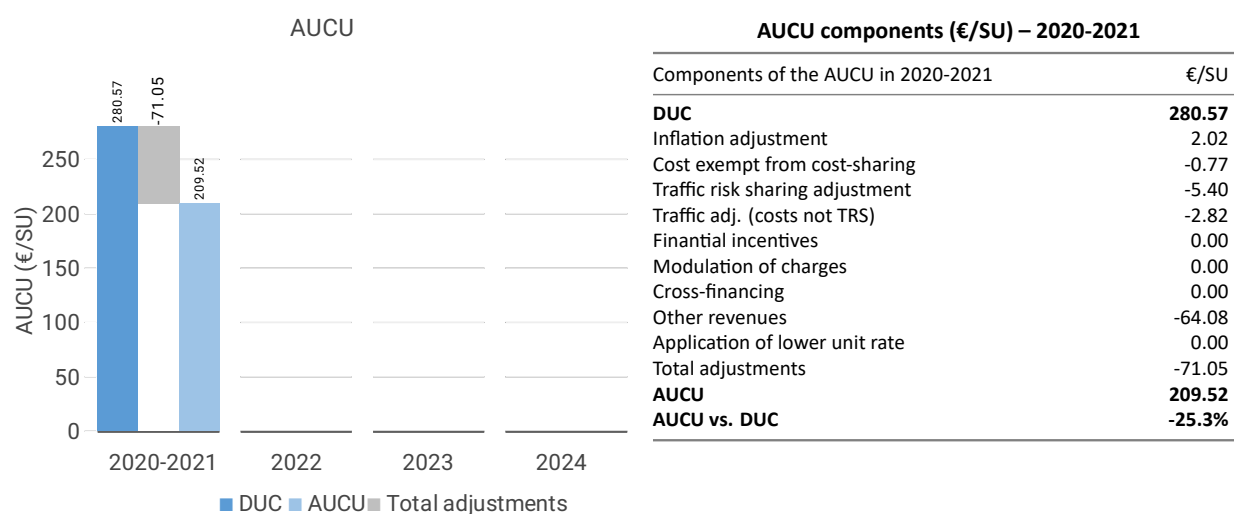
Actual real terminal costs are -2.0% (-0.1 M€2017) lower than planned. This is driven by the main ANSP, EANS (-2.0%, or -0.1 M€2017) and NSA (-2.3%, or -0.01 M€2017).

Terminal costs for the main ANSP at charging zone level

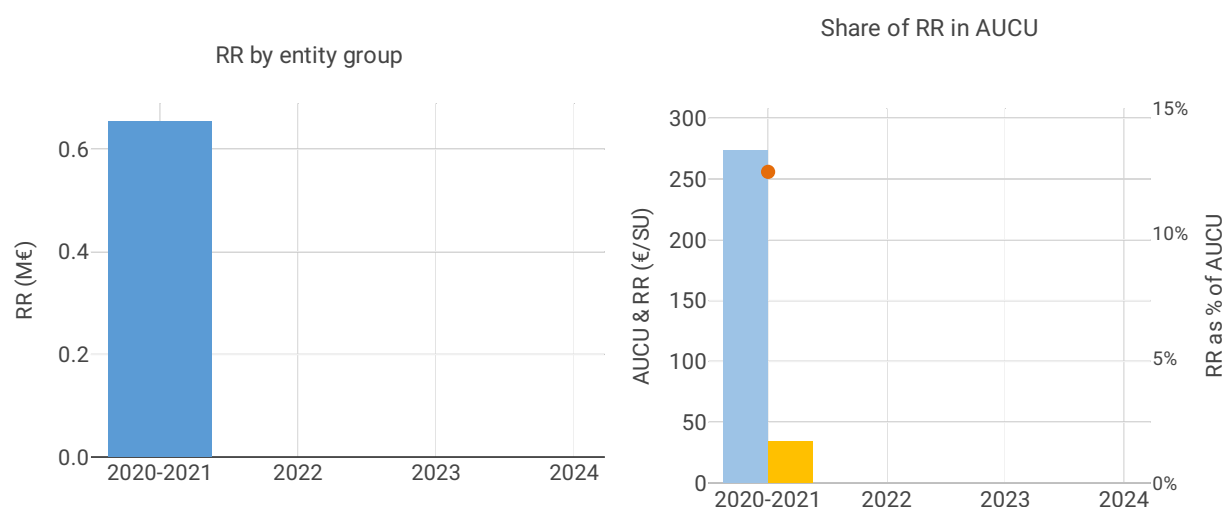
The lower than planned terminal costs in real terms for EANS (-2.0%, or -0.1 M€2017) result from:

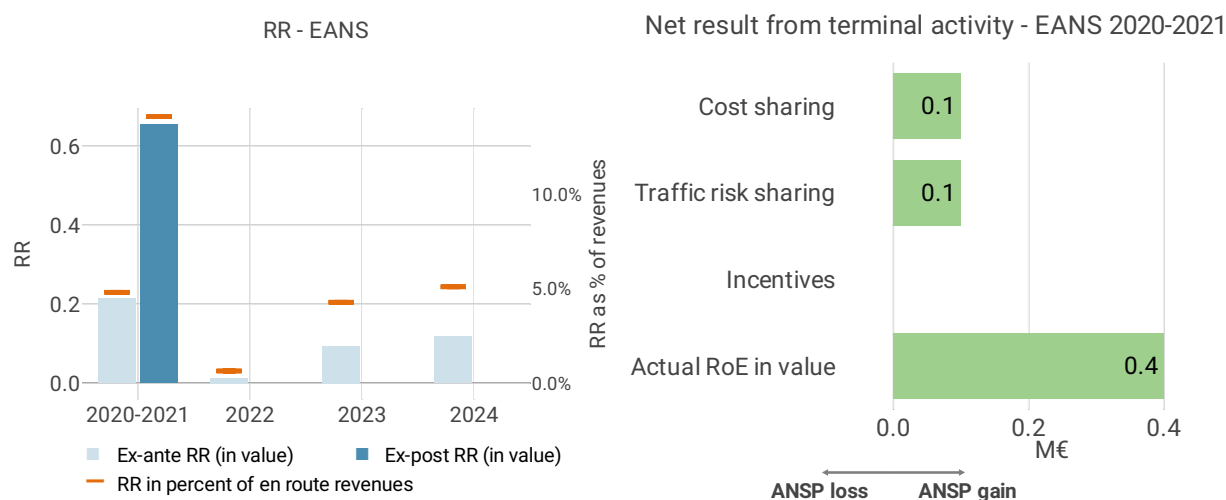
- lower staff costs (-5.7%);
- lower other operating costs (-8.3%), due to implementation extensive cost-cutting measures to reduce losses. Travelling expenses, rental expenses (especially communication service rental costs) and training expenses were lower than planned and other cost items were cut where possible;
- lower depreciation (-5.5%), due to the postponement of some investments to 2022 and further;
- higher cost of capital (+41.9%), resulting from the approval of an additional shareholder investment in equity, leading to higher cost of capital, although the rate of return on equity remained unchanged.

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



5.3.3 Regulatory result (RR)





Focus on regulatory result

EANS net gain on activity in the Estonia terminal charging zone in the combined year 2020-2021

EANS's net gain amounts to +0.2 M€ due to gains of +0.1 M€ from the cost sharing mechanism and of +0.1 M€ from the traffic risk sharing mechanism.

EANS overall regulatory results (RR) for the terminal charging zone activity

Ex-post, the overall RR taking into account the net gain from the terminal activity mentioned above (+0.2 M€) and the actual RoE (+0.4 M€) amounts to +0.7 M€ (14.1% of the terminal revenues). The resulting ex-post rate of return on equity is 11.3%, which is higher than the 7.3% planned in the PP.