Annual Monitoring Report 2023

Local level view

ESTONIA

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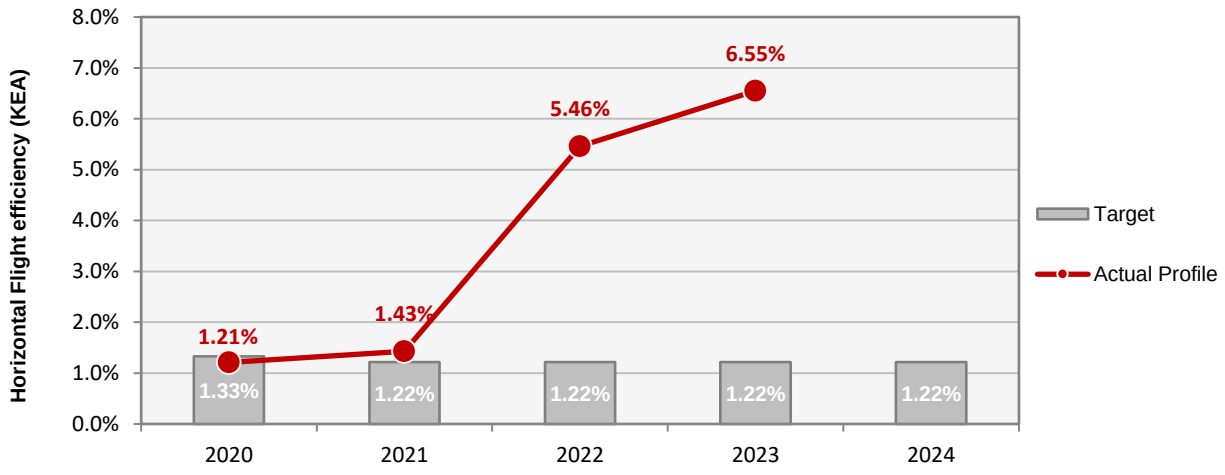
Effectiveness of Safety Management						
	Score	**Safety Culture**	**Safety Policy and Objectives**	**Safety Risk Management**	**Safety Assurance**	**Safety Promotion**
EANS	100	D	D	D	D	D

Note: EoSM questionnaire has been updated in RP3 using CANSO Standard of Excellence as the basis, maturity levels of study areas and calculation of the score have been updated too. A direct comparison with maturity levels and scoring of EoSM used RP2 is not advisable.

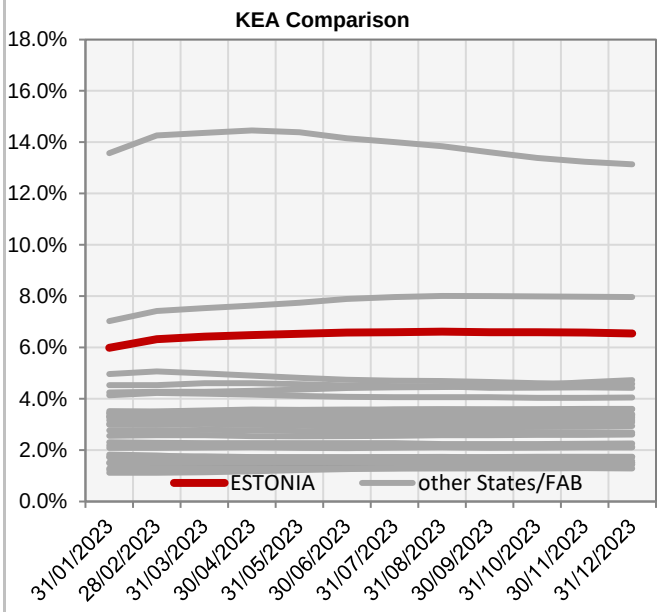
Observations

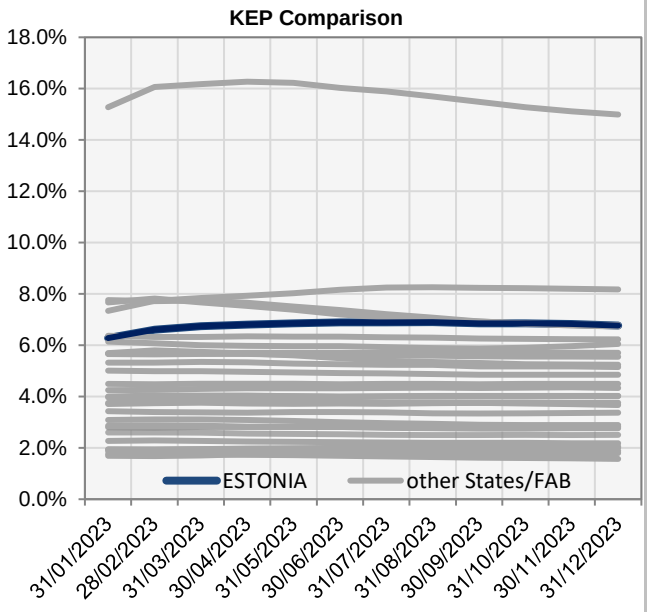
All five EoSM components of the ANSP meet, or exceed, already the RP3 target level. Maximum maturity level was maintained compared with 2022.

KEA	2020	2021	2022	2023	2024
Target	1.33%	1.22%	1.22%	1.22%	1.22%
Actual performance	1.21%	1.43%	5.46%	6.55%	



End of month indicators evolution in 2023	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
KEA	5.99%	6.32%	6.43%	6.48%	6.53%	6.59%	6.60%	6.62%	6.60%	6.60%	6.58%	6.55%
KEP	6.28%	6.61%	6.74%	6.80%	6.85%	6.89%	6.89%	6.90%	6.85%	6.85%	6.83%	6.77%
KES	6.26%	6.57%	6.68%	6.72%	6.75%	6.80%	6.79%	6.79%	6.75%	6.74%	6.71%	6.65%





The indicators are the ratio of flown distance and achieved distance over all (portions of) trajectories over a one year rolling window, excluding the ten best and ten worst days. The rolling window stops at the last day of the month.

1. Overview

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, additional taxi-out and ASMA times are not monitored and the environmental performance focuses only on the share of arrivals applying CDO.
Traffic at these Estonian airports in 2023 was still 23% lower than in 2019.
The share of CDO flights is in the higher range of all observed values in 2023. Estonia has the highest share of CDO flights when calculated by State (65.5%).

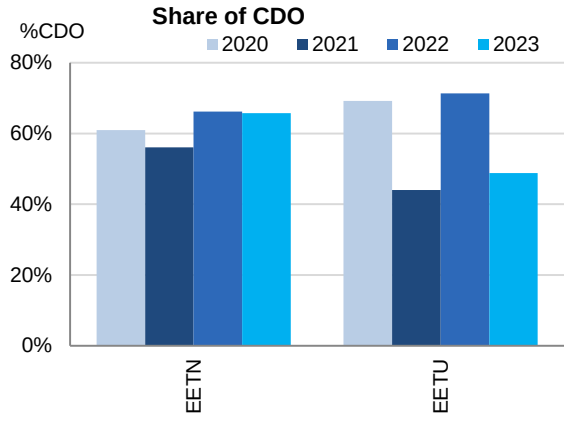
2. Additional Taxi-Out Time

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. Additional ASMA Time

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.

4. Share of arrivals applying CDO



The share of CDO flights has stayed stable for Tallin (EETN) but has significantly decreased again for Tartu (EETU): -22.5 percentage points with respect to 2022. They are still well above the overall RP3 value in 2023 (28.8%). Tallin (EETN) is in the top 10 of all observed values in 2023.

5. Appendix

n/a: airport operator data flow not established, or more than two months of missing / non-validated data

Airport Name	Additional taxi-out time					Additional ASMA time					Share of arrivals applying CDO				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Tallin-EETN	-	-	-	-		-	-	-	-		61%	56%	66%	66%	
Tartu-EETU	-	-	-	-		-	-	-	-		69%	44%	71%	49%	

Update on Military dimension of the plan

Military - related measures implemented or planned to improve capacity

PI#6 Effective use of reserved or segregated airspace - national level

Ratio PI#6	2020	2021	2022	2023	2024
Estonia					

PI#6 Effective use of reserved or segregated airspace (per ACC)

Ratio PI#6	2020	2021	2022	2023	2024
Tallinn					

Initiatives implemented or planned to improve PI#6

No data available

PI#7 Rate of planning via available airspace structures - national level

Ratio PI#7	2020	2021	2022	2023	2024
Estonia				n/a	

PI#7 Rate of planning via available airspace structures (per ACC)

Ratio PI#7	2020	2021	2022	2023	2024
Tallinn				n/a	

Initiatives implemented or planned to improve PI#7

FRA has been implemented

PI#8 Rate of using available airspace structures - national level

Ratio PI#8	2020	2021	2022	2023	2024
Estonia				n/a	

PI#8 Rate of using available airspace structures (per ACC)

Ratio PI#8	2020	2021	2022	2023	2024
Tallinn				n/a	

Initiatives implemented or planned to improve PI#8

Minutes of ATFM en-route delay						
	2020	2021	2022	2023	2024	Observations
National Target	0.05	0.01	0.03	0.03	0.03	
Actual performance	0.00	0.00	0.00	0.00		

NSA's assessment of capacity performance

In operational context, in 2023 we faced significant challenges and modest recovery across different quarters. The year was largely impacted by the ongoing Russian aggression against Ukraine, comparable in its effects to the COVID-19 pandemic. The Estonian airspace continues to be impacted by sanctions and the resulting decrease in air traffic between Europe and Asia.
In 2023, Estonia experienced a slight increase in flights compared to the previous year but still faced significant decrease compared to 2019.

The en route capacity targets of Estonia, measured in minutes of ATFM delay per flight for 2023, was set at 0.03 minutes. The actual ATFM delay per flight for 2023 was recorded at 0.0 minutes. No capacity issues have been identified. Air traffic flows have remained significantly below 2019 levels due to the sanctions on Russia and airspace closures caused by Russia's war against Ukraine.

Monitoring process for capacity performance

Review of the actual values from the NM dashboard.

Capacity Planning

Due to the limited traffic volumes capacity planning remains standard. ATFM delays are anticipated to remain at zero, as capacity continues to align with user demand

ATCO in OPS (FTE)							
Tallinn ACC	2019	2020	2021	2022	2023	2024	Observations
Planned (Perf Plan)	-	-	25	27	27	27	
Actual	30	23	23	23	21		

Additional Information Related to Russia's War of Aggression Against Ukraine

Estonian airspace continues to be impacted by sanctions and the resulting decrease in air traffic between Europe and Asia. The ANSP has had to scale down and streamline operations while maintaining readiness for when traffic picks up again.

Summary of capacity performance

Estonia experienced an increase in traffic from 142k flights in 2022, to 148k flights in 2023 with zero ATFM delay. Traffic levels remain significantly below the 227k flights handled in 2019.

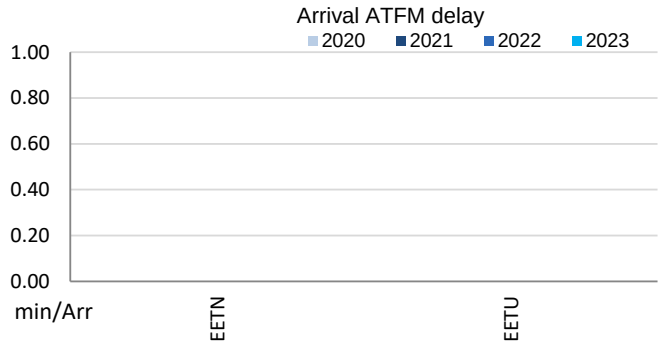
En route Capacity Incentive Scheme						
EANS	2020	2021	2022	2023	2024	Observations
National Capacity target	0.05	0.01	0.03	0.03	0.03	Actual performance falls inside the deadband range; therefore no bonus is due.
Deadband +/-	-	-	-	[0-0.06]	[0-0.06]	
Actual performance	0.00	0.00	0.00	0.00		

1. Overview

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 2023 was still 23% lower than in 2019.

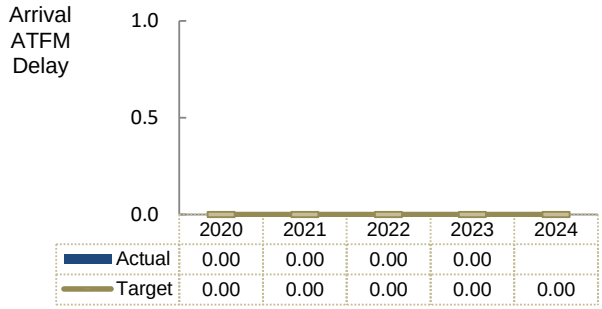
Like in the rest of RP3, no arrival ATFM delays were observed in the entire 2023 at these two airports and slot adherence remained very high (2023: 98.9%; 2022: 98.3%).

2. Arrival ATFM Delay



Like in previous years, no arrival ATFM delay was observed at the Estonian airports (Tallinn and Tartu) in 2023. According to the Estonian monitoring report, this is due to *low traffic volumes and well functioning systems*

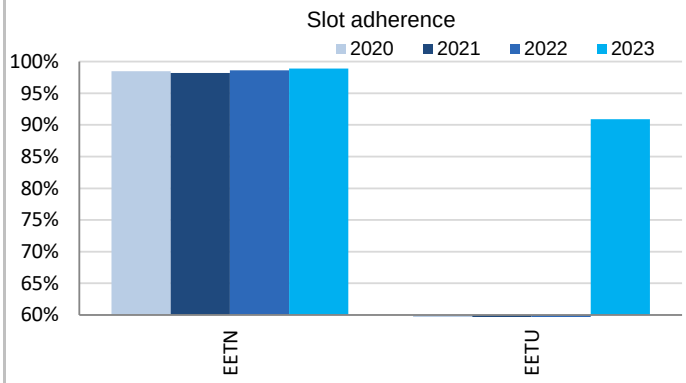
3. Arrival ATFM Delay – National Target and Incentive Scheme



The Estonian performance plan sets a national target on arrival ATFM delay for all RP3 of 0.0 min/arr. This target, like in the rest of RP3, was met in 2023 with an actual performance of 0.0 min/arr.
The Estonian performance plan does not establish any bonus.

According to the Estonian monitoring report: *Since the number of flights remains low and the number of delays attributable to EANS is zero, there is no point in establishing a bonus, as a bonus should motivate change, but it is impossible to improve non-existent delays.*

4. ATFM Slot Adherence



Tallin showed very high slot adherence (98.9%) and at Tartu there only 11 regulated departures in 2023, from which only 1 departed outside of the STW.
The national average was 98.9%. With regard to the 1.1% of flights that did not adhere, 0.3% was early and 0.8% was late.

According to the Estonian monitoring report: *Performance remained on the same high level.*

5. 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.

6. 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.

7. Appendix

n/a: airport operator data flow not established, or more than two months of missing / non-validated data

Airport Name	Avg arrival ATFM delay					Slot adherence					ATC pre-departure delay					All Causes Pre-departure Delay				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Tallin-EETN	0	0	0	0		98.5%	98.2%	98.6%			-	-	-	-		-	-	-	-	
Tartu-EETU	0	0	0	0		n/a	n/a	50.0%			-	-	-	-		-	-	-	-	

ESTONIA: En route charging zone

Monitoring of en route COST-EFFICIENCY for 2023

1. Contextual economic information: en route air navigation services

- Estonia ECZ represents 0.4% of the SES en route ANS actual costs in 2023
- National currency: EUR
- Performance Plan: RP3 draft performance plan dated 10 February 2022 and found consistent as per Commission Decision (EU) 2022/771 of 13 April 2022

  The final version of the plan was adopted and published by Estonia in accordance with Article 16 (a) of Regulation (EU) 2019/317

2. Monitoring of the en route determined unit cost (DUC) at charging zone level

The **Determined Unit Cost (DUC)** is the cost per service unit, at which the service is planned to be provided during the year. The **Actual Unit Cost (AUC)** reflects the cost per service unit, at which the service has actually been provided during the year.

The monitoring of the DUC / AUC is carried out in national currency in real terms, at 2017 prices.

3. En route actual unit cost (AUC) vs. en route determined unit cost (DUC)

Estonia: Data from RP3 Performance Plan	2020D	2021D	2020-2021D	2022D	2023D	2024D
En route costs (nominal €)	26 963 328	26 899 545	53 862 873	26 786 115	28 336 431	29 613 617
Inflation %	0.0%	1.8%		2.5%	2.1%	1.9%
Inflation index (100 in 2017)	105.8	107.7		110.4	112.7	114.8
Real en route costs (€2017)	26 132 098	25 829 816	51 961 914	25 297 780	26 447 397	27 337 166
Total en route service units	418 749	444 561	863 310	726 854	865 151	912 301
Real en route DUC per service unit (€2017)	**62.41**	**58.10**	**60.19**	**34.80**	**30.57**	**29.97**

Estonia: Actual data from Reporting Tables	2020A	2021A	2020-2021A	2022A	2023A	2024A
En route costs (nominal €)	26 963 329	26 509 273	53 472 602	26 102 327	26 710 715	
Inflation %	0.0%	4.5%		19.4%	9.1%	
Inflation index (100 in 2017)	105.8	110.5		132.0	144.0	
Real en route costs (€2017)	26 132 099	25 148 805	51 280 904	22 396 739	21 725 843	
Total en route service units	418 749	466 942	885 691	428 511	446 250	
Real en route AUC per service unit (€2017)	**62.41**	**53.86**	**57.90**	**52.27**	**48.69**	

Difference between Actuals and Planned		2020	2021	2020-2021	2022	2023	2024
En route costs (nominal €)	in value	1	-390 272	-390 271	-683 788	-1 625 716	
	in %	+0.0%	-1.5%	-0.7%	-2.6%	-5.7%	
Inflation %	in p.p.	0.0 p.p.	2.7 p.p.		16.9 p.p.	7.0 p.p.	
Inflation index (100 in 2017)	in p.p.	0.0 p.p.	2.9 p.p.		21.6 p.p.	31.3 p.p.	
Real en route costs (€2017)	in value	1	-681 011	-681 010	-2 901 041	-4 721 554	
	in %	+0.0%	-2.6%	-1.3%	-11.5%	-17.9%	
Total en route service units	in value	0	22 381	22 381	-298 343	-418 901	
	in %	-	+5.0%	+2.6%	-41.0%	-48.4%	
Real en route unit cost per service unit (€2017)	**in value**	**0.00**	**-4.24**	**-2.29**	**17.46**	**18.12**	
	in %	**+0.0%**	**-7.3%**	**-3.8%**	**+50.2%**	**+59.3%**	

4. Focus on en route DUC monitoring at charging zone level

AUC vs. DUC

In 2023, the en route AUC was +59.3% (or +18.12 €2017) higher than the planned DUC. This results from the combination of significantly lower than planned TSUs (-48.4%) and significantly lower than planned en route costs in real terms (-17.9%, or -4.7 M€2017). It should be noted that actual inflation index in 2023 was +31.3 p.p. higher than planned.

En route service units

The difference between actual and planned TSUs (-48.4%) falls outside the ±10% threshold foreseen in the traffic risk sharing mechanism. The resulting loss of en route revenues is therefore shared between the ANSP and the airspace users, with the ANSP (EANS) bearing a loss of -0.7 M€2017.

En route costs by entity

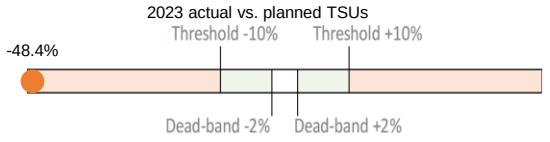
Actual real en route costs are -17.9% (-4.7 M€2017) lower than planned. This is the result of lower costs for the main ANSP, EANS (-28.0%, or -5.6 M€2017) and higher costs for the NSA/EUROCONTROL (+13.1%, or +0.9 M€2017).

En route costs for the main ANSP (EANS) at charging zone level

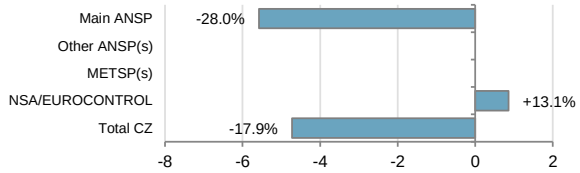
Significantly lower than planned en route costs in real terms for EANS in 2023 (-28.0%, or -5.6 M€2017) result from:

- Significantly lower staff costs (-21.7%) in real terms due to the inflation index impact (+31.3 p.p.) since, in nominal terms, staff costs are in line with the plan (+0.03%).
- Significantly lower other operating costs (-31.0%) reflecting the impact of inflation index but also "*extensive cost-cutting measures to reduce losses. Travelling expenses, equipment maintenance costs and training expenses were the main items for savings*",
- Significantly lower depreciation (-42.0%), reflecting "*changes in actual investment costs of new investments due to a delayed/postponed implementation*",
- Significantly lower cost of capital (-36.9%) reflecting the use of lower than planned share of financing through equity.

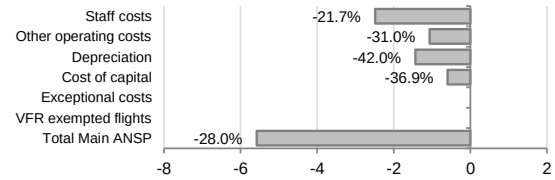
2023 actual vs. planned TSUs



Costs by entity at ECZ level (M€2017):



Costs by nature for main ANSP (M€2017):

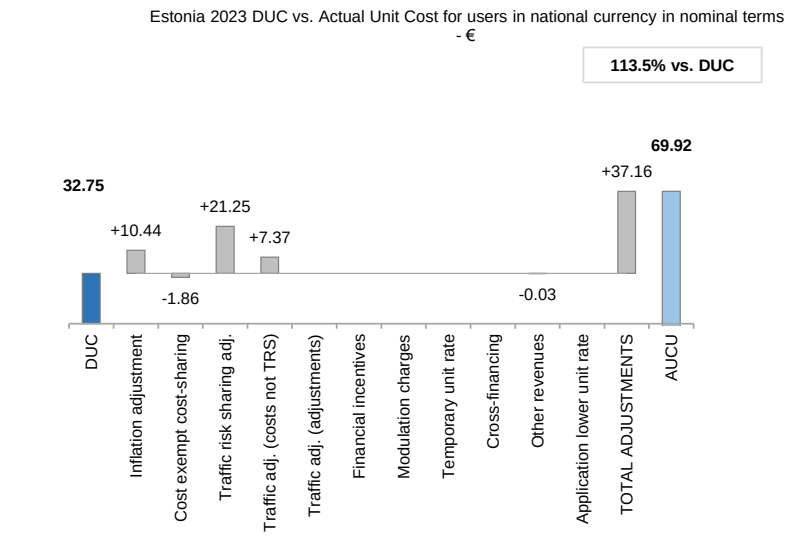


5. Monitoring of the en route actual unit cost for users (AUCU) at charging zone level

The **Actual Unit Cost for Users (AUCU)** reflects the price per service unit that is charged *in fine* to users for the services provided in the year. It corresponds to the sum of the DUC for the year and of the different adjustments stemming from that year.

The monitoring of the AUCU is carried out in national currency in nominal terms.

6. En route actual unit cost for users (AUCU) at charging zone level



Components of the AUCU	€/SU
Initial DUC charged	32.75
DUC to be charged retroactively	0.00
DUC	**32.75**
Inflation adjustment	10.44
Cost exempt from cost-sharing	-1.86
Traffic risk sharing adjustment	21.25
Traffic adj. (costs not TRS)	7.37
Traffic adj. (adjustments)*	
Financial incentives	0.00
Modulation of charges	0.00
Temporary UR**	
Cross-financing	0.00
Other revenues	-0.03
Application of lower unit rate	0.00
Total adjustments	37.16
AUCU	**69.92**
AUCU vs. DUC	**+113.5%**

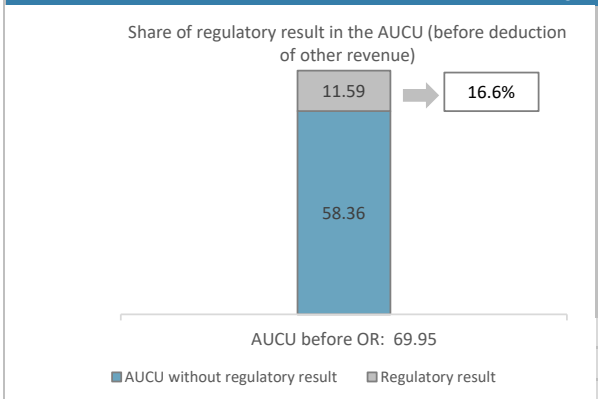
* The traffic adjustment on adjustments is not considered to avoid double counting, as the related adjustments have already been taken into account in full in the AUCU for the current year or previous years.
** The difference in revenue due to the application of the temporary unit rates in 2023, if applicable, is already reflected in the DUC (part to be charged retroactively) and is therefore not considered in the total adjustments, in order to avoid double counting.

7. En route costs exempt from cost sharing

		€ '000	€/SU
by item	New and existing investments	-1 689	-3.78
	Competent authorities and qualified entities costs	839	1.88
	Eurocontrol costs	19	0.04
	Pension costs	0	0.00
	Interest on loans	0	0.00
	Changes in law	0	0.00
Total costs exempt from cost sharing		**-831**	**-1.86**

These costs will be recovered from (+) or reimbursed to (-) users. These may be subject to change following user consultation and NSA Report on the verification of cost-sharing.

8. En route regulatory result at charging zone level



ANSP(S)	€ '000	€/SU
EANS	5 170	11.59
METSP(s)	**€ '000**	**€/SU**
Total charging zone	5 170	11.59
Actual cost for users* **	31 216	69.95
Regulatory result (% AUCU)	16.6%	16.6%

*** before deduction of other revenues, as is the case for the regulatory results (see items 10 to 13)

9. Focus on en route AUCU monitoring at charging zone level

The actual en route unit cost incurred by airspace users (AUCU) in respect of activities performed in 2023 (69.92 €) is +113.5% higher than the nominal DUC (32.75 €). The difference between these two figures (+37.16 €/SU) is due to:
- the positive inflation adjustment resulting from higher than planned inflation (+10.44 €/SU);
- the impact of adjustments resulting from the costs exempted from cost-sharing mechanism (-1.86 €/SU);
- the addition of the traffic risk sharing adjustments (+21.25 €/SU);
- the addition of the traffic adjustment (+7.37 €/SU) for the costs not subject to traffic risk sharing; and
- the deduction of the other revenues (-0.03 €/SU).

The share of the regulatory result (see items 10 to 13) in the AUCU (before the deduction of other revenues) is 16.6%.

Note that the cost exempt from cost sharing presented in this report for 2023 are preliminary figures which are subject to change based on the information that will be provided in the NSA Reports on the verification of the cost sharing to be submitted by the 1st September 2024. These changes may affect the analysis of the Actual Costs for Users (boxes 6-9) and of the regulatory result (boxes 11-14 for en route and terminal, and box 3 for gate-to-gate).

10. Monitoring of the en route ANSPs regulatory results (RR)

The **Regulatory Result (RR)** corresponds to the revenues generated by the activities of the year, that exceed the direct and indirect operating costs of an ANSP, and so provide for a reasonable return on assets to contribute towards necessary capital improvements. The notion of RR focuses on the ANSP results entitled to the ANS activity in the year. It is therefore different from the net accounting profit disclosed in ANSPs financial statements. Also, it does not take into account any opportunity cost.
The RR, when expressed in percentage of the revenues, can be associated to a "margin" generated by the ANSP with respect to the activity of the year, but it is not comparable to the margin that would be calculated straight from ANSPs financial statements.
- Ex-ante, the RR is equal to the RoE (in value) included in the determined cost of capital.
- Ex-post, the RR is the sum of the RoE (in value) in the actual cost of capital and the net gain/loss resulting from risk sharing and incentives generated from that year.

The **net gain/loss** calculated in box 11 results from the combination of three distinct items: a) the outcome of the cost-sharing mechanism to be retained by the ANSP (including the impact of costs exempted from cost-sharing and of the inflation adjustment); b) the outcome of the traffic risk sharing mechanism; and c) the outcome of the financial incentive mechanism for capacity and environment targets.
The monitoring of the RR is carried out in national currency in nominal terms.

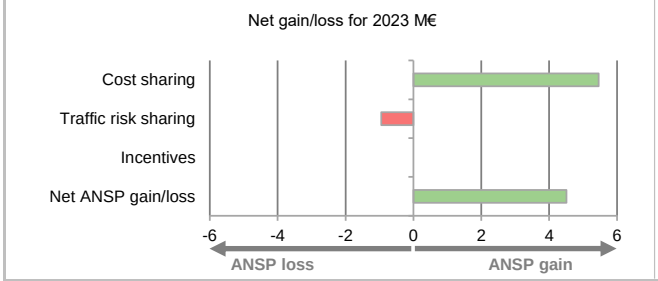
11. Net gain/loss for the main ANSP for the en route activity at charging zone level

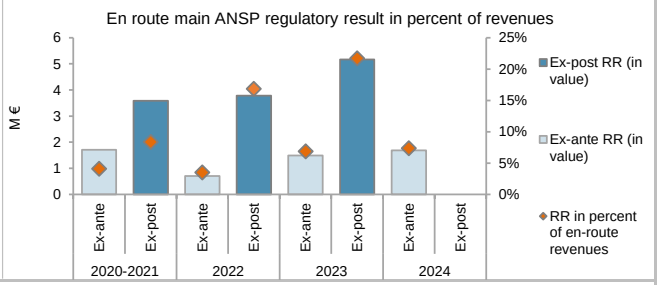
Cost sharing (€ '000)	2020-2021	2022	2023	2024
Difference in costs: gain (+)/Loss (-) retained/borne by the ANSP	-29	651	2 483	
Inflation adjustment to be recovered from (+) or reimbursed to (-) users	398	3 100	4 659	
Amounts excluded from cost sharing to be recovered from (+) or reimbursed to (-) users	-36	-100	-1 689	
Gain (+)/Loss (-) to be retained by the ANSP in respect of cost sharing	**333**	**3 651**	**5 453**	
Traffic risk sharing (€ '000)	**2020-2021**	**2022**	**2023**	**2024**
Difference in total service units (actual vs PP) %	2.6%	-41.0%	-48.4%	
Determined costs subject to traffic risk sharing for the ANSP (PP)	41 272	20 124	21 544	
Gain (+)/Loss (-) to be retained by the ANSP in respect of traffic risk sharing	**899**	**-885**	**-948**	
Incentives (€ '000)	**2020-2021**	**2022**	**2023**	**2024**
Gain (+)/Loss (-) to be retained by the ANSP in respect of incentives (bonus/penalty)	**0**	**0**	**0**	
Net ANSP gain(+)/loss(-) on en route activity (€ '000)	**1 231**	**2 766**	**4 505**	

12. Regulatory result (RR) for the main ANSP at charging zone level

EANS planned regulatory result (€ '000) from RP3 PP	2020D	2021D	2020-2021D	2022D	2023D	2024D
Total asset base	28 085	27 018	55 103	26 775	28 649	30 168
Proportion of financing through equity (in %)	61%	23%	42%	36%	71%	77%
RoE pre-tax rate (in %)	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
RoE (in value)	1 257	452	1 708	708	1 491	1 687
Ex-ante regulatory result (+/-) for the en route charging zone	**1 257**	**452**	**1 708**	**708**	**1 491**	**1 687**
Revenue for the en route charging zone	**21 284**	**20 433**	**41 716**	**20 360**	**21 792**	**22 944**
Ex-ante regulatory result (+/-) in percent of revenues	**5.9%**	**2.2%**	**4.1%**	**3.5%**	**6.8%**	**7.4%**
Ex-ante RoE pre-tax rate (in %)	**7.3%**	**7.3%**	**7.3%**	**7.3%**	**7.3%**	**7.3%**
EANS actual regulatory result (€ '000)	**2020A**	**2021A**	**2020-2021A**	**2022A**	**2023A**	**2024A**
Total asset base	28 085	28 876	56 961	22 928	24 872	
Proportion of financing through equity (in %)	61%	52%	57%	61%	37%	
RoE pre-tax rate (in %)	7.3%	7.3%	7.3%	7.3%	7.3%	
RoE (in value)	1 257	1 096	2 353	1 018	665	
Net ANSP gain(+)/loss(-) for the en route charging zone	0	1 231	1 231	2 766	4 505	
Ex-post regulatory result (+/-) for the en route charging zone	**1 257**	**2 328**	**3 584**	**3 783**	**5 170**	
Revenue for the en route charging zone	**21 284**	**21 694**	**42 977**	**22 474**	**23 814**	
Ex-post regulatory result (+/-) in percent of revenues	**5.9%**	**10.7%**	**8.3%**	**16.8%**	**21.7%**	
Ex-post RoE pre-tax rate (in %)	**7.3%**	**15.5%**	**11.1%**	**27.1%**	**56.8%**	

13. Focus on the main ANSP regulatory result on en route activity





EANS net gain on activity in the Estonia en route charging zone in the year 2023

EANS reported a net gain of +4.5 M€, as a combination of a gain of +5.5 M€ arising from the cost sharing mechanism, with a loss 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 (+4.5 M€) and the actual RoE (+0.7 M€) amounts to +5.2 M€ (21.7% of the en route revenues). The resulting ex-post rate of return on equity is 56.8%, which is substantially higher than the 7.3% planned in the PP.

ESTONIA: Terminal charging zone

Monitoring of terminal COST-EFFICIENCY for 2023

1. Contextual economic information: terminal air navigation services

- Estonia TCZ represents 0.2% of the SES terminal ANS actual costs in 2023
- Number of airports in charging zone in 2023: 2 of which:
  - Airports with fewer than 80,000 IFR mvmts: 2
  - Airports with more than 80,000 IFR mvmts: 0
- National currency: EUR
- Performance Plan: See item 1 for the en route charging zone(s).

2. Monitoring of the terminal determined unit cost (DUC) at charging zone level

The **Determined Unit Cost (DUC)** is the cost per service unit, at which the service is planned to be provided during the year. The **Actual Unit Cost (AUC)** reflects the cost per service unit, at which the service has actually been provided during the year.

The monitoring of the DUC / AUC is carried out in national currency in real terms, at 2017 prices.

3. Terminal actual unit cost (AUC) vs. terminal determined unit cost (DUC)

Estonia: Data from RP3 Performance Plan	**2020D**	**2021D**	**2020-2021D**	**2022D**	**2023D**	**2024D**
Terminal costs (nominal €)	2 572 617	2 526 192	5 098 809	2 393 127	2 528 987	2 646 202
Inflation %	0.0%	1.8%		2.5%	2.1%	1.9%
Inflation index (100 in 2017)	105.8	107.7		110.4	112.7	114.8
Real terminal costs (€2017)	2 496 661	2 422 118	4 918 779	2 254 405	2 355 293	2 438 319
Total terminal service units	8 201	9 972	18 173	17 372	18 786	19 870
Real terminal DUC per service unit (€2017)	**304.43**	**242.90**	**270.66**	**129.77**	**125.37**	**122.71**

Estonia: Actual data from Reporting Tables	**2020A**	**2021A**	**2020-2021A**	**2022A**	**2023A**	**2024A**
Terminal costs (nominal €)	2 572 617	2 446 840	5 019 457	2 809 249	3 320 847	
Inflation %	0.0%	4.5%		19.4%	9.1%	
Inflation index (100 in 2017)	105.8	110.5		132.0	144.0	
Real terminal costs (€2017)	2 496 661	2 323 789	4 820 450	2 393 352	2 697 694	
Total terminal service units	8 201	10 986	19 188	17 403	17 305	
Real terminal AUC per service unit (€2017)	**304.43**	**211.52**	**251.23**	**137.53**	**155.89**	

Difference between Actuals and Planned		**2020**	**2021**	**2020-2021**	**2022**	**2023**	**2024**
Terminal costs (nominal €)	in value	0	-79 352	-79 352	416 122	791 860	
	in %	-	-3.1%	-1.6%	+17.4%	+31.3%	
Inflation %	in p.p.	0.0 p.p.	2.7 p.p.		16.9 p.p.	7.0 p.p.	
Inflation index (100 in 2017)	in p.p.	0.0 p.p.	2.9 p.p.		21.6 p.p.	31.3 p.p.	
Real terminal costs (€2017)	in value	0	-98 329	-98 329	138 948	342 401	
	in %	-	-4.1%	-2.0%	+6.2%	+14.5%	
Total terminal service units	in value	0	1 015	1 015	30	-1 481	
	in %	-	+10.2%	+5.6%	+0.2%	-7.9%	
Real terminal unit cost per service unit (€2017)	**in value**	**0.00**	**-31.38**	**-19.44**	**7.76**	**30.52**	
	in %	**-**	**-12.9%**	**-7.2%**	**+6.0%**	**+24.3%**	

4. Focus on terminal DUC monitoring at charging zone level

AUC vs. DUC

In 2023, the terminal AUC was +24.3% (or +30.52 €2017) higher than the planned DUC. This results from the combination of significantly higher than planned terminal costs in real terms (+14.5%, or +0.3 M€2017) and significantly lower than planned TNSUs (-7.9%). It should be noted that actual inflation index in 2023 was +31.3 p.p. higher than planned.

Terminal service units

The difference between actual and planned TNSUs (-7.9%) falls outside the ±2% dead band, but does not exceed the ±10% threshold foreseen in the traffic risk sharing mechanism. The resulting loss of terminal revenues is therefore shared between the ANSP and the airspace users, with the ANSP (EANS) bearing a loss of -0.1 M€2017.

Terminal costs by entity

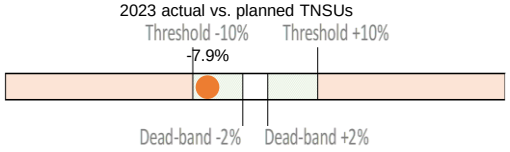
Actual real terminal costs are +14.5% (+0.3 M€2017) higher than planned. This is the result of higher costs for the main ANSP, EANS (+14.8%, or +0.3 M€2017) and the NSA (+12.8%, or +0.04 M€2017).

Terminal costs for the main ANSP (EANS) at charging zone level

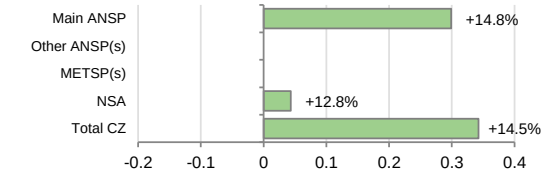
Significantly higher than planned terminal costs in real terms for EANS in 2023 (+14.8%, or +0.3 M€2017) result from:

- Significantly lower staff costs (-12.5%) in real terms due to the inflation index impact (+31.3 p.p.). In nominal terms, staff costs are above the plan (+11.8%), which, based on the information provided by Estonia, is due to the fact that "*higher proportion of actual costs were allocated to terminal costs*" due to a significantly lower en route traffic.
- Significantly higher other operating costs (+21.1%), which, as already detailed above, is also explained by the changes in the allocation of actual costs.
- Significantly higher depreciation (+46.4%), reflecting continuation of the invesment programme, including projects which had been postponed in previous years.
- Significantly higher cost of capital (+20.3%) reflecting a combination of higher than planned interest rate on debt and higher proportion of financing through equity.

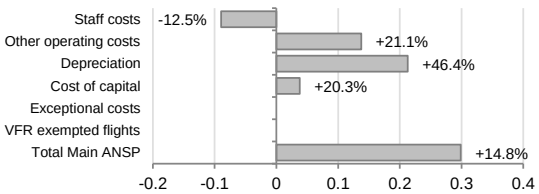
2023 actual vs. planned TNSUs



Costs by entity at TCZ level (M€2017):



Costs by nature for main ANSP (M€2017):

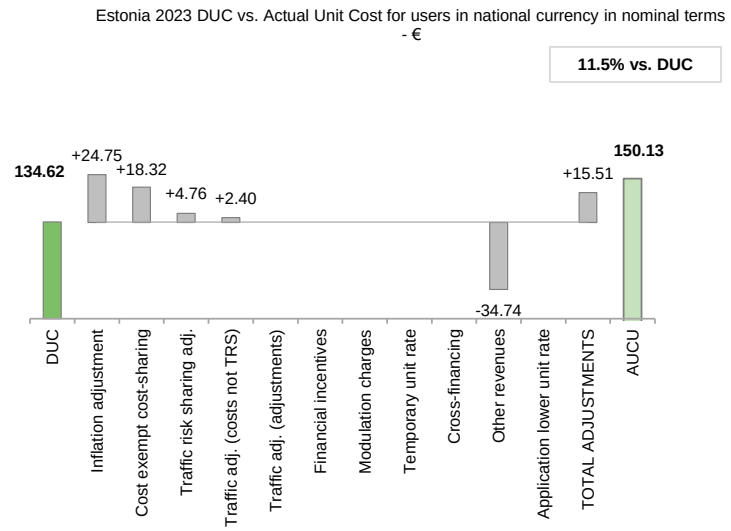


5. Monitoring of the terminal actual unit cost for users (AUCU) at charging zone level

The **Actual Unit Cost for Users (AUCU)** reflects the price per service unit that is charged *in fine* to users for the services provided in the year. It corresponds to the sum of the DUC for the year and of the different adjustments stemming from that year.

The monitoring of the AUCU is carried out in national currency in nominal terms.

6. Terminal actual unit cost for users (AUCU) at charging zone level



Components of the AUCU	€/SU
Initial DUC charged	134.62
DUC to be charged retroactively	0.00
DUC	**134.62**
Inflation adjustment	24.75
Cost exempt from cost-sharing	18.32
Traffic risk sharing adjustment	4.76
Traffic adj. (costs not TRS)	2.40
Traffic adj. (adjustments)*	
Financial incentives	0.00
Modulation of charges	0.00
Temporary UR**	
Cross-financing	0.00
Other revenues	-34.74
Application of lower unit rate	0.00
Total adjustments	15.51
AUCU	**150.13**
AUCU vs. DUC	**11.5%**

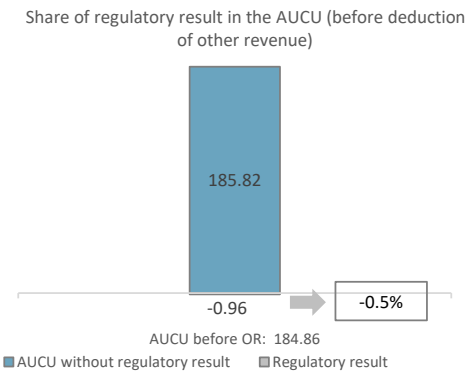
* The traffic adjustment on adjustments is not considered to avoid double counting, as the related adjustments have already been taken into account in full in the AUCU for the current year or previous years.
** The difference in revenue due to the application of the temporary unit rates in 2023, if applicable, is already reflected in the DUC (part to be charged retroactively) and is therefore not considered in the total adjustments, in order to avoid double counting.

7. Terminal costs exempt from cost sharing

		€ '000	€/SU
by item	New and existing investments	274	15.81
	Competent authorities and qualified entities costs	43	2.51
	Eurocontrol costs	0	0.00
	Pension costs	0	0.00
	Interest on loans	0	0.00
	Changes in law	0	0.00
Total costs exempt from cost sharing		**317**	**18.32**

These costs will be recovered from (+) or reimbursed to (-) users. These may be subject to change following user consultation and NSA Report on the verification of cost-sharing.

8. Terminal regulatory result at charging zone level



ANSP(S)	€ '000	€/SU
EANS	-17	-0.96
METSP(s)	**€ '000**	**€/SU**
Total charging zone	-17	-0.96
Actual cost for users* **	3 199	184.86
Regulatory result (% AUCU)	-0.5%	-0.5%

*** before deduction of other revenues, as is the case for the regulatory results (see items 10 to 13)

9. Focus on terminal AUCU monitoring at charging zone level

The actual terminal unit cost incurred by airspace users (AUCU) in respect of activities performed in 2023 (150.13 €) is +11.5% higher than the nominal DUC (134.62 €). The difference between these two figures (+15.51 €/SU) is due to:
- the positive inflation adjustment resulting from higher than planned inflation (+24.75 €/SU);
- the impact of adjustments resulting from the costs exempted from cost-sharing mechanism (+18.32 €/SU);
- the addition of the traffic risk sharing adjustments (+4.76 €/SU);
- the addition of the traffic adjustment (+2.40 €/SU) for the costs not subject to traffic risk sharing; and
- the deduction of the other revenues (-34.74 €/SU).

The share of the regulatory result (see items 10 to 13) in the AUCU (before the deduction of other revenues) is -0.5%.

Note that the cost exempt from cost sharing presented in this report for 2023 are preliminary figures which are subject to change based on the information that will be provided in the NSA Reports on the verification of the cost sharing to be submitted by the 1st September 2024. These changes may affect the analysis of the Actual Costs for Users (boxes 6-9) and of the regulatory result (boxes 11-14 for en route and terminal, and box 3 for gate-to-gate).

10. Monitoring of the terminal ANSPs regulatory results (RR)

The **Regulatory Result (RR)** corresponds to the revenues generated by the activities of the year, that exceed the direct and indirect operating costs of an ANSP, and so provide for a reasonable return on assets to contribute towards necessary capital improvements. The notion of RR focuses on the ANSP results entitled to the ANS activity in the year. It is therefore different from the net accounting profit disclosed in ANSPs financial statements. Also, it does not take into account any opportunity cost.
The RR, when expressed in percentage of the revenues, can be associated to a "margin" generated by the ANSP with respect to the activity of the year, but it is not comparable to the margin that would be calculated straight from ANSPs financial statements.
- Ex-ante, the RR is equal to the RoE (in value) included in the determined cost of capital.
- Ex-post, the RR is the sum of the RoE (in value) in the actual cost of capital and the net gain/loss resulting from risk sharing and incentives generated from that year.

The **net gain/loss** calculated in box 11 results from the combination of three distinct items: a) the outcome of the cost-sharing mechanism to be retained by the ANSP (including the impact of costs exempted from cost-sharing and of the inflation adjustment); b) the outcome of the traffic risk sharing mechanism; and c) the outcome of the financial incentive mechanism for capacity and environment targets.
The monitoring of the RR is carried out in national currency in nominal terms.

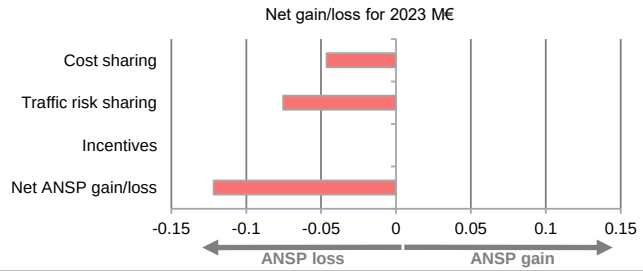
11. Net gain/loss for the main ANSP for the terminal activity at charging zone level

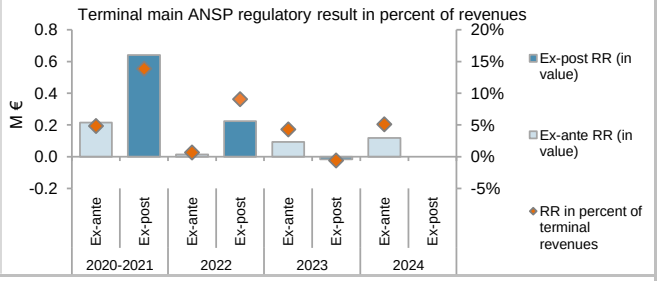
Cost sharing (€ '000)	2020-2021	2022	2023	2024
Difference in costs: gain (+)/Loss (-) retained/borne by the ANSP	65	-378	-748	
Inflation adjustment to be recovered from (+) or reimbursed to (-) users	39	289	428	
Amounts excluded from cost sharing to be recovered from (+) or reimbursed to (-) users	-14	133	274	
Gain (+)/Loss (-) to be retained by the ANSP in respect of cost sharing	**89**	**45**	**-46**	
Traffic risk sharing (€ '000)	**2020-2021**	**2022**	**2023**	**2024**
Difference in total service units (actual vs PP) %	5.6%	0.2%	-7.9%	
Determined costs subject to traffic risk sharing for the ANSP (PP)	4 128	1 883	2 002	
Gain (+)/Loss (-) to be retained by the ANSP in respect of traffic risk sharing	**127**	**3**	**-75**	
Incentives (€ '000)	**2020-2021**	**2022**	**2023**	**2024**
Gain (+)/Loss (-) to be retained by the ANSP in respect of incentives (bonus/penalty)	**0**	**0**	**0**	
Net ANSP gain(+)/loss(-) on terminal activity (€ '000)	**216**	**48**	**-122**	

12. Regulatory result (RR) for the main ANSP at charging zone level

EANS planned regulatory result (€ '000) from RP3 PP	**2020**	**2021**	**2020-2021D**	**2022**	**2023**	**2024**
Total asset base	7 835	7 538	15 373	6 499	7 992	8 416
Proportion of financing through equity (in %)	35%	2%	19%	3%	16%	19%
RoE pre-tax rate (in %)	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
RoE (in value)	202	13	215	13	94	117
Ex-ante regulatory result (+/-) for the terminal charging zone	**202**	**13**	**215**	**13**	**94**	**117**
Revenue for the terminal charging zone	**2 263**	**2 200**	**4 463**	**2 061**	**2 188**	**2 297**
Ex-ante regulatory result (+/-) in percent of revenues	**8.9%**	**0.6%**	**4.8%**	**0.6%**	**4.3%**	**5.1%**
Ex-ante RoE pre-tax rate (in %)	**7.3%**	**7.3%**	**7.3%**	**7.3%**	**7.3%**	**7.3%**
EANS actual regulatory result (€ '000)	**2020**	**2021**	**2020-2021A**	**2022**	**2023**	**2024**
Total asset base	7 835	8 055	15 890	6 396	6 888	
Proportion of financing through equity (in %)	35%	38%	37%	38%	21%	
RoE pre-tax rate (in %)	7.3%	7.3%	7.3%	7.3%	7.3%	
RoE (in value)	202	222	424	177	105	
Net ANSP gain(+)/loss(-) for the terminal charging zone	0	216	216	48	-122	
Ex-post regulatory result (+/-) for the terminal charging zone	**202**	**438**	**641**	**225**	**-17**	
Revenue for the terminal charging zone	**2 263**	**2 352**	**4 615**	**2 486**	**2 815**	
Ex-post regulatory result (+/-) in percent of revenues	**8.9%**	**18.6%**	**13.9%**	**9.0%**	**-0.6%**	
Ex-post RoE pre-tax rate (in %)	**7.3%**	**14.4%**	**11.0%**	**9.3%**	**-1.2%**	

13. Focus on main ANSP regulatory result on terminal activity





EANS net gain on activity in the Estonia terminal charging zone in the year 2023

EANS reported a net loss of -0.1 M€, as a combination of a loss of -0.05 M€ arising from the cost sharing mechanism, with a loss of -0.1 M€ arising from the traffic risk sharing mechanism.

EANS overall regulatory results (RR) for the terminal activity

Ex-post, the overall RR taking into account the net loss from the terminal activity mentioned above (-0.1 M€) and the actual RoE (+0.1 M€) amounts to -0.02 M€ (-0.6% of the terminal revenues). The resulting ex-post rate of return on equity is negative (-1.2%).

ESTONIA: Gate-to-gate **Monitoring of gate-to-gate COST-EFFICIENCY for 2023**

1. Monitoring of gate-to-gate ANS costs

Charging zones concerned:

En route charging zone 1: Estonia

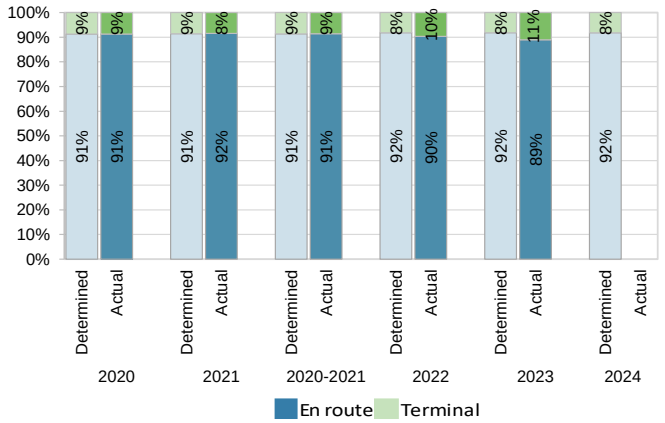
Terminal charging zone 1: Estonia

Estonia: data from RP3 performance plan	2020D	2021D	2020-2021D	2022D	2023D	2024D
Real en route costs (€2017)	26 132 098	25 829 816	51 961 914	25 297 780	26 447 397	27 337 166
Real terminal costs (€2017)	2 496 661	2 422 118	4 918 779	2 254 405	2 355 293	2 438 319
Real gate-to-gate costs (€2017)	28 628 758	28 251 934	56 880 693	27 552 184	28 802 690	29 775 486
En route share (%)	91.3%	91.4%	91.4%	91.8%	91.8%	91.8%

Estonia: actual data from reporting tables	2020A	2021A	2020-2021A	2022A	2023A	2024A
Real en route costs (€2017)	26 132 099	25 148 805	51 280 904	22 396 739	21 725 843	
Real terminal costs (€2017)	2 496 661	2 323 789	4 820 450	2 393 352	2 697 694	
Real gate-to-gate costs (€2017)	28 628 760	27 472 594	56 101 354	24 790 091	24 423 537	
En route share (%)	91.3%	91.5%	91.4%	90.3%	89.0%	

Difference between actuals and planned (actuals vs. PP)		2020	2021	2020-2021	2022	2023	2024
Real gate-to-gate costs (€2017)	in value	1	-779 340	-779 339	-2 762 093	-4 379 153	
	in %	0.0%	-2.8%	-1.4%	-10.0%	-15.2%	
En route share	in p.p.	0.0 p.p.	0.1 p.p.	0.1 p.p.	-1.5 p.p.	-2.9 p.p.	

2. Share of en route and terminal in gate-to-gate actual costs (2023)

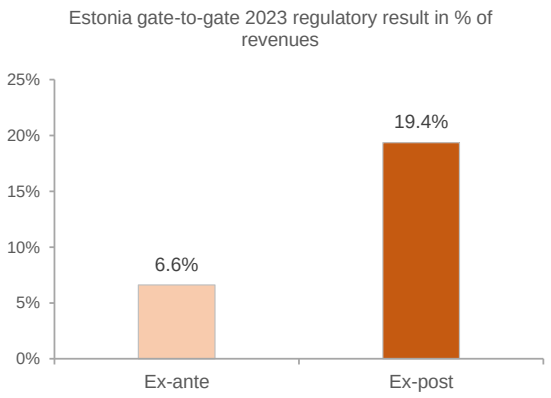


In 2023, actual gate-to-gate ANS costs are -15.2% (-4.4 M€2017) lower than planned, as en route costs are lower than planned by -4.7 M€2017 and terminal costs are higher than planned by +0.3 M€2017.

The actual share of en route in gate-to-gate ANS costs (89%) is lower than planned in the PP for 2023 (91.8%).

3. Gate-to-gate regulatory result (RR) 2023

In € '000	Ex-ante				Ex-post			
ANSP(S)	**RR**	**Revenues**	**RR % revenues**		**RR**	**Revenues**	**RR % revenues**	
EANS	1 585	23 980	6.6%		5 153	26 629	19.4%	
METSP(s)	**RR**	**Revenues**	**RR % revenues**		**RR**	**Revenues**	**RR % revenues**	
Total	**1 585**	**23 980**	**6.6%**		**5 153**	**26 629**	**19.4%**	

For the ANSPs providing services in the en route and terminal charging zones of Estonia covered by the SES performance scheme, the ex-post gate-to-gate regulatory result in 2023 amounts to +5.2 M€ (+5.2 M€ for en route and -0.02 M€ for terminal - see boxes 10 to 14 for the detailed analysis at charging zone level), corresponding to 19.4% of gate-to-gate ANS revenues.

This is higher than the return planned for the year (6.6% of gate-to-gate revenues).