PRB | Performance review body of the single european sky

Performance Review Body Monitoring Report

Finland - 2020

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1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/765 of 13 April 2022

List of ACCs 1
Tampere ACC

No of airports in the scope of the performance plan:
- **≥80'K** 1
- **<80'K** 0

Exchange rate (1 EUR=)
2017: 1 EUR
2020: 1 EUR

Share of Union-wide:
- **traffic (TSUs) 2020** 0.9%
- **en route costs 2020** 0.6%

Share en route / terminal costs 2020 72% / 28%

En route charging zone(s)
Finland

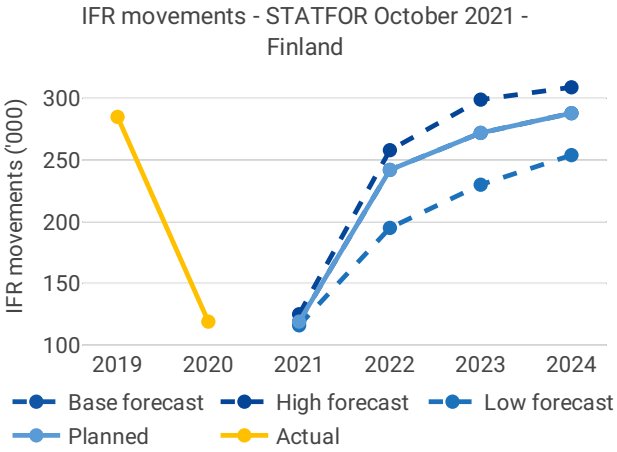
Terminal charging zone(s)
Finland

Main ANSP
- Fintraffic ANS

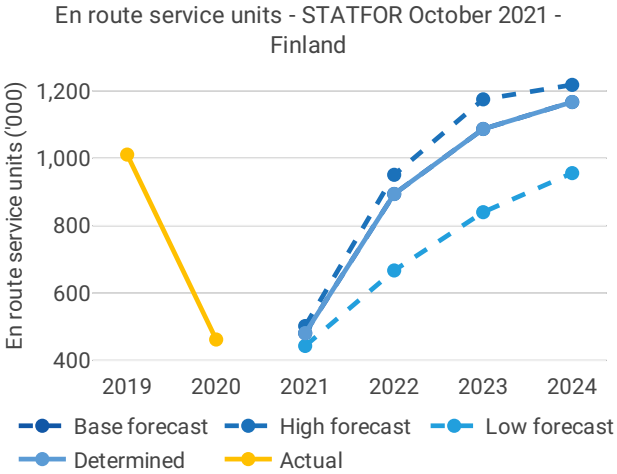
Other ANSPs
–

MET Providers
- Finnish Meteorological Institute (FMI)

1.2 Traffic (En route traffic zone)

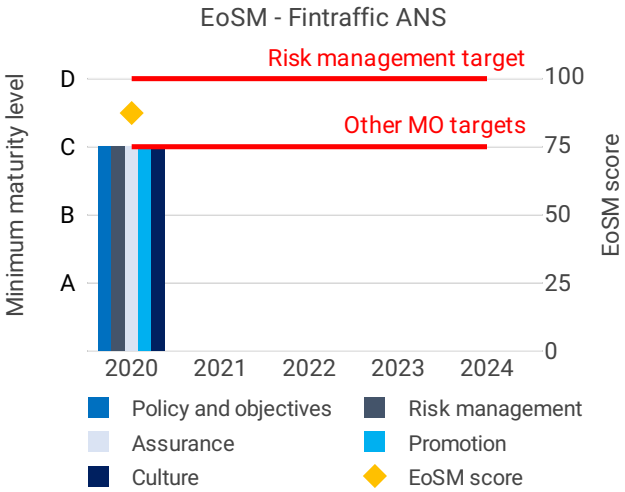


- Finland recorded 119K actual IFR movements in 2020, -58% compared to 2019 (285K).
- Finland IFR movements reduced more than the average reduction at Union-wide level (-57%).



- Finland recorded 462K actual en route service units in 2020, -54% compared to 2019 (1,011K).
- Finland service units reduced less than the average reduction at Union-wide level (-57%).

1.3 Safety (Main ANSP)



• ANS Finland achieved the RP3 EoSM targets in four management objectives and must improve in only one area: safety risk management. According to its 2019 draft performance plan, ANS Finland should have achieved the RP3 targets in 2020.

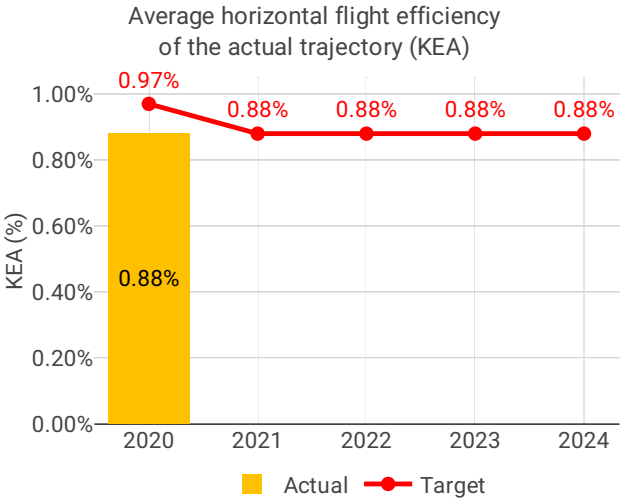
• The reason for not achieving the target on safety risk management is under assessment by the Finnish Transport and Communications Agency. No circumstances have been identified as of yet that should prevent ANS Finland from reaching the target.

• Compared to the maturity achieved at the end of RP2, the EoSM performance has remained stable as ANS was only deficient in safety risk management in 2019. ANS Finland has two out of three EoSM questions to improve on safety risk management, which should be feasible during RP3.

• Finland recorded good performances with respect to safety occurrences. Lower rates of both SMIs and RIs were achieved in 2020 compared with 2019, although SMI performance was higher than the Union-wide average.

• ANS Finland should improve its SMS by implementing automated safety data recording systems.

1.4 Environment (Member State)



• Finland achieved a KEA performance of 0.88% compared to its reference value of 0.97% and therefore contributed- positively towards achieving the Union-wide target.

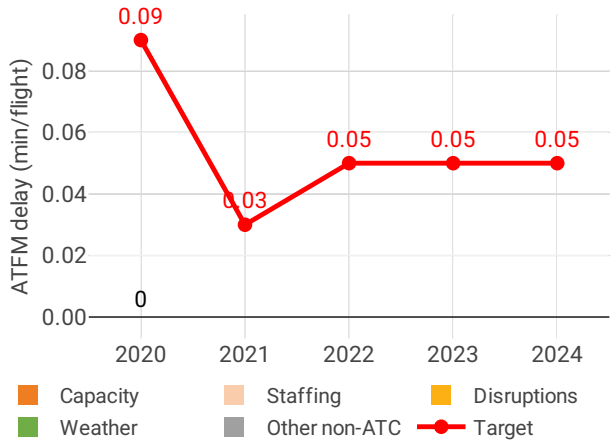
• Finland offers airspace users cross-border free route airspace with NEFAB and DK-SE FABs and stated that overflying traffic was as direct as possible.

• The share of flights operating CCO/CDO at Vantaa airport remained similar in 2020 compared to 2019. However, the performance is still class leading among Union-wide regulated airports with 60% of all arrivals completing a CDO landing.

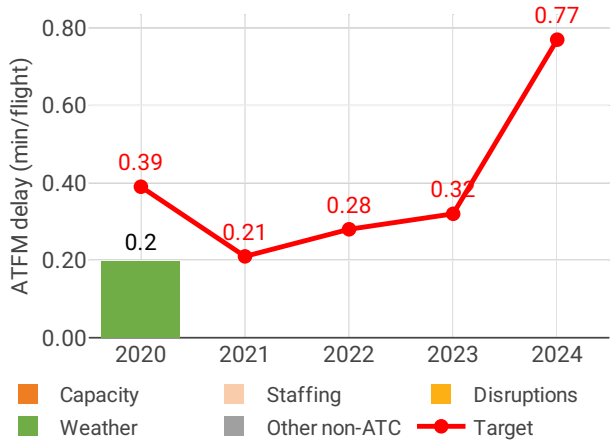
• The additional time airspace users spent taxiing or holding in terminal airspace reduced by 30% although most of this was due to improvements to airfield queuing. Since time spent holding in terminal airspace is approximately three times more fuel inefficient than taxiing, Vantaa airport should seek to improve this further going forward.

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups



Average arrival ATFM delay per flight by delay groups



• ANS Finland registered zero minutes of average en route ATFM delay per flight during 2020, thus meeting the local breakdown value of 0.09.

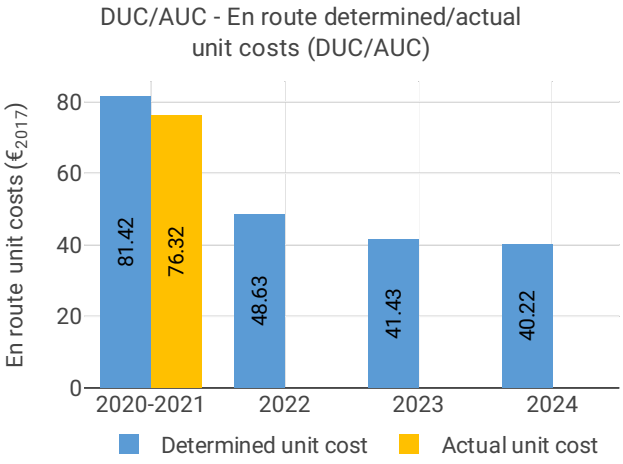
• Delays must be considered in the context of the traffic evolution: IFR movements in 2020 were 58% below the 2019 levels in Finland.

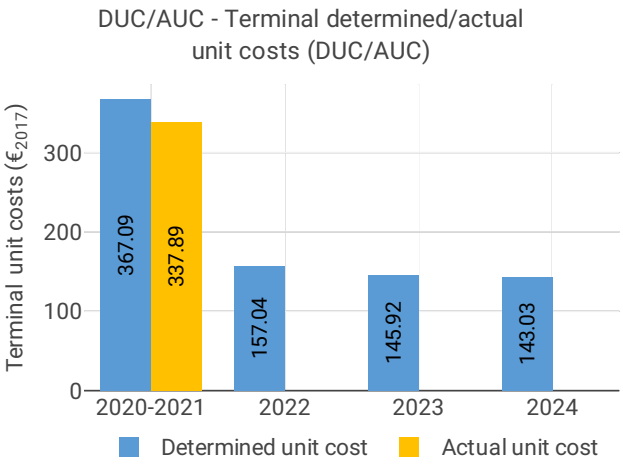
• Finland reported no capacity issues and a 32% drop in ATCO FTE numbers compared to 2019 and also compared to 2020 planned values. Finland did not report any specific drivers behind the ATCO FTE number reduction, however, only two ATCO FTEs are reported to have stopped working in OPS.

• The yearly total of sector opening hours in Tampere ACC was 10,168, showing a 24.6% decrease compared to 2019.

• Tampere ACC registered 8.44 IFR movements per one sector opening hour in 2020, being 42.9% below 2019 levels.

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





• The 2020 actual service units (462K) were 54% lower than the actual service units in 2019 (1,012K).

• Finland reduced total costs in 2020 by 4.5 M€2017 (-11%) compared to 2019 actual costs. The main driver of this reduction has been staff costs, with a decrease of 3.4 M€2017 (-15%), due for instance to temporary layoffs and cancellation of bonuses.

• Cost of capital increased by 247 K€2017 (+45%), due to combination of a higher WACC and asset base (due to higher current assets).

• ANS Finland spent 5.9 M€2017 in 2020 related to cost of investments, 19% less than planned in the 2019 draft performance plan (7.3 M€2017). The decrease is induced by a lower asset base than planned in the 2019 draft performance plan.

2 SAFETY - FINLAND

2.1 PRB monitoring

• ANS Finland achieved the RP3 EoSM targets in four management objectives and must improve in only one area: safety risk management. According to its 2019 draft performance plan, ANS Finland should have achieved the RP3 targets in 2020.

• The reason for not achieving the target on safety risk management is under assessment by the Finnish Transport and Communications Agency. No circumstances have been identified as of yet that should prevent ANS Finland from reaching the target.

• Compared to the maturity achieved at the end of RP2, the EoSM performance has remained stable as ANS was only deficient in safety risk management in 2019. ANS Finland has two out of three EoSM questions to improve on safety risk management, which should be feasible during RP3.

• Finland recorded good performances with respect to safety occurrences. Lower rates of both SMIs and RIs were achieved in 2020 compared with 2019, although SMI performance was higher than the Union-wide average.

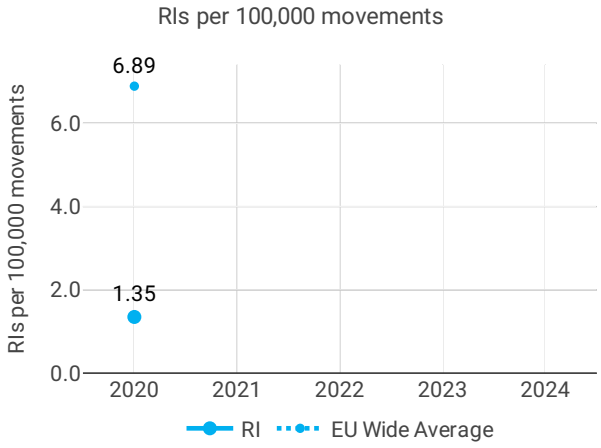
• ANS Finland should improve its SMS by implementing automated safety data recording systems.

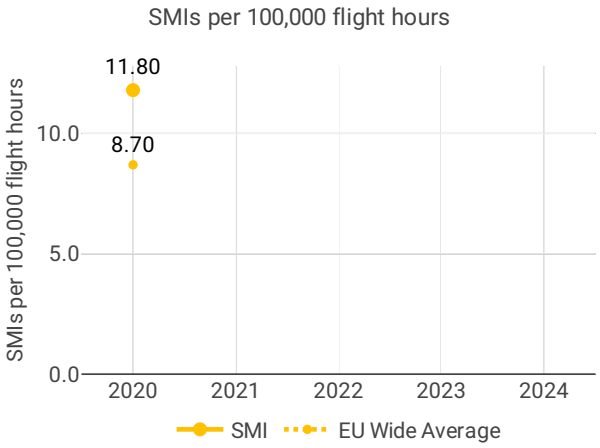
2.2 Effectiveness of Safety Management (EoSM) (KPI#1)

Focus on EoSM

Four out of five EoSM components of the ANSP meet already the 2024 target level. Only the component "Safety Risk Management" is below 2024 target level. Improvements in safety risk management are still expected during RP3 to achieve 2024 targets.

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





3 ENVIRONMENT - FINLAND

3.1 PRB monitoring

• Finland achieved a KEA performance of 0.88% compared to its reference value of 0.97% and therefore contributed- positively towards achieving the Union-wide target.

• Finland offers airspace users cross-border free route airspace with NEFAB and DK-SE FABs and stated that overflying traffic was as direct as possible.

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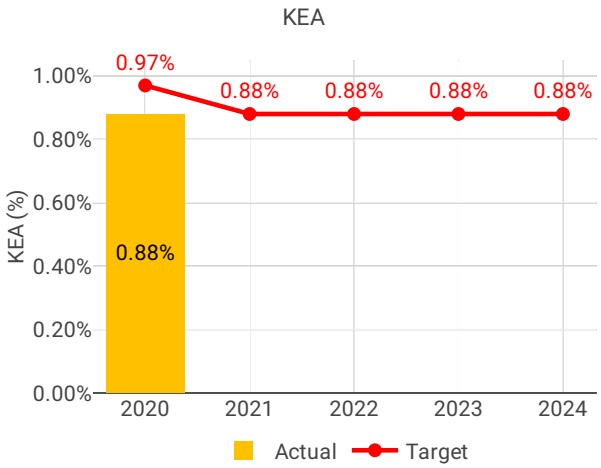
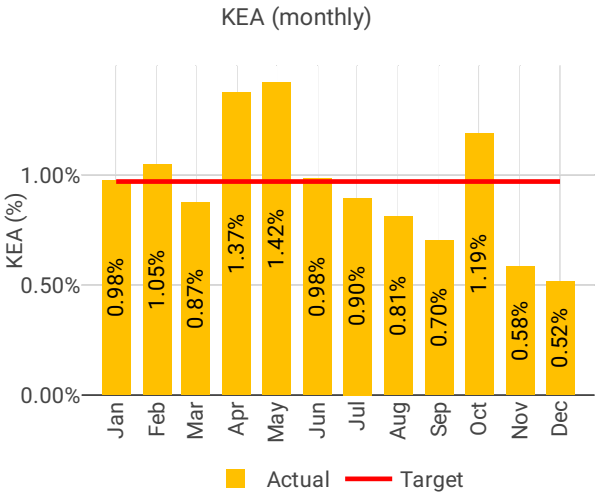
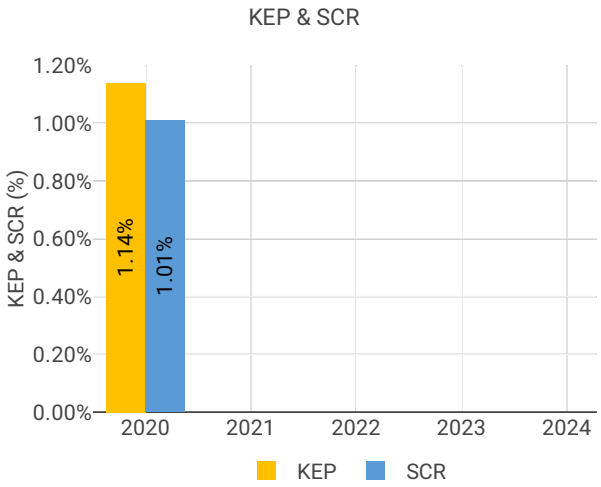
• The additional time airspace users spent taxiing or holding in terminal airspace reduced by 30% although most of this was due to improvements to airfield queuing. Since time spent holding in terminal airspace is approximately three times more fuel inefficient than taxiing, Vantaa airport should seek to improve this further going forward.

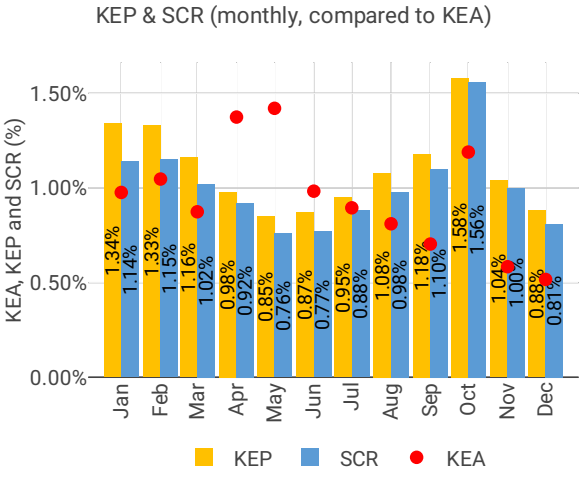
3.2 En route performance

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)



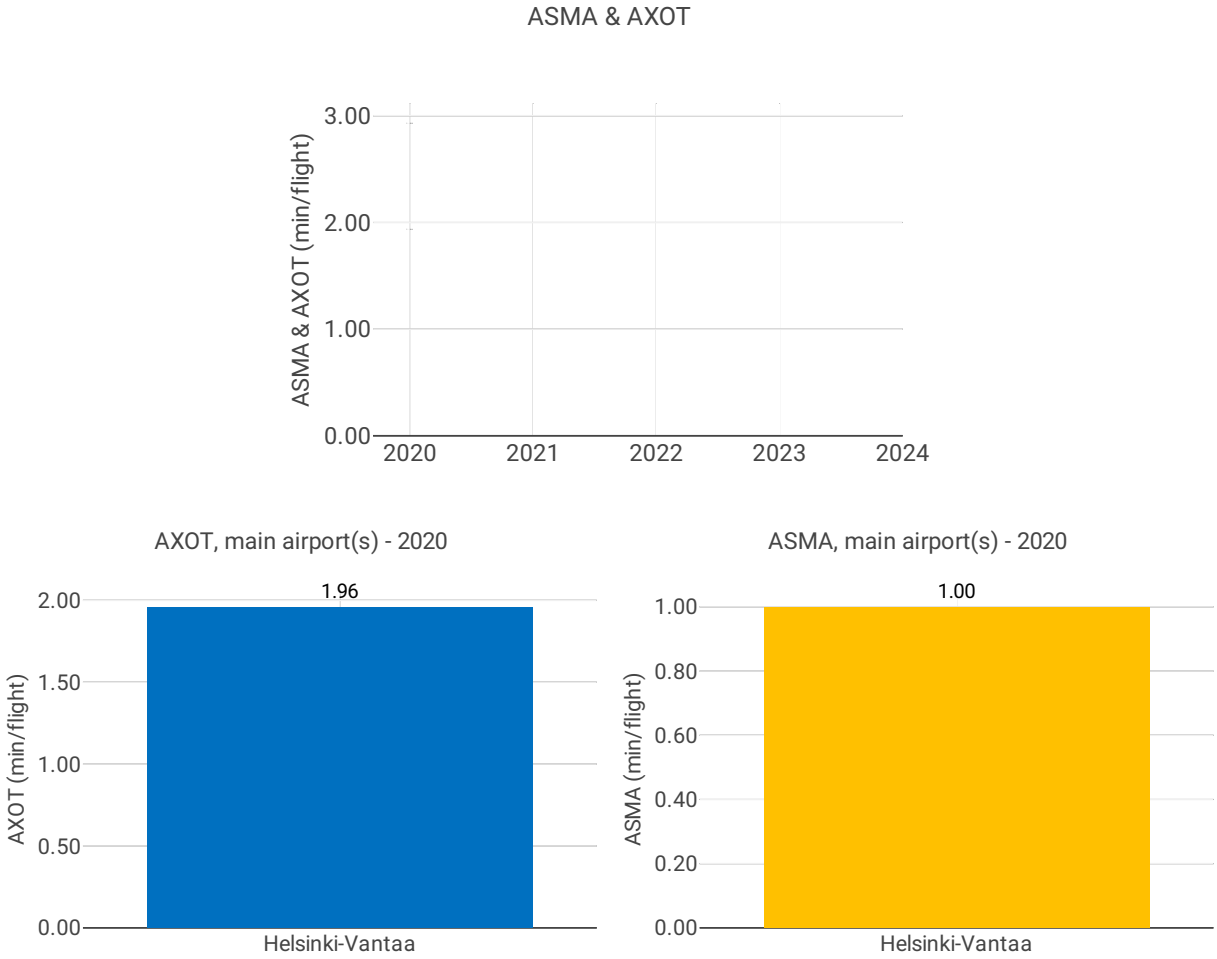






3.3 Terminal performance

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



Focus on ASMA & AXOT

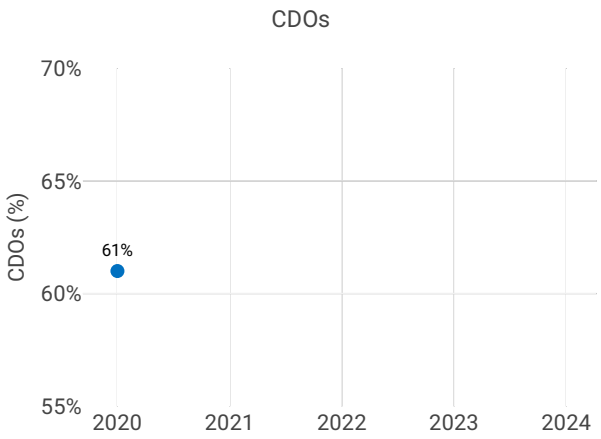
AXOT

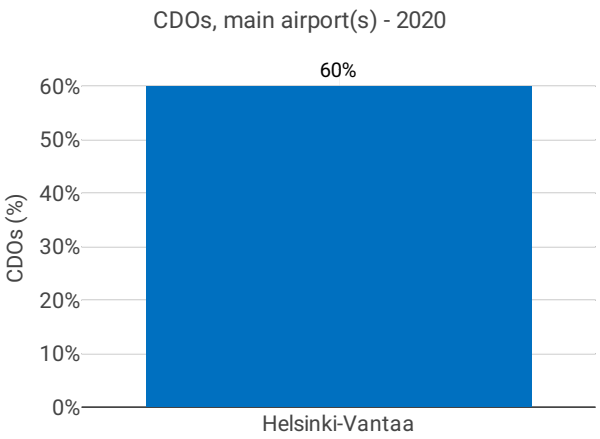
Additional taxi-out times at Helsinki (EFHK; 2019: 3.04 min/dep.; 2020: 1.96 min/dep.) are very influenced by the winter operations (winter maintenance and de-icing procedures), but the impact of these winter operations was much lower than in 2019. Interestingly, although the biggest drop in traffic was observed during April to June, the additional taxi out times were at the lowest from August to October.
According to the Finland's monitoring report:
During 2020 with reduced traffic, the closest runway to the terminal building was closed in order to reduce noise emissions, and this was affecting the taxi-out times.

ASMA

The additional times in the terminal airspace also decreased in 2020 (EFHK; 2019: 1.19 min/arr.; 2020: 1 min/arr.) but in a smaller proportion compared to the additional taxi-out times or the additional ASMA times at other European airports.
The biggest reduction was observed from June to August, when these times were practically zero.

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





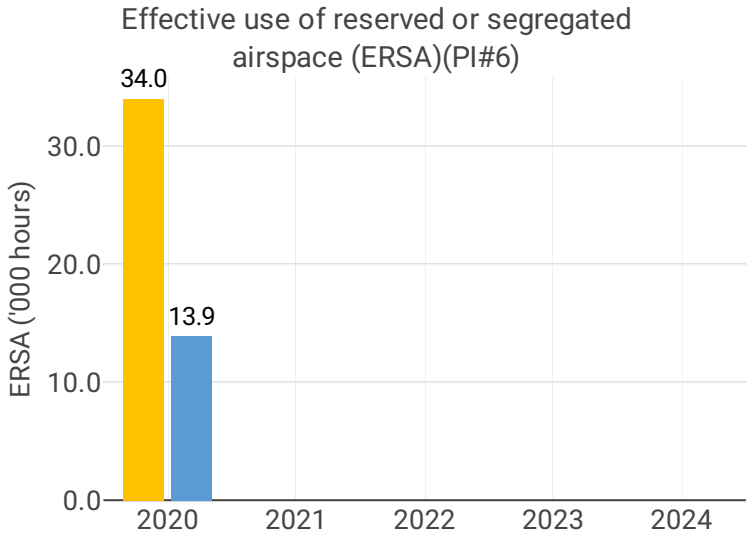
Focus CDOs

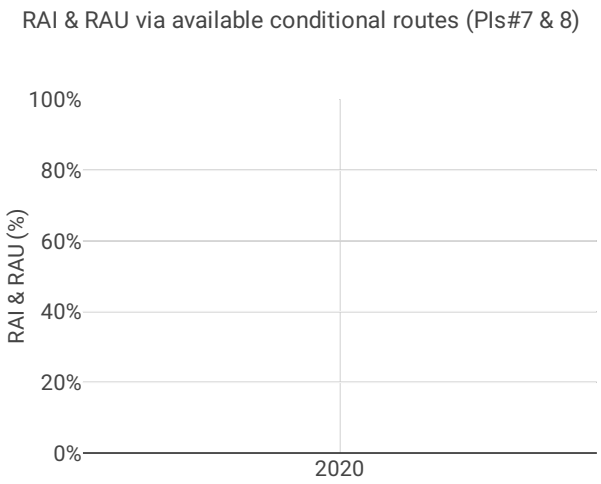
The share of CDO flights at Helsinki (EFHK) is 60.2% which is well above the overall RP3 value in 2020 (32.5%) and in the higher range of all observed values in 2020.

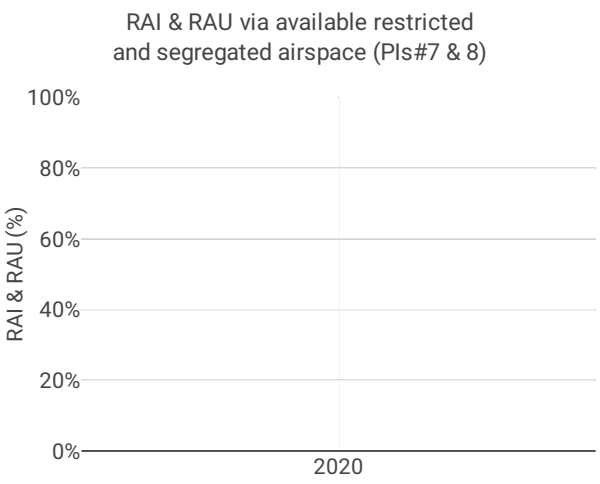
Airport level

	Additional taxi-out time (PI#3)					Additional ASMA time (PI#4)					Share of arrivals applying CDO (PI#5)				
Airport Name	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Helsinki-Vantaa	1.96	NA	NA	NA	NA	1	NA	NA	NA	NA	60%	NA	NA	NA	NA

3.4 Civil-Military dimension







Focus on Civil-Military dimension

Update on Military dimension of the plan

No data available

Military - related measures implemented or planned to improve environment and capacity

No data available

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 - FINLAND

4.1 PRB monitoring

• ANS Finland registered zero minutes of average en route ATFM delay per flight during 2020, thus meeting the local breakdown value of 0.09.

• Delays must be considered in the context of the traffic evolution: IFR movements in 2020 were 58% below the 2019 levels in Finland.

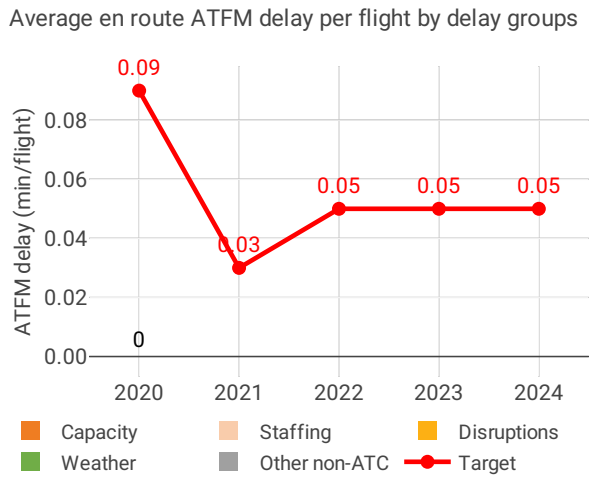
• Finland reported no capacity issues and a 32% drop in ATCO FTE numbers compared to 2019 and also compared to 2020 planned values. Finland did not report any specific drivers behind the ATCO FTE number reduction, however, only two ATCO FTEs are reported to have stopped working in OPS.

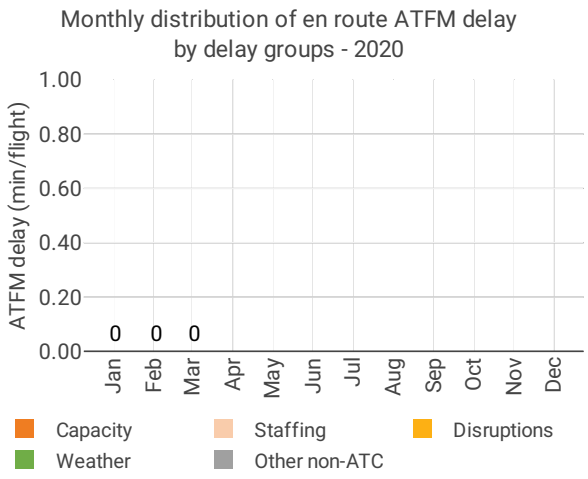
• The yearly total of sector opening hours in Tampere ACC was 10,168, showing a 24.6% decrease compared to 2019.

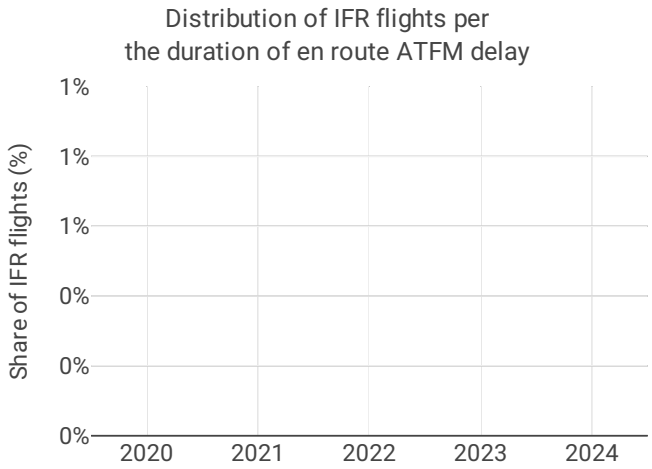
• Tampere ACC registered 8.44 IFR movements per one sector opening hour in 2020, being 42.9% below 2019 levels.

4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)







Focus on en route ATFM delay

Summary of capacity performance

The Finland FIR experienced a traffic reduction of 58% from 2019 levels, to 119k flights. The traffic level was accommodated with zero en route ATFM delays to airspace users.

NSA's assessment of capacity performance

The traffic dropped significantly over the year due to COVID-19 pandemic. The en-route ATFM delay has been 0 for many years. During RP3 planning, airspace user demand was to keep the delays as low as possible, and ANSP has achieved the target of this KPI.

Monitoring process for capacity performance

Review of the actual values from the NM dashboard.

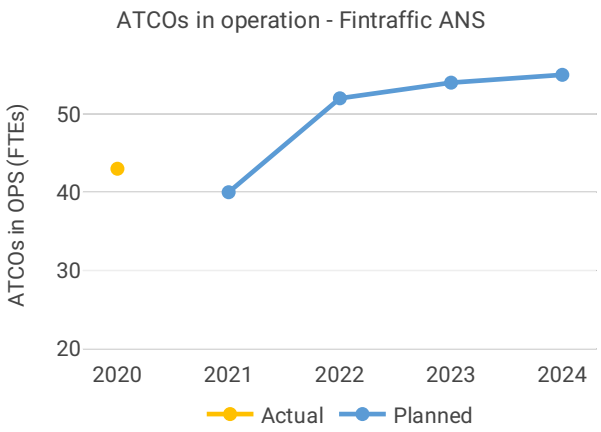
Capacity planning

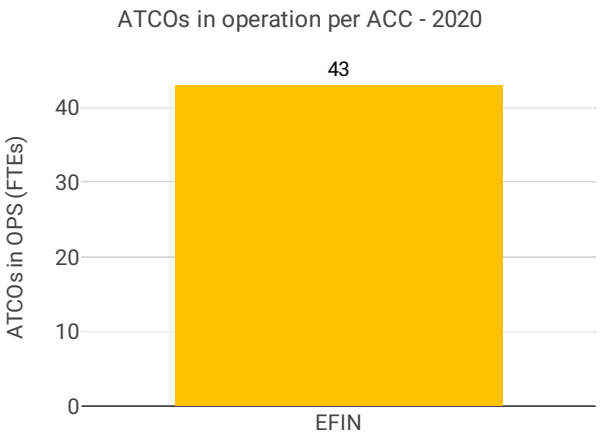
ANSP is expected to continue this good trend on en-route ATFM delay.

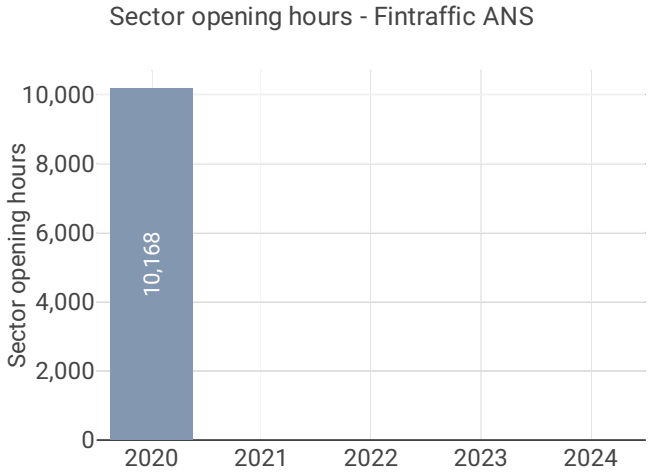
Application of Corrective Measures for Capacity (if applicable)

No data available

4.2.2 Other indicators



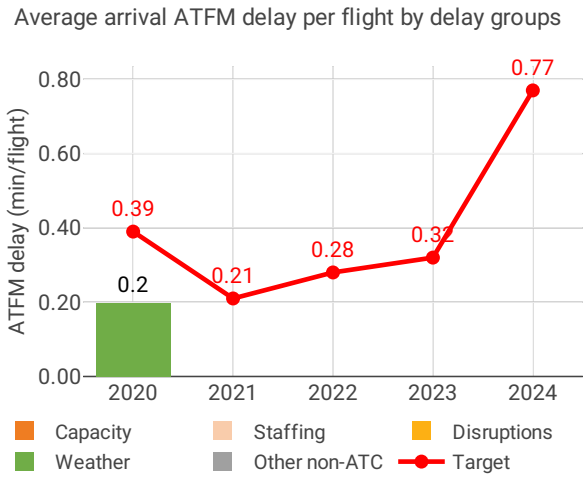


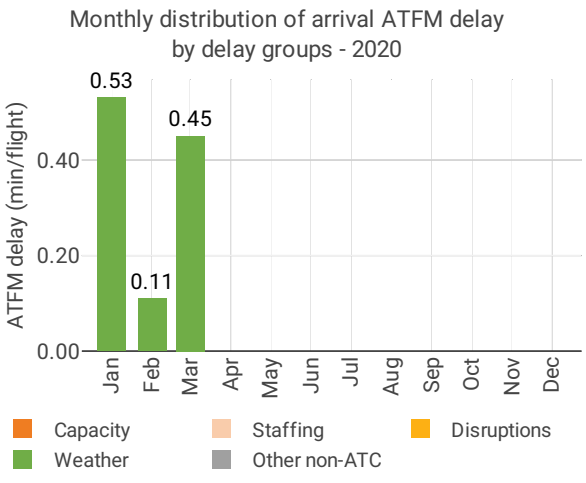


Focus on ATCOs in operations

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)





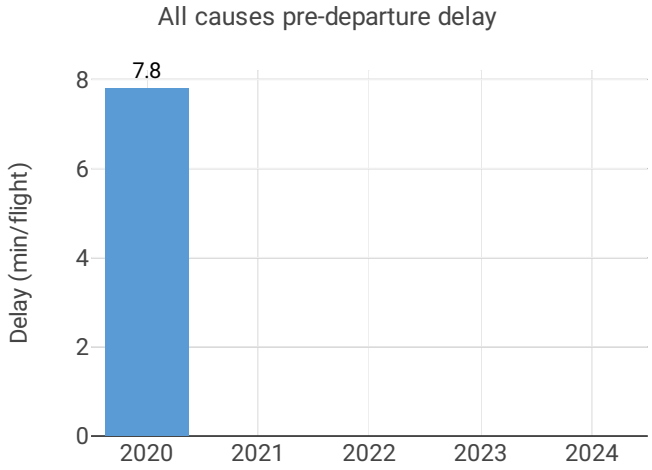
Focus on arrival ATFM delay

Finland identifies only Helsinki airport as subject to RP3 monitoring.
The Airport Operator Data Flow is fully established and the monitoring of all capacity indicators can be performed. Nevertheless, the quality of the reporting does not allow for the calculation of the ATC pre-departure delay, with more than 60% of the reported delay not allocated to any cause.
Traffic at this airport in 2020 decreased by 63% with respect to 2019. Arrival ATFM delays were observed only in the first trimester and slot adherence was well above 90%.

The average arrival ATFM delay at Helsinki in 2020 was 0.20 min/arr, 47% less than the 0.37 min/arr observed in 2019.
The terminal ANS ATFM delay target was achieved, and the 0,20 actual values were caused by weather causes. The delays were only in winter months (January-February-March) and after significant drop in traffic, the terminal delays dropped to zero for the rest of the year.

The provisional national target on arrival ATFM delay in 2020 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

	Avg arrival ATFM delay (KPI#2)				Slot adherence (PI#1)			
Airport name	2020	2021	2022	2023	2020	2021	2022	2023
Helsinki-Vantaa	0.2	NA	NA	NA	93.6%	NA%	NA%	NA%

	ATC pre departure delay (PI#2)				All causes pre departure delay (PI#3)			
Airport name	2020	2021	2022	2023	2020	2021	2022	2023
Helsinki-Vantaa	0.08	NA	NA	NA	7.8	NA	NA	NA

Focus on performance indicators at airport level

ATFM slot adherence

With the drastic drop in traffic, regulated departures from Helsinki also virtually disappeared as of April. The annual figure is therefore driven by the performance in the first trimester.
Helsinki's ATFM slot compliance was 93.6%. With regard to the 6.4% of flights that did not adhere, 2.4% was early and 4% was late.
Finnish NSA reports: *Slot adherence remained on a similar level with 2019 (93,9%) and was better than all other years in RP2 (2015-2018). ANSP updated internal documentation (instructions) related to flow management in ATS units in December 2019, and this might have effect on this PI.*

ATC pre-departure delay

The quality of the airport data reported by Helsinki is too low, preventing the calculation of this indicator.
The calculation of the ATC pre-departure delay is based on the data provided by the airport operators through the Airport Operator Data Flow (APDF) which is properly implemented at Helsinki.
However, there are several quality checks before EUROCONTROL can produce the final value which is established as the average minutes of pre-departure delay (delay in the actual off block time) associated to the IATA delay code 89 (through the APDF, for each delayed flight, the reasons for that delay have to be transmitted and coded according to IATA delay codes.
However, sometimes the airport operator has no information concerning the reasons for the delay in the off block, or they cannot convert the reasons to the IATA delay codes. In those cases, the airport operator might:
- Not report any information about the reasons for the delay for that flight (unreported delay)
- Report a special code to indicate they do not have the information (code ZZZ)
- Report a special code to indicate they do not have the means to collect and/or translate the information (code 999)

To be able to calculate with a minimum of accuracy the PI for a given month, the minutes of delay that are not attributed to any IATA code reason should not exceed 40% of the total minutes of pre-departure delay observed at the airport.
Finally, to be able to produce the annual figure, at least 10 months of valid data is requested by EUROCONTROL.
The share of unidentified delay reported by Helsinki was above 40% for 5 months in 2020, preventing the annual calculation of this indicator. Helsinki usually has proper reporting, and the issue those months is likely to be due to the special traffic composition.

All causes pre-departure delay

The total (all causes) delay in the actual off block time at Helsinki in 2020 was 7.76 min/dep. The higher delays per flight were observed in April, due to the lower traffic and extraordinary circumstances.
This performance indicator has been introduced in the performance scheme for the first time this year, so no evolution with respect to 2019 can be analysed.

5 COST-EFFIENCY - FINLAND

5.1 PRB monitoring

• The 2020 actual service units (462K) were 54% lower than the actual service units in 2019 (1,012K).

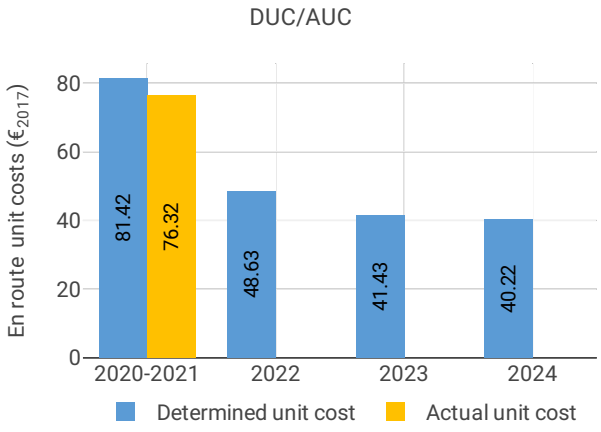
• Finland reduced total costs in 2020 by 4.5 M€2017 (-11%) compared to 2019 actual costs. The main driver of this reduction has been staff costs, with a decrease of 3.4 M€2017 (-15%), due for instance to temporary layoffs and cancellation of bonuses.

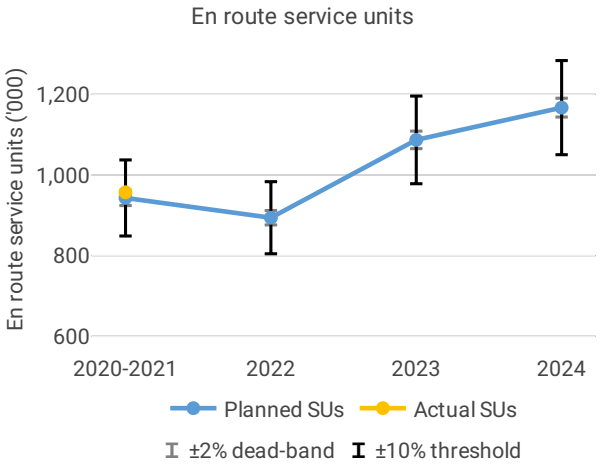
• Cost of capital increased by 247 K€2017 (+45%), due to combination of a higher WACC and asset base (due to higher current assets).

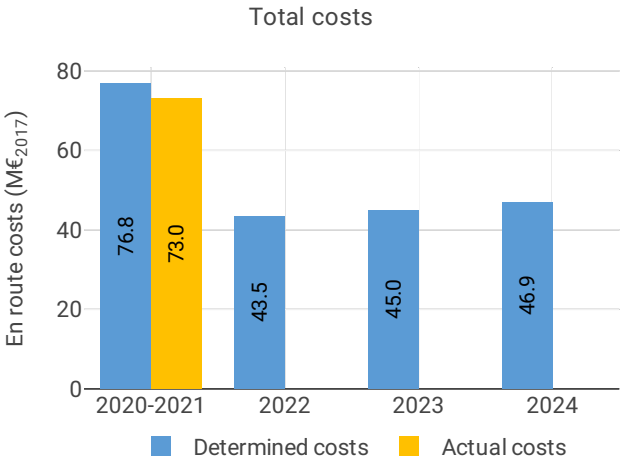
• ANS Finland spent 5.9 M€2017 in 2020 related to cost of investments, 19% less than planned in the 2019 draft performance plan (7.3 M€2017). The decrease is induced by a lower asset base than planned in the 2019 draft performance plan.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)

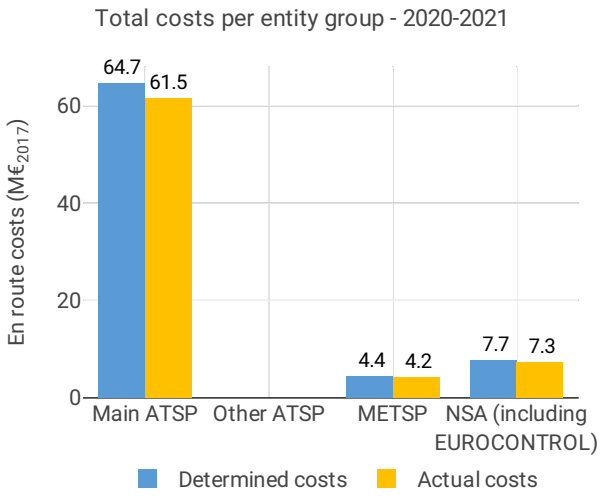


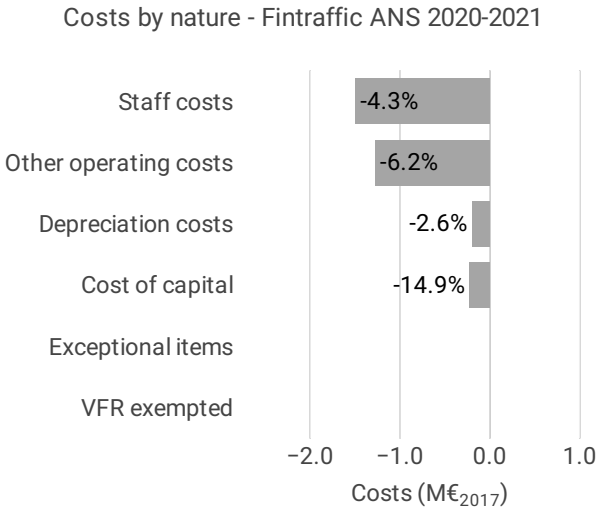




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	75	NA	NA	NA
Determined costs	79	45	48	50
Difference costs	-4	NA	NA	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	1.5%	1.6%	1.8%
Determined inflation index	NA	105.7	107.4	109.3
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 -6.3%, or -5.10€2017). This results from the combination of higher than planned TSUs (+1.5%) and lower than planned en route costs in real terms (by -4.9%, or -3.8 M€2017).

En route service units

The difference between actual and planned TSUs (+1.5%) falls within the ±2% dead band. Hence the resulting additional revenue is kept by the ANSPs.

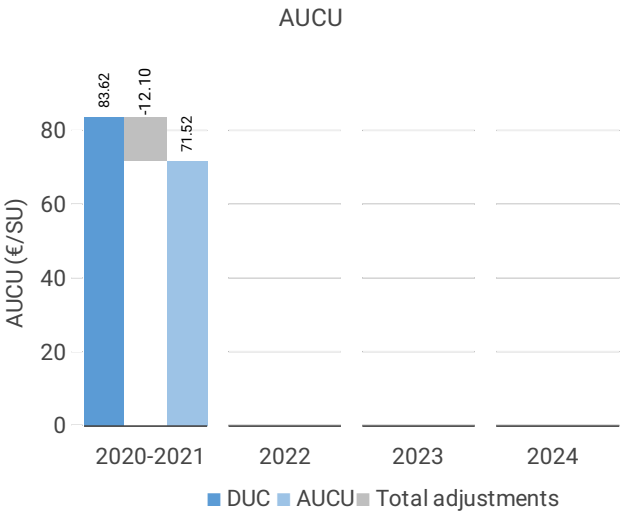
En route costs by entity

Actual real en route costs for 2020-2021 are -4.9% (-3.8 M€2017) lower than planned. This result is driven by the main ANSP, Fintraffic ANS (-4.9%, or -3.2 M€2017), the MET service provider (-4.4% or -0.2 M€2017) and the NSA/EUROCONTROL (-4.7%, or -0.4 M€2017).

En route costs for the main ANSP at charging zone level

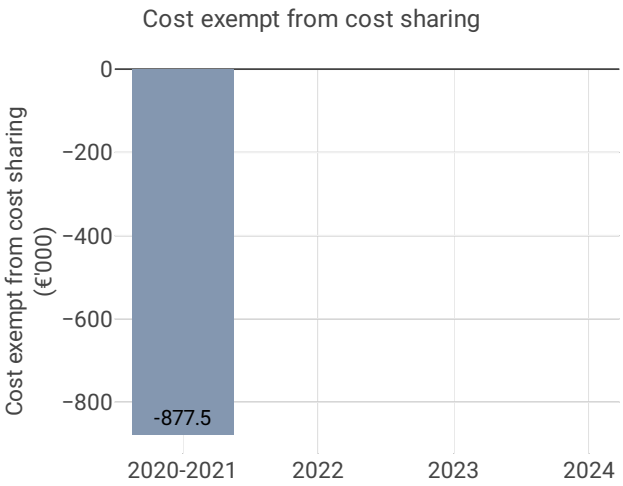
Lower then planned en route costs in real terms for Fintraffic ANS in 2020-2021 (-4.9%, or -3.2 M€2017 lower) results from:
- lower staff costs (-4.3%), "due to temporary lay-offs, lower head count, abandoning bonuses, lower pension costs, postponing recruiting and other savings in staff costs;"
- lower other operating costs (-6.2%), "due to savings in many cost groups: voluntary staff costs (health cost, training, parking), travel costs and telecommunication and maintenance and spare parts expenses, less payments to airport operator (Finavia) due to new contracts related to HR and ICT, lower credit losses, purchases from military (ATCO) and LFV (ATCO service for Kvarken flights) were lower, costs of operative ICT services lower than planned";
- lower depreciation (-2.6%), "due to postponing investments";
- lower cost of capital (-14.9%), "due to postponing investments";
- lower deduction for VFR exempted flights (-0.3%).

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



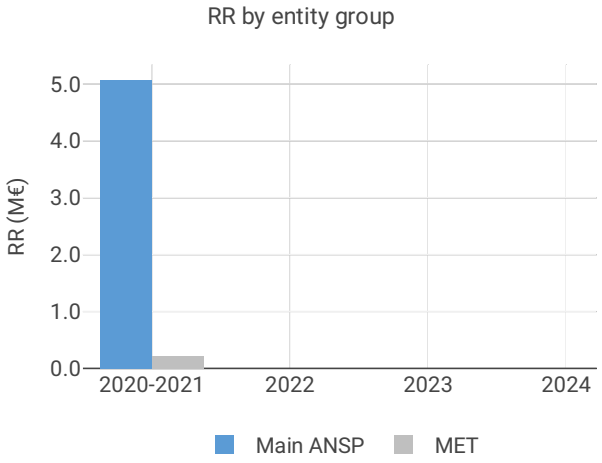
AUCU components (€/SU) – 2020-2021

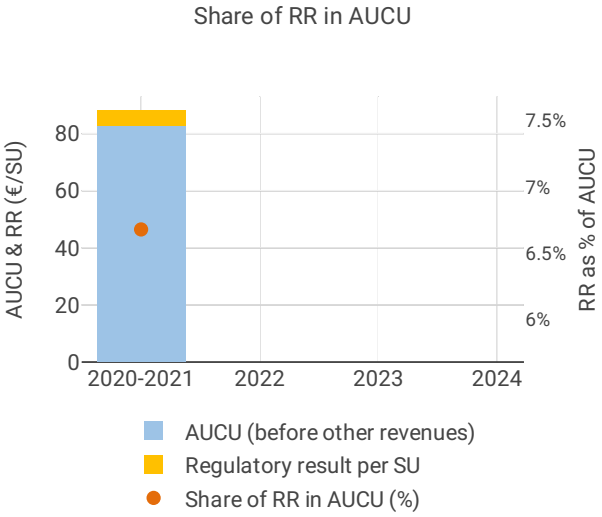
Components of the AUCU in 2020-2021	€/SU
DUC	**83.62**
Inflation adjustment	0.22
Cost exempt from cost-sharing	-0.92
Traffic risk sharing adjustment	0.00
Traffic adj. (costs not TRS)	-0.19
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-11.22
Application of lower unit rate	0.00
Total adjustments	-12.10
AUCU	**71.52**
AUCU vs. DUC	**-14.5%**

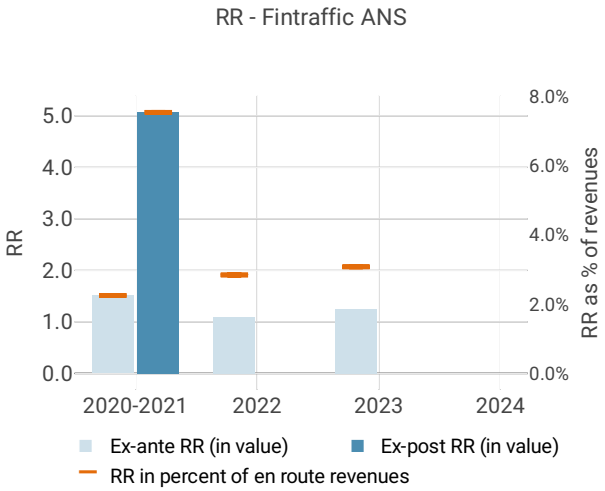


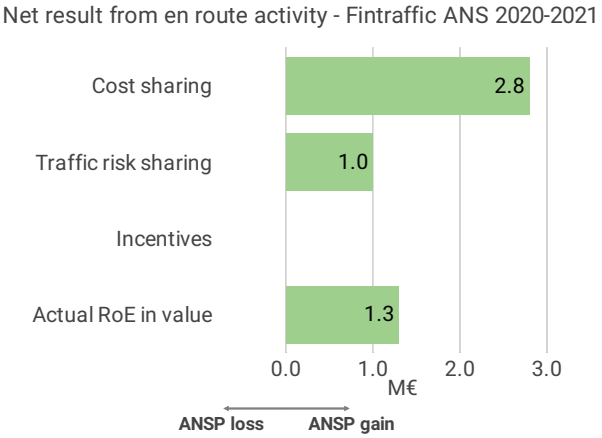
Cost exempt from cost sharing by item - 2020-2021	€'000	€/SU
New and existing investments	-424.2	-0.44
Competent authorities and qualified entities costs	0.0	0.00
Eurocontrol costs	-364.4	-0.38
Pension costs	-88.9	-0.09
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**-877.5**	**-0.92**

5.2.3 Regulatory result (RR)









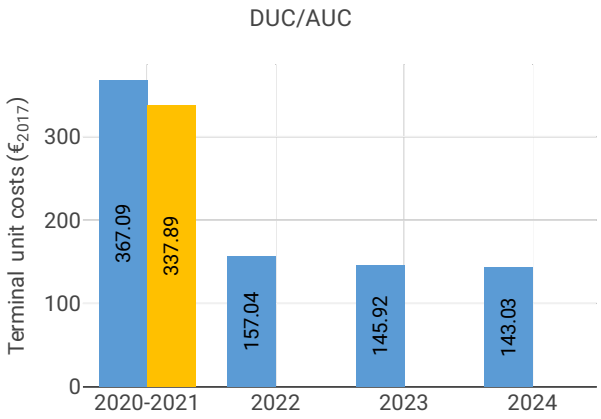
Focus on regulatory result

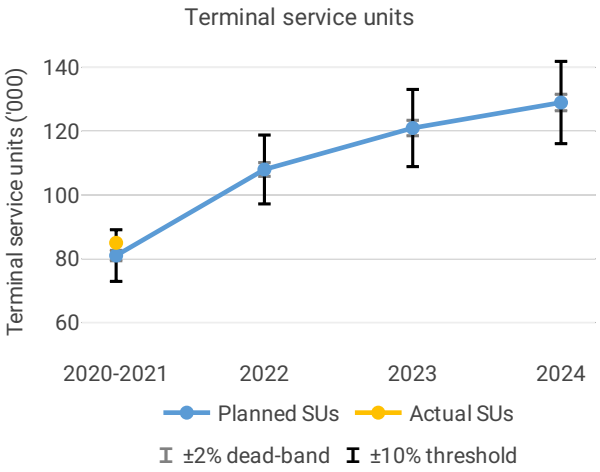
Fintraffic ANS net gain on en route activity in the Finland charging zone in the combined year 2020-2021
Fintraffic ANS's net gain amounts to +3.8 M€, as a combination of a gain of +2.8 M€ arising from the cost sharing mechanism and a gain of +1.0 M€ arising from the traffic risk sharing mechanism.

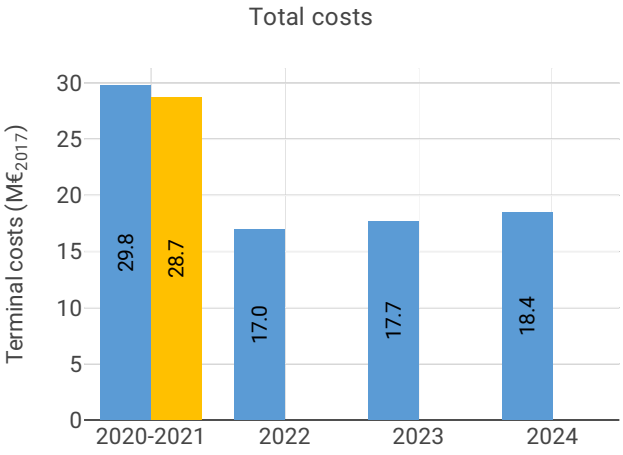
Fintraffic ANS overall regulatory results (RR) for the en route activity
Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+3.8 M€) and the actual RoE (+1.3 M€) amounts to +5.1 M€ (7.5% of the en route revenues). The resulting ex-post rate of return on equity is 16.9%, which is higher than the 4.3% planned in the PP.

5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)

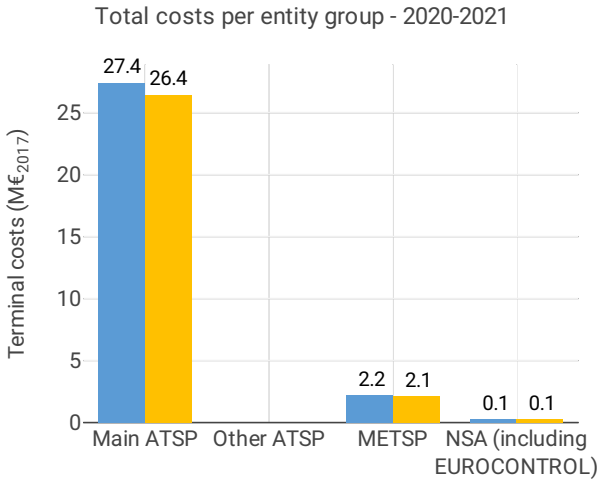


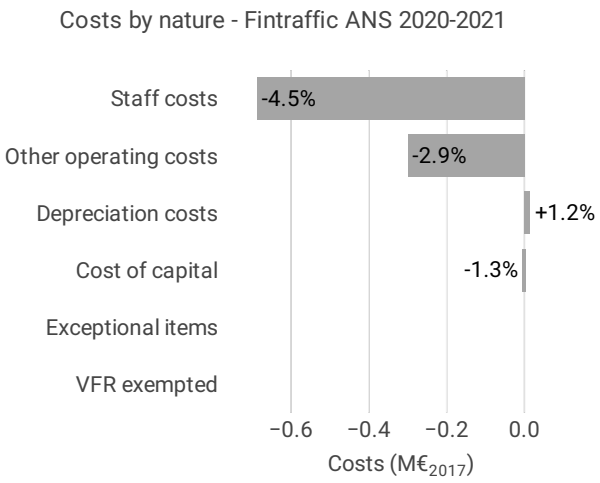




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	30	NA	NA	NA
Determined costs	31	18	19	20
Difference costs	-1	NA	NA	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	1.5%	1.6%	1.8%
Determined inflation index	NA	105.7	107.4	109.3
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 terminal AUC was -8.0% (or -29.20€2017) lower than the planned DUC. This results from the combination of higher than planned TNSUs (+4.7%) and lower than planned terminal costs in real terms (-3.6%, or -1.1 M€2017).

Terminal service units

The difference between actual and planned TNSUs (+4.7%) falls between the ±2% dead band, and the ±10% threshold. The resulting gain of additional terminal revenues is therefore shared between the ATSP and the airspace users, with the ATSP (Fintraffic ANS) retaining an amount of +0.8 M€2017.

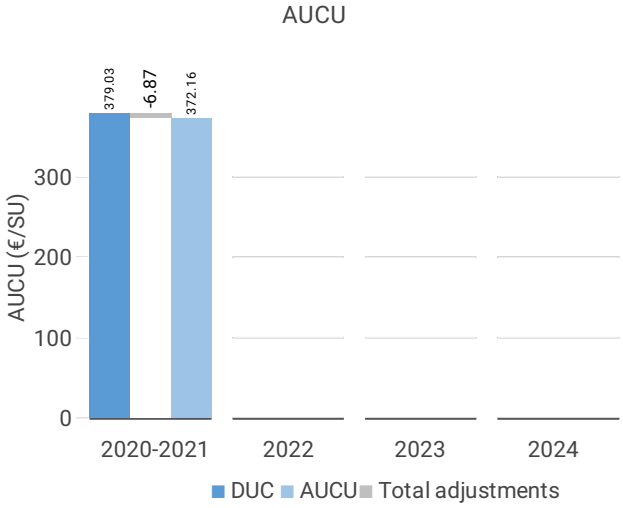
Terminal costs by entity

Actual real terminal costs are -3.6% (-1.1 M€2017) lower than planned. This is driven by the main ANSP, Fintraffic ANS (-3.6%, or -1.0 M€2017) and the MET service provider (-4.4%, or -0.1 M€2017).

Terminal costs for the main ANSP at charging zone level

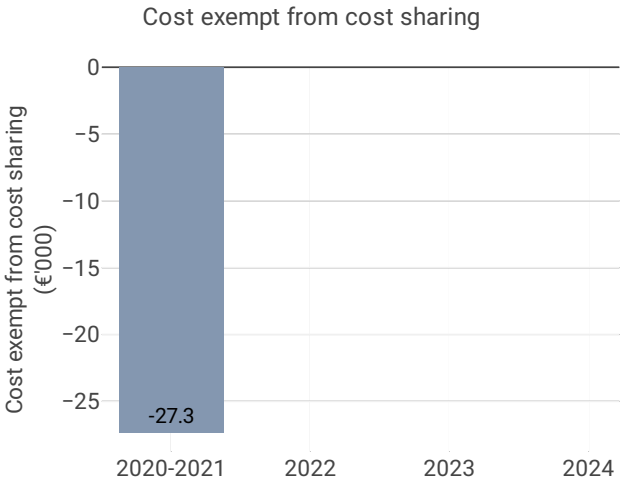
The lower than planned terminal costs in real terms for Fintraffic ANS (-3.6%, or -1.0 M€2017) result from:
- lower staff costs (-4.5%), "due to temporary lay-offs, lower head count, abandoning bonuses, lower pension costs, postponing recruiting and other savings in staff costs";
- lower other operating costs (-2.9%), "due to savings in many cost groups: voluntary staff costs (health cost, training, parking) and travel costs due to remote work, less payments to airport operator (Finavia) due to new contracts related to HR and ICT, lower telecommunication costs, lower credit losses, less purchases of equipment and spare parts, costs of operative ICT services lower than planned";
- slightly higher depreciation (+1.2%); and
- slightly lower cost of capital (-1.3%).

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



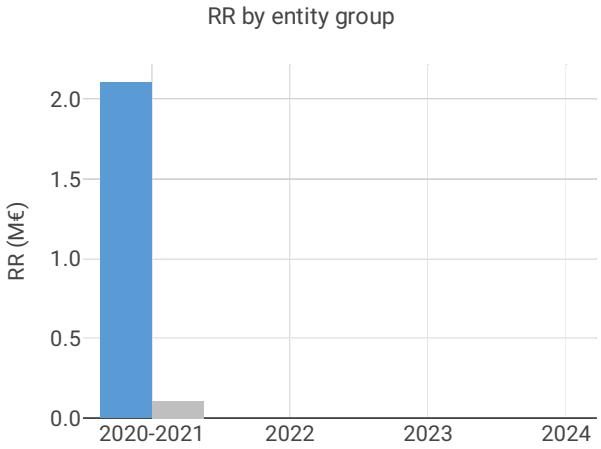
AUCU components (€/SU) – 2020-2021

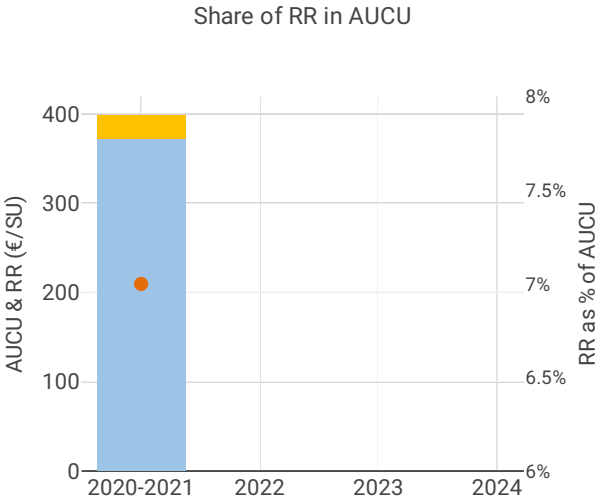
Components of the AUCU in 2020-2021	€/SU
DUC	**379.03**
Inflation adjustment	1.16
Cost exempt from cost-sharing	-0.32
Traffic risk sharing adjustment	-6.36
Traffic adj. (costs not TRS)	-1.35
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	0.00
Application of lower unit rate	0.00
Total adjustments	-6.87
AUCU	**372.16**
AUCU vs. DUC	**-1.8%**

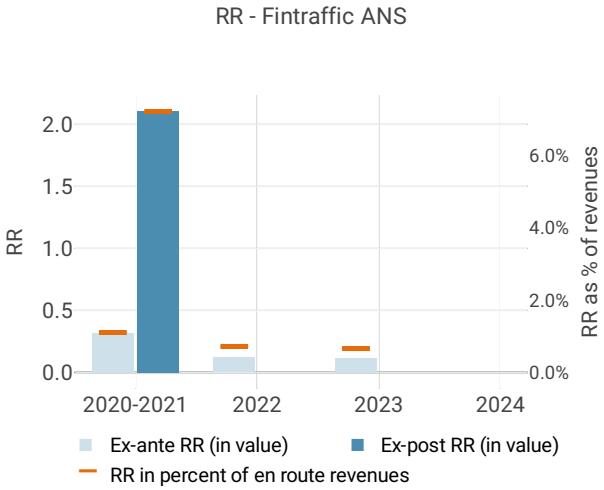


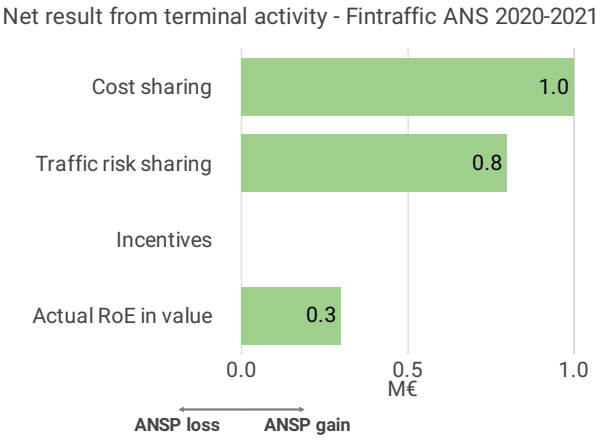
Cost exempt from cost sharing by item - 2020-2021	€'000	€/SU
New and existing investments	10.0	0.12
Competent authorities and qualified entities costs	0.0	0.00
Eurocontrol costs	0.0	0.00
Pension costs	-37.4	-0.44
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**-27.3**	**-0.32**

5.3.3 Regulatory result (RR)









Focus on regulatory result

Fintraffic ANS net gain on activity in the Finland terminal charging zone in the combined year 2020-2021
Fintraffic ANS's net gain amounts to +1.8 M€ due to gains of +1.0 M€ from the cost sharing mechanism and of +0.8 M€ from the traffic risk sharing mechanism.

Fintrafffic ANS 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 (+1.8 M€) and the actual RoE (+0.3 M€) amounts to +2.1 M€ (7.2% of the terminal revenues). The resulting ex-post rate of return on equity is 28.6%, which is higher than the 4.3% planned in the PP.