PRB | Performance review body of the single european sky

Performance Review Body Monitoring Report

Italy - 2023

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1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/773 of 13 April 2022

List of ACCs 4
- Brindisi ACC
- Milano ACC
- Padova ACC
- Rome ACC

No of airports in the scope of the performance plan:
- **≥80'K** 5
- **<80'K** 0

Exchange rate (1 EUR=)
- 2017: 1 EUR
- 2023: 1 EUR

Share of Union-wide:
- **traffic (TSUs) 2023** 8.7%
- **en route costs 2023** 9.6%

Share en route / terminal costs 2023 87% / 13%

En route charging zone(s)
- Italy

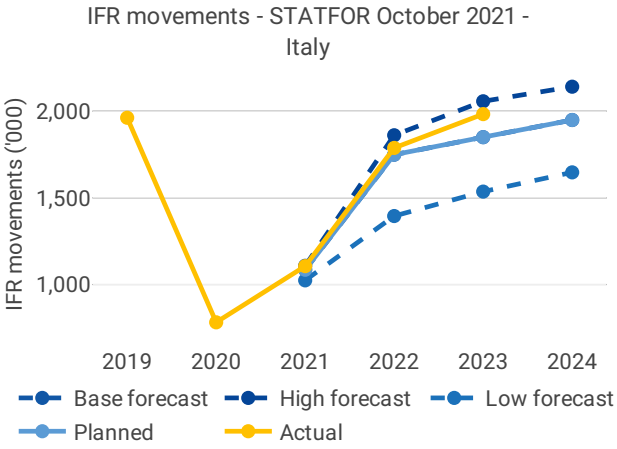
Terminal charging zone(s)
- Italy Zone 1
- Italy Zone 2

Main ANSP
- ENAV

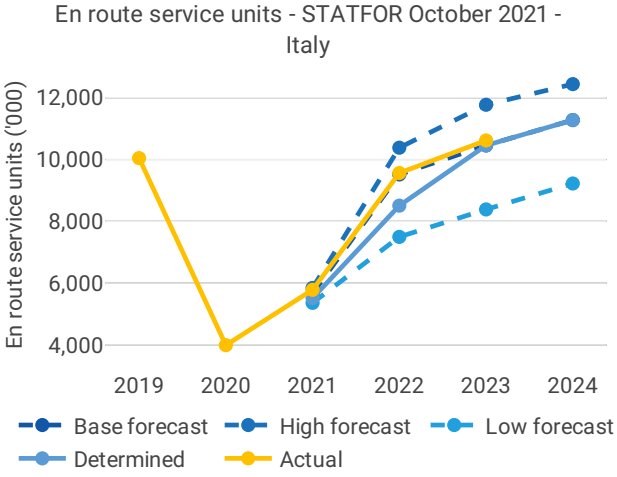
Other ANSPs
- ITAF

MET Providers
- –

1.2 Traffic (En route traffic zone)

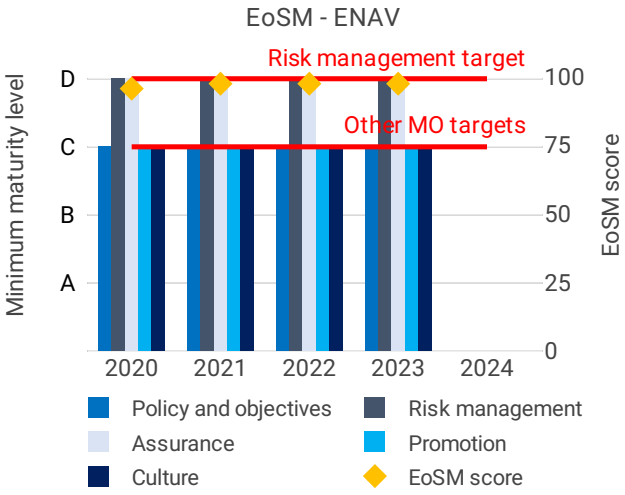


- Italy recorded 1,983K actual IFR movements in 2023, +11% compared to 2022 (1,788K).
- Actual 2023 IFR movements were +7.2% above the plan (1,850K).
- Actual 2023 IFR movements are +1% above the actual 2019 level (1,962K).



- Italy recorded 10,618K actual en route service units in 2023, +11% compared to 2022 (9,562K).
- Actual 2023 service units were +1.5% above the plan (10,457K).
- Actual 2023 service units are +6% above of the actual 2019 level (10,046K).

1.3 Safety (Main ANSP)

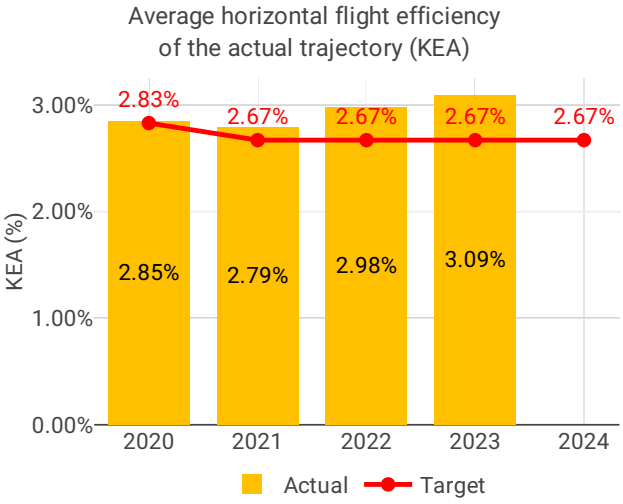


• ENAV maintained its safety performance, remaining at the RP3 EoSM target levels in all management objectives in 2023. The achieved maturity levels exceeded the planned maturity levels.

• Italy recorded a stable number of safety occurrences, with a similar rate of runway incursions and a marginal decrease in the rate of separation minima infringements.

• ENAV do not use automated safety data recording systems.

1.4 Environment (Member State)



• Italy achieved a KEA performance of 3.09% compared to its target of 2.67% and did not contribute positively towards achieving the Union-wide target.

• The NSA has not provided an explanation as to why KEA has deteriorated year on year.

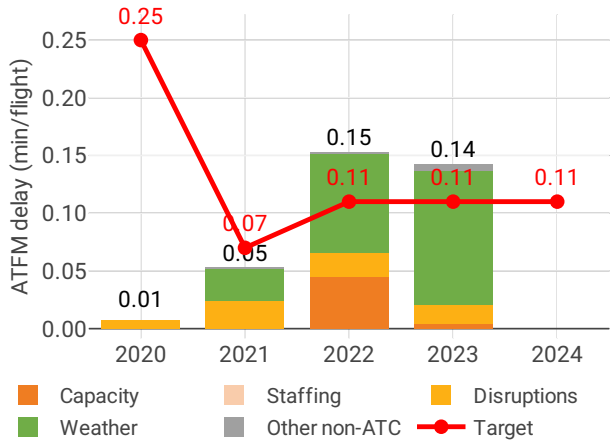
• Both KEP and SCR deteriorated in comparison with 2022.

• The share of CDO flights decreased from 35.05% to 31.45% in 2023.

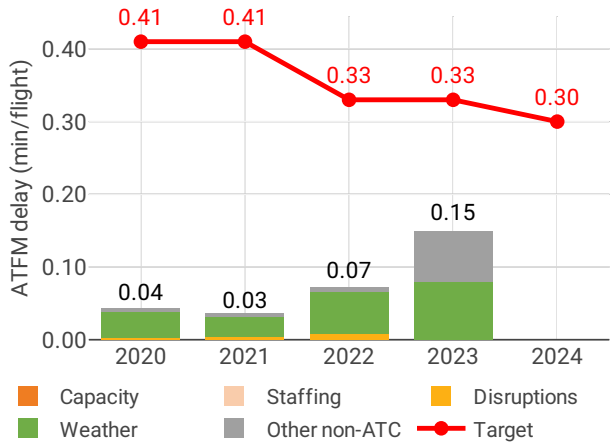
• During 2023, additional time in terminal airspace increased from 1.32 to 1.44 min/flight, while additional taxi out time increased from 3.41 to 3.89 min/flight.

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups



Average arrival ATFM delay per flight by delay groups



• Italy registered 0.17 minutes of average en route ATFM delay per flight during 2023 which has been adjusted to 0.14 during the post-ops adjustment process, thus not achieving the local target value of 0.11. Delays in Italy decreased by 0.01 minutes per flight year-on-year.

• Delays were highest between April and August, mostly due to adverse weather conditions.

• The share of delayed flights with delays longer than 15 minutes in Italy increased by 5 p.p. compared to 2022 and was lower than 2019 values.

• The average number of IFR movements was 1% above 2019 levels in Italy in 2023.

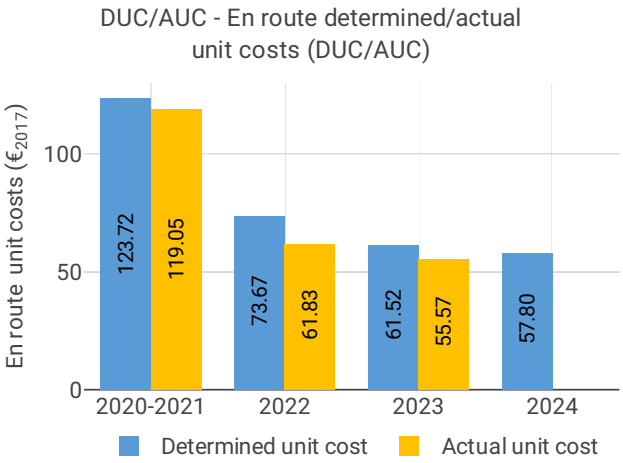
• The number of ATCOs in OPS is expected to increase by 5% by 2024, with the actual value being below the 2023 plan in Brindisi by 2 FTEs. The number of ATCOs in OPS is expected to increase by 10% by 2024, with the actual value being over the 2023 plan in Milano by 8 FTEs. The number of ATCOs in OPS is expected to increase by 9% by 2024, with the actual value being below the 2023 plan in Padova by 6 FTEs. The number of ATCOs in OPS is expected to decrease by 2% by 2024, with the actual value being over the 2023 plan in Rome by 8 FTEs.

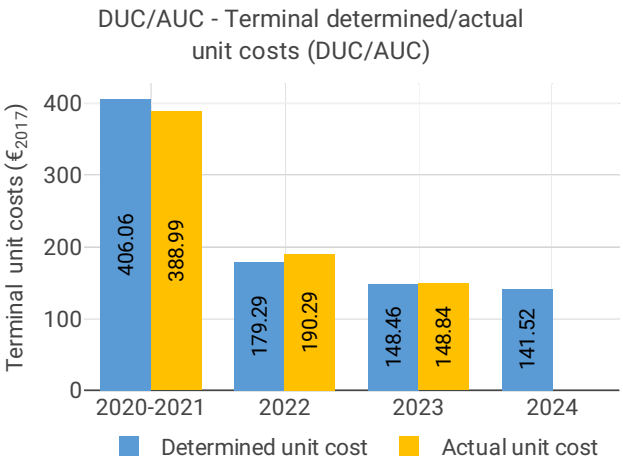
• The yearly total of sector opening hours in Brindisi ACC was 26,280, showing an 8.3% increase compared to 2022. Sector opening hours are 29.6% above 2019 levels. The yearly total of sector opening hours in Milano ACC was 63,763, showing a 22.9% decrease compared to 2022. Sector opening hours are 26.7% below 2019 levels. The yearly total of sector opening hours in Padova ACC was 58,059, showing a 5.7% increase compared to 2022. Sector opening hours are 4.1% above 2019 levels. The yearly total of sector opening hours in Rome ACC was 118,115, showing a 105.8% increase compared to 2022. Sector opening hours are 114.8% above 2019 levels.

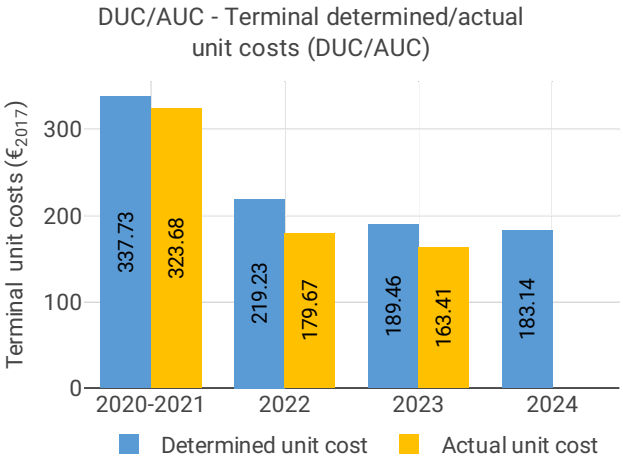
• Brindisi ACC registered 15.97 IFR movements per one sector opening hour in 2023, being 11.1% below 2019 levels. Milano ACC registered 14.95 IFR movements per one sector opening hour in 2023, being 42.5% above 2019 levels. Padova ACC registered 13.05 IFR movements per one sector opening hour in 2023, being 4.5% below 2019 levels. Rome ACC registered 7.78 IFR movements per one sector opening hour in 2023, being 52.6% below 2019 levels.

• Italy was badly affected by adverse weather in 2023, resulting in unusually high levels of en route ATFM delay. As the uncertainty of weather impact is likely to increase, Italy should work closely with the NM and all concerned stakeholders to mitigate weather impact as much as possible.

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







• The en route 2023 actual unit cost of Italy was 55.57 €2017, -10% lower than the determined unit cost (61.52 €2017). The terminal zone 1 2023 actual unit cost was 148.84 €2017, +0.3% higher than the determined unit cost (148.46 €2017), while the terminal zone 2 2023 actual unit cost was 163.41 €2017, -14% lower than the determined unit cost (189.46 €2017).

• The en route 2023 actual service units (11M) were 1.5% higher than the determined service units (10M).

• The en route 2023 actual total costs were -53 M€2017 (-8.3%) lower than determined, with reductions across all categories except for the cost of capital. The most significant reduction was in staff costs (-35 M€2017, or -9.8%). Despite this, in nominal terms, there was a difference of +1% in actual staff costs compared to the determined figures due to new hires and an agreement with trade unions. Other operating costs also saw a substantial underspend between actual and determined cots (-19.9 M€2017, or -13%), for which the NSA did not provide a detailed explanation.

• ENAV spent 142 M€2017 in 2023 related to costs of investments for both en route and terminal charging zones, +1.3% more than determined (140 M€2017). This gap was largely due to an overspend in the cost of capital (+29%, or +11 M€2017), which is primarily attributed to the growth in fixed assets and rising interest rates (from 1.86% to 5.0%). However, the reported average interest rate does not align with the genuine average interest rate that ENAV incurred in 2023, which was 3.83%. The PRB recommends that ENAV report the genuine average interest rate they experienced as the actual figure, in line with the Regulation.

• The en route actual unit cost incurred by users in 2023 was 71.14€ (+10% above the 2023 DUC), while the terminal zone 1 actual unit cost incurred by users was 179.31€ (+16% above the 2023 DUC) and 213.48€ (+7.5% above the 2023 DUC) for terminal zone 2. The difference between the AUCU and the DUC for all charging zones is primarily attributed to the inflation mechanism (+68 M€).

• The en route regulatory result for ENAV amounted to +119 M€, or 18% of the 2023 revenue. This may indicate that the airspace users are charged for costs which have not materialised in 2023. The PRB will take into consideration the implementation of the RP3 performance plan when assessing the RP4 cost-efficiency targets.

2 SAFETY - ITALY

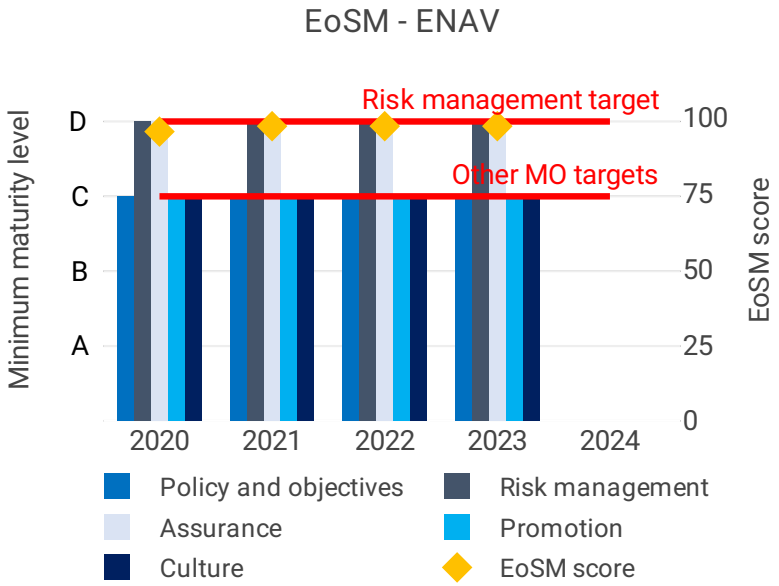
2.1 PRB monitoring

• ENAV maintained its safety performance, remaining at the RP3 EoSM target levels in all management objectives in 2023. The achieved maturity levels exceeded the planned maturity levels.

• Italy recorded a stable number of safety occurrences, with a similar rate of runway incursions and a marginal decrease in the rate of separation minima infringements.

• ENAV do not use automated safety data recording systems.

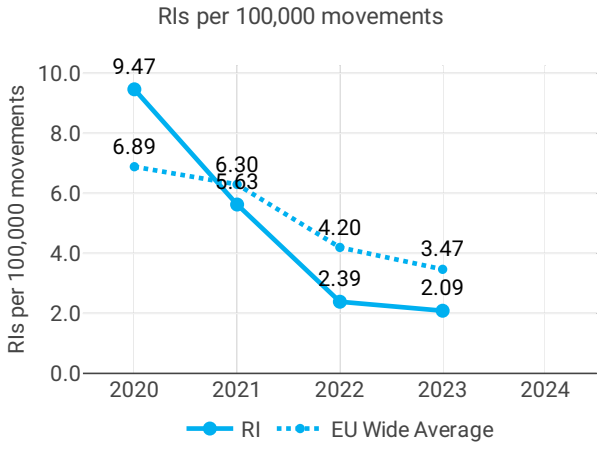
2.2 Effectiveness of Safety Management (EoSM) (KPI#1)

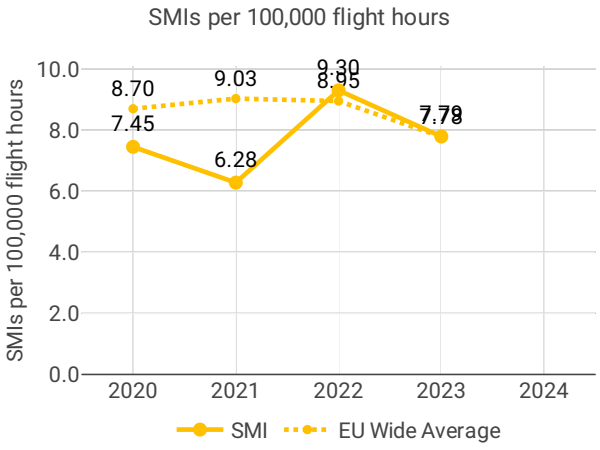


Focus on EoSM

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

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





3 ENVIRONMENT - ITALY

3.1 PRB monitoring

• Italy achieved a KEA performance of 3.09% compared to its target of 2.67% and did not contribute positively towards achieving the Union-wide target.

• The NSA has not provided an explanation as to why KEA has deteriorated year on year.

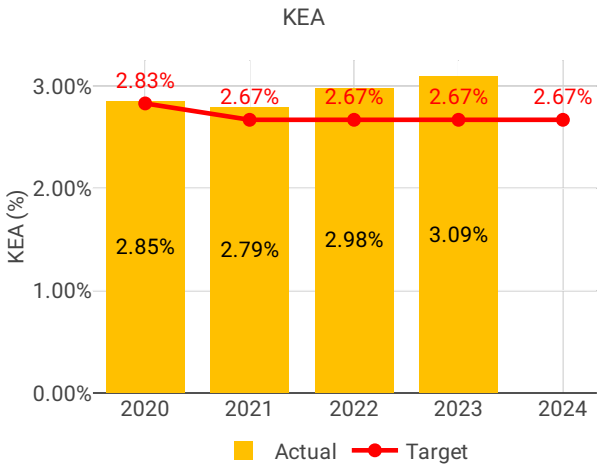
• Both KEP and SCR deteriorated in comparison with 2022.

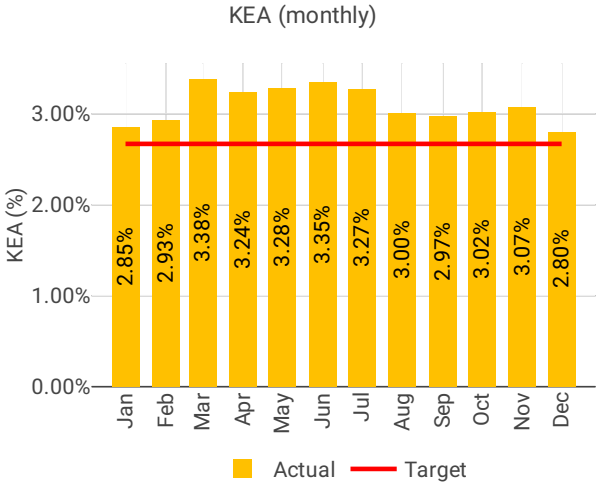
• The share of CDO flights decreased from 35.05% to 31.45% in 2023.

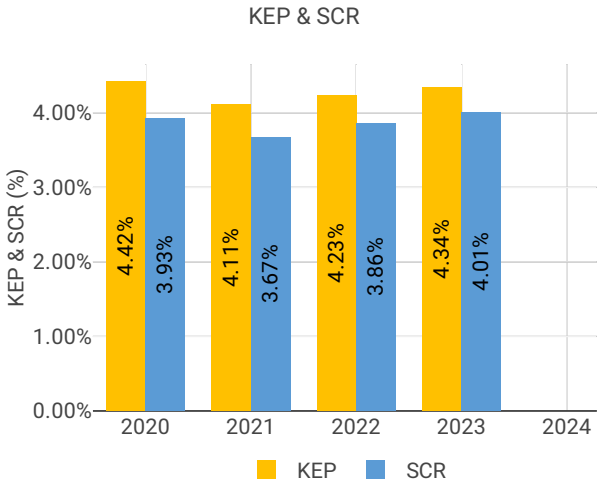
• During 2023, additional time in terminal airspace increased from 1.32 to 1.44 min/flight, while additional taxi out time increased from 3.41 to 3.89 min/flight.

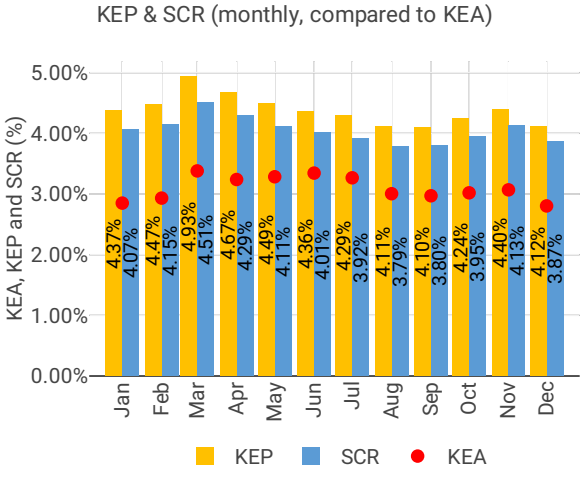
3.2 En route performance

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)



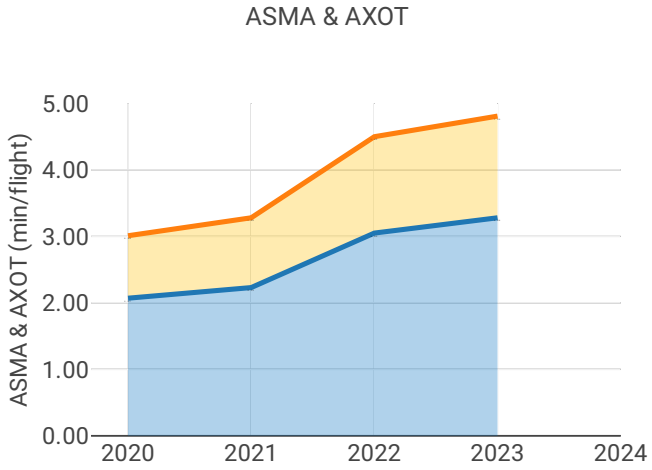


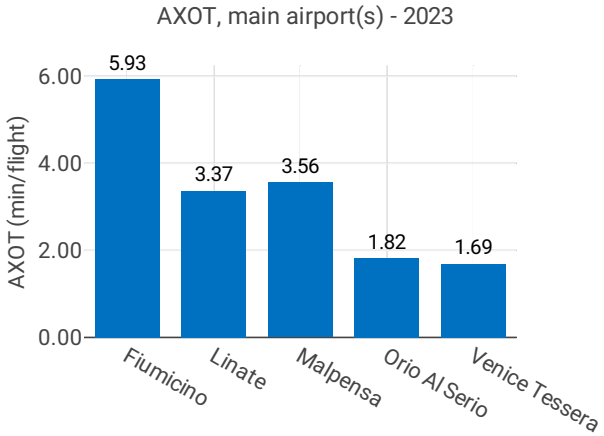


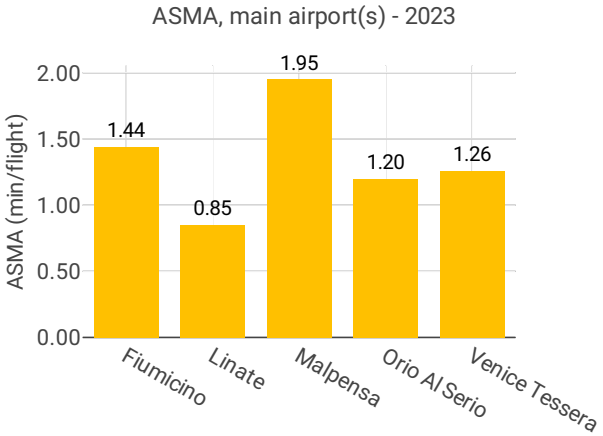


3.3 Terminal performance

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 Rome Fiumiccino (LIRF; 2019: 7.87 min/dep.; 2020: 3.1 min/dep.; 2021: 3 min/dep.; 2022: 5 min/dep.; 2023: 5,93 min/dep.) increased once again in 2023 resulting in the highest additional taxi-out times in the SES monitored airports.
The rest of Italian airports observed a small increase of their additional taxi-out times in 2023, except for Venice (LIPZ) where there was a small reduction.
According to the Italian monitoring report: *As in previous years of the RP3 and also for the entire RP2, similar as for the PI of the Terminal/ASMA, ENAV and the other ANSPs in ECAC do not have full access to the complete set of data used by PRU to process the output, and therefore they are not able to replicate the data processing and consequently to verify the correct assessment of the information.
As already reported in past years, the ad-hoc WG PRU/EUROCONTROL/ANSPs created for the scope of reviewing the TAXI-OUT Methodology completed the assigned task and released the new Methodology at the end of the 2022.
Then, since March 2023 both the outputs (new output and previous one) are available within the ANS Performance website, accessible at monthly level for the scope of monitoring and comparing any gaps or any inconsistencies between the National yearly counted outputs vs the assigned Performance Targets.
Therefore, the results counted in 2023 encourage the Italian NSA to continue to incentivize ENAV SpA with the flight efficiency policy implemented with the aim of also reducing/optimising performance of TAXI-OUT for the monitored Italian airports and consequently reduce consumption and CO2 emissions.
As can be seen from the data reported below, even Milan Linate airport, which had recorded an increase in both TAXI times and for the ASMA PI due to Safety requirement, has reported the trend towards the

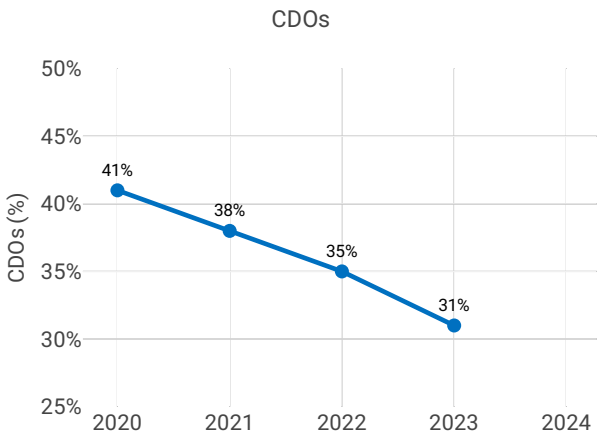
reduction of additional TAXI times thanks to the optimizations implemented on the movement area of the airport.
The single value that highlighted an increase in TAXI Additional Time is related to Bergamo airport which, in contrast to the trend, recorded a slight increase in the PI TAXI-OUT value (2019 vs 2023); the cause of that can be attributed to the considerable increase in traffic managed at the airport in 2023 (over 4,500 vs 2019 and 2,500 vs 2022), which for obvious reasons led to an increase in movements on the manoeuvring area and therefore a slight and related increase of TAXI-Out time.**However, mitigation actions have already been planned to improve TAXI procedures with the aim to continue with time optimization and to avoid any future inconsistencies for this PI.
Below the 2023's output data for the ASMA PI (using the new Methodology) compared with the similar data from 2019 and 2022, albeit with characteristics that are not always the same both for the type of aircraft and/or for the detail of the trajectory:
LIMC (Milan/Malpensa) 2019: 5.11 mins 2022: 4.16 mins 2023: 4.22 mins
LIME (Bergamo/Orio Alserio) 2019: 3.41 mins 2022: 3.22 mins 2023: 3.43 mins
LIML (Milan/Linate) 2019: 3.75 mins 2022: 4.79 mins 2023: 4.75 mins
LIPZ (Venice/Tessera) 2019: 3.98 mins 2022: 3.09 mins 2023: 3.15 mins
LIRF (Rome/Fiumicino) 2019: 7.12 mins 2022: 5.88 mins 2023: 6.51 mins
Here following the output data (using the actual Methodology and the same criteria for the new methodology) referred to 2019, 2022 and 2023:
LIMC (Milan/Malpensa 2019: 4.76 mins 2022: 3.41 mins 2023: 3.56 mins
LIME (Bergamo/Orio Alserio) 2019: 1.81 mins 2022: 1.77 mins 2023: 1.82 mins
LIML (Milan/Linate) 2019: 2.43 mins 2022: 2.89 mins 2023: 3.37 mins
LIPZ (Venice/Tessera) 2019: 2.52 mins 2022: 1.83 mins 2023: 1.69 mins
LIRF (Rome/Fiumicino) 2019: 7.87 mins 2022: 5.00 mins 2023: 5.93 mins

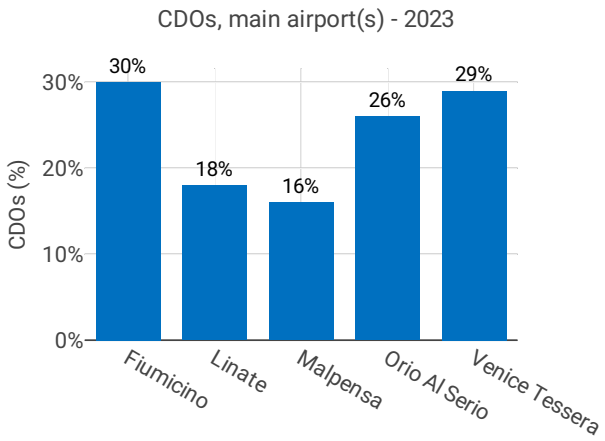
ASMA

Similar as for additional taxi-out time, additional ASMA times at most of Italian airports increased in 2023 (except for Milan Linate). Milan Malpensa (LIMC: 2019: 2.59 min/arr.; 2020: 0.85 min/arr.; 2021: 1.25 min/arr.; 2022: 1.64 min/arr.; 2023: 1.95 min/arr.) showed the longest additional ASMA time in Italy and the 4th highest in the SES monitored airports (SES average additional ASMA time= 1.16 min/arr.)
According to the Italian monitoring report: *As in previous years of this RP3 and also for the entire RP2, similar as for the PI of the TAXI-OUT, ENAV SpA and the other ANSPs in ECAC do not have full access to the complete set of data used by PRU to process the output, and therefore they are not able to replicate the data processing and consequently to verify the correct assessment of the information.
As already reported last years within the comments of the 2022 and 2023 Reports, the ad-hoc WG PRU/EUROCONTROL/ANSPs created for the scope of reviewing the ASMA Methodology completed the assigned task and released the new Methodology at the end of the 2022.
Then, since March 2023 both the outputs (new output and previous one) are available within the ANS Performance website, accessible at monthly level for the scope of monitoring and comparing any gaps or any inconsistencies between the National yearly counted outputs vs the assigned Performance Targets.
As already considered for the PI TAXI-Out that the complete detail of the trajectory data (flight trajectory on the Terminal Area/ASMA) is not available to Users (except in the case following a specific request addressed directly to the PRU) and that only the consolidated value at a monthly level it is available, for the purposes of the post analysis and for the comments to be provided to this Report, an ad hoc analysis was conducted comparing both the 2 outputs.
The conclusions are available at the bottom of this paragraph.
As already demonstrated and also considering the notes to the TAXI-OUT PI at the PI #3 sheet, the same considerations can also be taken into account for the ASMA PI, both for the presentation of the data and for the analysis' method, without the necessity to report and therefore repeat them also in this section.
Therefore, as for the PI TAXI_Out, also the results counted in 2023 encourage the Italian NSA to continue to incentivize ENAV SpA with the flight efficiency policy implemented with the aim of also reducing/optimising performance of the PI ASMA for the monitored Italian airports and consequently reduce consumption and CO2 emissions.
*As can be seen from the data reported below, even Milan Linate airport (which had recorded an increase in both TAXI times and for the ASMA PI due to Safety requirement in 2022) has reported the trend towards the reduction of additional ASMA times thanks to the ATC optimization procedures implemented

in the Terminal airspace around the arrival airport.
Below the 2023's output data for the ASMA PI (using the new Methodology) compared with the similar data from 2019 and 2022, albeit with characteristics that are not always the same both for the type of aircraft and/or for the detail of the trajectory:
LIMC (Milan/Malpensa) 2019: 4.48 mins 2022: 3.33 mins 2023: 3.47 mins
LIME (Bergamo/Orio Alserio) 2019: 3.05 mins 2022: 2.30 mins 2023: 2.55 mins
LIML (Milan/Linate) 2019: 2.46 mins 2022: 2.49 mins 2023: 2.36 mins
LIPZ (Venice/Tessera) 2019: 3.49 mins 2022: 2.70 mins 2023: 2.81 mins
LIRF (Rome/Fiumicino) 2019: 3.81 mins 2022: 2.88 mins 2023: 3.22 mins
Here following the output data (using the actual Methodology and the same criteria for the new methodology) referred to 2019, 2022 and 2023:
LIMC (Milan/Malpensa 2019: 2.59 mins 2022: 1.64 mins 2023: 1.95 mins
LIME (Bergamo/Orio Alserio) 2019: 0.94 mins 2022: 0.81 mins 2023: 1.20 mins
LIML (Milan/Linate) 2019: 0.96 mins 2022: 1.16 mins 2023: 0.85 mins
LIPZ (Venice/Tessera) 2019: 1.95 mins 2022: 1.15 mins 2023: 1.26 mins
LIRF (Rome/Fiumicino) 2019: 2.08 mins 2022: 1.40 mins 2023: 1.44 mins

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





Focus CDOs

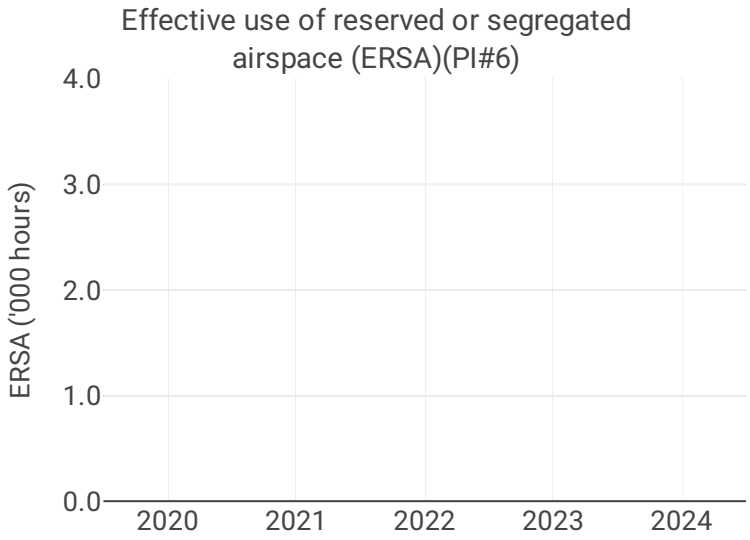
The share of CDO flights decreased at all airports with the biggest decrease at Bergamo (-7.3 percentage points). Rome and Venice had shares of CDO flights above the overall RP3 value in 2023 - 28.8% - (LIRF: 30.2%; LIPZ: 29.2%).
All airports had the lowest monthly values during the summer months.According to the Italian monitoring report: *The current methodology used by PRU to measure the performances of ANSPs in the management of Continuous Descent Operations (PI CDO) has been questioned several times and by several representatives (STATES/ANSPs) both in the method and in the metrics used by PRU for the performance analysis of the proposed output.*
ENAV SpA has strongly contested (see the notes to last year's 2022 Report and previous ones) the methodology with which the "interruptions" of the CDO trajectory are identified as negative input, disagreeing with the value presented in the Performance Reports starting from 2020. A methodology that does not take into consideration the real ATC constraints in managing the flight itself, nor, obviously, the needs and priorities of the Safety of Operations.
Given the above, it is absolutely unacceptable that only 30% of flights landing at LIRF, or only 16% landing at LIMC in 2023, were consistent with a continuous descent from TOD to landing!
It is not possible for such a low percentage of flights to be compliant with Continuous Descent Operations using an efficient EnRoute and Terminal NTW and other implementations introduced in the airspace in order to increase the efficiency of flight operations at national airports.
Just as it is unacceptable that the presence of the AMAN TOOL in operation for Rome Fiumicino airport since last spring 2023 and that the CDO measures applied during real-time operations by the ATCOs do not impact and indeed reduce the performance for the PI CDO compared to the previous year (2022).

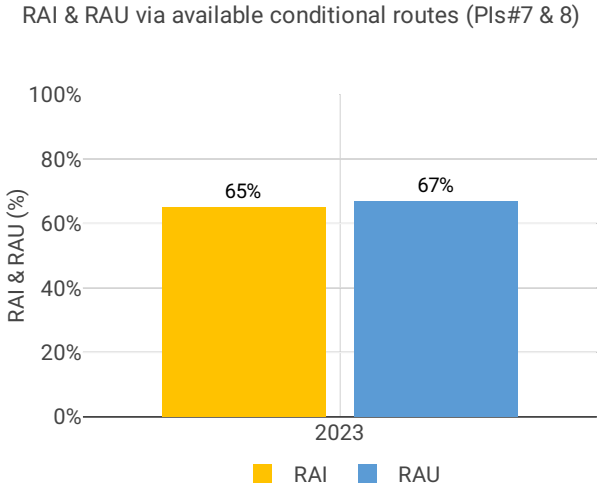
Hence the need to consider a revision of the methodology used by the PRU; but at the same time, as already proposed in previous years and following coordination with the PRU which shared the data in order to detect a different metric, it is required to be able to re-count the value of the proposed output by excluding from the calculation the flights not compliant with the CDO flight segment below FL75.
The numbers are available within the ANS Performance website and easily manageable by PRU.
And yet, without repeating once again what has already been observed and presented in recent years in terms of comments and objections to the output proposed by PRU in the Report, an update/revision was also requested with a recalculation of the output proposed for the PI CDO since the beginning of RP3 (2020).
Giving simply that, that it is almost clear particularly during the rush hours when it is impossible for an aircraft in sequence for landing to maintain the continuous descent glide path due to preceding aircraft, the recalculated numbers will reflect what it really happens in the Italian airspace relatively to the VFE PI.

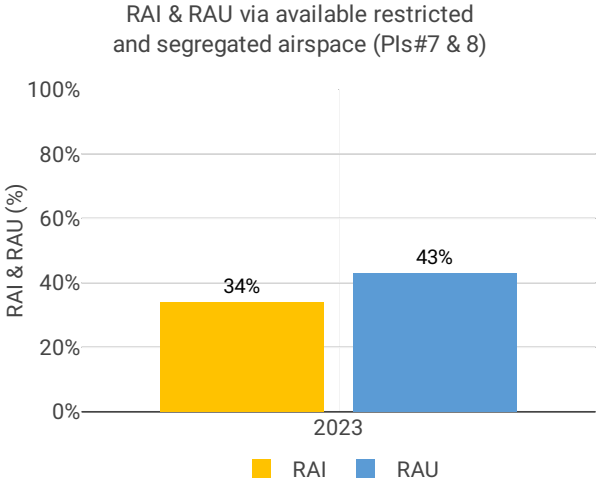
Airport level

	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
Orio Al Serio	1.02	1.11	1.77	1.82	NA	0.45	0.70	0.81	1.20	NA	39%	40%	33%	26%	NA
Linate	1.93	2.18	2.89	3.37	NA	0.78	0.84	1.16	0.85	NA	28%	28%	24%	18%	NA
Malpensa	2.66	2.86	3.41	3.56	NA	0.85	1.25	1.64	1.95	NA	24%	23%	20%	16%	NA
Fiumicino	3.10	3.00	5.00	5.93	NA	1.25	0.96	1.40	1.44	NA	43%	40%	36%	30%	NA
Venice Tessera	1.38	1.10	1.83	1.69	NA	1.06	0.53	1.15	1.26	NA	34%	34%	29%	29%	NA

3.4 Civil-Military dimension







Focus on Civil-Military dimension

Update on Military dimension of the plan

The Military invests efforts and resources for a well-functioning FUA and free-route airspace procedures that provide additional airspace and flight efficiency to civil aviation to the maximum extent possible, which, at the same time, could also contribute reducing CO2 emissions. The interoperability of systems is pursued at every level and in every area of civil.military cooperation (ASM, ATS, AIS); the stuatus of implementation of common information exchange systems or the development of solution (i.e. interface between civil-military systems) to ensure full interoperability is constantly followed within cooperation committees and technical boards. Within airspace and airports where ANS are provided by military collaborative decision-making process is very effective and there are no critical issues attributable to specific ANS and airport restrictions with reference to ATFM measures

Military - related measures implemented or planned to improve capacity

Measures already in place:
• *Full advantage of FUA application at pre-tactical and tactical level in the most of military ARES and free-route*
• *Collocation of civ mil ATCO in the same ACC Ops Room (they use the same technology and data);*
• *Collaborative Decision Making Process (CDM) in Airspace design and AIS*
• *Full interoperability Systems implementation and optimization is pursued*
• Dynamic CDM in airspace design;
• Continuing promotion of the procedures used in airspace reservation;
• Evolution in the interoperability of systems, information management.*

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 - ITALY

4.1 PRB monitoring

• Italy registered 0.17 minutes of average en route ATFM delay per flight during 2023 which has been adjusted to 0.14 during the post-ops adjustment process, thus not achieving the local target value of 0.11. Delays in Italy decreased by 0.01 minutes per flight year-on-year.

• Delays were highest between April and August, mostly due to adverse weather conditions.

• The share of delayed flights with delays longer than 15 minutes in Italy increased by 5 p.p. compared to 2022 and was lower than 2019 values.

• The average number of IFR movements was 1% above 2019 levels in Italy in 2023.

• The number of ATCOs in OPS is expected to increase by 5% by 2024, with the actual value being below the 2023 plan in Brindisi by 2 FTEs. The number of ATCOs in OPS is expected to increase by 10% by 2024, with the actual value being over the 2023 plan in Milano by 8 FTEs. The number of ATCOs in OPS is expected to increase by 9% by 2024, with the actual value being below the 2023 plan in Padova by 6 FTEs. The number of ATCOs in OPS is expected to decrease by 2% by 2024, with the actual value being over the 2023 plan in Rome by 8 FTEs.

• The yearly total of sector opening hours in Brindisi ACC was 26,280, showing an 8.3% increase compared to 2022. Sector opening hours are 29.6% above 2019 levels. The yearly total of sector opening hours in Milano ACC was 63,763, showing a 22.9% decrease compared to 2022. Sector opening hours are 26.7%

below 2019 levels. The yearly total of sector opening hours in Padova ACC was 58,059, showing a 5.7% increase compared to 2022. Sector opening hours are 4.1% above 2019 levels. The yearly total of sector opening hours in Rome ACC was 118,115, showing a 105.8% increase compared to 2022. Sector opening hours are 114.8% above 2019 levels.

• Brindisi ACC registered 15.97 IFR movements per one sector opening hour in 2023, being 11.1% below 2019 levels. Milano ACC registered 14.95 IFR movements per one sector opening hour in 2023, being 42.5% above 2019 levels. Padova ACC registered 13.05 IFR movements per one sector opening hour in 2023, being 4.5% below 2019 levels. Rome ACC registered 7.78 IFR movements per one sector opening hour in 2023, being 52.6% below 2019 levels.

• Italy was badly affected by adverse weather in 2023, resulting in unusually high levels of en route ATFM delay. As the uncertainty of weather impact is likely to increase, Italy should work closely with the NM and all concerned stakeholders to mitigate weather impact as much as possible.

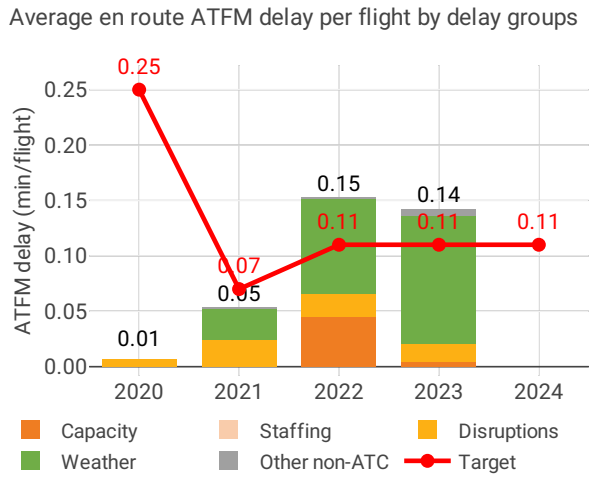
• Italy registered an average airport arrival ATFM delay of 0.15 minutes per flight in 2023, achieving the local target of 0.33 minutes.

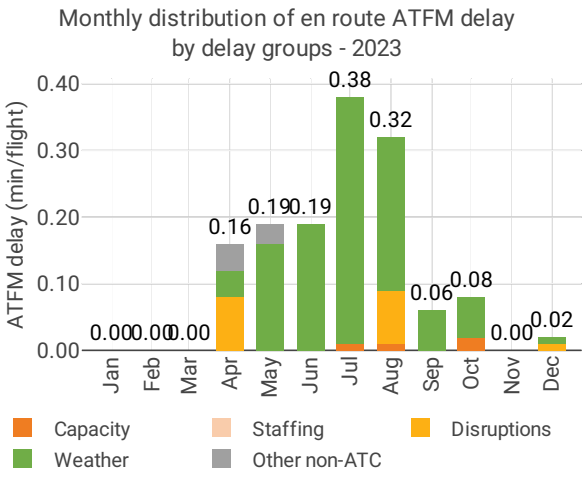
• Compared to 2022, average arrival ATFM delays in Italy were 109% higher in 2023, while the number of IFR arrivals increased by 15%.

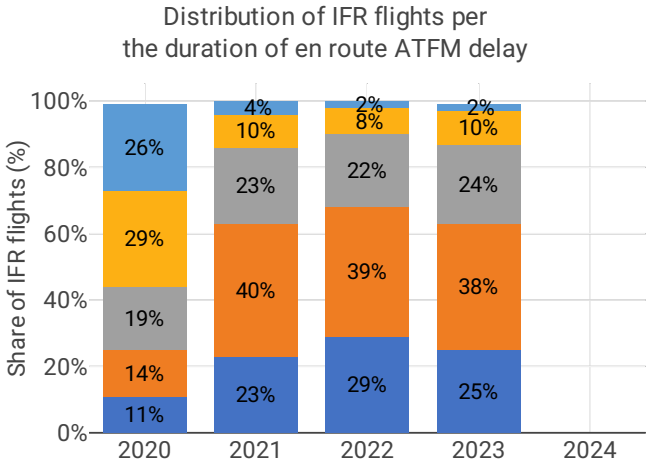
• The main reasons for delays were weather, accounting for 54% of delays, and other, non-ATC related causes, responsible for 46%.

4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)







Focus on en route ATFM delay

Summary of capacity performance

Italian ACCs experienced an increase in traffic from 1 664k flights with 254k minutes of ATFM delay (following NM post operations delay attribution process) in 2022 to 1 854k flights with 264k minutes of ATFM delay in 2023.
For reference, in 2019, Italian ACCs handled 1 831k flights with 32k minutes of ATFM delays.
There was an additional 56k minutes of ATFM delay originating in Italy that were re-attributed to the DFS via the NM post operations delay attribution process, according to the NMB agreement for eNM/S23 measures, to ameliorate the capacity shortfall in Karlsruhe UAC.
En route ATFM delays in 2023 were attributed to adverse weather (81%); ATC equipment (6%); industrial action (5%); Other (4%) and ATC capacity (3%).
The amount of delays attributed to adverse weather in 2023 were 214k minutes. In 2018 with 1 753 flights, there were 16k minutes of attributed weather delay; in 2019 with 1 831k flights, there were 15k minutes of ATFM delay attributed to adverse weather; in 2022, with 1 854k flights there were 144k minutes of ATFM delays attributed to adverse weather.

NSA's assessment of capacity performance

After the recovery observed during 2022, for Italy 2023 represented the year in which the crisis in the air traffic
sector was finally overcome, with a total volume of flights at the end of the year that saw a result of +1,5% compared to 2019 - a pre-Covid reference year and a record year in terms of traffic levels handled - or +10,7% compared to 2022.
A substantial contribution to traffic growth and the increased development of service units was also ensured by the performance achieved in operational capacity, as measured by the flight punctuality indicator. In particular, despite a large volume of traffic, the punctuality recorded at the end of 2023 was at the highest level, with an average delay of 0,01 minutes per assisted flight, compared to the target for the year of 0,04 minutes (when considering only C, R, S, M, T and P causes).
The global ER target (0,11) wasn't reached by ANSP due to weather; indeed, the delay was almost 0,13min just for weather reason.
ANSP reached the capacity goal for the incentive ER and terminal schemes.

Monitoring process for capacity performance

Monthly monitoring and analysis of the operational performance at Country and single ACC level is carried out by ENAV. Checks are made against the value of ATFM generated delay per month and its exepcted trend across the year.
The post-operations performance adjustment process was conducted by ENAV during the year. At the beginning of summer 2023 a few disputation processes were initiated by ENAC in respect of NM to acknowledge the erroneous attribution to Italy of some enroute ATFM delays.
In addition during all the Summer 2023, the process of delay reattribution was put in place between NM and ENAV. The outcomes of the reconciliation process confirmed the figure of Capacity KPI #1 as presented by PRB in the current table (0.14 m/f). In addition to that, the supplementary Capacity ENR PI#1 which solely includes the ATM reasons of ATFM delay scored 0,01 min/flight.
In 2023 there were six reasons of Enroute ATFM delay: Weather (81.2%), ATC Equipment (6.4%), Industrial Action (4.8%), Other (4.0%), ATC Capacity (3.3%) and Other (0.2%). As such, the "ATM" reasons (ATC Equipment and Capacity) accounted only for a small part of the overall delay assignment. As represented in several fora, Italy is experiencing a huge increase of weather phenomena having impact on traffic flows and capacity.

Capacity planning

No remarks

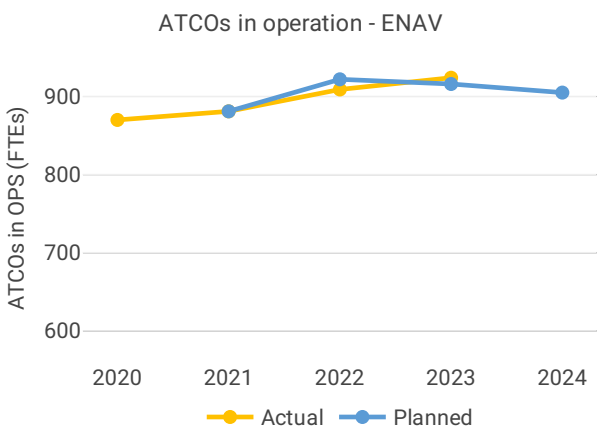
Application of Corrective Measures for Capacity (if applicable)

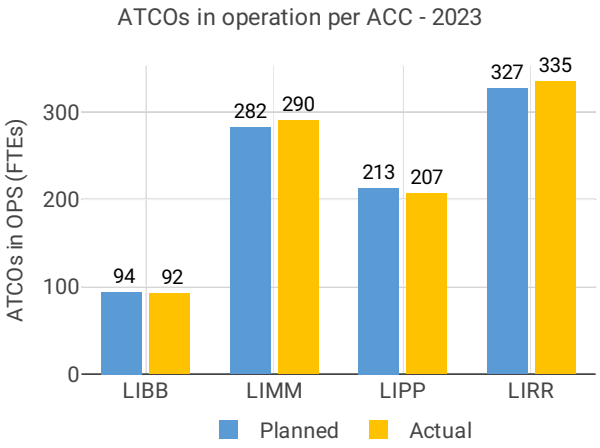
In 2023 there were six reasons of Enroute ATFM delay: Weather (81.2%), ATC Equipment (6.4%), Industrial Action (4.8%), Other (4.0%), ATC Capacity (3.3%) and P – Special Events (0.2%). As such, the "ATM" reasons (ATC Equipment and Capacity) accounted only for a small part of the overall delay assignment. As represented in several fora, Italy is experiencing a huge increase of weather phenomena having impact on traffic flows and capacity.
The capacity target entered in RP3 does not adequately take into account the anomalous increase in meteorological impact on air traffic flow. Over the last three years, weather conditions have had an over-increasing influence in delay reasons and we must recognize this as a factual reality when considering the baseline for these last two years of the RP3 period and the subsequent RP4.
It wasn't possible to identify any further measures to reduce the delay due to meteorological phenomena, that have not already been adopted (e.g. opening new sectors, diversions etc.)

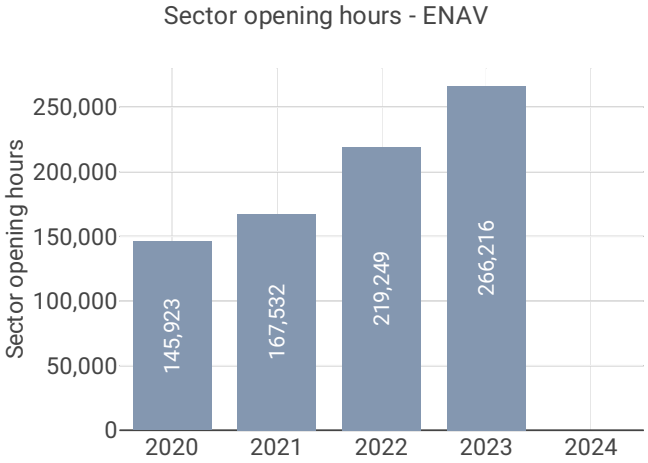
En route Capacity Incentive Scheme

ENAV: The incentive scheme is under review by the European CommissionIn accordance with Article 3(3)(a) of Implementing Regulation (EU) 2020/1627: The incentive scheme shall cover only the calendar years 2022 to 2024.

4.2.2 Other indicators





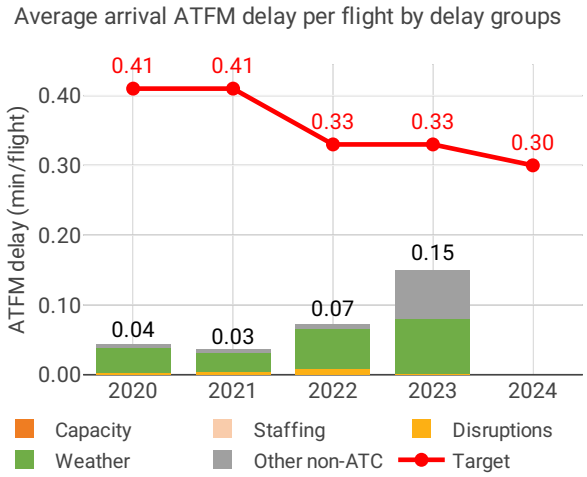


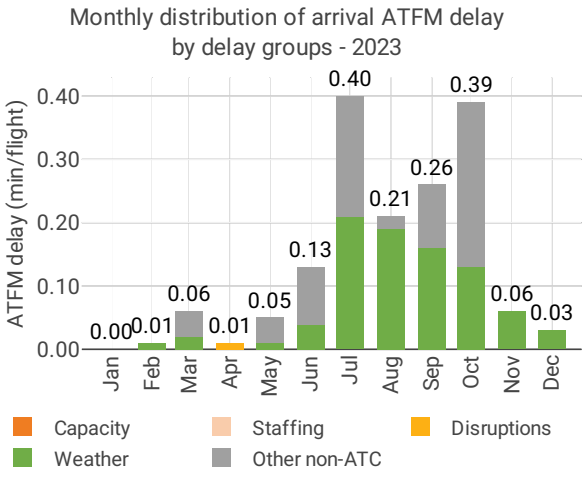
Focus on ATCOs in operations

N/A

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)





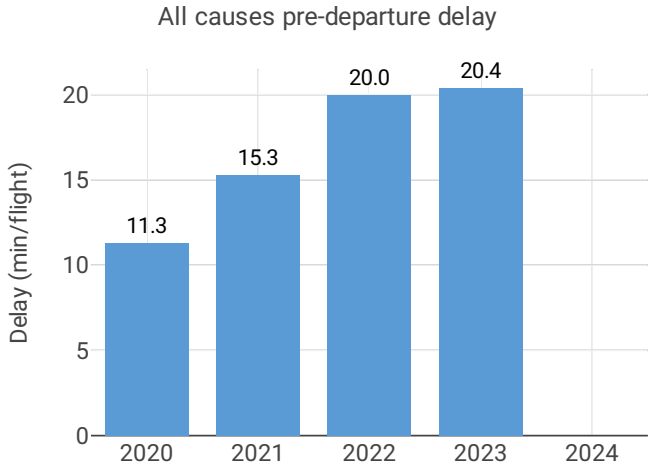
Focus on arrival ATFM delay

Italy identified five airports as subject to RP3 monitoring. All of them have a fully implemented data flow that allows the proper monitoring of pre-departure delays. The quality of the reporting has improved, allowing in 2023 the calculation of the ATC pre-departure delay at the five airports.
Traffic at the ensemble of these Italian airports in 2023 is 6% lower than in 2019, but increased 15% with respect to 2022.
Average arrival ATFM delays in 2023 was 0.15 min/arr, compared to 0.07 min/arr in 2022. National target was met.
ATFM slot adherence has slightly deteriorated (2023: 95.8%; 2022: 96.1%).

The national average arrival ATFM delay at Italian airports in 2023 was 0.15 min/arr.
54% of all delays at Italian airports were attributed to weather and 23% associated with environmental issues mostly at Milan Malpensa.
According to the Italian monitoring report: *This indicator includes all the reasons of ATFM delay. Nevertheless, as done in 2.3.1.A KPI#1, it is important to show the figures that really contributed to the achievement of the ATM performance. Below there are the figures for the "Terminal ATM-only arrival delay per flight" indicator which is limited to C,R,S,T,M,P causes for the following airports:*
LIMC: 0.00 m/f
LIME: 0.00 m/f
LIML: 0.00 m/f
LIPZ: 0.00 m/f
LIRF: 0.02 m/f

The Italian performance plan sets a national target on arrival ATFM delay for 2023 of 0.33 min/arr. This target was met in 2023 with an actual performance of 0.15 min/arr.
The incentive scheme uses modulated pivot values limited CRSTMP delay causes. This pivot value for CRSTMP is 0.04 min/arr in 2023. According to the attribution of the regulation reason, the actual CRSTMP value for 2023 is 0.006 min/arr. The NSA calculates a bonus of € 976 750.

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
Fiumicino	0.02	0.00	0.04	0.06	98.0%	98.1%	96.5%	95.5%
Linate	0.06	0.03	0.13	0.06	96.1%	96.9%	98.0%	98.2%
Malpensa	0.02	0.05	0.09	0.38	97.3%	97.2%	97.7%	97.7%
Orio Al Serio	0.04	0.07	0.08	0.07	94.8%	96.1%	93.9%	92.5%
Venice Tessera	0.16	0.04	0.04	0.07	90.0%	94.2%	92.8%	93.8%

	ATC pre departure delay (PI#2)				All causes pre departure delay (PI#3)			
Airport name	2020	2021	2022	2023	2020	2021	2022	2023
Fiumicino	0.64	0.89	1.55	1.93	6.4	9.2	14.9	17.3
Linate	0.05	0.06	0.38	0.63	5.1	7.8	11.2	13.0
Malpensa	0.36	0.64	1.18	1.23	17.8	20.1	23.5	23.9
Orio Al Serio	0.52	0.77	1.14	1.06	8.0	12.5	21.4	20.7
Venice Tessera	0.85	0.68	1.15	1.15	9.8	12.0	20.1	20.3

Focus on performance indicators at airport level

ATFM slot adherence

All Italian airports showed adherence above 90% and the national average was 95.8%. With regard to the 4.2% of flights that did not adhere, 2% was early and 2.2% was late.
According to the Italian monitoring report: *Slightly worse performance values are reported in the prefilled tables for year 2023 with respect to what has been elaborated by Italy (ENAV) for the same year. The own elaboration is based upon NM/NMIR data and the difference is usually around one decimal percentage point. It can be explained by the use of different flight samples that eventually respected the ATFM slot time window.*

ATC pre-departure delay

The performance at all four Italian airports in 2023 was similar to the observed in 2022, with Rome almost reaching 2 min/dep, the second highest ATC pre-departure delay in the SES monitored airports.

All causes pre-departure delay

The total (all causes) delay in the actual off block time at Italian airports in 2023 was similar to the observed delay in 2022. Once again, the highest pre-departure delays were observed at Milan Malpensa (LIMC: 2023: 23.95 min/dep) followed by Bergamo (LIME: 2023: 20.68 min/dep) and Venice (LIPZ: 2023: 20.27 min/dep), all of them above the SES average of 19.15 min/dep.

5 COST-EFFIENCY - ITALY

5.1 PRB monitoring

• The en route 2023 actual unit cost of Italy was 55.57 €2017, -10% lower than the determined unit cost (61.52 €2017). The terminal zone 1 2023 actual unit cost was 148.84 €2017, +0.3% higher than the determined unit cost (148.46 €2017), while the terminal zone 2 2023 actual unit cost was 163.41 €2017, -14% lower than the determined unit cost (189.46 €2017).

• The en route 2023 actual service units (11M) were 1.5% higher than the determined service units (10M).

• The en route 2023 actual total costs were -53 M€2017 (-8.3%) lower than determined, with reductions across all categories except for the cost of capital. The most significant reduction was in staff costs (-35 M€2017, or -9.8%). Despite this, in nominal terms, there was a difference of +1% in actual staff costs compared to the determined figures due to new hires and an agreement with trade unions. Other operating costs also saw a substantial underspend between actual and determined cots (-19.9 M€2017, or -13%), for which the NSA did not provide a detailed explanation.

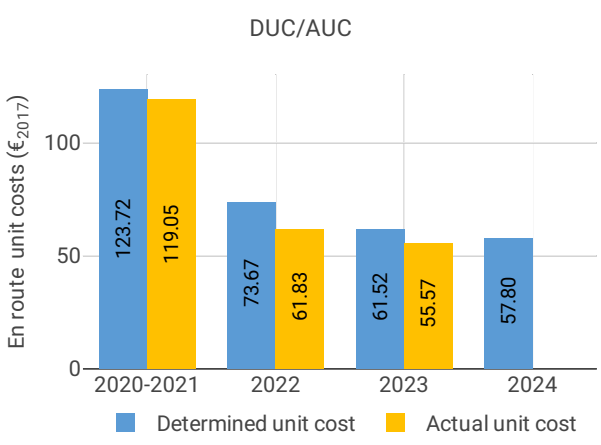
• ENAV spent 142 M€2017 in 2023 related to costs of investments for both en route and terminal charging zones, +1.3% more than determined (140 M€2017). This gap was largely due to an overspend in the cost of capital (+29%, or +11 M€2017), which is primarily attributed to the growth in fixed assets and rising interest rates (from 1.86% to 5.0%). However, the reported average interest rate does not align with the genuine average interest rate that ENAV incurred in 2023, which was 3.83%. The PRB recommends that ENAV report the genuine average interest rate they experienced as the actual figure, in line with the Regulation.

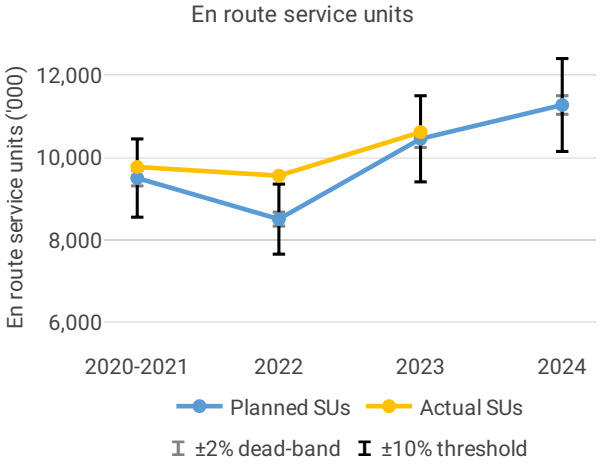
• The en route actual unit cost incurred by users in 2023 was 71.14€ (+10% above the 2023 DUC), while the terminal zone 1 actual unit cost incurred by users was 179.31€ (+16% above the 2023 DUC) and 213.48€ (+7.5% above the 2023 DUC) for terminal zone 2. The difference between the AUCU and the DUC for all charging zones is primarily attributed to the inflation mechanism (+68 M€).

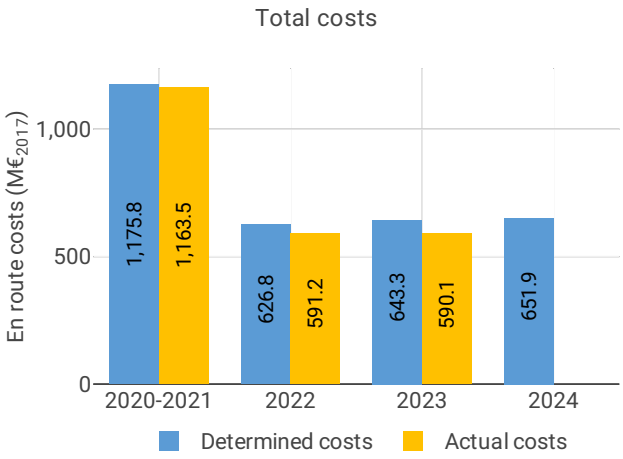
• The en route regulatory result for ENAV amounted to +119 M€, or 18% of the 2023 revenue. This may indicate that the airspace users are charged for costs which have not materialised in 2023. The PRB will take into consideration the implementation of the RP3 performance plan when assessing the RP4 cost-efficiency targets.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)

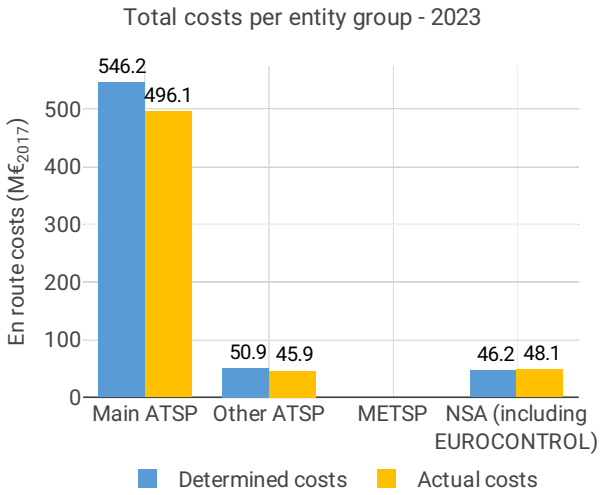


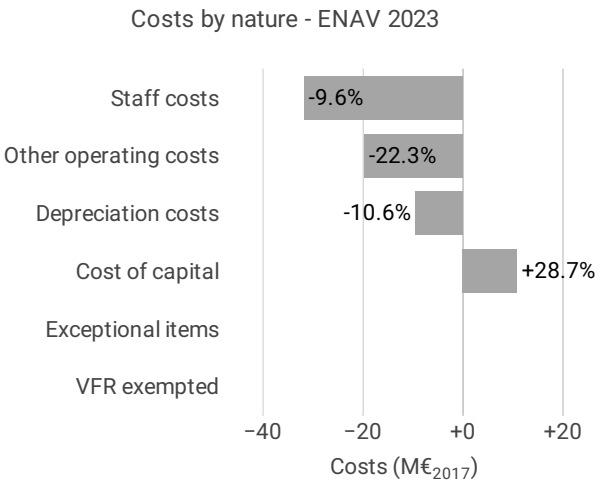




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	1,186	645	669	NA
Determined costs	1,197	651	674	689
Difference costs	-12	-6	-4	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	1.8%	1.2%	1.2%
Determined inflation index	NA	105.3	106.6	107.9
Actual inflation rate	NA	8.7%	5.9%	NA
Actual inflation index	NA	112.8	119.4	NA
Difference inflation index (p.p.)	NA	+7.4	+12.9	NA





Focus on unit cost

AUC vs. DUC

In 2023, the en route AUC was -9.7% (or -5.95 €2017) lower than the planned DUC. This results from the combination of significantly lower than planned en route costs in real terms (-8.3%, or -53.2 M€2017) and higher than planned TSUs (+1.5%). It should be noted that the actual inflation index in 2023 was +12.9 p.p. higher than planned.

En route service units

The difference between the 2023 actual and planned TSUs (+1.5%) falls inside the ±2% dead band. Hence the gain of additional en route revenues is retained by the ANSPs .

En route costs by entity

The 2023 actual real en route costs are -8.3% (-53.2 M€2017) lower than planned. This is the result of lower than planned costs for the main ANSP, ENAV (-9.2%, or -50.1 M€2017) and the other ANSP (ITAF, -9.8%, or -5.0 M€2017), while the NSA/EUROCONTROL costs are higher (+4.1%, or +1.9 M€2017) than planned.

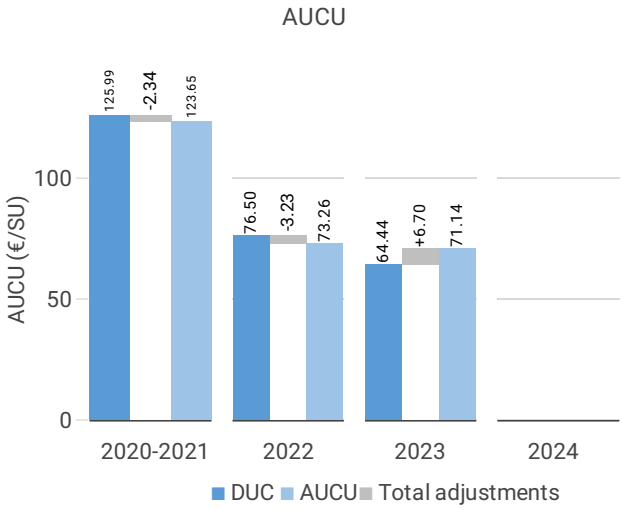
En route costs for the main ANSP at charging zone level

The 2023 actual real en route costs for ENAV are significantly lower than planned (-9.2%, or -50.1 M€2017), mainly due to a higher than planned inflation index in 2023 (+12.9 p.p.) and resulting from:

- Significantly lower than planned staff costs in real terms (-9.6%), but slightly higher in nominal terms (+1.3%), reported to be mainly due to "*hirings, and agreements with the trade unions with regard to working hours flexibility, recovery of inflation of approximately 5.2%, and increase in salary of 2% per annum over 2023-2025*",

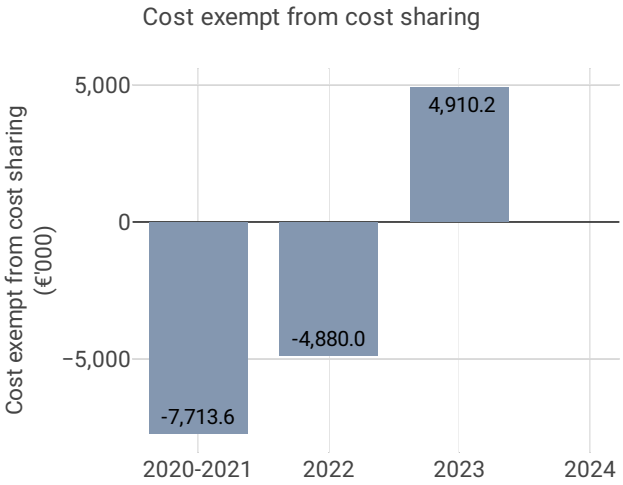
- Significantly lower than planned other operating costs (-22.3%) without explanations,
- Significantly lower than planned depreciation (-10.6%), no explanations is provided beyond the fact that the difference will be reimbursed to users,
- Significantly higher than planned cost of capital (+28.7%), mainly due to "*the increase in the average interest on debt from 1.86% to 5.00% (including the debt risk premium equal to 3.83%)*"

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



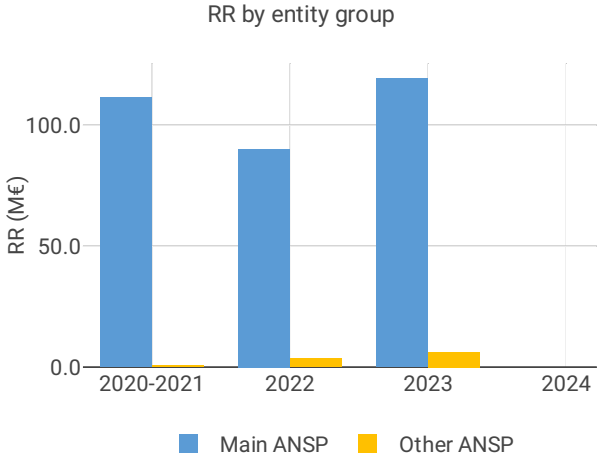
AUCU components (€/SU) – 2023

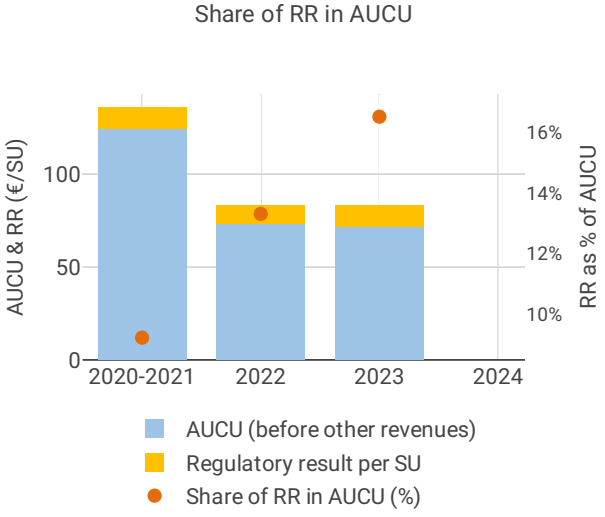
Components of the AUCU in 2023	€/SU
DUC	**64.44**
Inflation adjustment	5.64
Cost exempt from cost-sharing	0.46
Traffic risk sharing adjustment	0.00
Traffic adj. (costs not TRS)	-0.17
Finantial incentives	1.08
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-0.31
Application of lower unit rate	0.00
Total adjustments	6.70
AUCU	**71.14**
AUCU vs. DUC	**+10.4%**

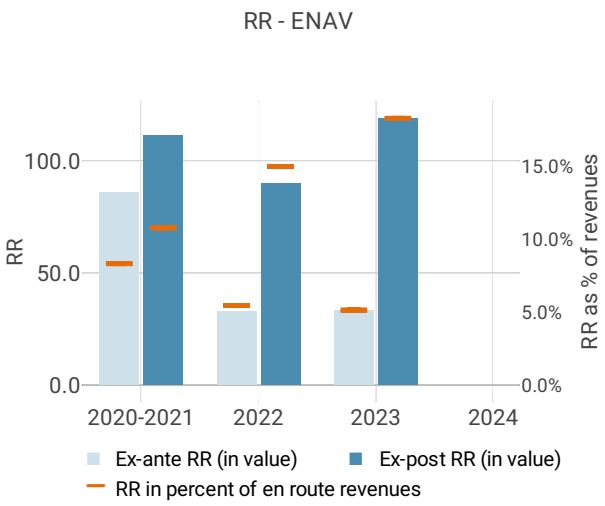


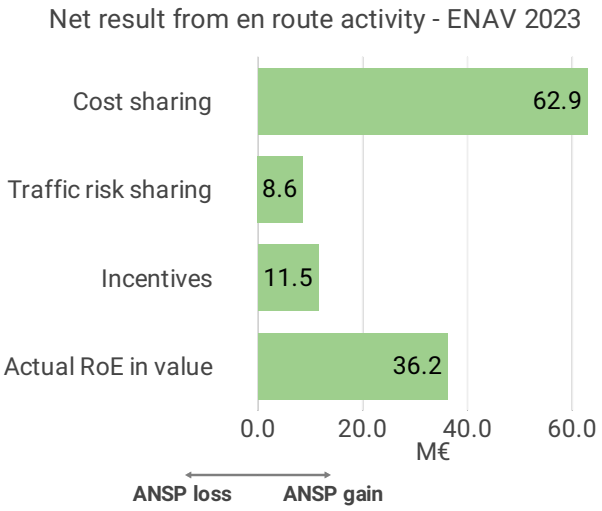
Cost exempt from cost sharing by item - 2023	€'000	€/SU
New and existing investments	1,345.0	0.13
Competent authorities and qualified entities costs	-233.2	-0.02
Eurocontrol costs	2,114.7	0.20
Pension costs	0.0	0.00
Interest on loans	1,683.6	0.16
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**4,910.2**	**0.46**

5.2.3 Regulatory result (RR)









Focus on regulatory result

ENAV net gain on activity in the Italy en route charging zone in the year 2023

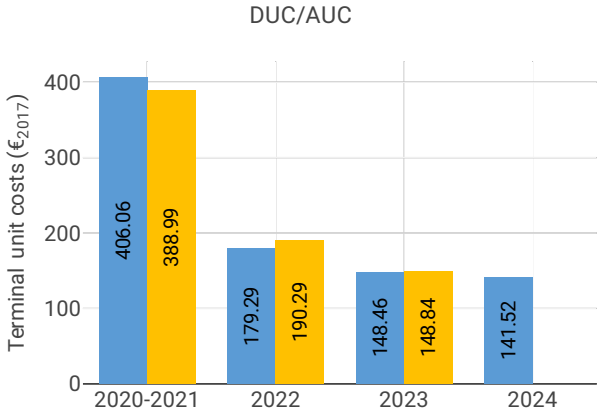
ENAV reported a net gain of +83.0 M€, as a combination of a gain of +62.9 M€ arising from the cost sharing mechanism, with a gain of +8.6 M€ arising from the traffic risk sharing mechanism and a gain of +11.5 M€ relating to financial incentives.

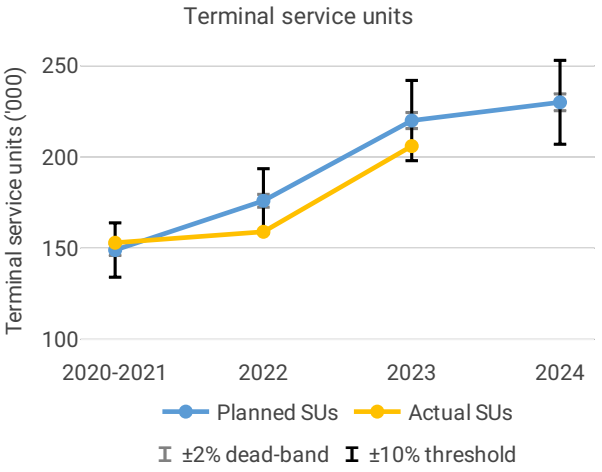
ENAV overall regulatory results (RR) for the en route activity

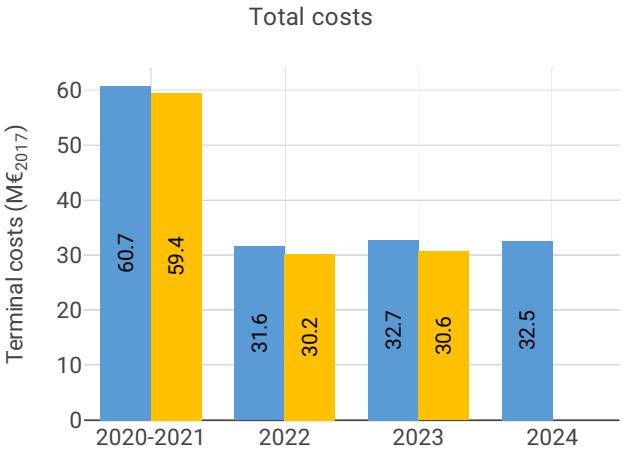
Ex-post, the overall RR taking into account the net gain from the en route activity above mentioned (+83.0 M€) and the actual RoE (+36.2 M€) amounts to +119.2 M€ (18.3% of the en route revenues). The resulting ex-post rate of return on equity is 16.1%, which is higher than the 4.9% planned in the PP.

5.3 Terminal charging zone - Italy Zone 1

5.3.1 Unit cost (KPI#1)



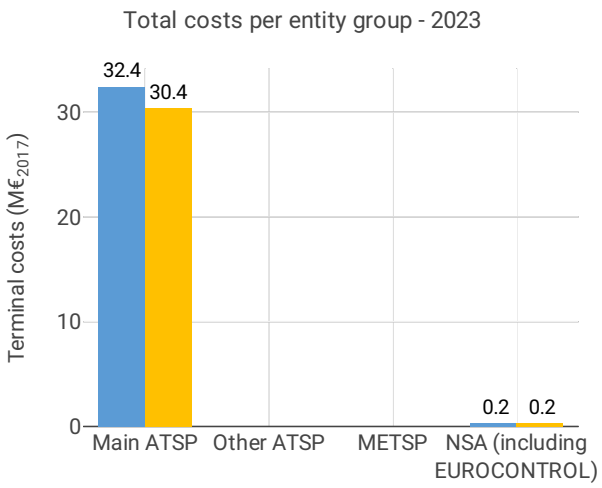


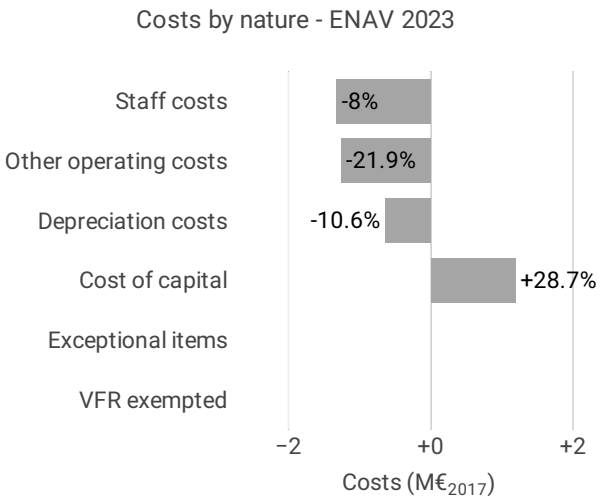


Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	60	33	34	NA
Determined costs	62	33	34	34
Difference costs	-1	0	0	NA

Inflation assumptions	2020-2021	2022	2023	2024
Determined inflation rate	NA	1.8%	1.2%	1.2%
Determined inflation index	NA	105.3	106.6	107.9
Actual inflation rate	NA	8.7%	5.9%	NA
Actual inflation index	NA	112.8	119.4	NA
Difference inflation index (p.p.)	NA	+7.4	+12.9	NA





Focus on unit cost

AUC vs. DUC

In 2023, the terminal AUC was +0.3% (or +0.38 €2017) higher than the planned DUC. This results from the combination of significantly lower than planned TNSUs (-6.5%) and significantly lower than planned terminal costs in real terms (-6.2%, or -2.0 M€2017). It should be noted that actual inflation index in 2023 was +12.9 p.p. higher than planned.

Terminal service units

The difference between actual and planned TNSUs (-6.5%) 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.

Terminal costs by entity

The 2023 actual real terminal costs are -6.2% (-2.0 M€2017) lower than planned for the TCZ1. This results from lower than planned costs for the main ANSP, ENAV (-6.3%, or -2.0 M€2017) and the NSA (-0.8%, or -0.002 M€2017).

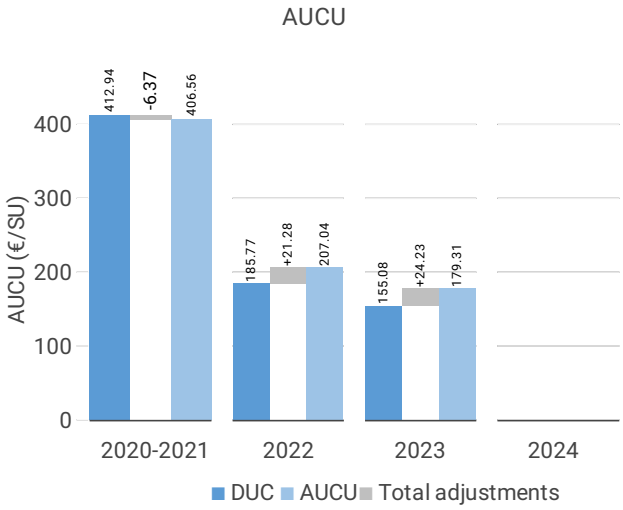
Terminal costs for the main ANSP at charging zone level

The 2023 actual real terminal ANS costs are significantly lower than planned for ENAV TCZ1 (-6.3%, or -2.0 M€2017), mainly due to a higher than planned inflation index in 2023 and from:

- Significantly lower than planned staff costs (-8.0%), but higher in nominal terms (+3.1%), reported to be mainly due to *"hirings, and agreements with the trade unions with regard to working hours flexibility, recovery of inflation of approximately 5.2%, and increase in salary of 2% per annum over 2023-2025*",
- Significantly lower than planned other operating costs (-21.9%), without explanations,

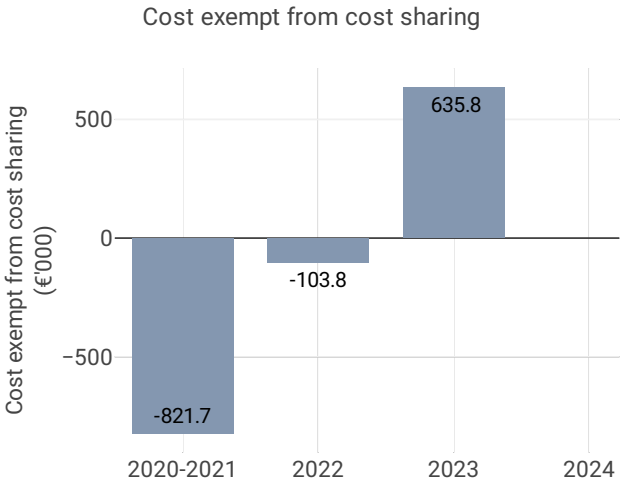
- Significantly lower than planned depreciation (-10.6%), no explanation is provided beyond the fact that the difference will be reimbursed to users,
- Significantly higher than planned cost of capital (+28.7%), reported to be mainly due to *"the increase in the average interest on debt from 1.86% to 5.00% (including the debt risk premium equal to 3.83%)"*.

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



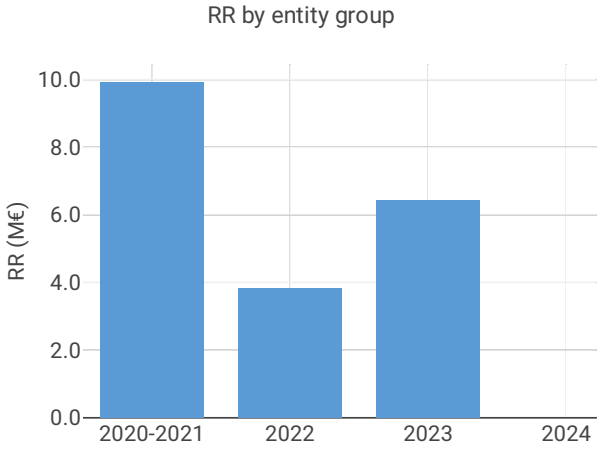
AUCU components (€/SU) – 2023

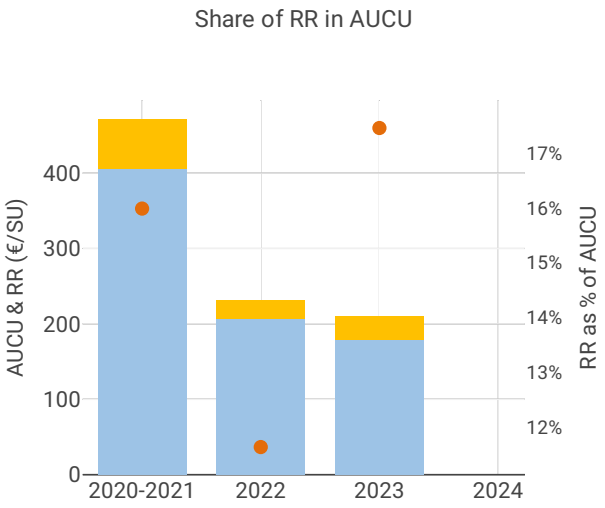
Components of the AUCU in 2023	€/SU
DUC	**155.08**
Inflation adjustment	13.88
Cost exempt from cost-sharing	3.09
Traffic risk sharing adjustment	4.79
Traffic adj. (costs not TRS)	0.83
Finantial incentives	1.65
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	0.00
Application of lower unit rate	0.00
Total adjustments	24.23
AUCU	**179.31**
AUCU vs. DUC	**+15.6%**

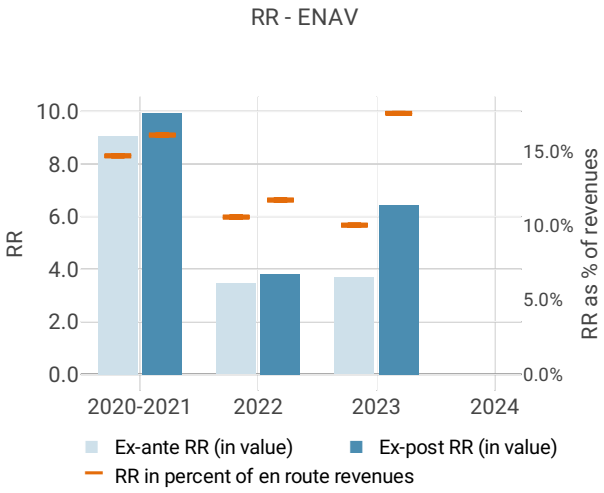


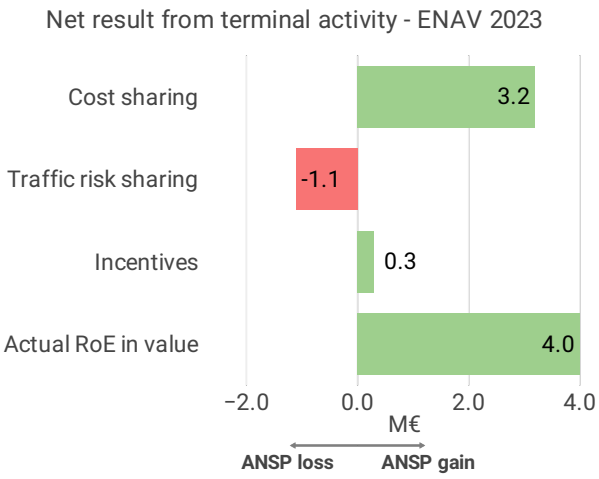
Cost exempt from cost sharing by item - 2023	€'000	€/SU
New and existing investments	452.4	2.20
Competent authorities and qualified entities costs	-1.9	-0.01
Eurocontrol costs	0.0	0.00
Pension costs	0.0	0.00
Interest on loans	185.3	0.90
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**635.8**	**3.09**

5.3.3 Regulatory result (RR)









Focus on regulatory result

ENAV net gain on activity in the Italy terminal charging zone 1 in the year 2023

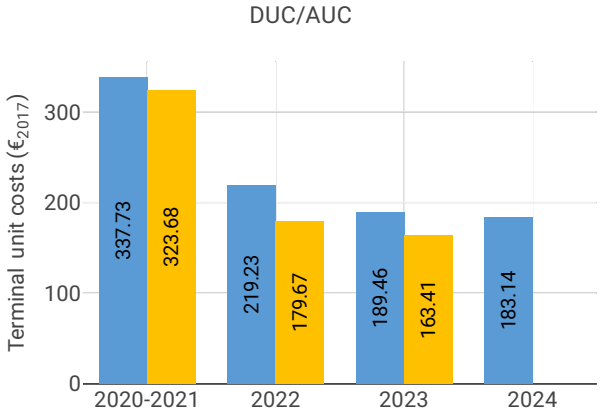
ENAV reported a net gain of +2.5 M€, as a combination of a gain of +3.2 M€ arising from the cost sharing mechanism, with a loss of -1.1 M€ arising from the traffic risk sharing mechanism and a gain of +0.3 M€ relating to financial incentives.

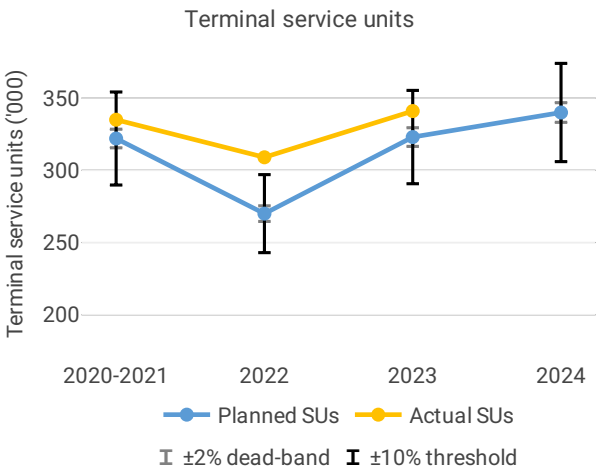
ENAV overall regulatory results (RR) for the terminal charging zone 1 activity

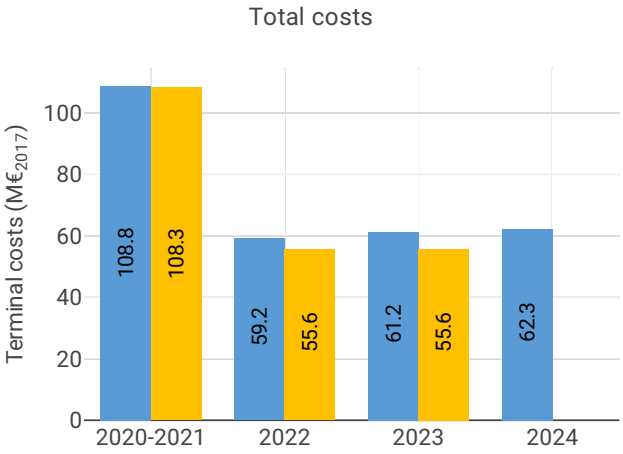
Ex-post, the overall RR taking into account the net gain from the terminal activity mentioned above (+2.5 M€) and the actual RoE (+4.0 M€) amounts to +6.4 M€ (17.6% of the terminal revenues in the TCZ1). The resulting ex-post rate of return on equity is 7.9%, which is higher than the 4.9% planned in the PP.

5.4 Terminal charging zone - Italy Zone 2

5.4.1 Unit cost (KPI#1)

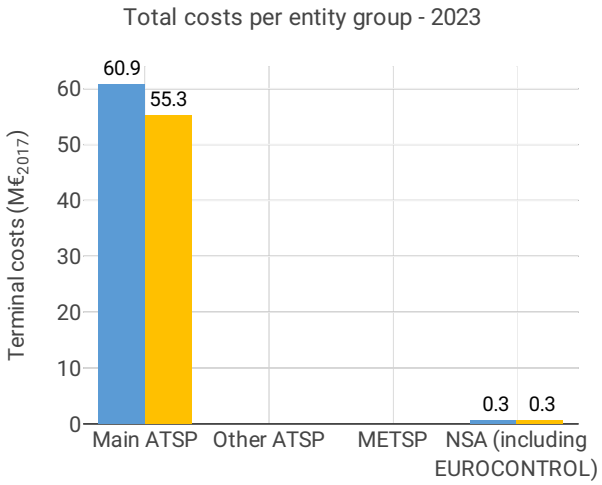


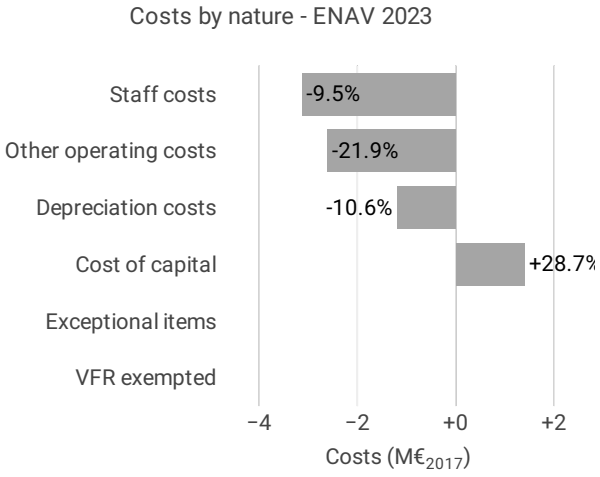




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	110	61	63	NA
Determined costs	111	61	64	66
Difference costs	0	-1	-1	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	1.8%	1.2%	1.2%
Determined inflation index	NA	105.3	106.6	107.9
Actual inflation rate	NA	8.7%	5.9%	NA
Actual inflation index	NA	112.8	119.4	NA
Difference inflation index (p.p.)	NA	+7.4	+12.9	NA





Focus on unit cost

AUC vs. DUC

In 2023, the terminal AUC was -13.8% (or -26.05 €2017) lower than the planned DUC. This results from the combination of significantly lower than planned terminal costs in real terms (-9.1%, or -5.5 M€2017) and significantly higher than planned TNSUs (+5.4%). It should be noted that actual inflation index in 2023 was +12.9 p.p. higher than planned.

Terminal service units

The difference between the 2023 actual and planned TNSUs (+5.4%) falls outside the ±2% dead band, but does not exceed the ±10% threshold foreseen in the traffic risk sharing mechanism. The resulting gain of additional terminal revenues is therefore shared between the ANSP and the airspace users.

Terminal costs by entity

The 2023 actual real terminal ANS costs are -9.1% (-5.5 M€2017) lower than planned for the TCZ2. This is the result of lower than planned costs for the main ANSP, ENAV (-9.1%, or -5.6 M€2017) and the NSA (-0.8%, or -0.003 M€2017).

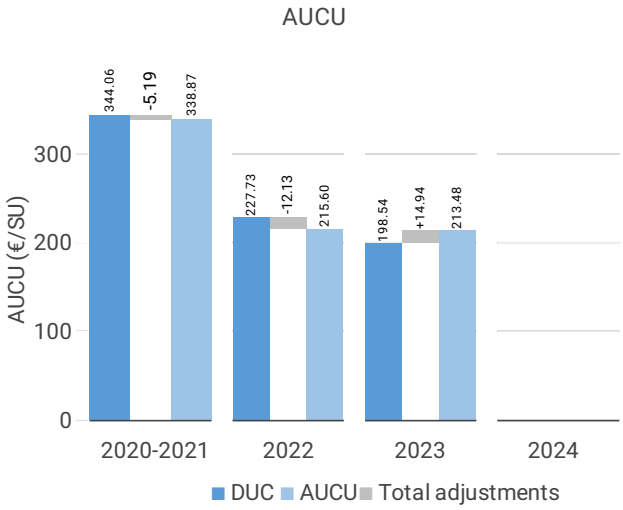
Terminal costs for the main ANSP at charging zone level

The 2023 real actual terminal ANS costs are significantly lower than planned for ENAV TCZ2 (-9.1%, or -5.6 M€2017), mainly due to a higher than planned inflation index in 2023 and from:

- Significantly lower than planned staff costs (-9.5%), but slightly higher in nominal terms (+1.4%), reported to be mainly due to *"hirings, and agreements with the trade unions with regard to working hours flexibility, recovery of inflation of approximately 5.2%, and increase in salary of 2% per annum over 2023-2025",*
- Significantly lower than planned other operating costs (-21.9%), without explanations,

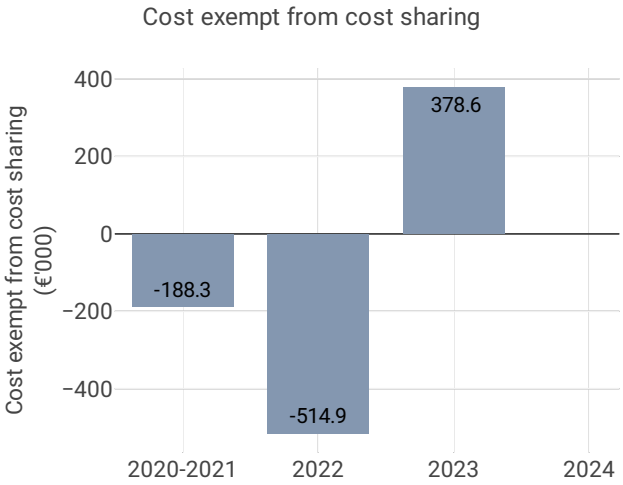
- Significantly lower than planned depreciation (-10.6%), no explanation is provided beyond the fact that the difference will be reimbursed to users,
- Significantly higher than planned cost of capital (+28.7%), reported to be mainly due to *"the increase in the average interest on debt from 1.86% to 5.00% (including the debt risk premium equal to 3.83%)".*

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



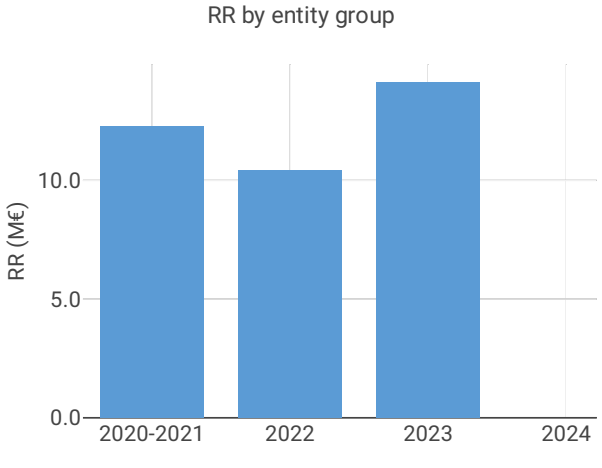
AUCU components (€/SU) – 2023

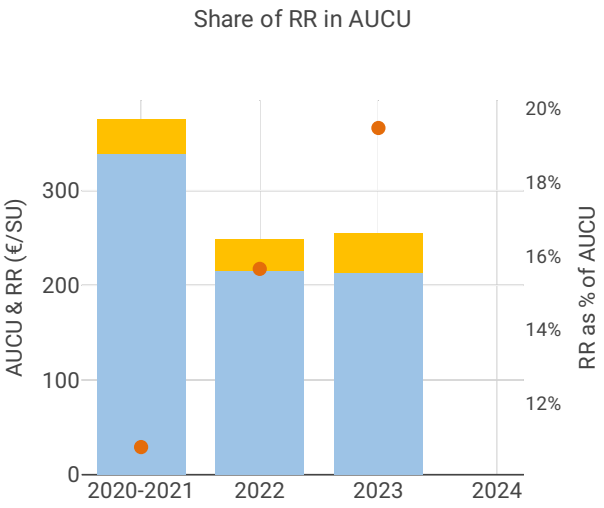
Components of the AUCU in 2023	€/SU
DUC	**198.54**
Inflation adjustment	16.88
Cost exempt from cost-sharing	1.11
Traffic risk sharing adjustment	-4.21
Traffic adj. (costs not TRS)	-0.72
Finantial incentives	1.87
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	0.00
Application of lower unit rate	0.00
Total adjustments	14.94
AUCU	**213.48**
AUCU vs. DUC	**+7.5%**

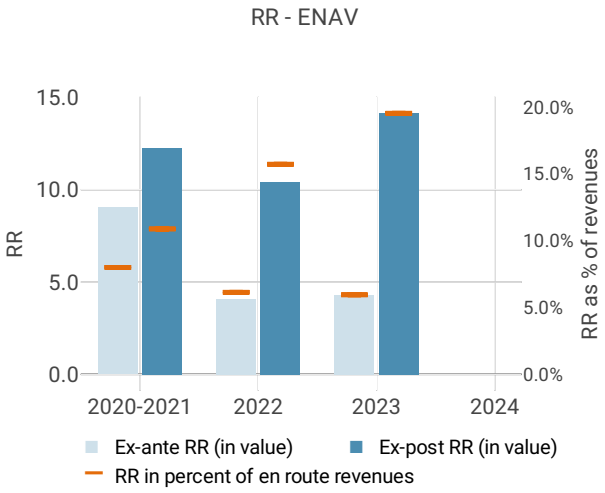


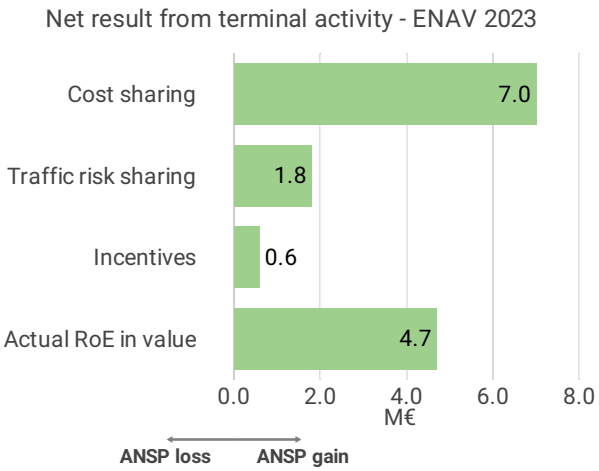
Cost exempt from cost sharing by item - 2023	€'000	€/SU
New and existing investments	164.7	0.48
Competent authorities and qualified entities costs	-2.9	-0.01
Eurocontrol costs	0.0	0.00
Pension costs	0.0	0.00
Interest on loans	216.8	0.64
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**378.6**	**1.11**

5.4.3 Regulatory result (RR)









Focus on regulatory result

ENAV net gain on activity in the Italy terminal charging zone 2 in the year 2023

ENAV reported a net gain of +9.5 M€, as a combination of a gain of +7.0 M€ arising from the cost sharing mechanism, with a gain of +1.8 M€ arising from the traffic risk sharing mechanism and a gain of +0.6 M€ relating to financial incentives.

ENAV overall regulatory results (RR) for the terminal charging zone 2 activity

Ex-post, the overall RR taking into account the net gain from the terminal activity above mentioned (+9.5 M€) and the actual RoE (+4.7 M€) amounts to +14.1 M€ (19.6% of the terminal revenues in TCZ2). The resulting ex-post rate of return on equity is 14.9%, which is higher than the 4.9% planned in the PP.