

Performance Review Board

Monitoring Report

Greece - 2024



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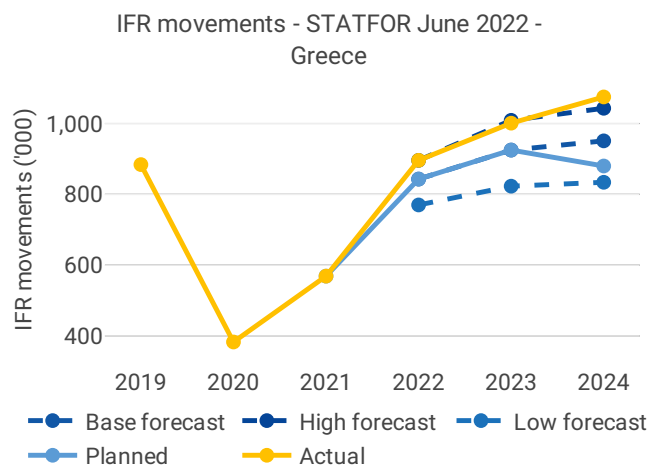
1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/2421 of 5 December 2022

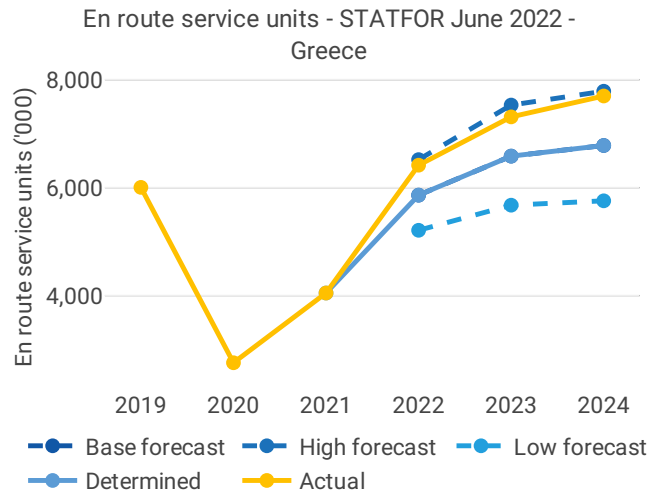
<p>List of ACCs 2 Athens ACC Makedonia ACC</p> <p>No of airports in the scope of the performance plan:</p> <ul style="list-style-type: none"> • $\geq 80^{\circ}K$ 1 • $< 80^{\circ}K$ 0 	<p>Exchange rate (1 EUR=) 2017: 1 EUR 2024: 1 EUR</p> <p>Share of Union-wide:</p> <ul style="list-style-type: none"> • traffic (TSUs) 2024 5.9% • en route costs 2024 2.5% <p>Share en route / terminal costs 2024 88% / 12%</p> <p>En route charging zone(s) Greece</p> <p>Terminal charging zone(s) Greece</p>	<p>Main ANSP</p> <ul style="list-style-type: none"> • HASP <p>Other ANSPs</p> <p>-</p> <p>MET Providers</p> <ul style="list-style-type: none"> • HNMS
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1.2 Traffic (En route traffic zone)



- Greece recorded 1,075K actual IFR movements in 2024, +7.4% compared to 2023 (1,001K).
- Actual 2024 IFR movements were +22.2% above the plan (880K).
- Actual 2024 IFR movements are +21.6% above the actual 2019 level (884K).





- Greece recorded 7,698K actual service units in 2024, +5.3% compared to 2023 (7,311K).
- Actual 2024 service units were +13.5% above the plan (6,781K).
- Actual 2024 service units are +28.2% above the actual 2019 level (6,005K).

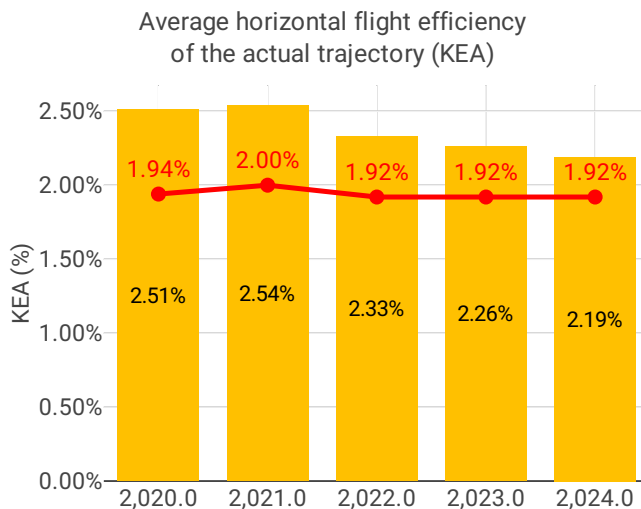
1.3 Safety (Main ANSP)



- HASP planned to reach maturity level D for Safety Risk Management in 2024 to achieve the RP3 targets, however HASP only achieved level C.
- Greece recorded an increase in the rate of separation minima infringements (SMIs) and a marginally lower rate of runway incursions (RIs) in 2024 compared to 2023.
- In 2024, HASP implemented enhancements to its occurrence reporting and investigation processes, incorporating the Bow Tie methodology. These improvements are expected to significantly strengthen the ability to identify contributing factors and systematically develop effective risk mitigation measures aimed at preventing future occurrences.
- Greece should ensure that the ANSP implements, in a timely and cost-efficient manner, the necessary additional measures such as enhanced processes, improved allocation of resources, targeted training, and systematic reviews. Without such actions, the achievement of the RP4 targets could be jeopardised.

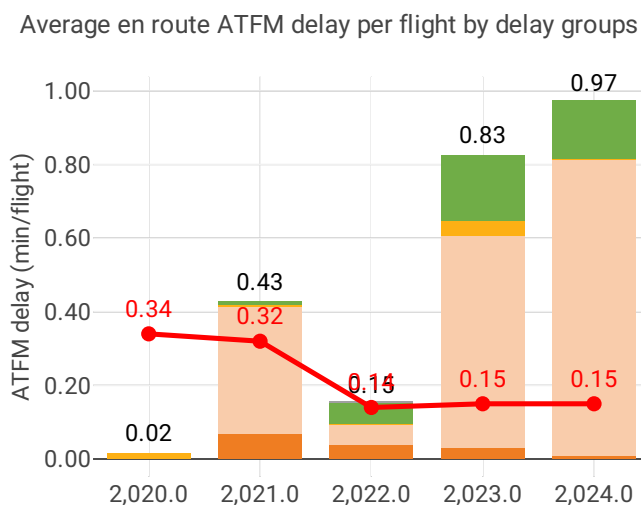


1.4 Environment (Member State)



- Greece achieved a KEA performance of 2.19% compared to its target of 1.92% and did not contribute positively towards achieving the Union-wide target.
- The NSA states that the target was missed mainly due to military activity, adverse weather phenomena and high levels of traffic.
- KEP improved and SCR improved marginally in comparison with 2023. Despite the KEA target being missed, KEA improved in 2024.
- The share of CDO flights increased from 43.31% to 46.42% in 2024.
- Additional taxi out time increased marginally from 2.85 to 2.95 min/flight, while additional time in terminal airspace increased from 1.44 to 1.55 min/flight in 2024 compared to 2023.

1.5 Capacity (Member State)

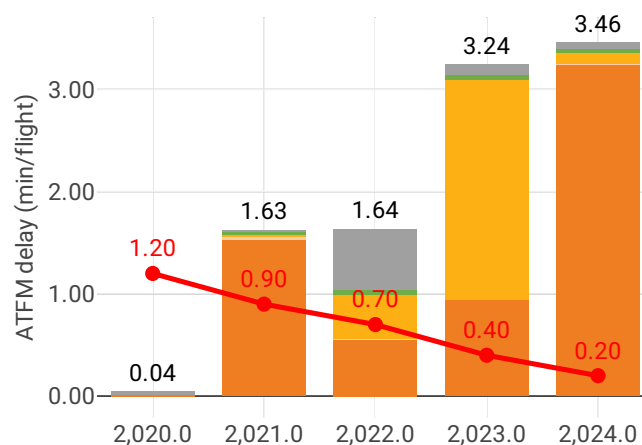


- Greece registered 0.98 minutes of average en route ATFM delay per flight during 2024, which has been adjusted to 0.97 during the post-ops adjustment process, thus not achieving the local target value of 0.15. Delays in Greece increased by 0.14 minutes per flight year-on-year.



- Most of the delays were generated between May and September, mainly driven by ATC Staffing issues.
- The share of delayed flights with delays longer than 15 minutes in Greece decreased by 4 percentage points compared to 2023 and was lower than 2019 values.
- The average number of IFR movements was 22% above 2019 levels in Greece in 2024.
- The number of ATCOs in OPS is 175, being below the 2024 plan in Athinai/Makedonia by 110 FTEs.
- The yearly total of sector opening hours in Greece was 56,167 showing a 3.9% increase compared to 2023. Sector opening hours are 1.7% below 2019 levels.
- Greece registered 18.31 IFR movements per one sector opening hour in 2024, being 22.7% above 2019 levels.
- The deterioration in the capacity performance of Greece in 2024 is a direct consequence of the under-investment in ATM systems and the significant lack of ATCO resources. Greece must prioritise and deploy the investments enabling capacity improvements and expedite the recruitment and training of controllers. These issues are still apparent in the 2025 performance up to August.

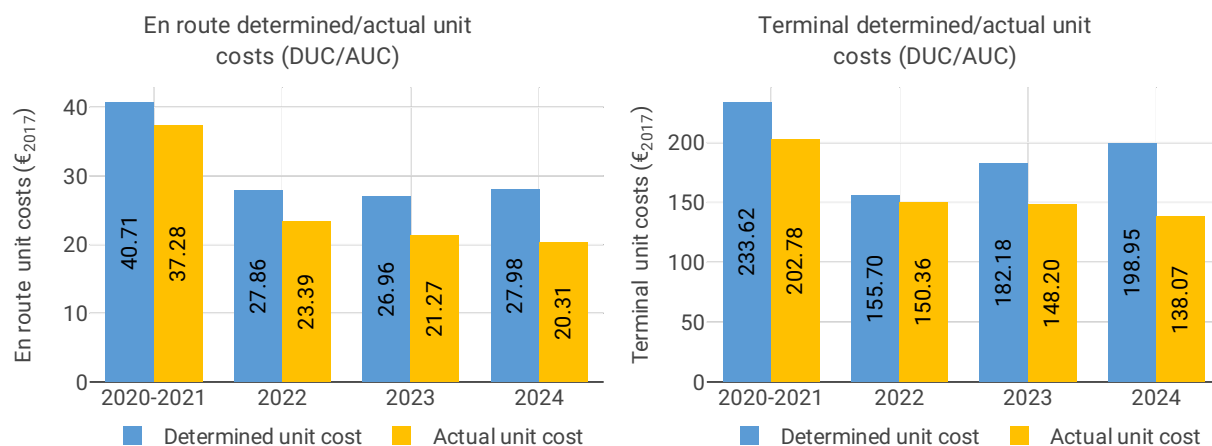
Average arrival ATFM delay per flight by delay groups



- Greece registered an average airport arrival ATFM delay of 3.46 minutes per flight in 2024, thus not achieving the local target of 0.20 minutes.
- Compared to 2023, average arrival ATFM delays in Greece were 7% higher in 2024, while the number of IFR arrivals increased by 12%.
- The main reason for delays was ATC capacity, accounting for 94% of total delays.



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



- The en route 2024 actual unit cost of Greece was 20.31 €2017, -27% lower than the determined unit cost (27.98 €2017). The terminal 2024 actual unit cost was 138.07 €2017, -31% lower than the determined unit cost (198.95 €2017).
- The en route 2024 actual service units (7.7M) were +14% higher than the determined service units (6.8M).
- The en route 2024 actual total costs were -33M €2017, (-18%) lower than the determined, marking an underspend across all cost categories. The largest difference for HASP was in staff costs (-18M €2017, or -14%), followed by significantly lower depreciation costs (-13M€2017, or -92%), cost of capital (-4.3M€2017, or -97%), and other operating costs (-3.1M€2017, or -18%). The NSA did not provide sufficient explanations for these results. The PRB highlights that the actual number of ACC ATCOs in OPS FTEs for HASP were -39% below plan.
- HASP costs of investments were 2.3M €2017 in 2024 for both en route and terminal charging zones, -89% lower than determined (21M €2017), due to postponed investment projects. The NSA did not provide explanations for the non-implementation of the eight new major investments that were planned for RP3. As for the previous monitoring years, the discrepancies regarding costs of investments were significant.
- The en route actual unit cost incurred by users in 2024 was 26.80€ (-11% lower than the 2024 DUC), while the terminal actual unit cost incurred by users in 2024 was 147.25€ (-32% lower than the 2024 DUC). The difference between the AUCU and the DUC in the en route charging zone is primarily attributable to the difference between determined and actual costs in 2024, while for the terminal charging zone it is primarily attributed to the loss of revenue relating to the application of a lower unit rate, which amounted to -5.5M€.
- The en route regulatory result for HASP amounted to +25M€, or 14% of the 2024 revenue.
- Greece should take immediate, adequate, and proportionate action to implement the relevant ATCO and investment plans committed to in the RP3 performance plan and to provide the ANSP with the necessary means to implement the planned actions both in respect of decisional and budgetary procedures.



- Greece should ensure that any excessive regulatory result, including excess funds received by the ANSP due to the inflation mechanism, is either reinvested to improve the quality of services delivered to airspace users or reimbursed to them.

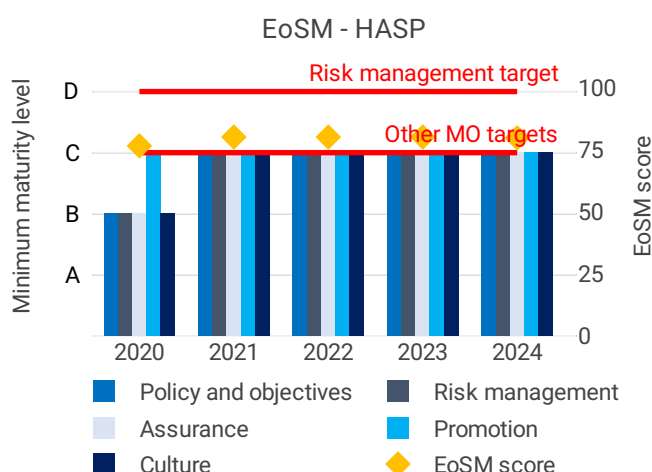


2 SAFETY - GREECE

2.1 PRB monitoring

- HASP planned to reach maturity level D for Safety Risk Management in 2024 to achieve the RP3 targets, however HASP only achieved level C.
- Greece recorded an increase in the rate of separation minima infringements (SMIs) and a marginally lower rate of runway incursions (RIs) in 2024 compared to 2023.
- In 2024, HASP implemented enhancements to its occurrence reporting and investigation processes, incorporating the Bow Tie methodology. These improvements are expected to significantly strengthen the ability to identify contributing factors and systematically develop effective risk mitigation measures aimed at preventing future occurrences.
- Greece should ensure that the ANSP implements, in a timely and cost-efficient manner, the necessary additional measures such as enhanced processes, improved allocation of resources, targeted training, and systematic reviews. Without such actions, the achievement of the RP4 targets could be jeopardised.

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



Focus on EoSM

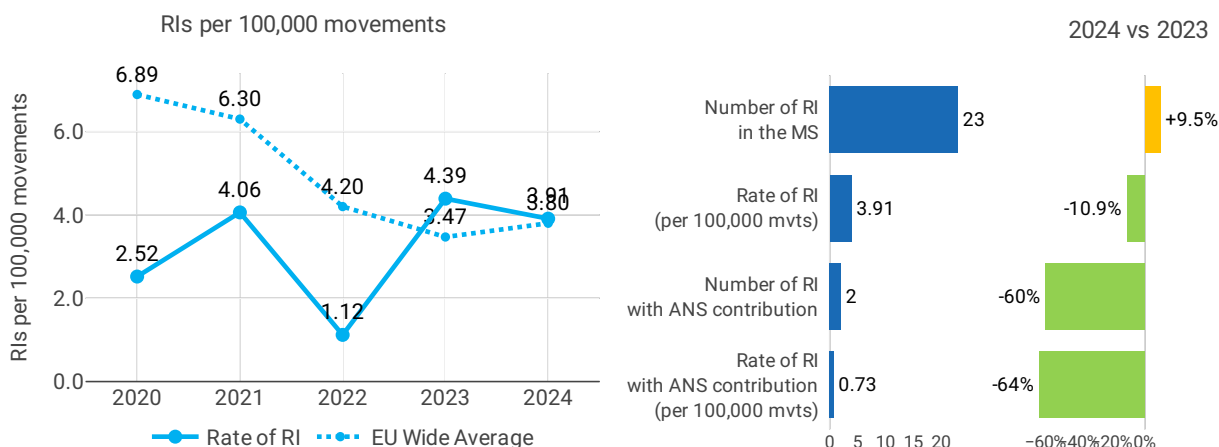
Four out of five EoSM components of the ANSP meet the RP3 target level. No improvements were observed over 2024, but only “Safety Risk Management” component is below 2024 target level. Three questions are to be improved to reach the RP3 target level.

HANSP reached maturity level C for all Management Objectives as planned and aims to improve only in Safety Risk Management to achieve the RP3 targets. While some improvements have been observed, HANSP did not manage to reach maturity level D in Safety Risk Management, missing the RP3 targets.



2.3 Safety occurrences

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

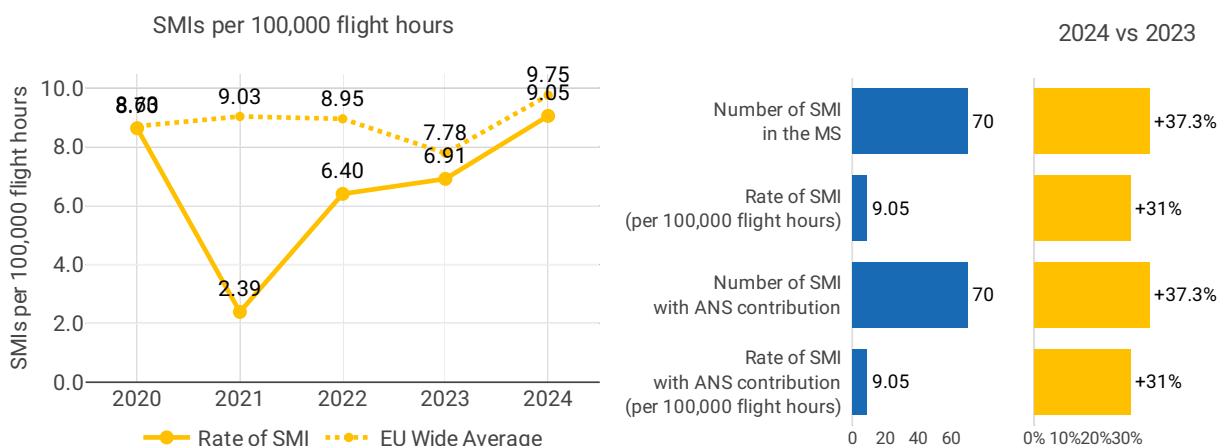


Rate of RIs per 100,000 airport movements - Greece				
#	Airport name	APT movements	Number of RI	Rate RI per 100,000
1	Athinai-Eleftherios Venizelos	273,688	2	0.73

Focus on runway incursions

Greece recorded a rate of RIs below the Union-wide average, while exceeding it in 2023. The rate decreased marginally between 2023 and 2024. The rate of RIs with ANS contribution decreased between 2023 and 2024.

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



Rate of SMI with ANS contribution per 100,000 flight hours											
#	ANSP	Flight hours					Number of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	HASP	276,276	418,381	650,415	738,472	773,456	24	31	42	51	70



#	ANSP	Rate of SMI per 100,000 flight hours					% variation in rate of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	HASP	9	2	6	7	9		-72%	+170%	+7%	+31%

Focus on separation minima

After a significant decrease in the number of SMIs from 2020 to 2021, the rate of SMIs has increased since then, both at Member State level and for SMIs with ANS contribution. Between 2023 and 2024, the rate of SMIs increased further, potentially because of the enhancements implemented to the occurrence reporting.

HANSP and the NSA should assess occurrences and mitigate risk according to their procedures, if necessary.

2.3.3 Quality of occurrences reporting

The implemented enhancements to the HANSP occurrence reporting and investigation processes may have increased the number of occurrences reported in 2024 compared to 2023.

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

Use of automated safety data recording system - 2024	
For RIs	For SMIs
X	X



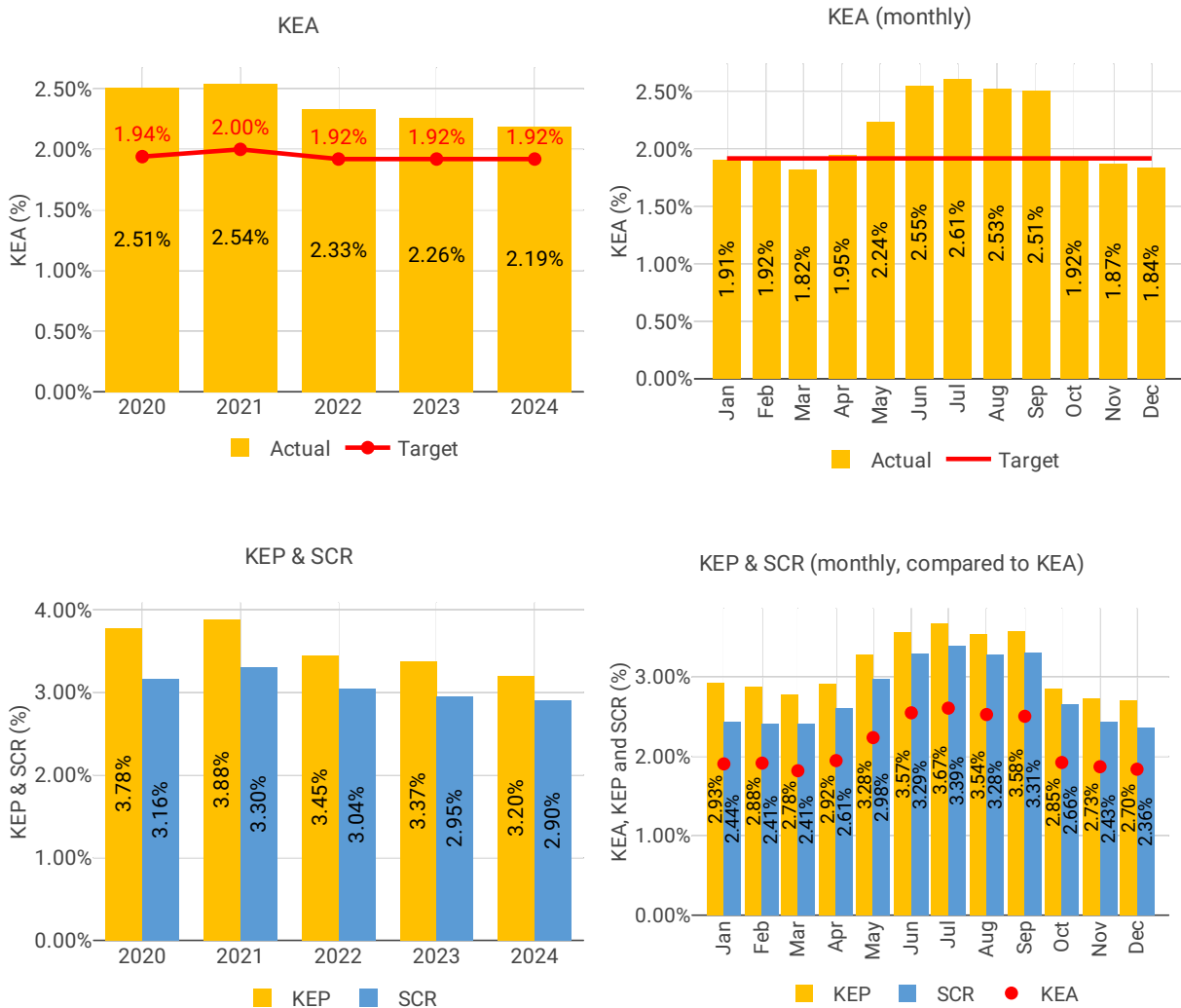
3 ENVIRONMENT - GREECE

3.1 PRB monitoring

- Greece achieved a KEA performance of 2.19% compared to its target of 1.92% and did not contribute positively towards achieving the Union-wide target.
- The NSA states that the target was missed mainly due to military activity, adverse weather phenomena and high levels of traffic.
- KEP improved and SCR improved marginally in comparison with 2023. Despite the KEA target being missed, KEA improved in 2024.
- The share of CDO flights increased from 43.31% to 46.42% in 2024.
- Additional taxi out time increased marginally from 2.85 to 2.95 min/flight, while additional time in terminal airspace increased from 1.44 to 1.55 min/flight in 2024 compared to 2023.

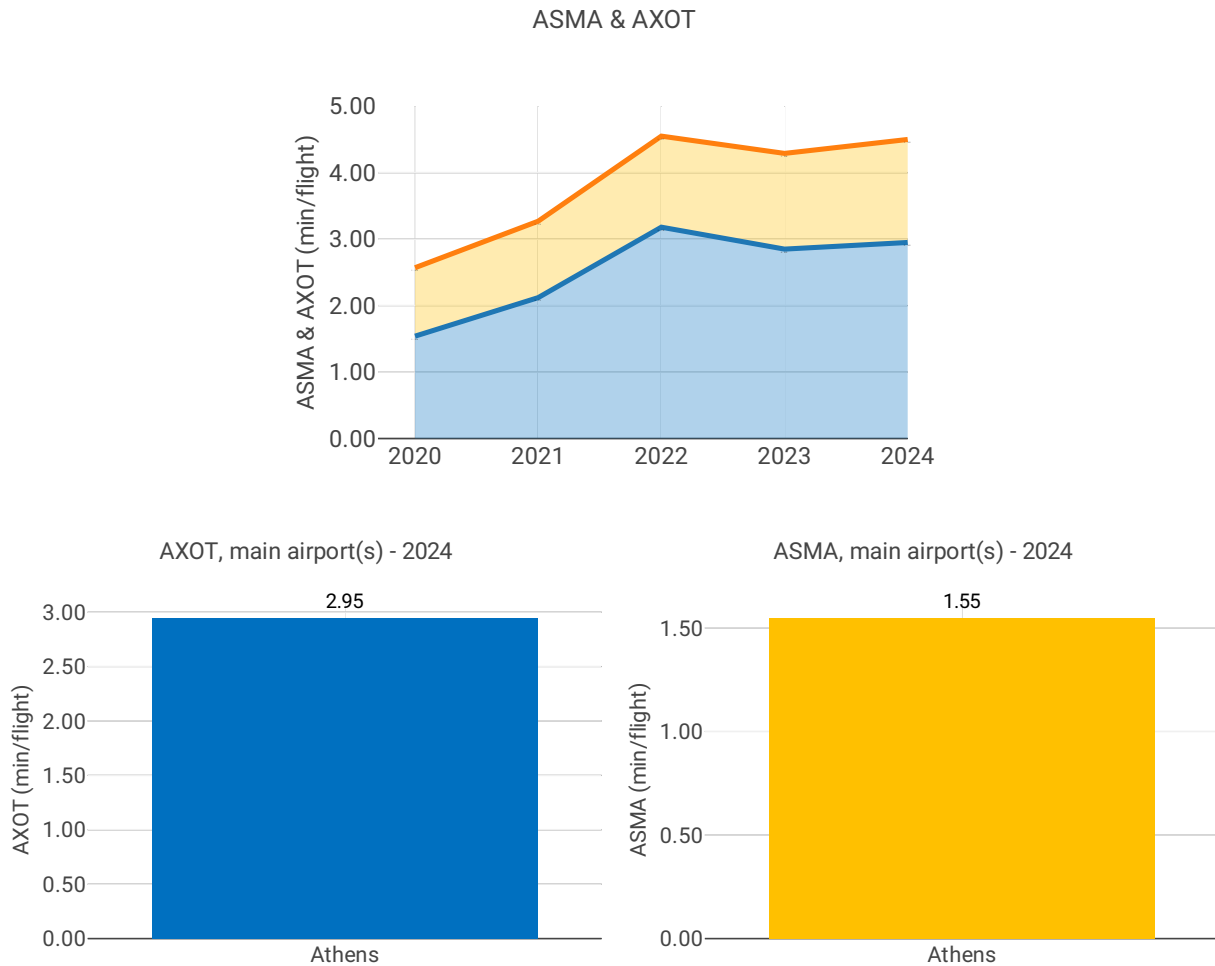
3.2 En route performance

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

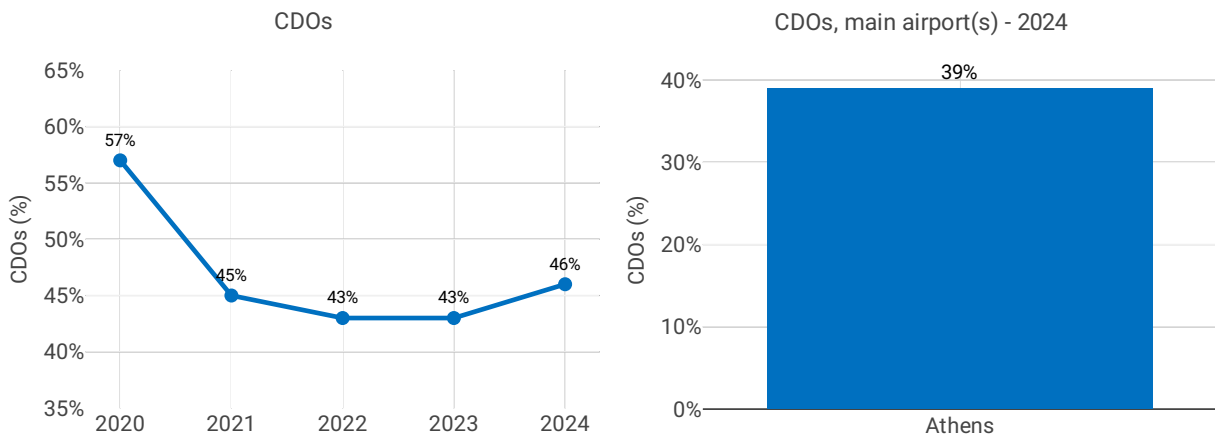
Additional taxi-out times at Athens (LGAV: 2019: 2.61 min/dep.; 2020: 1.54 min/dep.; 2021: 2.12 min/dep.; 2022: 3.18 min/dep.; 2023: 2.85 min/dep.; 2023: 2.95 min/dep.) increased slightly in 2024 and sit above the SES average of 2.91 min/dep.

ASMA

The additional times in the terminal airspace (LGAV; 2019: 1.30 min/arr.; 2020: 1.03 min/arr.; 2021: 1.15 min/arr.; 2022: 1.37 min/arr.; 2023: 1.44 min/arr.; 2023: 1.55 min/arr.) observed a gradual increase during RP3, and in 2024 was higher than in 2019 and than the SES average for 2024 (1.28 min/arr)



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

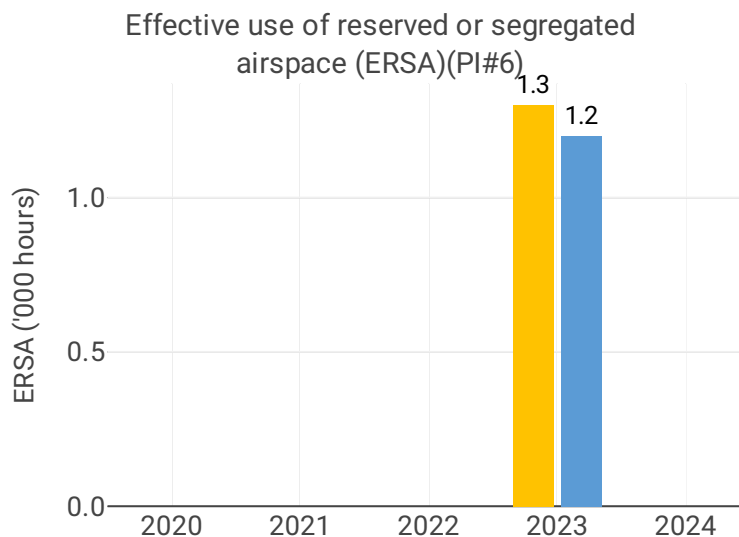


Focus CDOs

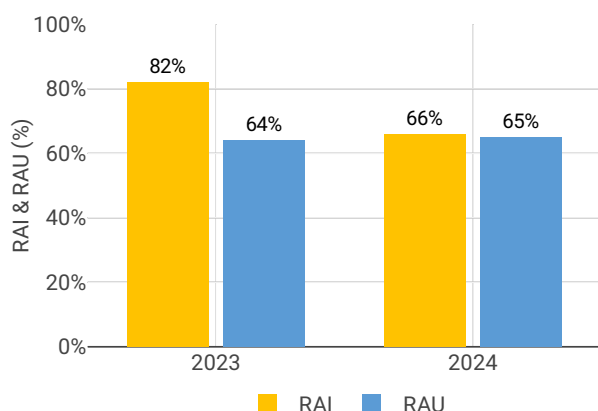
The share of CDO flights at Athens (LGAV) has increased in 2024 to 39.2% which is above the overall RP3 value in 2024 (29.3%). The monthly values ranged from 35.9% in January to 42.0% in November.

Airport level															
Airport	Additional taxi-out time (PI#3)					Additional ASMA time (PI#4)					Share of arrivals applying CDO (PI#5)				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Athens	1.54	2.12	3.18	2.85	2.95	1.03	1.15	1.37	1.44	1.55	41%	38%	38%	38%	39%

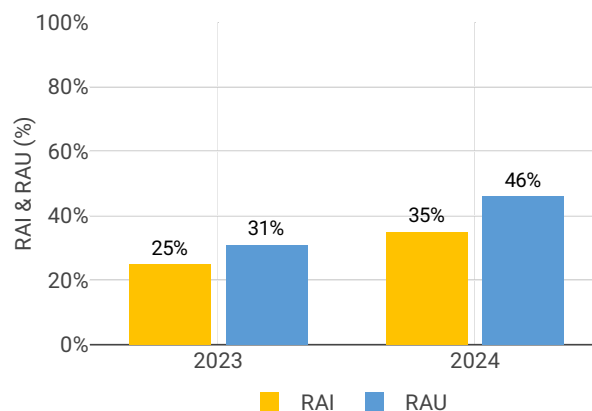
3.4 Civil-Military dimension



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



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



Focus on Civil-Military dimension

Update on Military dimension of the plan

Air military activities (training exercises and operations), can significantly impact airspace environment and capacity (KPAs), potentially leading to both reduced capacity and disruptions of civil air traffic as they restrict the use of that airspace leading to delays, inefficiencies, and increased fuel consumption, all of which have environmental implications.

Military air traffic, while vital for national security and defense, has a significant environmental footprint that needs to be addressed. Recognizing this impact within a KPA is crucial for developing effective strategies to mitigate the negative environmental consequences and ensure sustainable air traffic management.

In order to ensure efficient use of airspace and minimizing environmental impacts; effective planning (through optimization of flight paths and procedures) reducing noise pollution and emissions, as well as the coordination between military and civil aviation stakeholders could be effective in minimizing environmental impacts. The scale of impact can range since it is directly proportional to the frequency and intensity of military operations in the relevant airspace.

Military - related measures implemented or planned to improve capacity

The application of FUA principles and practices has been a major enabler for the continuous ATC capacity increase and flight-efficiency improvements while releasing enough airspace to military forces. However, allocation and use of airspace could be further improved. Under the current operating mode, the route network is a fundamental piece of the ATM system. The safe ATC capacity requires the systematisation of traffic flows through the route network design and associated rules governing the route utilisation. The configuration of shared airspace and ATC sector configuration is more important for flight planning as it relates directly to the production of ATC capacity and the airspace availability for military training. The mitigation measure to improve airspace capacity impact is the flexible sector configuration through ASM advanced technology tools/systems (e.g. LARA/PRISMIL).

Initiatives implemented or planned to improve PI#6

n/a



Initiatives implemented or planned to improve PI#7

n/a

Initiatives implemented or planned to improve PI#8

n/a



4 CAPACITY - GREECE

4.1 PRB monitoring

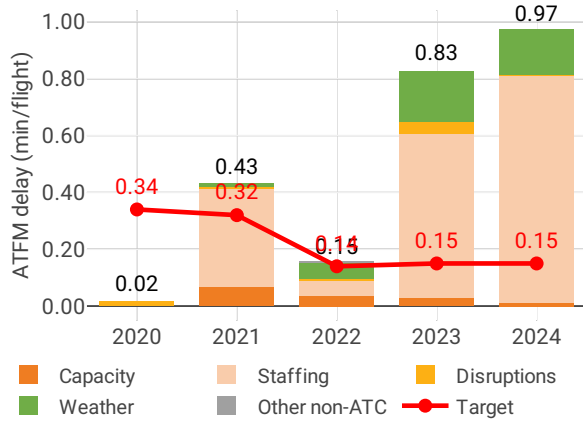
- Greece registered 0.98 minutes of average en route ATFM delay per flight during 2024, which has been adjusted to 0.97 during the post-ops adjustment process, thus not achieving the local target value of 0.15. Delays in Greece increased by 0.14 minutes per flight year-on-year.
- Most of the delays were generated between May and September, mainly driven by ATC Staffing issues.
- The share of delayed flights with delays longer than 15 minutes in Greece decreased by 4 percentage points compared to 2023 and was lower than 2019 values.
- The average number of IFR movements was 22% above 2019 levels in Greece in 2024.
- The number of ATCOs in OPS is 175, being below the 2024 plan in Athinai/Makedonia by 110 FTEs.
- The yearly total of sector opening hours in Greece was 56,167 showing a 3.9% increase compared to 2023. Sector opening hours are 1.7% below 2019 levels.
- Greece registered 18.31 IFR movements per one sector opening hour in 2024, being 22.7% above 2019 levels.
- The deterioration in the capacity performance of Greece in 2024 is a direct consequence of the under-investment in ATM systems and the significant lack of ATCO resources. Greece must prioritise and deploy the investments enabling capacity improvements and expedite the recruitment and training of controllers. These issues are still apparent in the 2025 performance up to August.
- Greece registered an average airport arrival ATFM delay of 3.46 minutes per flight in 2024, thus not achieving the local target of 0.20 minutes.
- Compared to 2023, average arrival ATFM delays in Greece were 7% higher in 2024, while the number of IFR arrivals increased by 12%.
- The main reason for delays was ATC capacity, accounting for 94% of total delays.



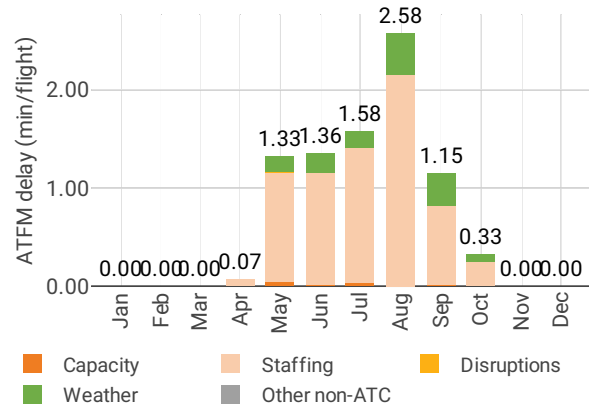
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

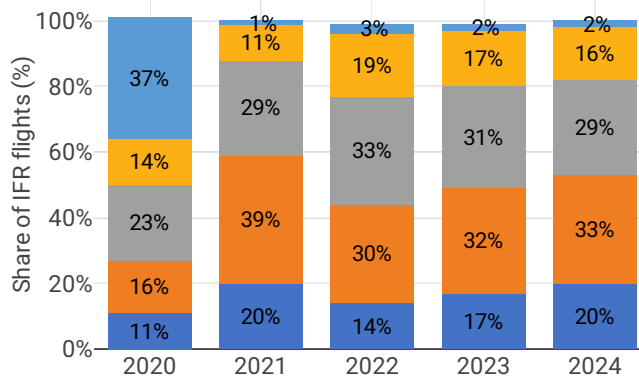
Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2024



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



Focus on en route ATFM delay

Summary of capacity performance

Greece experienced an increase in traffic from 1001k flights in 2023 to 1075k flights in 2024. For reference, traffic in 2019 was 884k flights). En route ATFM delays increased significantly from 827k minutes in 2023 to 1047k minutes of en route ATFM delay in 2024. (For comparison, 2019 saw delays of 375k minutes).

There were an additional 4k minutes of ATFM delay originating in Greece that were re-attributed to the DFS (2k) and HungaroControl (<2k) via the NM post operations delay attribution process, according to the NMB agreement for eNM/S24 measures, to ameliorate the capacity shortfall in Karlsruhe UAC and udapest ACC.

NSA's assessment of capacity performance

Capacity showed delays in both en route and terminal. En route capacity target was not met primarily due to ATC staffing and secondarily due to Weather.



Monitoring process for capacity performance

Daily monitoring regarding the correct implementation of the ACCs' scheduled sector configurations (as depicted in the RP3 relative NOP). Overload in 2024 did generate capacity-related delay but was mitigated thanks to the additional availability of ATCOs in line with the summer 2024 incentive scheme, the high tactical flexibility and advanced ATFM techniques (including STAM & extensive use of occupancy counts).

Capacity planning

The observed inconsistency is mainly due to the large increase in air traffic in Greece in 2024 combined with the severe shortage of ATC personnel (more than 80% of the en-route ATFM delays were assigned to the reason ATC Staffing).

Application of Corrective Measures for Capacity (if applicable)

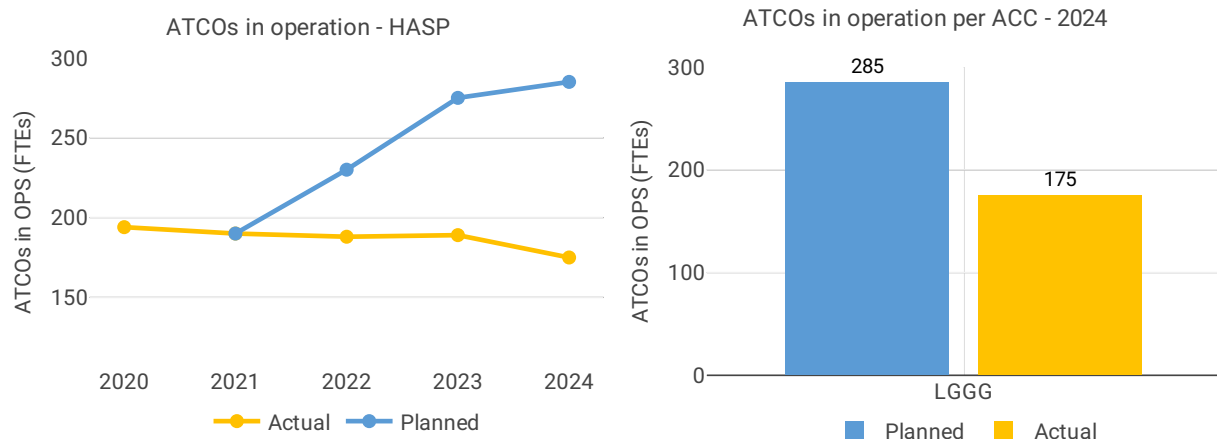
Recruitment planning of adequate personnel, proper rostering to meet anticipated capacity and modernisation of infrastructure. Planned recruitment targets have not been met so far, modernisation of infrastructure still pending.

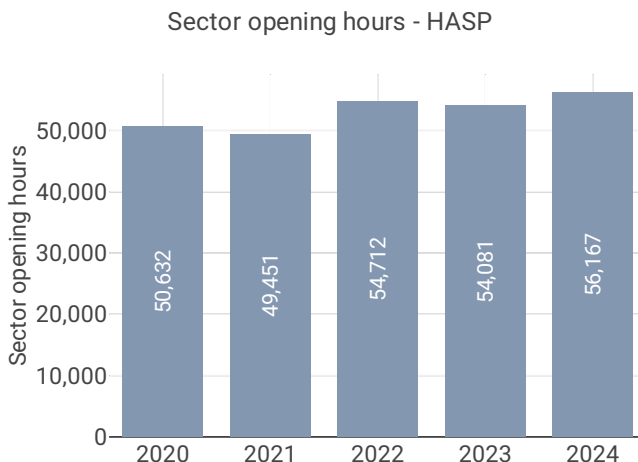
En route Capacity Incentive Scheme

HASP: The NSA reports that the actual en route capacity performance for 2024 merits a financial penalty of €3 487 966 for the ANSP.

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.

4.2.2 Other indicators





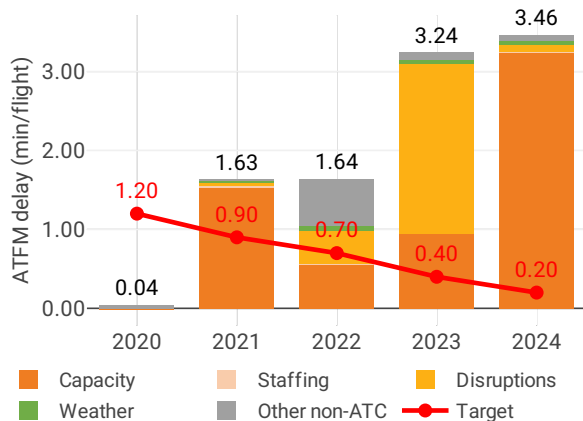
Focus on ATCOs in operations

The ACCs are physically co-located in terms of system and personnel, however the ATC procedures, staff and corresponding infrastructure throughout Greece concern two distinct ACCs.

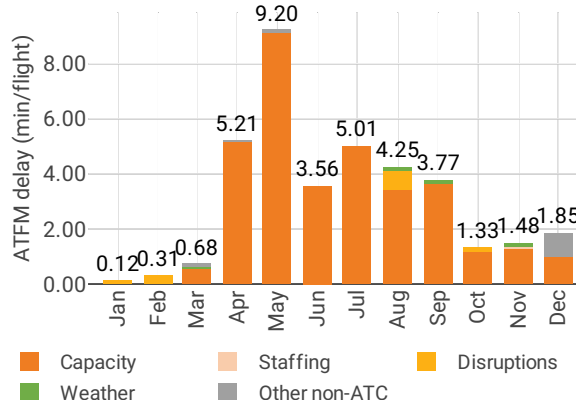
4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)

Average arrival ATFM delay per flight by delay groups



Monthly distribution of arrival ATFM delay by delay groups - 2024



Focus on arrival ATFM delay

Operational ANS performance at airports is monitored for one airport in Greece (i.e. Athens (LGAV)), the only airport 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. Traffic at Athens in 2024 increased by 12% with respect to 2023 and it was significantly higher than in 2019 (+20%).

Average arrival ATFM delay in 2024 was 3.46 min/arr, compared to 3.24 min/arr in 2023. The national target was not met. ATFM slot adherence remains decreased (2023: 94.4%; 2024: 92.4%).



Average arrival ATFM delays at Athens increased again in 2024 (LGAV: 2019: 3.57 min/arr.; 2020: 0.04 min/arr.; 2021: 1.63 min/arr.; 2022: 1.67 min/arr.; 2023: 3.24 min/arr.; 2024: 3.46 min/arr.), resulting in the third highest across the SES monitored airports. These delays were attributed mainly to ATC Capacity (94%) followed by ATC Equipment (3%) and Aerodrome Capacity (2%).

Greece reports that the observed inconsistency is due to:

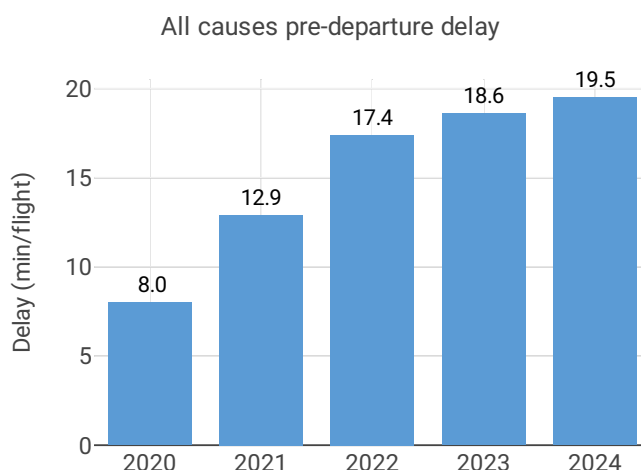
1. the large increase in the arrival traffic in LGAV in 2024 (10,5% more compared to 2023),
2. the local pre-trial A-CDM operational procedures in force at the airport,
3. the fact that LGAV was not coordinated or schedules facilitated in 2024.

Airport and terminal capacity was not met primarily due to ATC capacity and staffing and secondarily due to ATC disruptions and Weather. Planning and actual recruitment of adequate personnel (mainly ATCOs), proper rostering to meet anticipated demand and modernisation of infrastructure. Planned recruitment targets have not been met so far, modernisation of infrastructure still pending.

The Greek performance plan sets a national target on arrival ATFM delay for 2023 of 0.2 min/arr. This target was not met in 2023 with an actual performance of 3.46 min/arr.

According to the Greek monitoring report, this performance corresponds to the maximum penalty (1.5%), computed by the NSA as EUR400632.33.

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



Airport level										
Airport name	Avg arrival ATFM delay (KPI#2)					Slot adherence (PI#1)				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Athens	0.04	1.63	1.64	3.24	3.46	94.5%	93.9%	94.7%	94.4%	92.4%

Airport name	ATC pre departure delay (PI#2)					All causes pre departure delay (PI#3)				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Athens	0.03	0.15	NA	0.08	1.52	8.0	12.9	17.4	18.6	19.5



Focus on performance indicators at airport level

ATFM slot adherence

Athens's ATFM slot compliance was 92.4%, 2 points below the performance in 2023 (94.4%). With regard to the 7.63% of flights that did not adhere, 5.27% were early and 2.36% were late.

ATC pre-departure delay

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 Athens. 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 Athens along the entire RP3 was above 40% for many months in the year, so this indicator cannot be calculated.

All causes pre-departure delay

The total (all causes) delay in the actual off block time at Athens increased again in 2024 (LGAV: 2020: 8 min/dep.; 2021: 12.90 min/dep.; 2022: 17.44 min/dep.; 2023: 18.63 min/dep.; 2024: 19.53 min/dep.).



5 COST-EFFICIENCY - GREECE

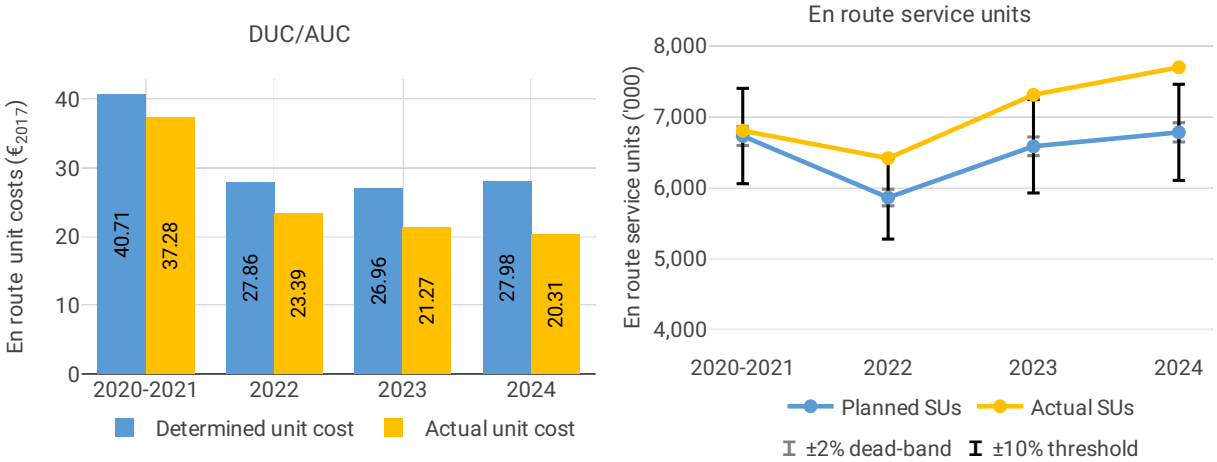
5.1 PRB monitoring

- The en route 2024 actual unit cost of Greece was 20.31 €2017, -27% lower than the determined unit cost (27.98 €2017). The terminal 2024 actual unit cost was 138.07 €2017, -31% lower than the determined unit cost (198.95 €2017).
- The en route 2024 actual service units (7.7M) were +14% higher than the determined service units (6.8M).
- The en route 2024 actual total costs were -33M €2017, (-18%) lower than the determined, marking an underspend across all cost categories. The largest difference for HASP was in staff costs (-18M €2017, or -14%), followed by significantly lower depreciation costs (-13M€2017, or -92%), cost of capital (-4.3M€2017, or -97%), and other operating costs (-3.1M€2017, or -18%). The NSA did not provide sufficient explanations for these results. The PRB highlights that the actual number of ACC ATCOs in OPS FTEs for HASP were -39% below plan.
- HASP costs of investments were 2.3M €2017 in 2024 for both en route and terminal charging zones, -89% lower than determined (21M €2017), due to postponed investment projects. The NSA did not provide explanations for the non-implementation of the eight new major investments that were planned for RP3. As for the previous monitoring years, the discrepancies regarding costs of investments were significant.
- The en route actual unit cost incurred by users in 2024 was 26.80€ (-11% lower than the 2024 DUC), while the terminal actual unit cost incurred by users in 2024 was 147.25€ (-32% lower than the 2024 DUC). The difference between the AUCU and the DUC in the en route charging zone is primarily attributable to the difference between determined and actual costs in 2024, while for the terminal charging zone it is primarily attributed to the loss of revenue relating to the application of a lower unit rate, which amounted to -5.5M€.
- The en route regulatory result for HASP amounted to +25M€, or 14% of the 2024 revenue.
- Greece should take immediate, adequate, and proportionate action to implement the relevant ATCO and investment plans committed to in the RP3 performance plan and to provide the ANSP with the necessary means to implement the planned actions both in respect of decisional and budgetary procedures.
- Greece should ensure that any excessive regulatory result, including excess funds received by the ANSP due to the inflation mechanism, is either reinvested to improve the quality of services delivered to airspace users or reimbursed to them.



5.2 En route charging zone

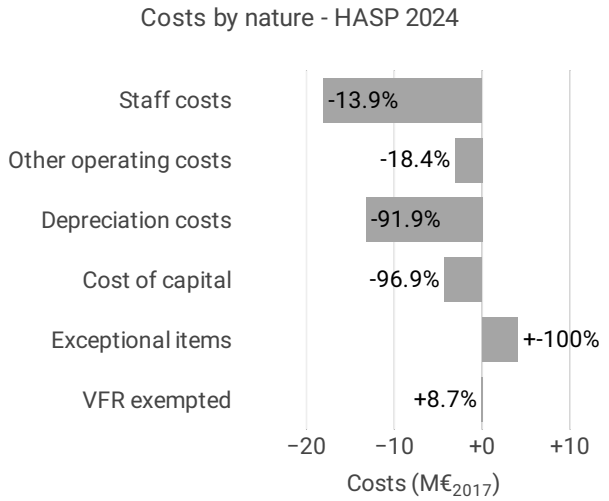
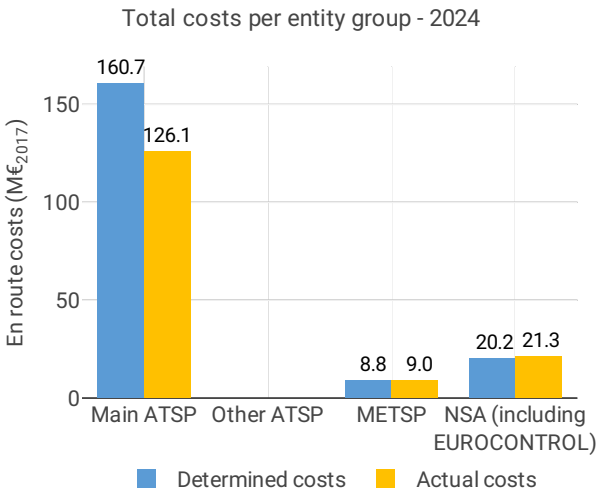
5.2.1 Unit cost (KPI#1)



Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	257	165	177	182
Determined costs	277	172	189	204
Difference costs	-20	-8	-12	-22

Inflation assumptions	2020-2021	2022	2023	2024
Determined inflation rate	NA	4.5%	1.3%	1.6%
Determined inflation index	NA	106.5	107.9	109.7
Actual inflation rate	NA	9.3%	4.2%	3.0%
Actual inflation index	NA	111.4	116.1	119.6
Difference inflation index (p.p.)	NA	+4.9	+8.2	+9.9



Focus on unit cost

AUC vs. DUC

In 2024, the en route AUC was -27.4% (or -7.68 €2017) lower than the planned DUC. This results from the combination of significantly lower than planned en route costs in real terms (-17.6%, or -33.4 M€2017) and significantly higher than planned TSUs (+13.5%). It should be noted that the actual inflation index in 2024 was +9.9 p.p. higher than planned.

En route service units

The difference between 2024 actual and planned TSUs (+13.5%) falls outside the +10% threshold foreseen in the traffic risk sharing mechanism. The resulting gain of additional en route revenues is therefore shared between the ANSP and the airspace users (see the main ANSP gain in Box 11).

En route costs by entity

The 2024 actual real en route costs are -17.6% (-33.4 M€2017) lower than planned. This is the result of lower than planned costs for the main ANSP, HASP (-21.5%, or -34.6 M€2017) and higher than planned costs for the MET service provider (+2.1%, or +0.2 M€2017), the NSA/EUROCONTROL (+3.7%, or +0.5 M€2017).

En route costs for the main ANSP at charging zone level

Significantly lower than planned en route costs in real terms for HASP in 2024 (-21.5%, or -34.6 M€2017) result from:

- Significantly lower than planned staff costs (-13.9%),
- Significantly lower than planned other operating costs (-18.4%),
- Significantly lower than planned depreciation (-91.9%),
- Significantly lower than planned cost of capital (-96.9%),
- Exceptional costs which reflect a reporting of negative amount (-4.5 M€ in nominal terms) in 2024 determined costs for HASP to correct for the difference between planned and actual costs in 2021 resulting from resubmission of the RP3 PP.
- Significantly higher than planned deduction for VFR exempted flights (+8.7%).

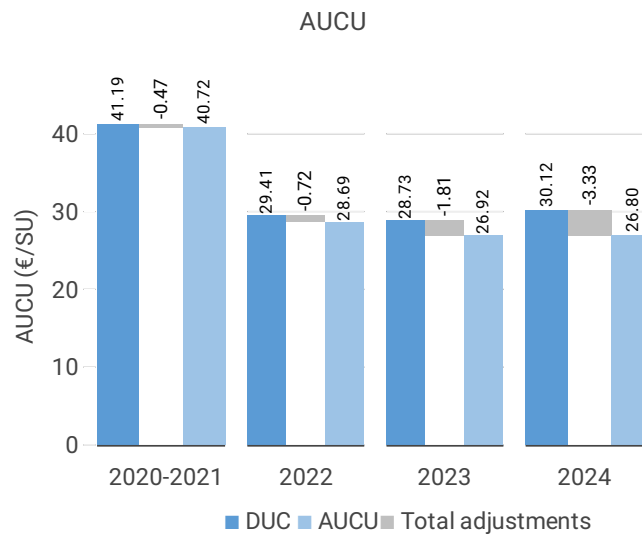
No explanations on the differences between the 2024 determined and actual costs are available in the Additional information to the reporting tables or in the NSA Monitoring Report.

RP3 summary

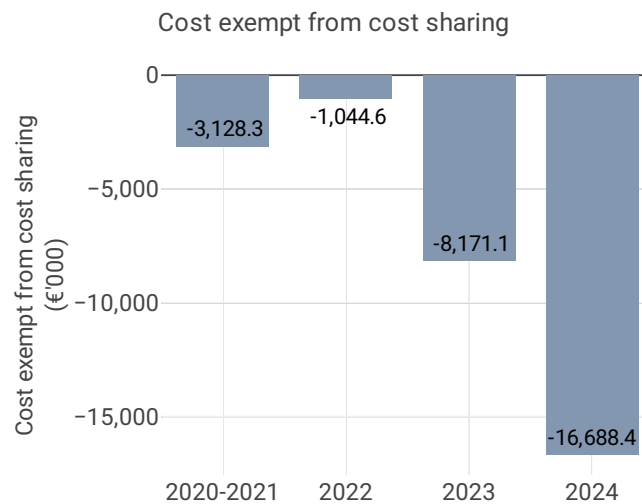
When considering the whole of RP3 (2020-2024) for Greece en route charging zone, actual TSUs are +8.8% higher than planned, while actual costs in real terms are -11.1% lower than the determined costs (some -89.0 M€2017). As a result, the weighted average actual unit cost over RP3 (25.35 €2017) is -18.2% lower than planned in the PP (31.00 €2017).



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

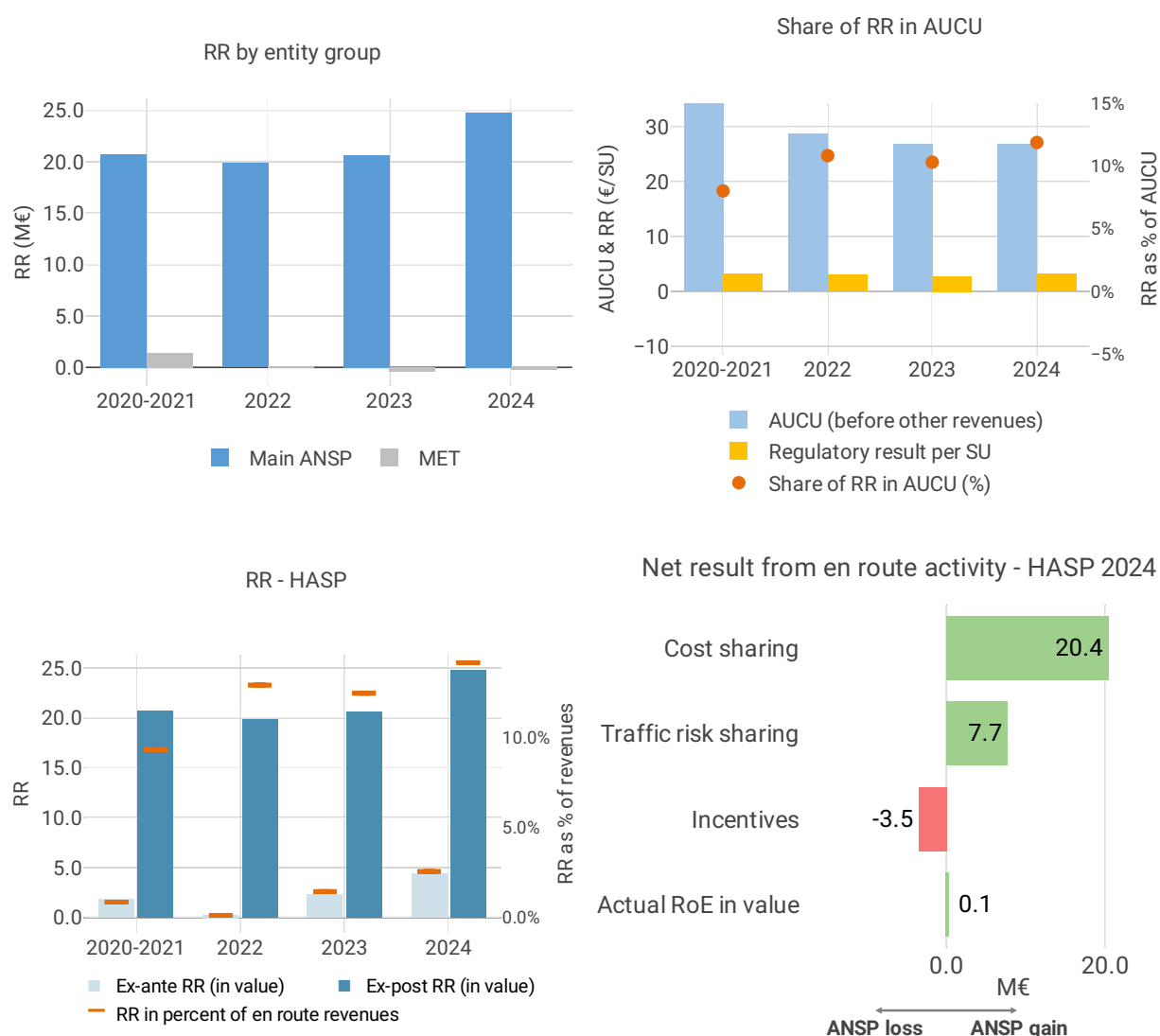


AUCU components (€/SU) - 2024	
Components of the AUCU in 2024	€/SU
DUC	30.12
Inflation adjustment	1.93
Cost exempt from cost-sharing	-2.17
Traffic risk sharing adjustment	-2.07
Traffic adj. (costs not TRS)	-0.52
Financial incentives	-0.45
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-0.04
Application of lower unit rate	0.00
Total adjustments	-3.33
AUCU	26.80
AUCU vs. DUC	-11.0%



Cost exempt from cost sharing – 2024		
Cost exempt from cost sharing by item - 2024	€'000	€/SU
New and existing investments	-17,713.8	-2.30
Competent authorities and qualified entities costs	470.7	0.06
Eurocontrol costs	554.8	0.07
Pension costs	0.0	0.00
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	-16,688.4	-2.17

5.2.3 Regulatory result (RR)



Focus on regulatory result

HASP net gain on activity in the Greece en route charging zone in the year 2024

HASP reported a net gain of +24.6 M€, as a combination of a gain of +20.4 M€ arising from the cost sharing mechanism, with a gain of +7.7 M€ arising from the traffic risk sharing mechanism and a loss of -3.5 M€ relating to financial incentives.



HASP overall regulatory result (RR) for the en route activity

Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+24.6 M€) and the actual RoE (+0.1 M€) amounts to +24.8 M€ (14.1% of the en route revenues). The resulting ex-post rate of return on equity is 817.9%, which is higher than the 4.6% planned in the PP (see also Note 1 in Box 10 above).

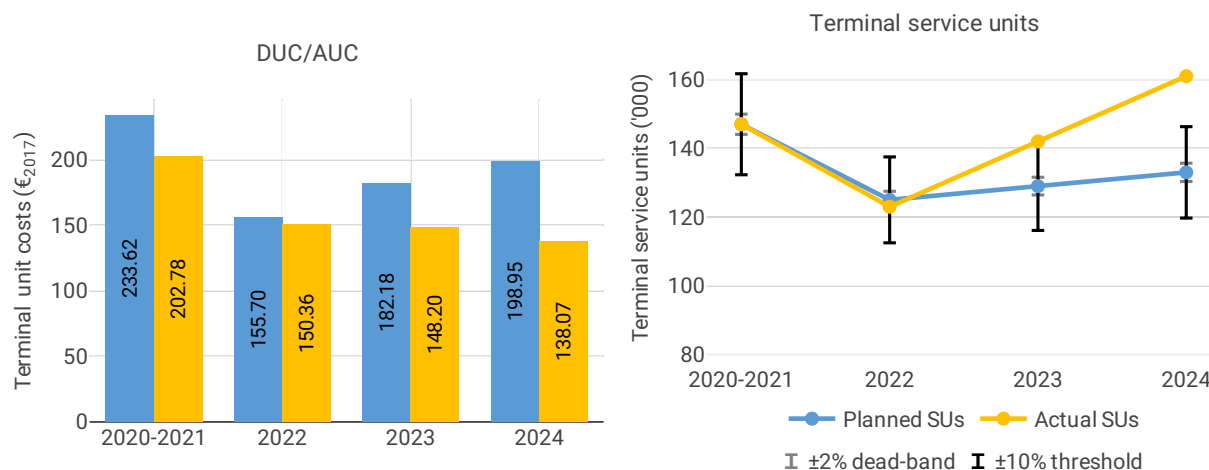
RP3 summary

When considering the whole of RP3 (2020-2024), HASP generated a cumulative gain in respect of cost sharing of +67.2 M€, as actual total costs for RP3 were lower than planned. The traffic risk sharing mechanism generated a gain of +23.1 M€. Adding the loss of -6.7 M€ to be retained by the ATSP in respect of financial incentives and the actual RoE (+2.3 M€ over RP3) leads to an overall regulatory result of +86.0 M€, which corresponds to an average ex-post rate of return on equity of 196.7% (compared to 4.8% initially planned in the PP) (see also Note 1 in Box 10 above).

Note1: Ex-post RoE cannot be correctly calculated due to a very low total asset base, due to: 1) the exclusion of net current assets from the calculation of the total asset base starting from 2021; 2) a very low net book value of fixed assets (as these are nearly fully depreciated).

5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)

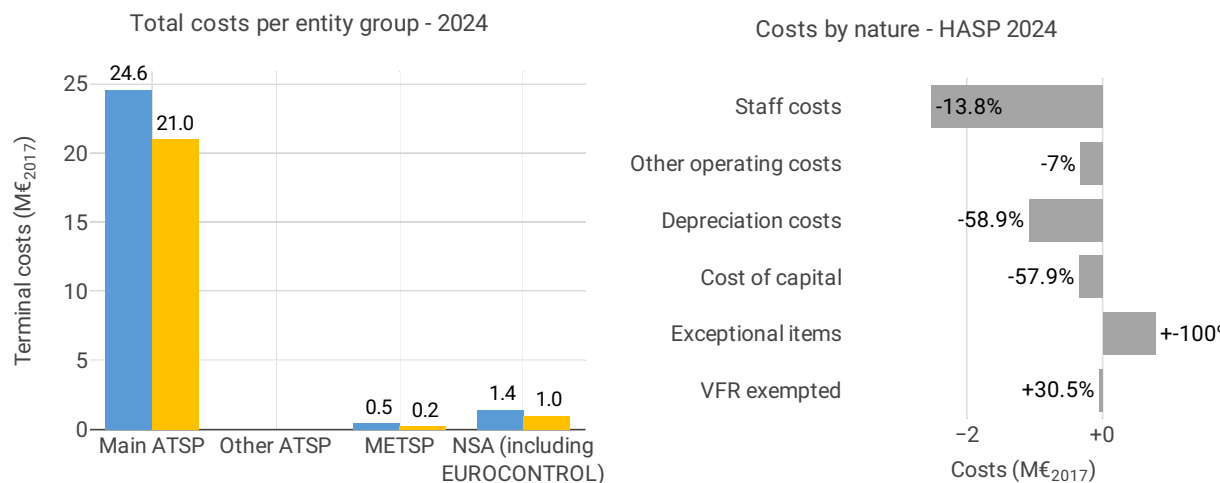


Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	30	21	24	26
Determined costs	35	21	25	29
Difference costs	-4	0	-1	-2



Inflation assumptions	2020-2021	2022	2023	2024
Determined inflation rate	NA	4.5%	1.3%	1.6%
Determined inflation index	NA	106.5	107.9	109.7
Actual inflation rate	NA	9.3%	4.2%	3.0%
Actual inflation index	NA	111.4	116.1	119.6
Difference inflation index (p.p.)	NA	+4.9	+8.2	+9.9



Focus on unit cost

AUC vs. DUC

In 2024, the terminal AUC was -30.6% (or -60.88 €2017) lower than the planned DUC. This results from the combination of significantly higher than planned TNSUs (+21.0%) and significantly lower than planned terminal costs in real terms (-16.0%, or -4.2 M€2017). It should be noted that the actual inflation index in 2024 was +9.9 p.p. higher than planned.

Terminal service units

The difference between 2024 actual and planned TNSUs (+21.0%) falls outside 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 (see the main ANSP gain in Box 11).

Terminal costs by entity

The 2024 actual real terminal costs are -16.0% (-4.2 M€2017) lower than planned. This is the result of lower than planned costs for the main ANSP, HASP (-14.6%, or -3.6 M€2017), the NSA (-29.8%, or -0.4 M€2017) and the MET service provider (-52.4%, or -0.2 M€2017).

Terminal costs for the main ANSP at charging zone level

Significantly lower than planned terminal costs in real terms for HASP in 2024 (-14.6%, or -3.6 M€2017) result from:

- Significantly lower than planned staff costs (-13.8%),
- Significantly lower than planned other operating costs (-7.0%),

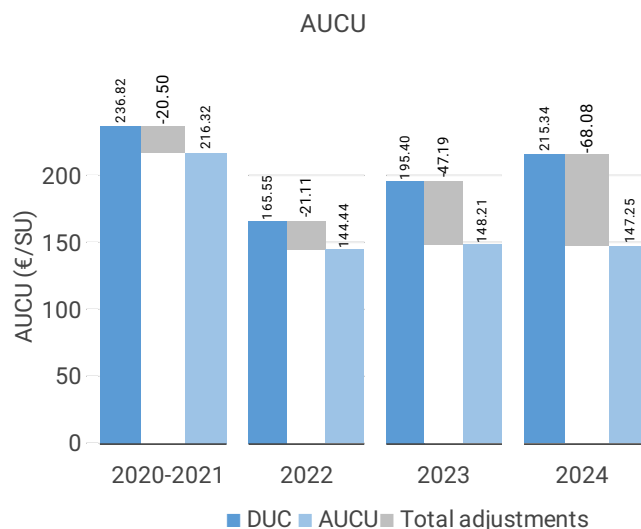


- Significantly lower than planned depreciation (-58.9%), reflecting “*delay in the implementation of the project “APP RELOCATION at AIA Airport (NEW VCRS & 14 CWP)s”*”
- Significantly lower than planned cost of capital (-57.9%),
- Exceptional costs which reflect a reporting of negative amount (-0.9 M€ in nominal terms) in 2024 determined costs for HASP to correct for the difference between planned and actual costs in 2021 resulting from resubmission of the RP3 PP.
- Significantly higher than planned deduction for VFR exempted flights (+30.5%).

RP3 summary

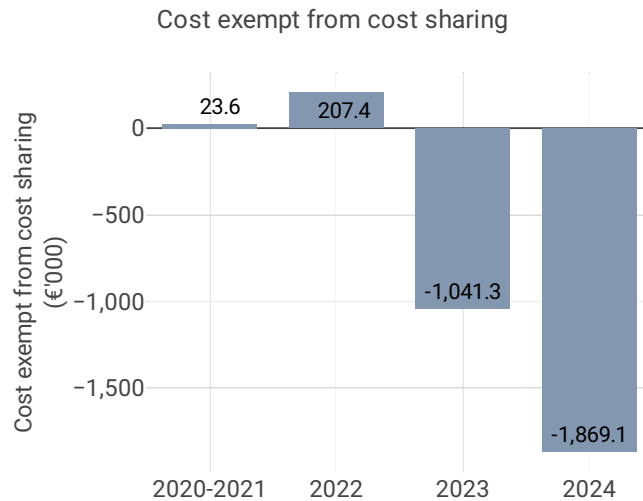
When considering the whole of RP3 (2020-2024) for Greece terminal charging zone, actual TNSUs are +7.4% higher than planned, while actual costs in real terms are -11.7% lower than the determined costs (some -12.1 M€2017). As a result, the weighted average actual unit cost over RP3 (159.81 €2017) is -17.7% lower than planned in the PP (194.30 €2017).

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



AUCU components (€/SU) - 2024	
Components of the AUCU in 2024	€/SU
DUC	215.34
Inflation adjustment	13.88
Cost exempt from cost-sharing	-11.61
Traffic risk sharing adjustment	-27.54
Traffic adj. (costs not TRS)	-2.52
Financial incentives	-2.49
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-3.60
Application of lower unit rate	-34.20
Total adjustments	-68.08
AUCU	147.25
AUCU vs. DUC	-31.6%

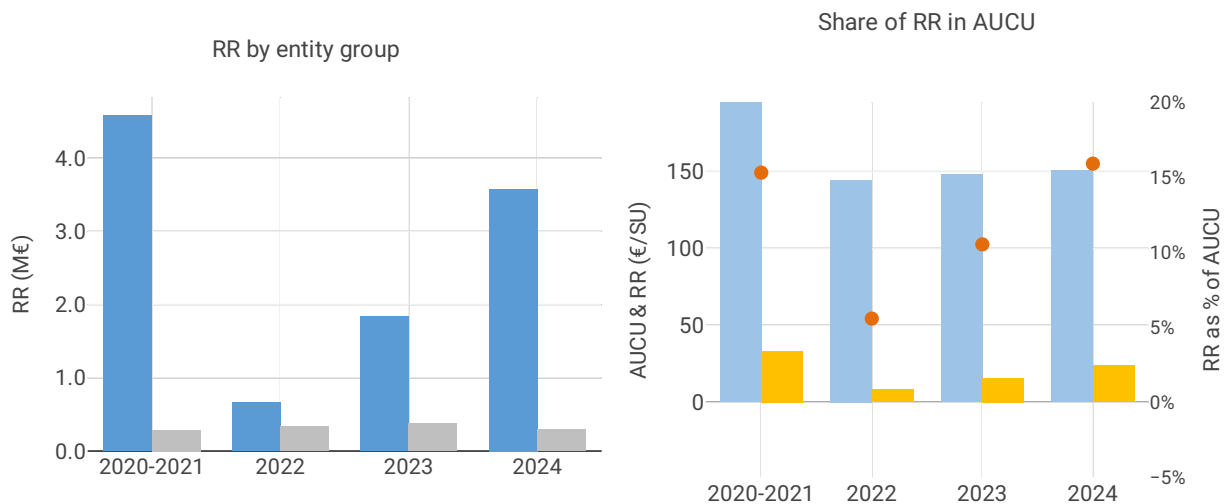


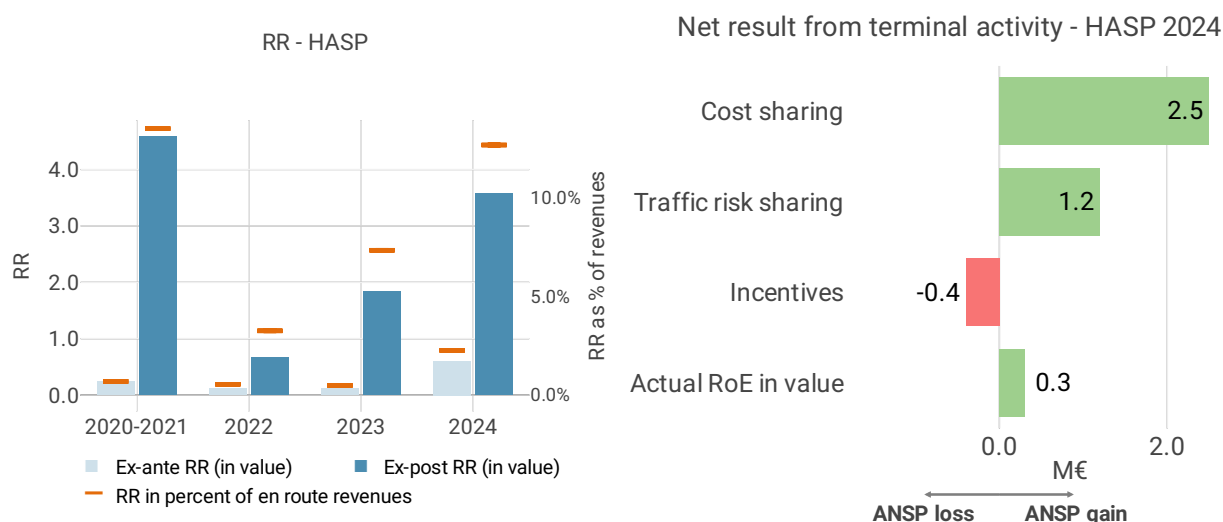


Cost exempt from cost sharing – 2024

Cost exempt from cost sharing by item - 2024	€'000	€/SU
New and existing investments	-1,443.9	-8.97
Competent authorities and qualified entities costs	-425.1	-2.64
Eurocontrol costs	0.0	0.00
Pension costs	0.0	0.00
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	-1,869.1	-11.61

5.3.3 Regulatory result (RR)





Focus on regulatory result

HASP net gain on activity in the Greece terminal charging zone in the year 2024

HASP reported a net gain of +3.3 M€, as a combination of a gain of +2.5 M€ arising from the cost sharing mechanism, with a gain of +1.2 M€ arising from the traffic risk sharing mechanism and a loss of -0.4 M€ relating to financial incentives.

HASP overall regulatory result (RR) for the terminal activity

Ex-post, the overall RR taking into account the net gain from the terminal activity mentioned above (+3.3 M€) and the actual RoE (+0.3 M€) amounts to +3.6 M€ (12.7% of the terminal revenues). The resulting ex-post rate of return on equity is 65.1%, which is higher than the 4.6% planned in the PP (see also Note 2 and Note 3 in Box 10 above).

RP3 summary

When considering the whole of RP3 (2020-2024), HASP generated a cumulative gain in respect of cost sharing of +9.1 M€, as actual total costs for RP3 were lower than planned. The traffic risk sharing mechanism generated a gain of +2.0 M€. Adding the loss of -0.9 M€ to be retained by the ATSP in respect of financial incentives and the actual RoE (+0.5 M€ over RP3) leads to an overall regulatory result of +10.7 M€, which corresponds to an average ex-post rate of return on equity of 107.6% (compared to 4.8% initially planned in the PP) (see also Note 2 and Note 3 in Box 10 above).

Note 2: Ex-post RR does not take into account the application of the lower unit rate as per Art. 29.6 (loss of revenue of -2.7 M€ in 2020/21, -3.6 M€ in 2022, and -5.0 M€ in 2023 and -5.1 M€ in 2024).***

*Note 3:** Ex-post RoE cannot be correctly calculated due to a very low total asset base, due to: 1) the exclusion of net current assets from the calculation of the total asset base starting from 2021; 2) a very low net book value of fixed assets (as these are nearly fully depreciated).

