



Performance Review Body Monitoring Report

Malta - 2023

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TABLE OF CONTENTS

1	OVERVIEW	3
1.1	Contextual information	3
1.2	Traffic (En route traffic zone)	3
1.3	Safety (Main ANSP)	4
1.4	Environment (Member State)	4
1.5	Capacity (Member State)	5
1.6	Cost-efficiency (En route/Terminal charging zone(s))	6
2	SAFETY - MALTA	6
2.1	PRB monitoring	6
2.2	Effectiveness of Safety Management (EoSM) (KPI#1)	7
2.3	Safety occurrences	7
2.4	Use of automated safety data recording system (ASDRS) (PI#3)	8
3	ENVIRONMENT - MALTA	8
3.1	PRB monitoring	8
3.2	En route performance	9
3.3	Terminal performance	10
3.4	Civil-Military dimension	11
4	CAPACITY - MALTA	12
4.1	PRB monitoring	12
4.2	En route performance	13
4.3	Terminal performance	15
5	COST-EFFICIENCY - MALTA	16
5.1	PRB monitoring	16
5.2	En route charging zone	17
5.3	Terminal charging zone	20

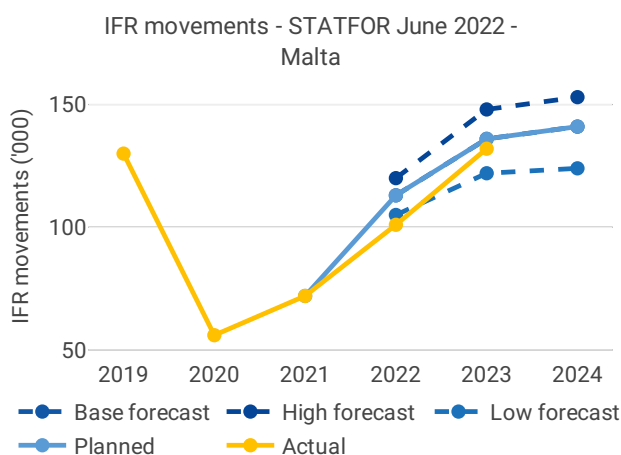
1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/2425 of 5 December 2022

List of ACCs	1	Exchange rate (1 EUR=)		Main ANSP	
Malta ACC		2017: 1 EUR		• MATS	
		2023: 1 EUR			
No of airports in the scope of the performance plan:		Share of Union-wide:		Other ANSPs	
• ≥80'K	0	• traffic (TSUs) 2023	0.8%	• Malta International Airport Plc.	
• <80'K	1	• en route costs 2023	0.3%		
		Share en route / terminal costs 2023	81% / 19%	MET Providers	
		En route charging zone(s)		–	
		Malta			
		Terminal charging zone(s)			
		Malta			

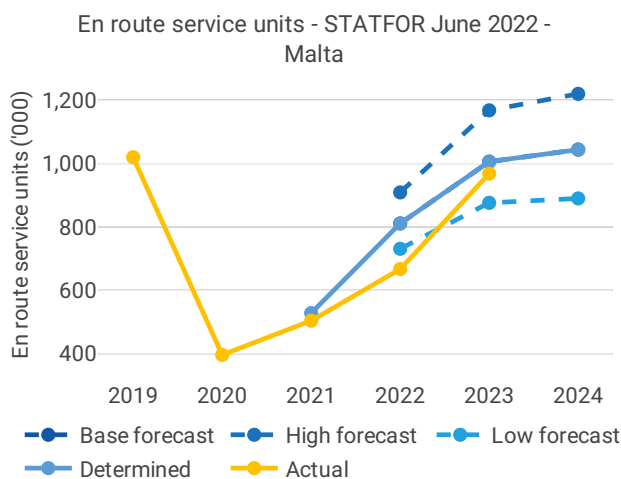
1.2 Traffic (En route traffic zone)



- Malta recorded 132K actual IFR movements in 2023, +32% compared to 2022 (101K).

- Actual 2023 IFR movements were -2.7% below the plan (136K).

- Actual 2023 IFR movements are 2% above the actual 2019 level (130K).

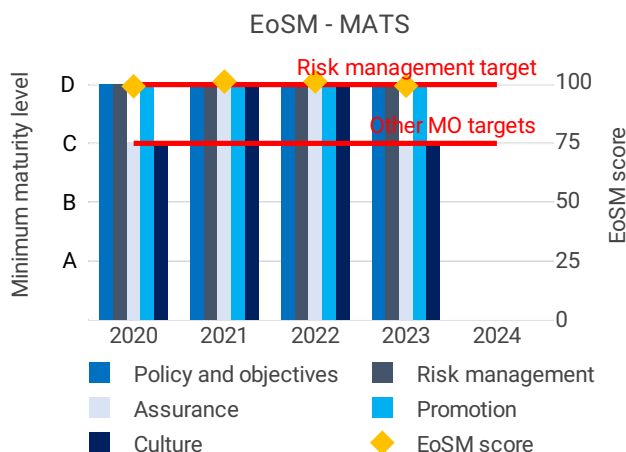


- Malta recorded 968K actual en route service units in 2023, +45% compared to 2022 (667K).

- Actual 2023 service units were -3.8% below the plan (1,006K).

- Actual 2023 service units represent 95% of the actual 2019 level (1,020K).

1.3 Safety (Main ANSP)

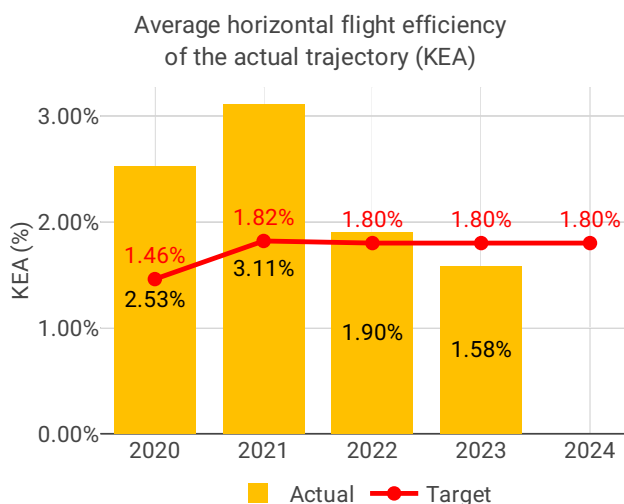


- MATS achieved its RP3 EoSM targets in 2020 and has since maintained this level. In 2023 safety culture was downgraded to level C, however MATS still achieves the RP3 target levels.

- Malta recorded a significant increase in the rate of runway incursion and a single occurrence of separation minima infringements (SMIs). The NSA is continually monitoring occurrences and results of the investigations carried out to ensure that mitigations are applied to reduce the risks.

- MATS do not use automated safety data recording systems.

1.4 Environment (Member State)



- Malta achieved a KEA performance of 1.58% compared to its target of 1.80% and contributed positively towards achieving the Union-wide target.

- The NSA states that despite the optimised route profiles, the sanctions imposed by Algeria and Morocco impacted the efficiency of its airspace.

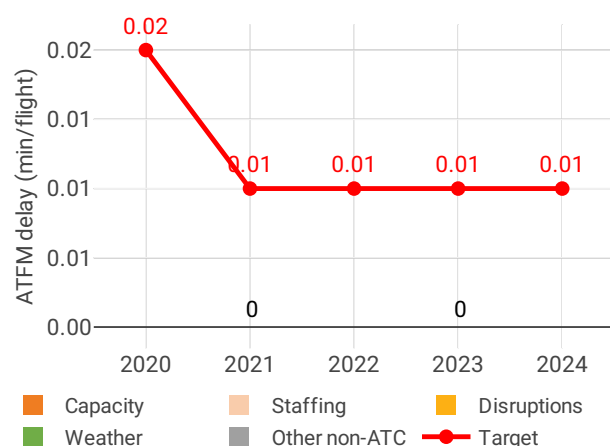
- Both KEP and SCR improved compared to 2022.

- The share of CDO flights decreased from 54.09% to 50.31% in 2023.

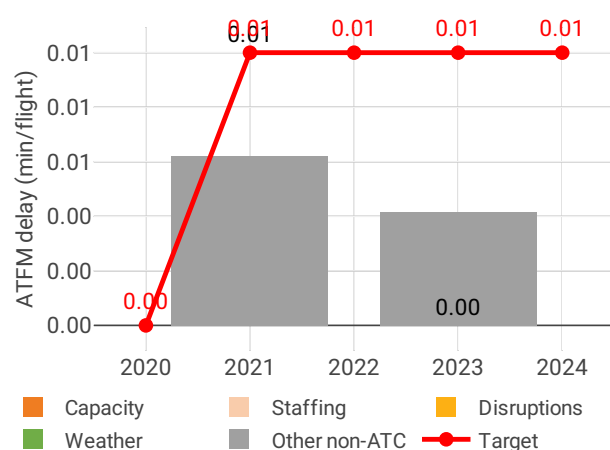
- During 2023, additional time in terminal airspace increased from 0.67 to 0.73 min/flight, while additional taxi out time increased from 1.81 to 1.97 min/flight.

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups



Average arrival ATFM delay per flight by delay groups



- Malta registered zero minutes of average en route ATFM delay per flight during 2023, thus achieving the local target value of 0.01. Delays in Malta remained unchanged year-on-year.

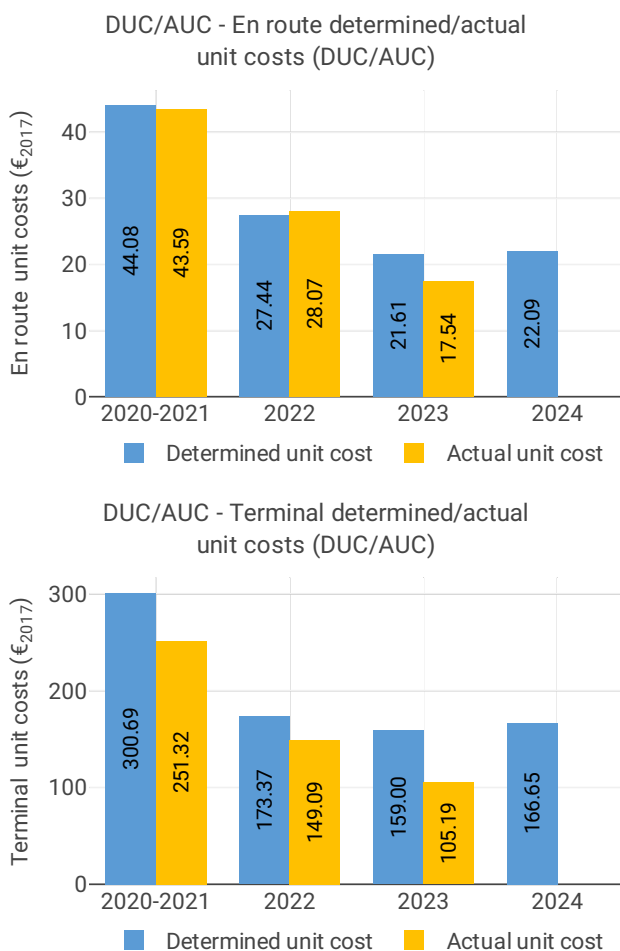
- The average number of IFR movements was 3% above 2019 levels in Malta in 2023.

- The number of ATCOs in OPS is expected to increase by 26% by 2024, with the actual value being below the 2023 plan in Malta by 6 FTEs.

- The yearly total of sector opening hours in Malta ACC was 8,760, showing a 0% change compared to 2022. Sector opening hours are 28.4% below 2019 levels.

- Malta ACC registered 15.45 IFR movements per one sector opening hour in 2023, being 46.3% above 2019 levels.

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



- The en route 2023 actual unit cost of Malta was 17.52 €2017, -19% lower than the determined unit cost (21.61 €2017). The terminal 2023 actual unit cost was 105.19 €2017, -34% lower than the determined unit cost (159.00 €2017).

- The en route 2023 actual service units (0.97M) were -3.8% lower than the determined service units (1.01M).

- The en route 2023 actual total costs were -4.8 M€2017 (-22%) lower than determined. The reduction was mainly due to significant difference in other operating costs (-2.5 M€2017, or -33%) and staff costs (-1.8 M€2017, or -16%). The NSA did not provide detailed explanations. The PRB recommends that the NSA submit an updated Additional Information to the Reporting Tables, providing more comprehensive explanations for the differences between the actual and determined costs in each cost category.

- MATS spent 2.3 M€2017 in 2023 related to costs of investments for both en route and terminal charging zones, -32% less than determined (3.4 M€2017). Furthermore, the actual net current assets for the year were +6.1 M€2017 higher than anticipated (+616%), whereas the actual fixed assets

were -5.2 M€2017 lower than the determined figures (-40%). The NSA did not provide an explanation for these discrepancies.

- Similarly to 2022, Malta did not provide the required data in time. The PRB recommends that the NSA put in place a solid process for reporting to fulfill the Regulation requirements.

- The en route actual unit cost incurred by users in 2023 was 23.53€ (-0.4% below the 2023 DUC), while the terminal actual unit cost incurred by users was 160.96€ (-7.5% below the 2023 DUC).

- The en route regulatory result for MATS amounted to +4.2 M€, or 21% 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 - MALTA

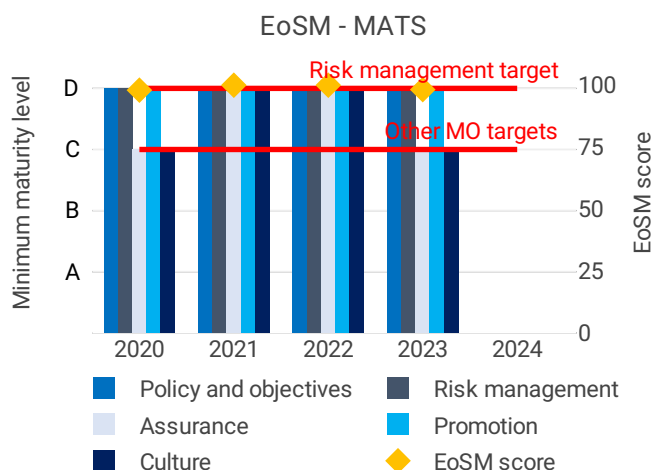
2.1 PRB monitoring

- MATS achieved its RP3 EoS targets in 2020 and has since maintained this level. In 2023 safety culture was downgraded to level C, however MATS still achieves the RP3 target levels.

- Malta recorded a significant increase in the rate of runway incursion and a single occurrence of separation minima infringements (SMIs). The NSA is continually monitoring occurrences and results of the investigations carried out to ensure that mitigations are applied to reduce the risks.

- MATS do not use automated safety data recording systems.

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



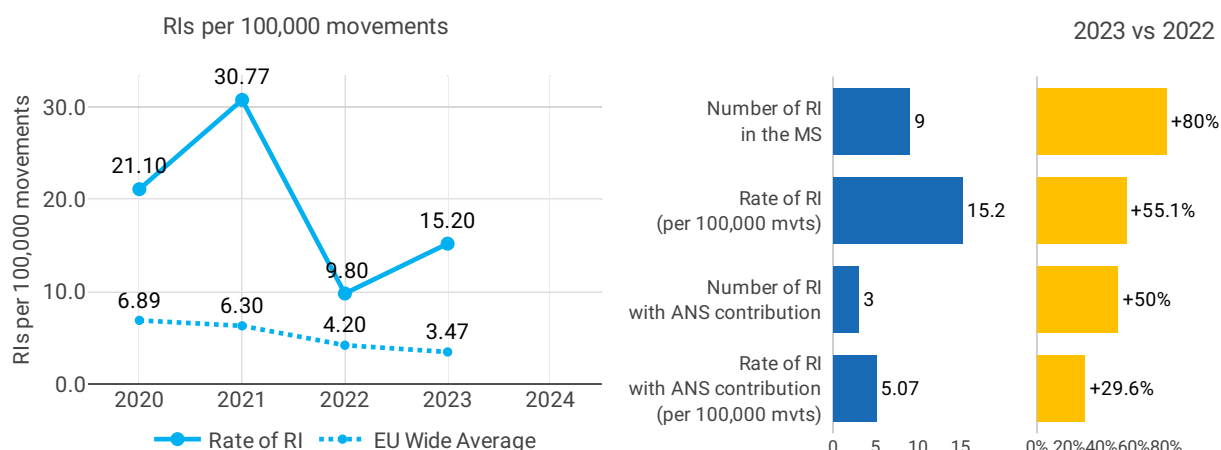
Focus on EoSM

All five EoSM components of the ANSP meet, or exceed, the RP3 target level. Two components “Safety Culture and Safety Assurance” were degraded from level D to Level C, but remained on the RP3 target levels.

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

2.3 Safety occurrences

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



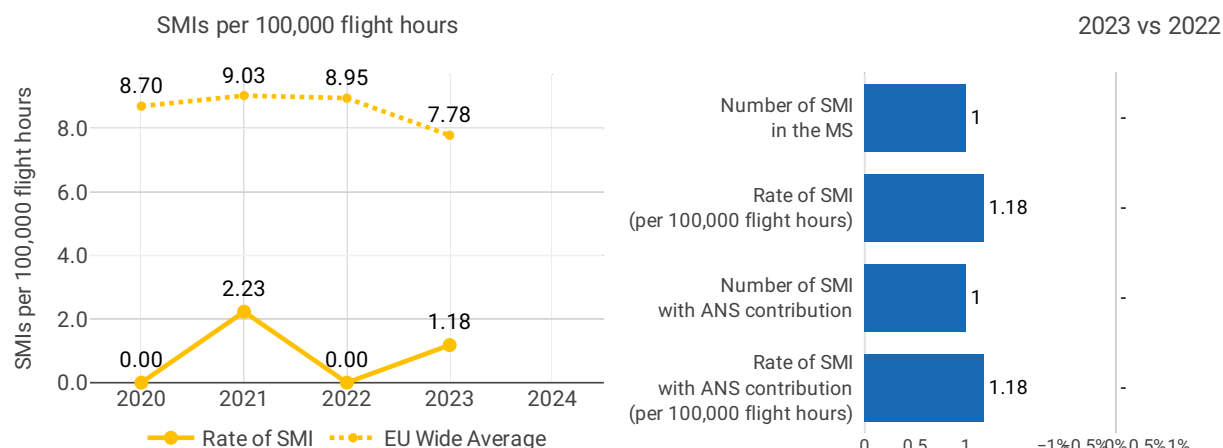
Rate of RIs per 100,000 airport movements - Malta

#	Airport name	APT movements	Number of RI	Rate RI per 100,000
1	Malta International	59,196	3	5.07

Focus on runway incursions

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

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



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

#	ANSP	Flight hours					Number of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	MATS	40,016	44,905	62,700	84,404	NA	NA	1	0	1	NA

#	ANSP	Rate of SMI per 100,000 flight hours					% variation in rate of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	MATS	NA	22.3	0.0	1.2	NA	NA	NA	-100%	0%	NA

Focus on separation minima

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

2.3.3 Quality of occurrences reporting

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

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

2023	
For RIs	For SMIs
X	X

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

3 ENVIRONMENT - MALTA

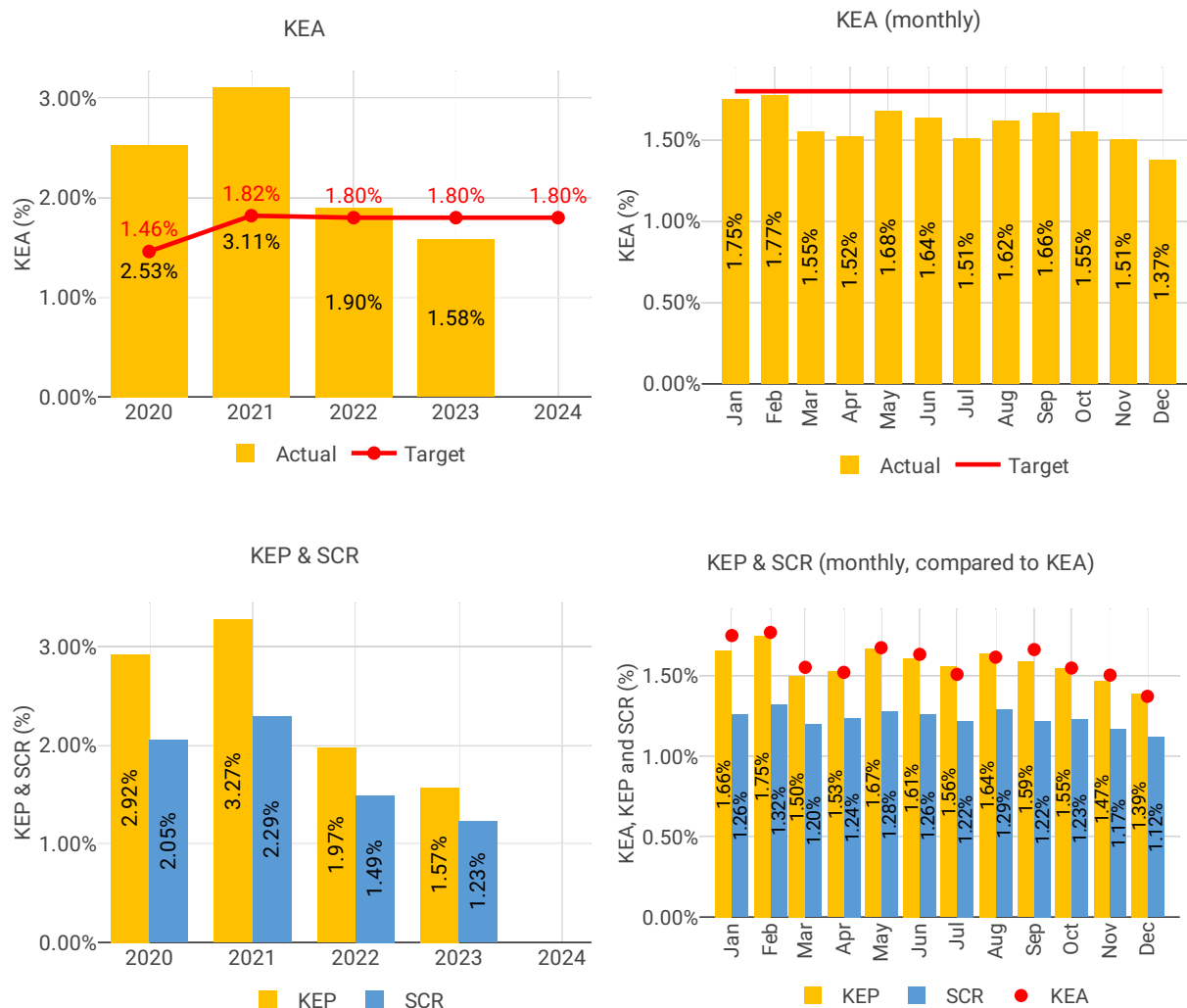
3.1 PRB monitoring

- Malta achieved a KEA performance of 1.58% compared to its target of 1.80% and contributed positively towards achieving the Union-wide target.

- The NSA states that despite the optimised route profiles, the sanctions imposed by Algeria and Morocco impacted the efficiency of its airspace.
- Both KEP and SCR improved compared to 2022.
- The share of CDO flights decreased from 54.09% to 50.31% in 2023.
- During 2023, additional time in terminal airspace increased from 0.67 to 0.73 min/flight, while additional taxi out time increased from 1.81 to 1.97 min/flight.

3.2 En route performance

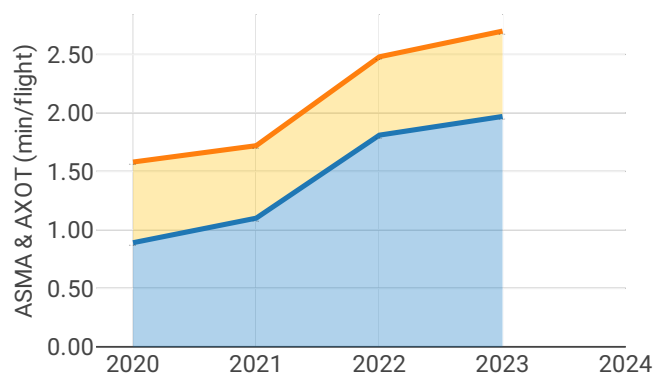
3.2.1 Horizontal flight efficiency of the actual trajectory (KEA) (KPI#1), of the last filed flight plan (KEP) (PI#1) & shortest constrained route (SCR) (PI#2)



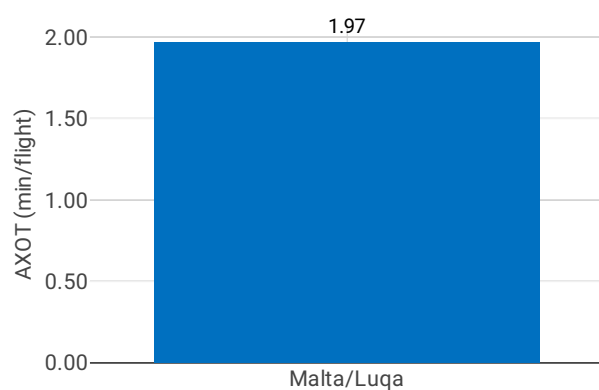
3.3 Terminal performance

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

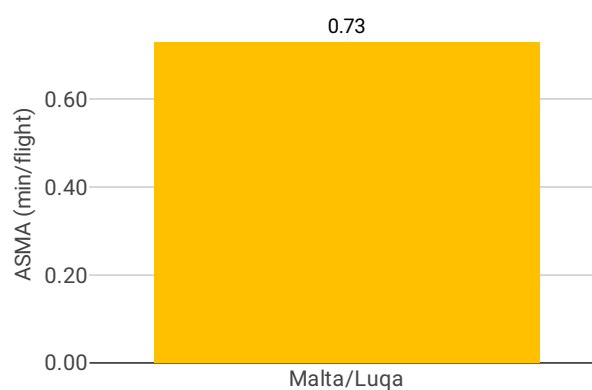
ASMA & AXOT



AXOT, main airport(s) - 2023



ASMA, main airport(s) - 2023



Focus on ASMA & AXOT

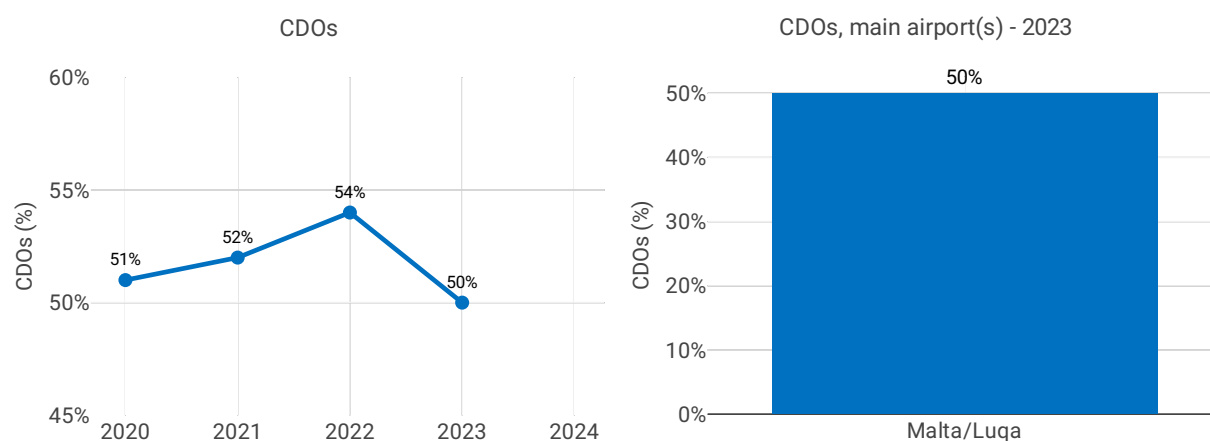
AXOT

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

ASMA

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

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



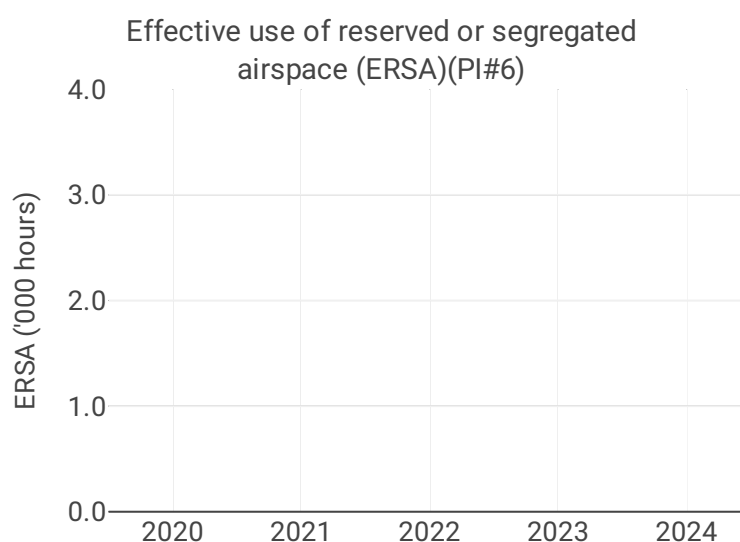
Focus CDOs

The share of CDO flights at Malta (LMML) decreased to 50.3% (-3.8 percentage points) which is still well above the overall RP3 value in 2023 (28.8%) and in the higher range of all observed values in 2023.

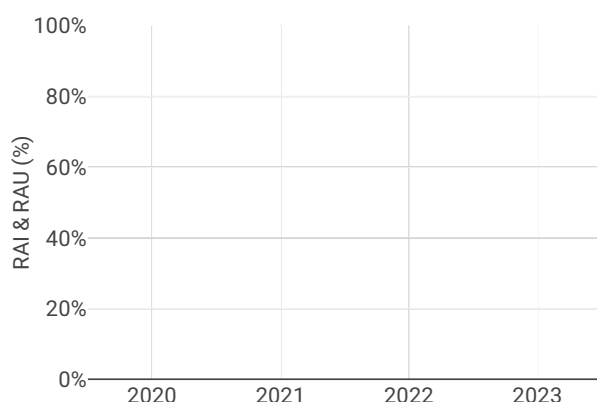
According to Malta's monitoring report: *With the introduction of the INTRAC project, the NSA will be in a position to monitor the effectiveness of CDO.*

Airport level															
Airport Name	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
Malta/Luqa	0.89	1.10	1.81	1.97	NA	0.69	0.62	0.67	0.73	NA	51%	52%	54%	50%	NA

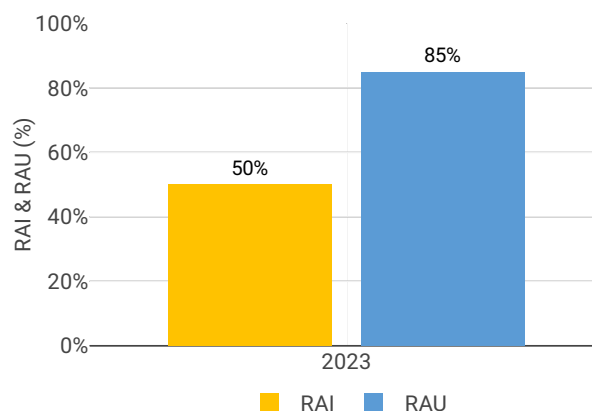
3.4 Civil-Military dimension



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



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



Focus on Civil-Military dimension

Update on Military dimension of the plan

No data available.

Military - related measures implemented or planned to improve capacity

No data available.

Initiatives implemented or planned to improve PI#6

No data available.

Initiatives implemented or planned to improve PI#7

No data available.

Initiatives implemented or planned to improve PI#8

No data available.

4 CAPACITY - MALTA

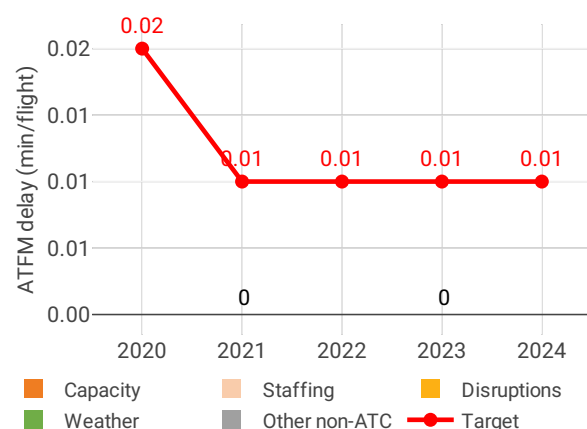
4.1 PRB monitoring

- Malta registered zero minutes of average en route ATFM delay per flight during 2023, thus achieving the local target value of 0.01. Delays in Malta remained unchanged year-on-year.
- The average number of IFR movements was 3% above 2019 levels in Malta in 2023.
- The number of ATCOs in OPS is expected to increase by 26% by 2024, with the actual value being below the 2023 plan in Malta by 6 FTEs.
- The yearly total of sector opening hours in Malta ACC was 8,760, showing a 0% change compared to 2022. Sector opening hours are 28.4% below 2019 levels.
- Malta ACC registered 15.45 IFR movements per one sector opening hour in 2023, being 46.3% above 2019 levels.

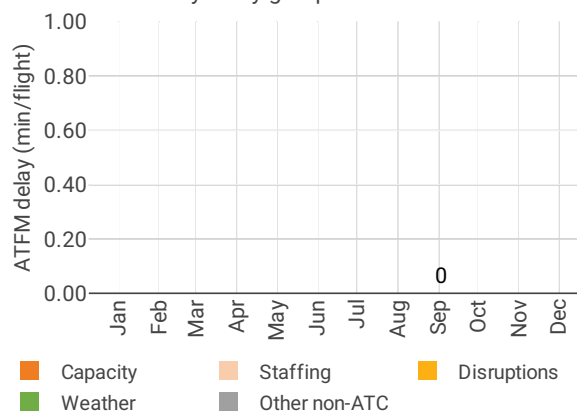
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

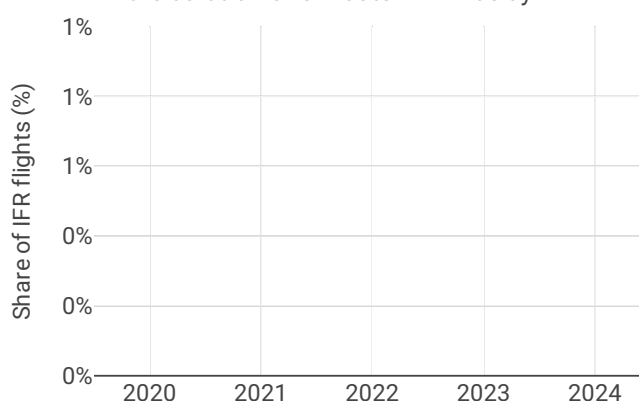
Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2023



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



Focus on en route ATFM delay

Summary of capacity performance

Malta experienced an increase in traffic from 101k flights in 2022, with zero en route ATFM delay, to 132k flights in 2023, also with zero en route ATFM delay. For reference, in 2019, Malta had 130k flights with negligible en route ATFM delays.

NSA's assessment of capacity performance

While numbers are rebounding, the charging zones retain significant excess capacity availability.

Monitoring process for capacity performance

NSA monitors ATFM delays via NM dashboard and regular inspections. Actual values represent expected capacity targets. NSA continues to monitor the recruitment progress by the ANSP.

Capacity planning

No capacity issues identified for LM ENR airspace, and Target set is the lowest allowable under the regulation.

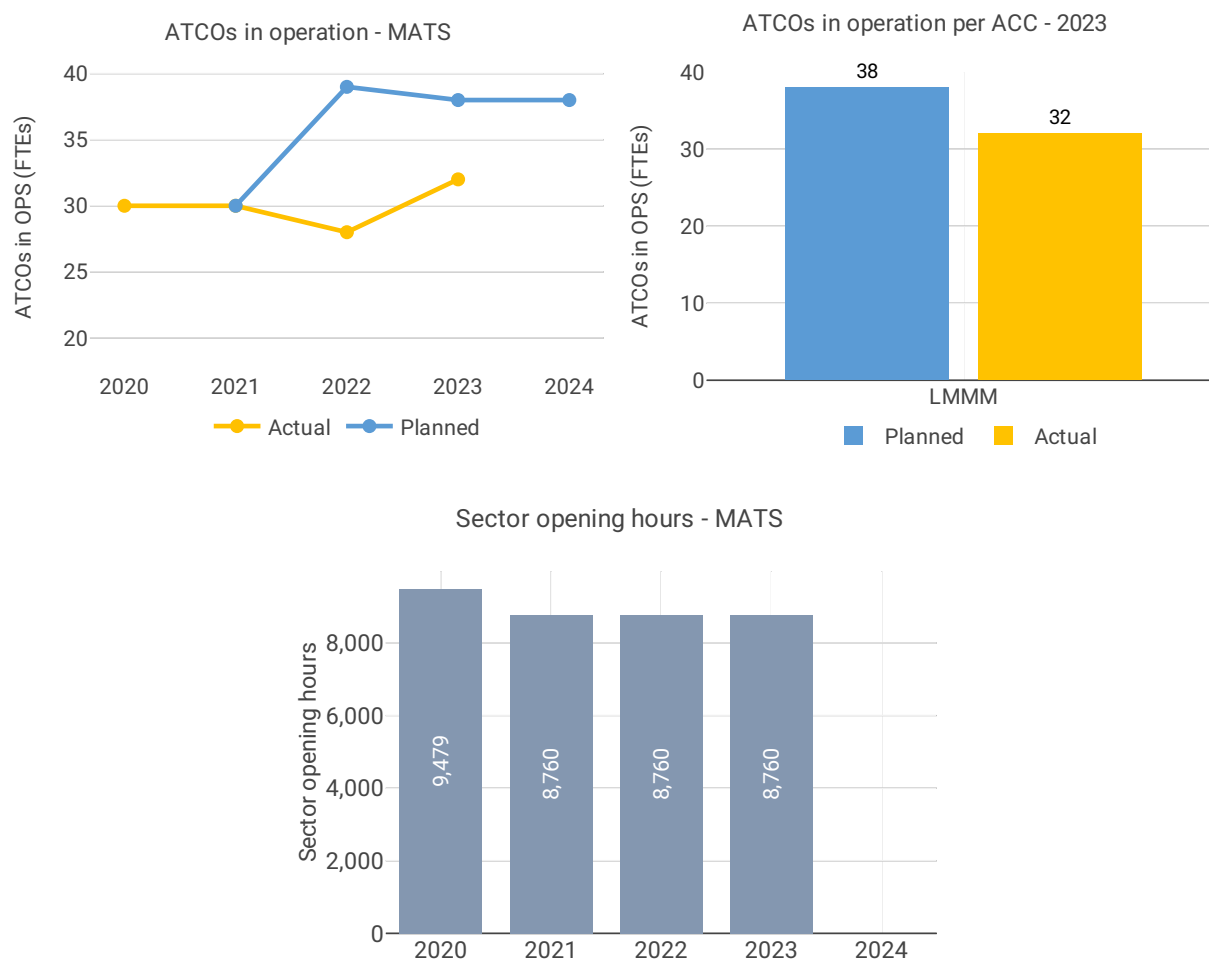
Application of Corrective Measures for Capacity (if applicable)

In addition to the 4 ATCOs added during 2023, an additional 4 FTE ATCOs will be employed during 2024. NSA continues to monitor the recruitment progress by the ANSP.

En route Capacity Incentive Scheme

Malta Air Traffic Services Ltd.: The incentive scheme is under review by the European Commission. 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

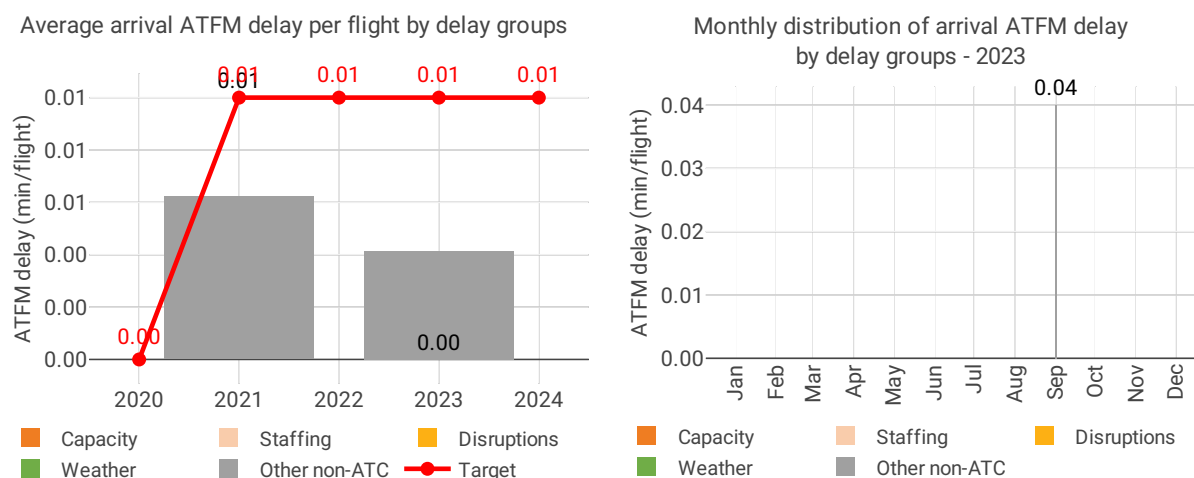


Focus on ATCOs in operations

N/A

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)



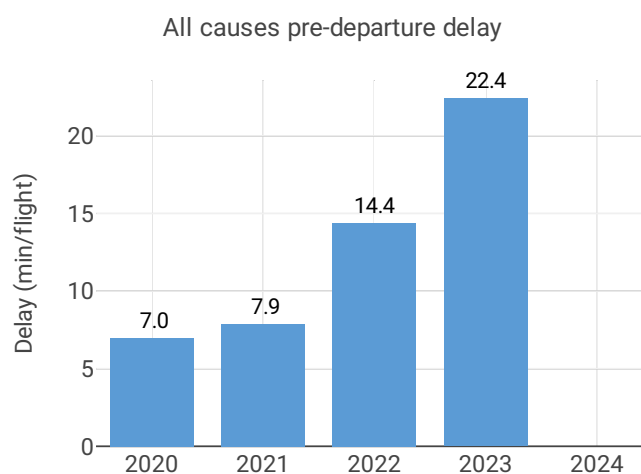
Focus on arrival ATFM delay

The scope of RP3 monitoring for Malta comprises the main airport (LMML), where traffic level in 2023, after a 22% increase with respect to 2022, was completely recovered and in fact 1% higher than in 2019. In accordance with IR (EU) 2019/317 and the traffic volume, pre-departure delays are not monitored at Malta and the capacity performance monitoring focuses on arrival ATFM delay and slot adherence. Average arrival ATFM delays in 2023 was 0 min/arr (same as in 2022) and ATFM slot adherence remains high (2023: 96.4%; 2022: 96.6%).

No arrival ATFM delay was observed at Malta-Luqa (LMML) in 2023.

Malta's performance plan sets a national target on arrival ATFM delay for 2023 of 0.01 min/arr. This target was met with an actual performance of 0.00 min/arr. According to the Performance Plan however, the pivot values are 0.02. The modulation is not clarified and Malta's monitoring report claims a bonus of € 60 687.

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
Malta/Luqa	NA	0.01	NA	0.00	NA	97.1%	96.6%	96.6%	96.4%	NA%

Airport name	ATC pre departure delay (PI#2)					All causes pre departure delay (PI#3)				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Malta/Luqa	0.04	0.01	0.21	1.06	NA	7.0	7.9	14.4	22.4	NA

Focus on performance indicators at airport level

ATFM slot adherence

Malta's ATFM slot compliance was 96.4%. With regard to the 3.6% of flights that did not adhere, 1.5% was early and 2.1% was late. According to Malta's monitoring report: *The performance has deteriorated slightly due to the huge increase in traffic and major ongoing works on the aerodrome which during busy periods resulted in slight extended taxi times.*

ATC pre-departure delay

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

All causes pre-departure delay

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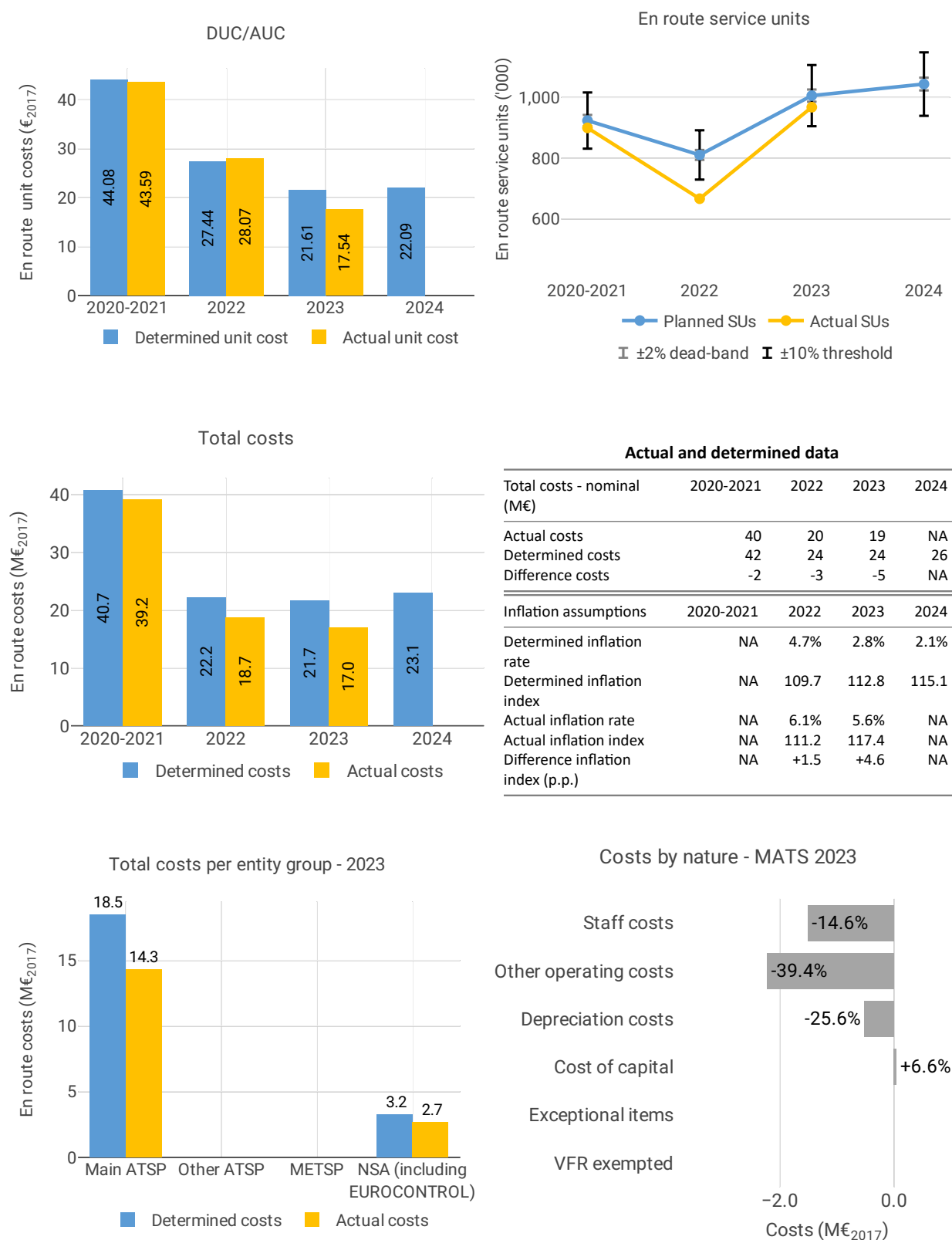
5 COST-EFFICIENCY - MALTA

5.1 PRB monitoring

- The en route 2023 actual unit cost of Malta was 17.52 €2017, -19% lower than the determined unit cost (21.61 €2017). The terminal 2023 actual unit cost was 105.19 €2017, -34% lower than the determined unit cost (159.00 €2017).
- The en route 2023 actual service units (0.97M) were -3.8% lower than the determined service units (1.01M).
- The en route 2023 actual total costs were -4.8 M€2017 (-22%) lower than determined. The reduction was mainly due to significant difference in other operating costs (-2.5 M€2017, or -33%) and staff costs (-1.8 M€2017, or -16%). The NSA did not provide detailed explanations. The PRB recommends that the NSA submit an updated Additional Information to the Reporting Tables, providing more comprehensive explanations for the differences between the actual and determined costs in each cost category.
- MATS spent 2.3 M€2017 in 2023 related to costs of investments for both en route and terminal charging zones, -32% less than determined (3.4 M€2017). Furthermore, the actual net current assets for the year were +6.1 M€2017 higher than anticipated (+616%), whereas the actual fixed assets were -5.2 M€2017 lower than the determined figures (-40%). The NSA did not provide an explanation for these discrepancies.
- Similarly to 2022, Malta did not provide the required data in time. The PRB recommends that the NSA put in place a solid process for reporting to fulfill the Regulation requirements.
- The en route actual unit cost incurred by users in 2023 was 23.53€ (-0.4% below the 2023 DUC), while the terminal actual unit cost incurred by users was 160.96€ (-7.5% below the 2023 DUC).
- The en route regulatory result for MATS amounted to +4.2 M€, or 21% 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)



Focus on unit cost

AUC vs. DUC

In 2023, the en route AUC was -18.9% (or -4.09 €2017) lower than the planned DUC. This results from the combination of significantly lower than planned en route costs in real terms (-22.0%, or -4.8 M€2017)

and lower than planned TSUs (-3.8%). It should be noted that actual inflation index in 2023 was +4.6 p.p. higher than planned.

En route service units

The difference between the 2023 actual and planned TSUs (-3.8%) falls outside the $\pm 2\%$ dead band, but does not exceed the $\pm 10\%$ threshold foreseen in the traffic risk sharing mechanism. The resulting loss of en route revenues is therefore shared between the ANSP and the airspace users.

En route costs by entity

The 2023 actual real en route costs are -22.0% (-4.8 M€2017) lower than planned. This is the result of lower than planned costs for the main ANSP, MATS (-22.7%, or -4.2 M€2017) and the NSA/EUROCONTROL (-17.7%, or -0.6 M€2017).

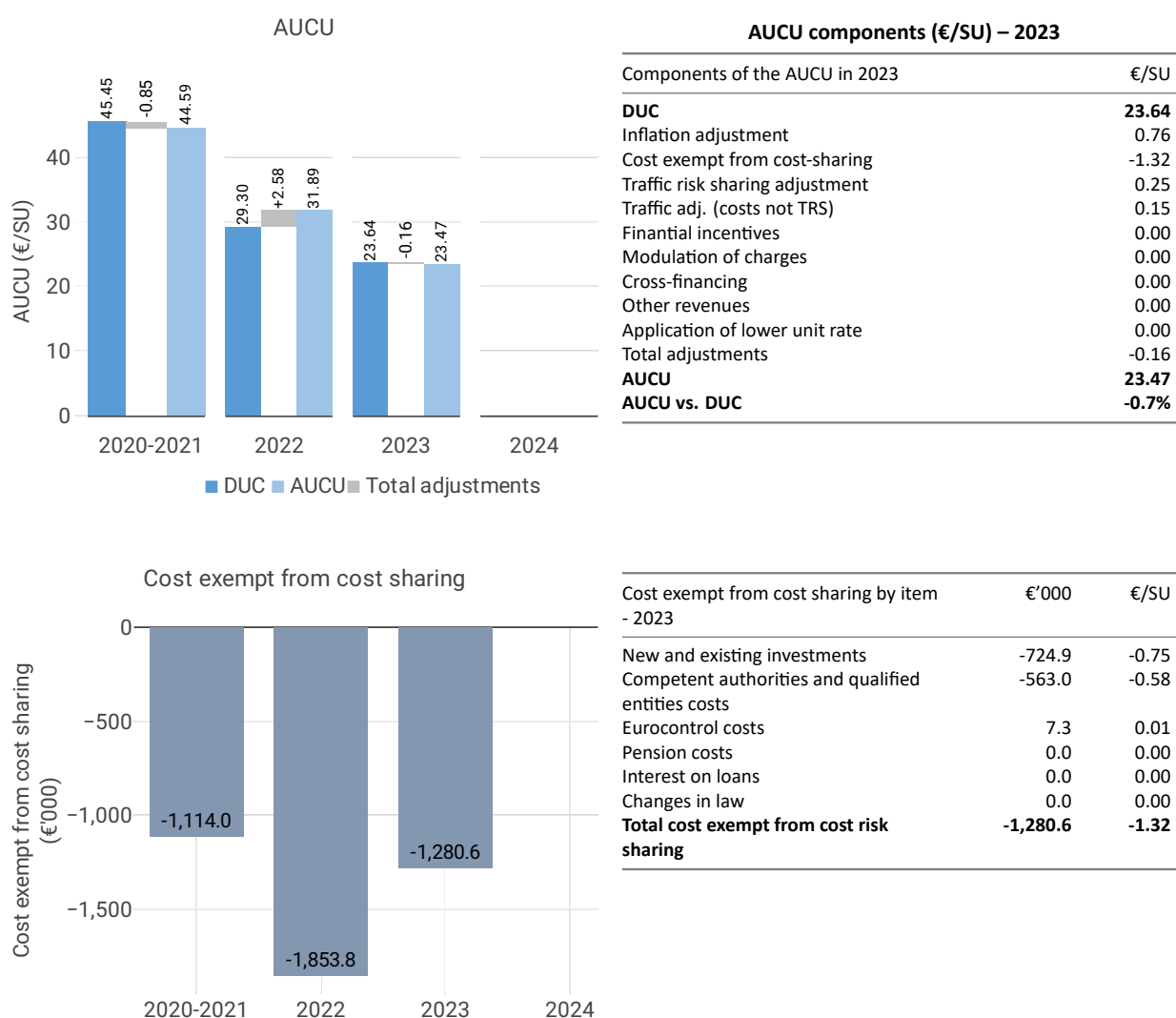
En route costs for the main ANSP at charging zone level

The 2023 actual real en route costs for MATS were significantly lower than planned (-22.7%, or -4.2 M€2017), partially due to a higher than planned inflation index in 2023 (+4.6 p.p.) and resulting from:

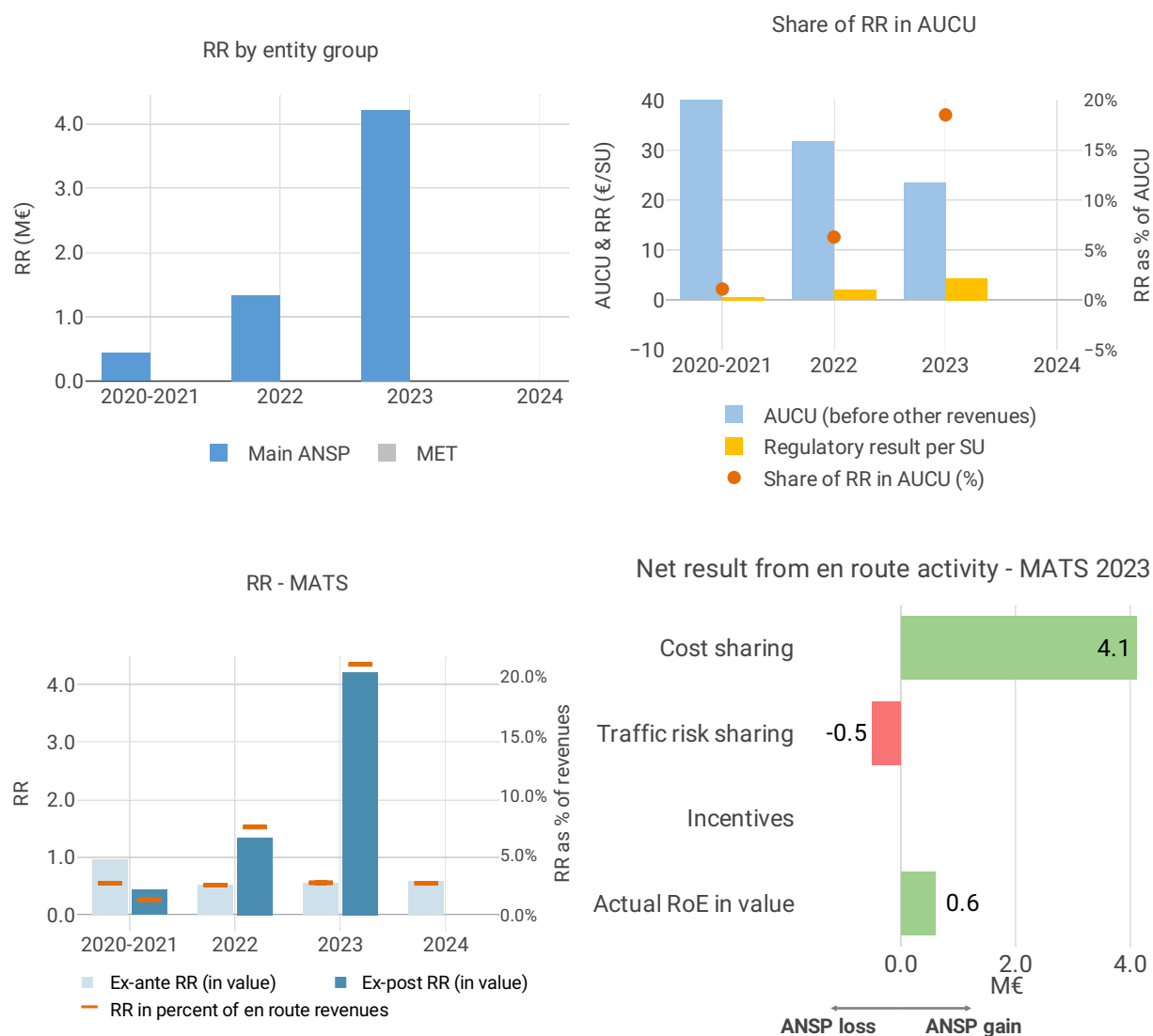
- Significantly lower than planned staff costs (-14.6%),
- Significantly lower than planned other operating costs (-39.4%),
- Significantly lower than planned depreciation (-25.6%),
- Significantly higher than planned cost of capital (+6.6%).

No explanations on the differences between the 2023 determined and actual costs is available in the Additional information to the reporting tables. It is noted that the en route actual costs reported are lower than planned for all items but the cost of capital.

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



5.2.3 Regulatory result (RR)



Focus on regulatory result

MATS net gain on activity in the Malta en route charging zone in the year 2023

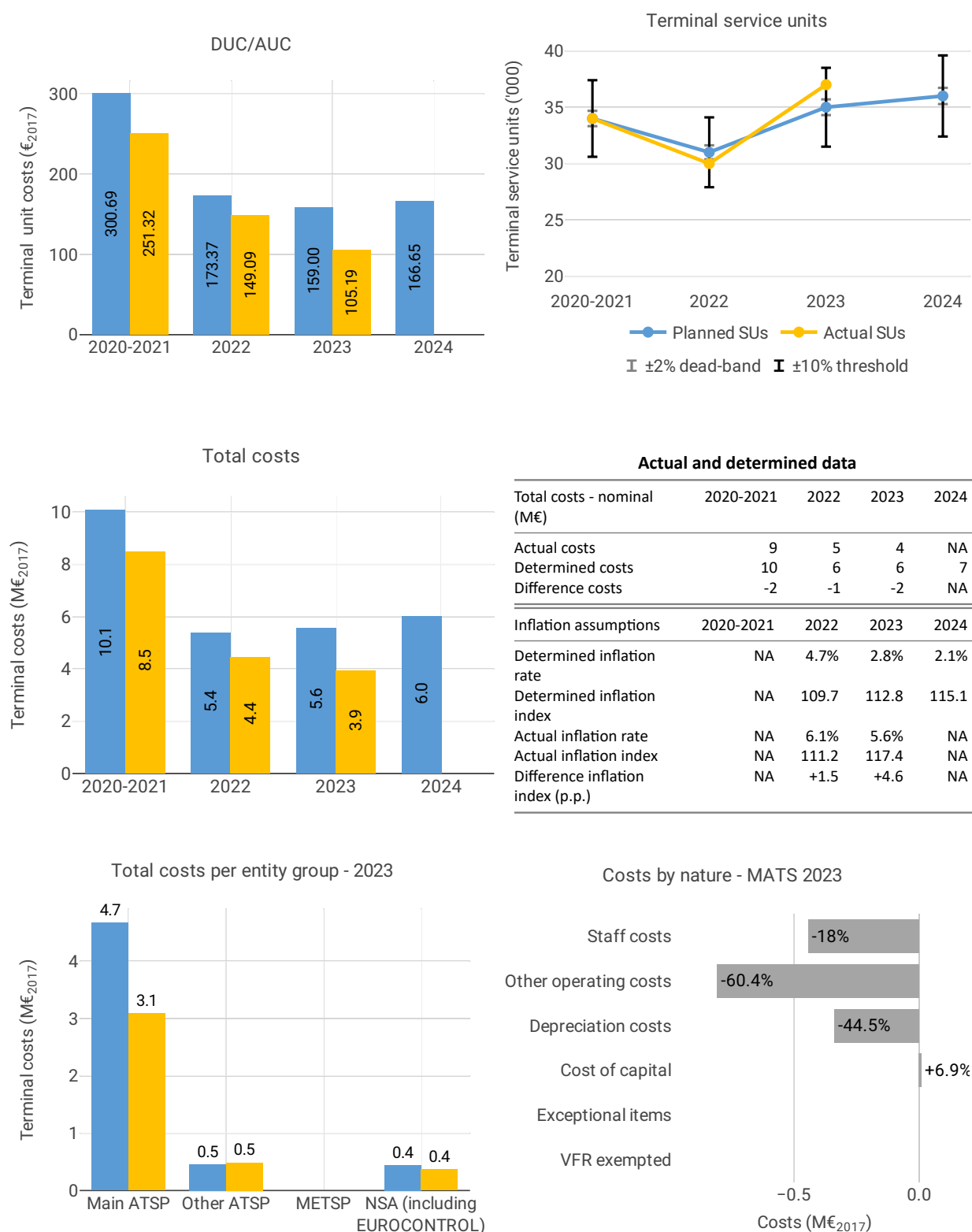
MATS reported a net gain of +3.7 M€, as a combination of a gain of +4.2 M€ arising from the cost sharing mechanism, with a loss of -0.5 M€ arising from the traffic risk sharing mechanism.

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

Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+3.7 M€) and the actual RoE (+0.6 M€) amounts to +4.3 M€ (21.3% of the en route revenues). The resulting ex-post rate of return on equity is 29.0%, which is higher than the 4.0% planned in the PP.

5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)



Focus on unit cost

AUC vs. DUC

In 2023, the terminal AUC was -33.8% (or -53.81 €2017) lower than the planned DUC. This results from the combination of significantly lower than planned terminal costs in real terms (-29.1%, or -1.6 M€2017) and significantly higher than planned TNSUs (+7.1%). It should be noted that actual inflation index in 2023 was +4.6 p.p. higher than planned.

Terminal service units

The difference between the 2023 actual and planned TNSUs (+7.1%) falls outside the $\pm 2\%$ dead band, but does not exceed the $\pm 10\%$ threshold foreseen in the traffic risk sharing mechanism. The resulting gain of additional terminal revenues is therefore shared between the ANSP and the airspace users .

Terminal costs by entity

The 2023 actual real terminal ANS costs are -29.1% (-1.6 M€2017) lower than planned. This is the result of lower than planned costs for the main ANSP, MATS (-33.8%, or -1.6 M€2017) and the NSA (-16.5%, or -0.1 M€2017) while other ANSP costs are higher (MIA, +6.5%, or +0.03 M€2017) than planned.

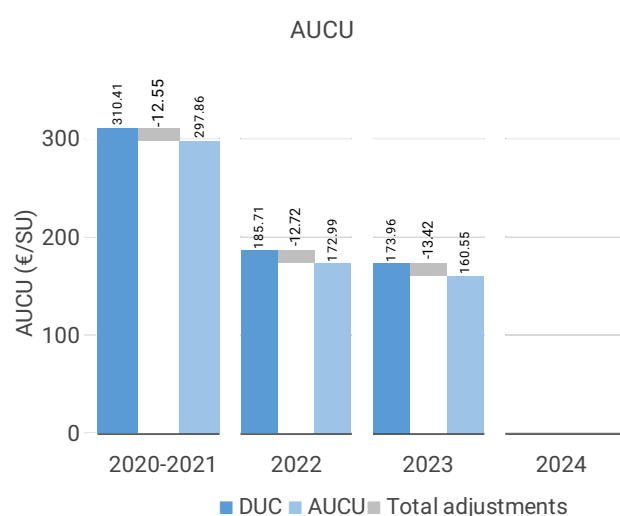
Terminal costs for the main ANSP at charging zone level

The 2023 actual real terminal ANS costs for MATS are lower than planned (-33.8%, or -1.6 M€2017), partially due to a higher than planned inflation index in 2023 (+4.6 p.p.) and resulting from:

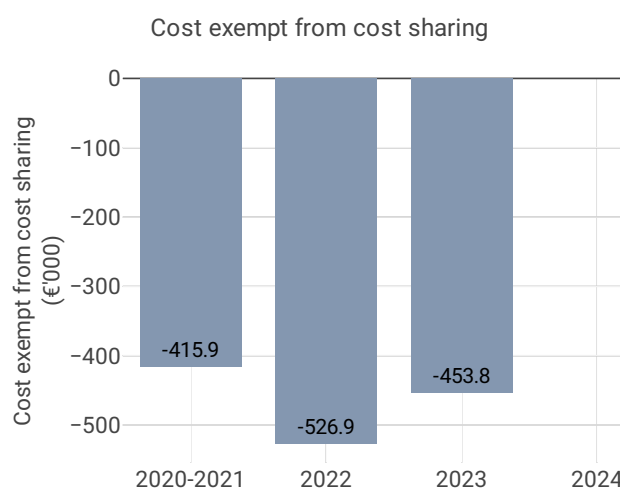
- Significantly lower than planned staff costs (-18.0%),
- Significantly lower than planned other operating costs (-60.4%),
- Significantly lower than planned depreciation (-44.5%),
- Significantly higher than planned cost of capital (+6.9%).

No explanations on the differences between the 2023 determined and actual costs is available in the Additional information to the reporting tables. It is noted that the en route actual costs reported are lower than planned for all items but the cost of capital.

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

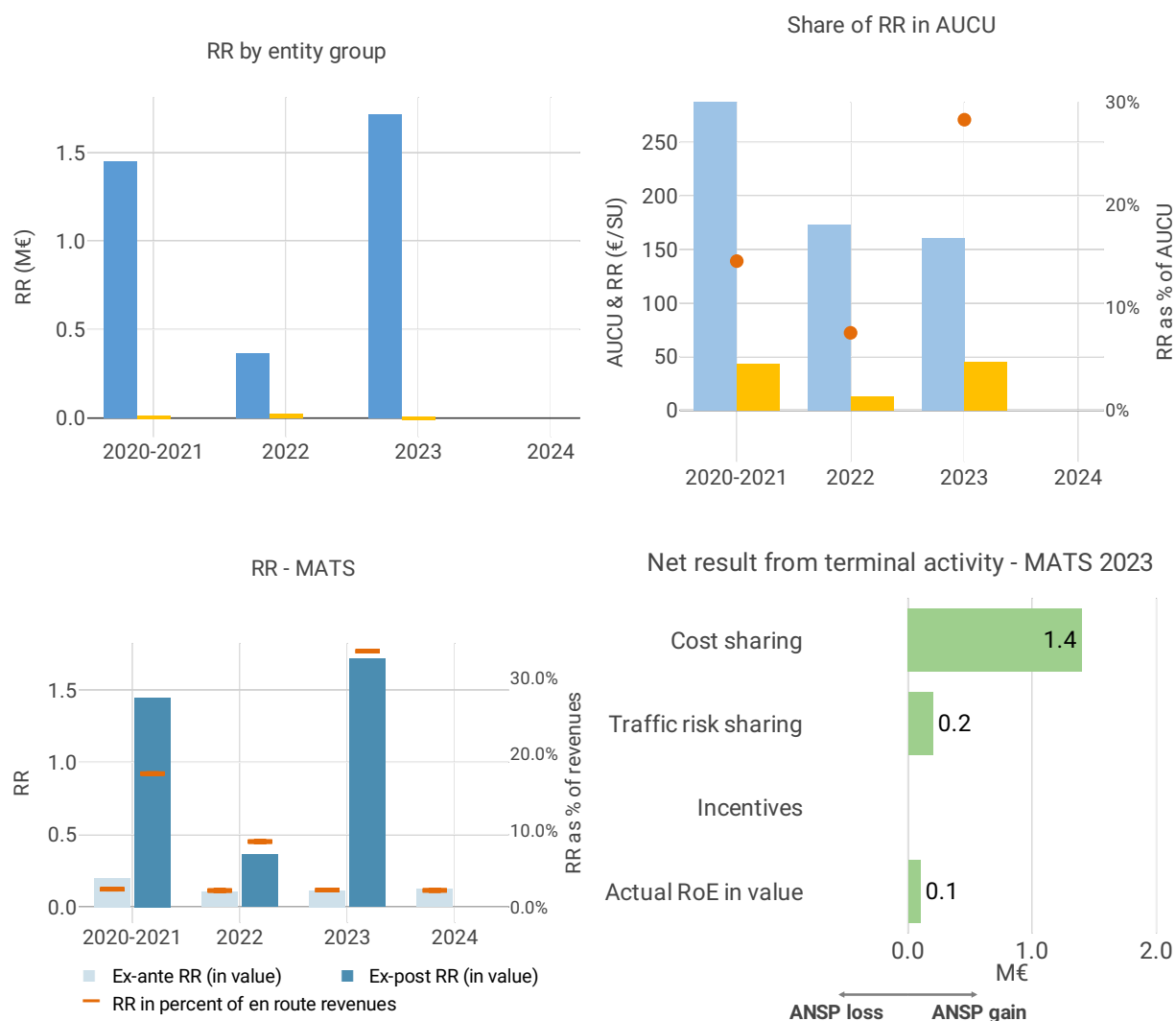


AUCU components (€/SU) – 2023	
Components of the AUCU in 2023	€/SU
DUC	173.96
Inflation adjustment	5.01
Cost exempt from cost-sharing	-12.10
Traffic risk sharing adjustment	-5.29
Traffic adj. (costs not TRS)	-1.03
Financial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	0.00
Application of lower unit rate	0.00
Total adjustments	-13.42
AUCU	160.55
AUCU vs. DUC	-7.7%



Cost exempt from cost sharing by item - 2023	€'000	€/SU
New and existing investments	-380.8	-10.16
Competent authorities and qualified entities costs	-73.0	-1.95
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	-453.8	-12.10

5.3.3 Regulatory result (RR)



Focus on regulatory result

MATS net gain on activity in the Malta terminal charging zone in the year 2023

MATS reported a net gain of +1.6 M€, as a combination of a gain of +1.4 M€ arising from the cost sharing mechanism, with a gain of +0.2 M€ arising from the traffic risk sharing mechanism.

MATS overall regulatory results (RR) for the terminal activity

Ex-post, the overall RR taking into account the net gain from the terminal activity mentioned above (+1.6 M€) and the actual RoE (+0.1 M€) amounts to +1.7 M€ (33.7% of the terminal revenues). The resulting ex-post rate of return on equity is 57.1%, which is higher than the 4.0% planned in the PP.