

Performance Review Body Monitoring Report

Malta - 2022

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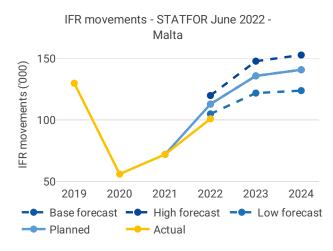
1 OVERVIEW

1.1 Contextual information

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

List of ACCs 1 Malta ACC	Exchange rate (1 EUR=) 2017: 1 EUR 2022: 1 EUR	Main ANSP • MATS
No of airports in the scope of the performance plan: • ≥80'K 0 • <80'K 1	Share of Union-wide: • traffic (TSUs) 2022 0.6% • en route costs 2022 0.3% Share en route / terminal costs 2022 81% / 19%	Other ANSPs • Malta International A Plc. MET Providers –
	En route charging zone(s) Malta Terminal charging zone(s) Malta	

1.2 Traffic (En route traffic zone)



En route service units - STATFOR June 2022 -Malta 1,200 En route service units ('000) 1,000 800 600 400 2019 2020 2021 2022 2023 2024 -- Base forecast -- High forecast -- Low forecast Determined - Actual

• Malta recorded 101K actual IFR movements in 2022, +39% compared to 2021 (72K).

• Actual 2022 IFR movements were -11% below the plan (113K).

• Actual 2022 IFR movements represent 77% of the actual 2019 level (130K).

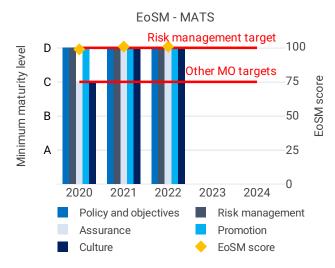
• Malta recorded 667K actual en route service units in 2022, +32% compared to 2021 (504K).

• Actual 2022 service units were -18% below the plan (811K).

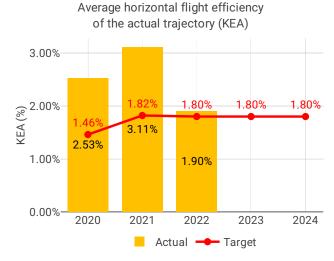
• Actual 2022 service units represent 65% of the actual 2019 level (1,020K).

Airport

1.3 Safety (Main ANSP)



1.4 Environment (Member State)



• MATS achieved its RP3 EoSM targets in 2020 and has since maintained this level.

• Despite a significant traffic increase in 2022, Malta's runway incursion rate decreased, demonstrating an improving trend. Malta did not record any separation minima infringements (SMIs).

• MATS could improve its safety management by implementing automated safety data recording systems.

• Malta achieved a KEA performance of 1.90% compared to its target of 1.80% and did not contribute positively towards achieving the Union-wide target. Performance improved by 1.21 p.p. compared to 2021.

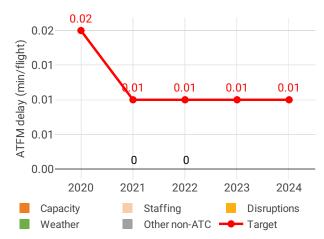
• The NSA states that despite the optimised route profiles, the sanctions imposed by Algeria and Mo-rocco impacted the efficiency in its airspace.

- Both KEP and SCR improved compared to 2021.
- The share of CDO flights increased by 4.24% compared to 2021.

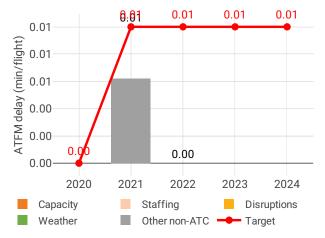
During 2022, additional time in terminal airspace

increased from 0.62 to 0.67 min/flight, while additional taxi out time increased from 1.1 to 1.81 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 2022, thus achieving the local target value of 0.01.

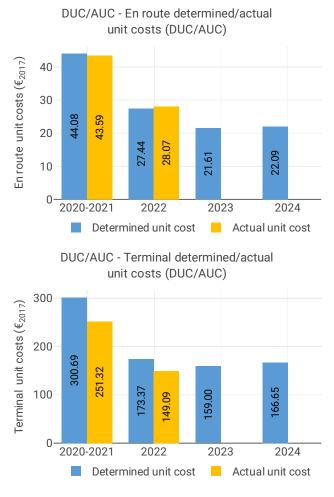
• The average number of IFR movements was 23% below 2019 levels in Malta in 2022.

• The number of ATCOs in OPS is planned to increase by 19% by the end of RP3, however, the actual value decreased in Malta ACC in 2022 due to lower-than-planned levels of recruitment and remained below the 2022 plan.

• The yearly total of sector opening hours in Malta ACC was 12,906 in 2022, showing a 21.4% increase compared to 2021. Sector opening hours are 6.4% below 2019 levels.

• Malta ACC registered 25.64 IFR movements per one sector opening hour in 2022, being 7.3% below 2019 levels.

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



• The en route 2022 actual unit cost of Malta was 27.83 €2017, 1.4% higher than the determined unit cost (27.44 €2017). The terminal 2022 actual unit cost was 114.43 €2017, 34% lower than the determined unit cost (173.37 €2017).

• The en route 2022 actual service units (667K) were 18% lower than the determined service units (811K).

• The en route 2022 actual total costs were 3.7 $M \notin 2017$ (-17%) lower than determined. The reduction was mainly due to significant decreases in other operating costs (-2.7 $M \notin 2017$, or -33%) and depreciation costs (-1.1 $M \notin 2017$, or -39%). The NSA did not provide explanations for the variations of costs.

• MATS spent 2.5 M€2017 in 2022 related to costs of investments, 42% less than determined (4.3 M€2017), as a result of lower depreciation and cost of capital. The NSA did not provide an explanation for the substantial decrease.

• The discrepancies regarding costs of investments are significant. The PRB invites the NSA to analyse the discrepancies, identify their reasons, and the Member State to take immediate, adequate, and proportionate action to ensure the implemen-

tation of the investment plans to avoid future capacity gaps.

• Malta did not provide the required data in time and with the required quality. The PRB recommends that the NSA put in place a solid process for reporting in order to fulfil the Regulation requirements.

• The en route actual unit cost incurred by users in 2022 was 34.39€, while the terminal actual unit cost incurred by users was 190.37€.

2 SAFETY - MALTA

2.1 PRB monitoring

• MATS achieved its RP3 EoSM targets in 2020 and has since maintained this level.

• Despite a significant traffic increase in 2022, Malta's runway incursion rate decreased, demonstrating an improving trend. Malta did not record any separation minima infringements (SMIs).

• MATS could improve its safety management by implementing automated safety data recording systems.

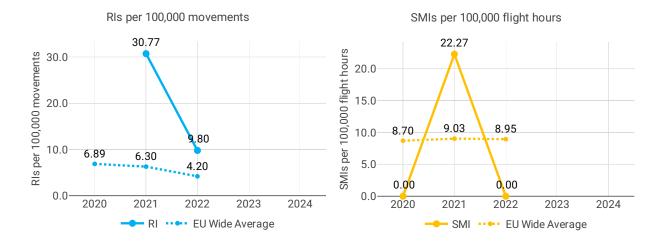
Risk management target 100 Minimum maturity level D Other MO targets 75 EoSM score С 50 В 25 А 0 2020 2021 2022 2023 2024 Policy and objectives **Risk management** Assurance Promotion Culture EoSM score

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 maximum level of maturity has been retained for all components.

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



EoSM - MATS

7/21

3 ENVIRONMENT - MALTA

3.1 PRB monitoring

• Malta achieved a KEA performance of 1.90% compared to its target of 1.80% and did not contribute positively towards achieving the Union-wide target. Performance improved by 1.21 p.p. compared to 2021.

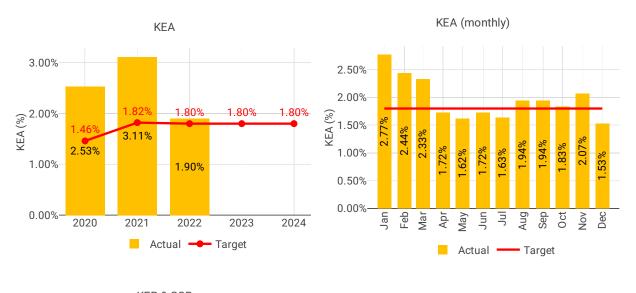
• The NSA states that despite the optimised route profiles, the sanctions imposed by Algeria and Morocco impacted the efficiency in its airspace.

- Both KEP and SCR improved compared to 2021.
- The share of CDO flights increased by 4.24% compared to 2021.

• During 2022, additional time in terminal airspace increased from 0.62 to 0.67 min/flight, while additional taxi out time increased from 1.1 to 1.81 min/flight.

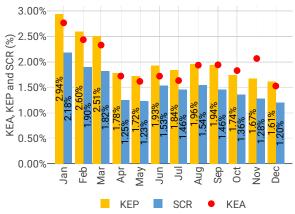
3.2 En route performance

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)



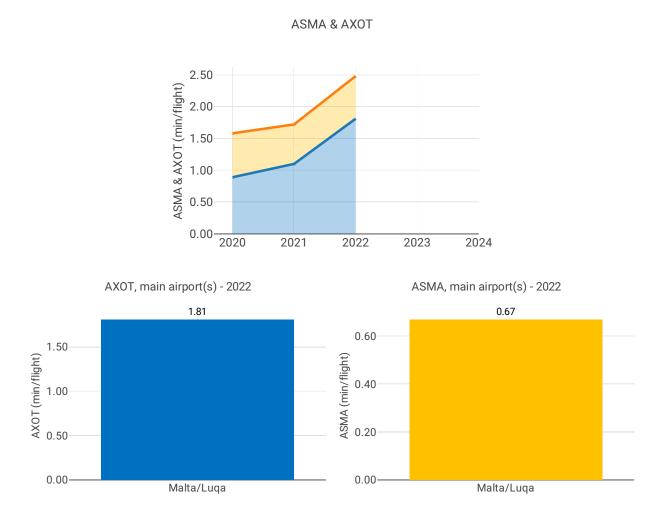


KEP & SCR (monthly, compared to KEA)



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

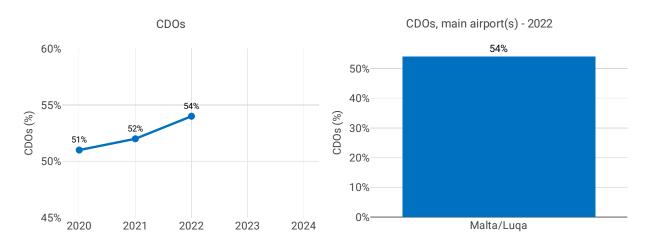
ΑΧΟΤ

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)

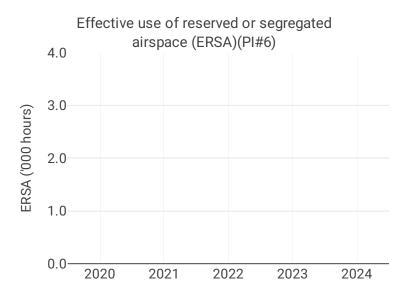


Focus CDOs

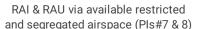
The share of CDO flights at Malta (LMML) increased slightly to 54.1% which is well above the overall RP3 value in 2022 (29.0%) and in the higher range of all observed values in 2022.

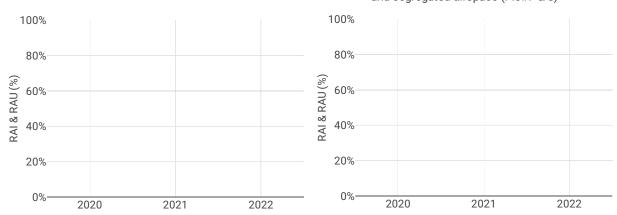
Airport level															
Additional taxi-out time (PI#3)		Additional ASMA time (PI#4)			Share of arrivals applying CDO (PI#5)										
Airport Name	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Malta/Luqa	0.89	1.10	1.81	NA	NA	0.69	0.62	0.67	NA	NA	51%	52%	54%	NA	NA

3.4 Civil-Military dimension



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





Focus on Civil-Military dimension

Update on Military dimension of the plan

Military - related measures implemented or planned to improve capacity

Initiatives implemented or planned to improve PI#6

No permanent segregated airspace for LMMMACC

Initiatives implemented or planned to improve PI#7

No permanent segregated airspace for LMMMACC

Initiatives implemented or planned to improve PI#8

No permanent segregated airspace for LMMMACC

4 CAPACITY - MALTA

4.1 PRB monitoring

• Malta registered zero minutes of average en route ATFM delay per flight during 2022, thus achieving the local target value of 0.01.

• The average number of IFR movements was 23% below 2019 levels in Malta in 2022.

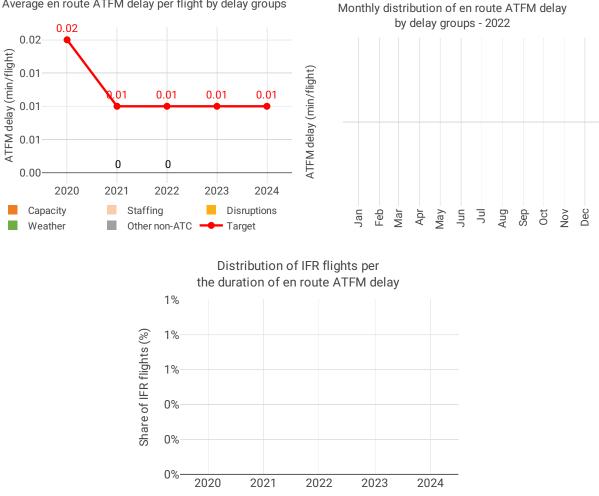
• The number of ATCOs in OPS is planned to increase by 19% by the end of RP3, however, the actual value decreased in Malta ACC in 2022 due to lower-than-planned levels of recruitment and remained below the 2022 plan.

• The yearly total of sector opening hours in Malta ACC was 12,906 in 2022, showing a 21.4% increase compared to 2021. Sector opening hours are 6.4% below 2019 levels.

• Malta ACC registered 25.64 IFR movements per one sector opening hour in 2022, being 7.3% below 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

Focus on en route ATFM delay

Summary of capacity performance

Malta experienced an increase in traffic from 72k flights in 2021, with zero ATFM delay, to 101k flights in 2022, also with zero en route ATFM delay.

Traffic levels were still substantially below the 130k flights in 2019.

NSA's assessment of capacity performance

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

Monitoring process for capacity performance

Actual values represent expected capacity targets.

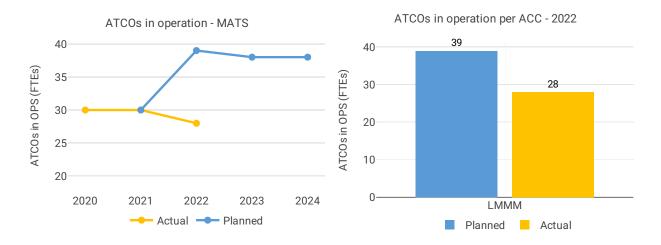
Capacity planning

No capacity issues identified for Malta en route airspace.

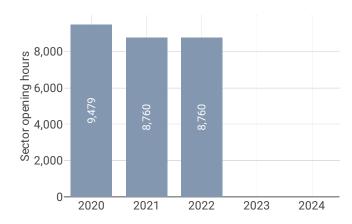
Application of Corrective Measures for Capacity (if applicable)

No data available

4.2.2 Other indicators



Sector opening hours - MATS

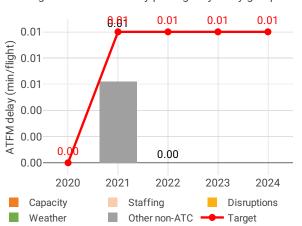


Focus on ATCOs in operations

Subsequent to COVID, recruitment of ATCOs has not been at the level planned for, due to high demand of these skills worlwide.

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)





Average arrival ATFM delay per flight by delay groups

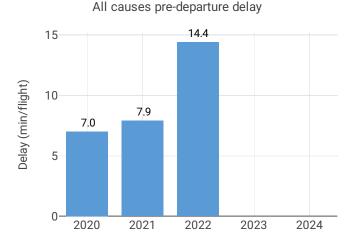
Focus on arrival ATFM delay

The scope of RP3 monitoring for Malta comprises the main airport (LMML), where traffic in 2022, regard-less of an increase of 49% with respect to 2021, was still 17 % lower 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 2022 was 0 min/arr, compared to 0.01 min/arr in 2021 and ATFM slot adherence remains high (2022: 96.6%; 2021: 96.6%).

No arrival ATFM delay was observed at Malta-Luqa (LMML) in 2022.3. Arrival ATFM Delay – National TargetThe national target on arrival ATFM delay in 2022 was met.

Malta's ATFM slot compliance was 96.6%. With regard to the 3.4% of flights that did not adhere, 1.3% was early and 2.1% was late.



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

				Airport level				
		Avg arrival ATF	M delay (KPI#2)	Slot adherence (PI#1)				
Airport name	2020	2021	2022	2023	2020	2021	2022	2023
Malta/Luqa	NA	0.01	NA	NA	97.1%	96.6%	96.6%	NA%
		ATC pre depart	ure delay (PI#2)		A	ll causes pre de	parture delay (PI#3	;)
Airport name	2020	2021	2022	2023	2020	2021	2022	2023
Malta/Luga	0.04	0.01	0.21	NA	7.0	7.9	14.4	NA

Focus on performance indicators at airport level

ATFM slot adherence

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.

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

No data available: airport operator data flow not established, or more than two months of missing / non-validated data

5 COST-EFFIENCY - MALTA

5.1 PRB monitoring

• The en route 2022 actual unit cost of Malta was 27.83 €2017, 1.4% higher than the determined unit cost (27.44 €2017). The terminal 2022 actual unit cost was 114.43 €2017, 34% lower than the determined unit cost (173.37 €2017).

• The en route 2022 actual service units (667K) were 18% lower than the determined service units (811K).

• The en route 2022 actual total costs were 3.7 M€2017 (-17%) lower than determined. The reduction was mainly due to significant decreases in other operating costs (-2.7 M€2017, or -33%) and depreciation costs (-1.1 M€2017, or -39%). The NSA did not provide explanations for the variations of costs.

• MATS spent 2.5 M€2017 in 2022 related to costs of investments, 42% less than determined (4.3 M€2017), as a result of lower depreciation and cost of capital. The NSA did not provide an explanation for the substantial decrease.

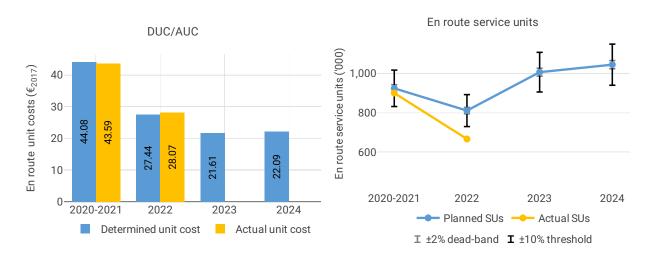
• The discrepancies regarding costs of investments are significant. The PRB invites the NSA to analyse the discrepancies, identify their reasons, and the Member State to take immediate, adequate, and proportion-ate action to ensure the implementation of the investment plans to avoid future capacity gaps.

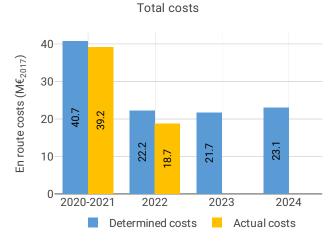
• Malta did not provide the required data in time and with the required quality. The PRB recommends that the NSA put in place a solid process for reporting in order to fulfil the Regulation requirements.

• The en route actual unit cost incurred by users in 2022 was 34.39€, while the terminal actual unit cost incurred by users was 190.37€.

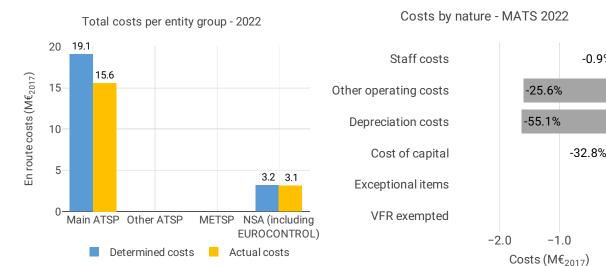
5.2 En route charging zone

5.2.1 Unit cost (KPI#1)





Actua	Actual and determined data						
Total costs - nominal (M€)	2020-2021	2022	2023	2024			
Actual costs	40	20	NA	NA			
Determined costs	42	24	24	26			
Difference costs	-2	-3	NA	NA			
Inflation assumptions	2020-2021	2022	2023	2024			
Determined inflation rate	NA	4.7%	2.8%	2.1%			
Determined inflation index	NA	109.7	112.8	115.1			
Actual inflation rate	NA	6.1%	NA	NA			
Actual inflation index	NA	111.2	NA	NA			
Difference inflation index (p.p.)	NA	+1.5	NA	NA			



Focus on unit cost

AUC vs. DUC

In 2022, the en route AUC was +1.4% (or +0.39 €2017) higher than the planned DUC. This results from the combination of significantly lower than planned TSUs (-17.8%) and significantly lower than the planned en route costs in real terms (-16.6%, or -3.7 M€2017).

En route service units

The difference between 2022 actual and planned TSUs (-17.8%) falls outside the ±10% threshold foreseen in the traffic risk sharing mechanism. The resulting loss of en route revenues is therefore shared between the ANSP and the airspace users, with the ANSP (MATS) bearing a loss of -0.8 M€2017.

En route costs by entity

The 2022 actual real en route costs are -16.6% (-3.7 M€2017) lower than planned. This is the result of lower costs for the main ANSP, MATS (-18.4%, or -3.5 M€2017) and lower NSA/EUROCONTROL costs (-5.7%, or -0.2 M€2017).

En route costs for the main ANSP at charging zone level

Significantly lower than planned en route costs in real terms for MATS in 2022 (-18.4%, or -3.5 M€2017) result from:

- Higher than planned staff costs (+3.4%, or +0.3 M€2017),
- Significantly lower than planned other operating costs (-40.0%, or -2.5 M€2017),
- Significantly lower than planned depreciation costs (-38.6%, or -1.1 M€2017),

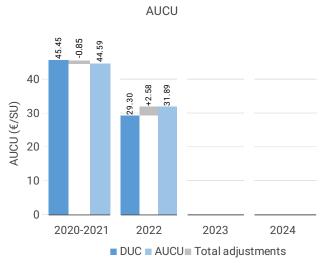
-0.9%

0.0

- lower than planned cost of capital (-33.7% or -0.2 M€2017).

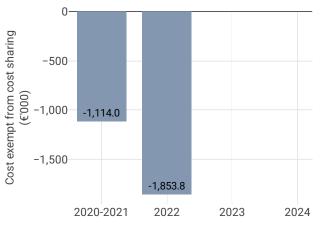
There are no explanations available in the Additional information to the reporting tables regarding the differences between the 2022 determined and actual costs.





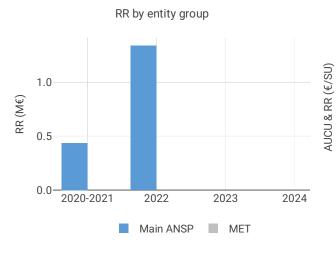
AUCU components (€/SU) – 2022				
Components of the AUCU in 2022	€/SU			
DUC	29.30			
Inflation adjustment	0.34			
Cost exempt from cost-sharing	-2.78			
Traffic risk sharing adjustment	4.00			
Traffic adj. (costs not TRS)	1.02			
Finantial incentives	0.00			
Modulation of charges	0.00			
Cross-financing	0.00			
Other revenues	0.00			
Application of lower unit rate	0.00			
Total adjustments	2.58			
AUCU	31.89			
AUCU vs. DUC	+8.8%			

Cost exempt from cost sharing

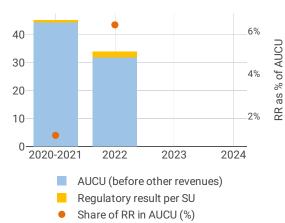


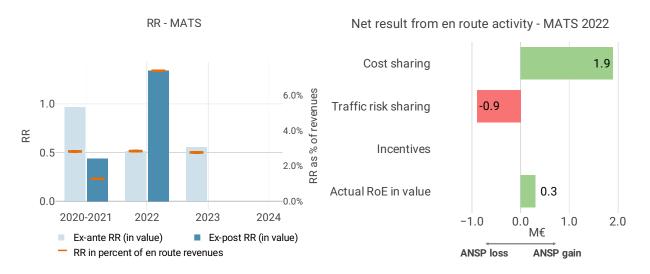
Cost exempt from cost sharing by item - 2022	€′000	€/SU
New and existing investments	-1,810.4	-2.71
Competent authorities and qualified entities costs	0.0	0.00
Eurocontrol costs	-43.2	-0.06
Pension costs	0.0	0.00
Interest on loans	-0.2	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	-1,853.9	-2.78

5.2.3 Regulatory result (RR)



Share of RR in AUCU





Focus on regulatory result

MATS net gain on activity in the Malta en route charging zone in the year 2022

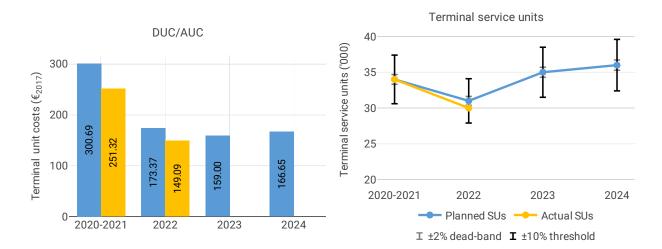
MATS reported a net gain of +2.9 M€, as a combination of a gain of +3.8 M€ arising from the cost sharing mechanism and a loss of -0.9 M€ arising from the traffic risk sharing mechanism.

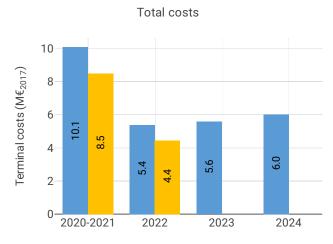
MATS overall regulatory results (RR) for the en route activity

Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+2.9 M) and the actual RoE (+0.5 M) amounts to +3.4 M (17.0% of the en route revenues). The resulting ex-post rate of return on equity is 26.6%, which is higher than the 4.0% planned in the PP.

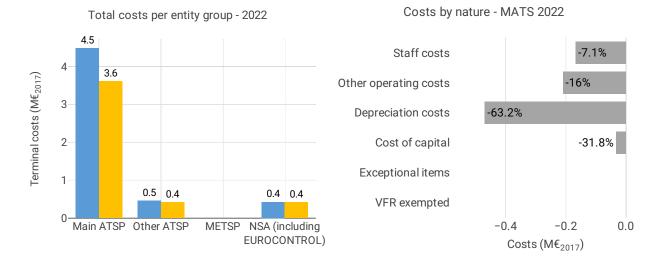
5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)





Actual and determined data						
Total costs - nominal (M€)	2020-2021	2022	2023	2024		
Actual costs	9	5	NA	NA		
Determined costs	10	6	6	7		
Difference costs	-2	-1	NA	NA		
Inflation assumptions	2020-2021	2022	2023	2024		
Determined inflation rate	NA	4.7%	2.8%	2.1%		
Determined inflation index	NA	109.7	112.8	115.1		
Actual inflation rate	NA	6.1%	NA	NA		
Actual inflation index	NA	111.2	NA	NA		
Difference inflation index (p.p.)	NA	+1.5	NA	NA		



Focus on unit cost

AUC vs. DUC

In 2022, the terminal AUC was -34.0% (or -58.95 €2017) lower than the planned DUC. This results from the combination of significantly lower than planned terminal costs in real terms (-36.6%, or -2.0 M€2017) and lower than planned TNSUs (-3.9%).

Terminal service units

The difference between the 2022 actual and planned TNSUs (-3.9%) 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 terminal revenues is therefore shared between the ATSP and the airspace users, with the ATSP (MATS) bearing a loss of -0.1 M€2017.

Terminal costs by entity

The 2022 actual real terminal costs are -36.6% (-2.0 M \in 2017) lower than planned. This is the result of lower costs for the main ANSP, MATS (-42.6%, or -1.9 M \in 2017), the other ANSP (MIA, -10.1%, or -0.05 M \in 2017) and the NSA (-2.1%, or 0.01 M \in 2017).

Terminal costs for the main ANSP at charging zone level

Significantly lower than planned terminal costs in real terms for MATS in 2022 (-42.6%, or -1.9 M€2017) result from:

- Significantly lower than planned staff costs (-38.2%, or -0.9 M€2017), "due to the fact that during 2022 some ATCOs obtained the area licence and a portion of their wages was apportioned to en route."

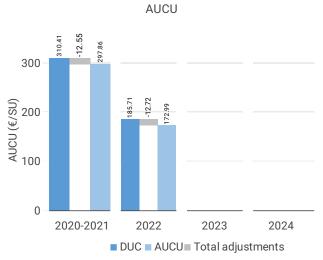
- Significantly lower than planned other operating costs (-58.0%, or -0.8 M€2017),

- Lower than planned depreciation costs (-30.7%, or -0.2 M€2017), "due to the fact that the actual realised

CAPEX was much lower than anticipated.",

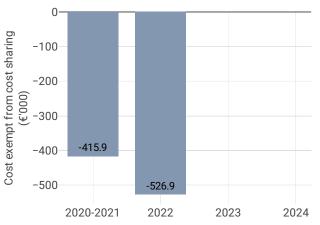
- Lower than planned cost of capital (-32.6%, or -0.03 M€2017), mainly due to significantly lower asset base.

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



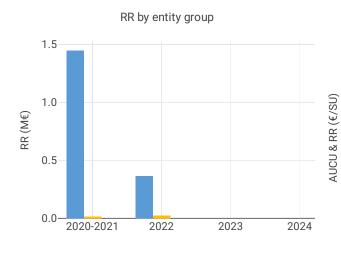
Components of the AUCU in 2022	€/SU
DUC	185.71
Inflation adjustment	1.93
Cost exempt from cost-sharing	-17.69
Traffic risk sharing adjustment	2.33
Traffic adj. (costs not TRS)	0.70
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	0.00
Application of lower unit rate	0.00
Total adjustments	-12.72
AUCU	172.99
AUCU vs. DUC	-6.9%

Cost exempt from cost sharing

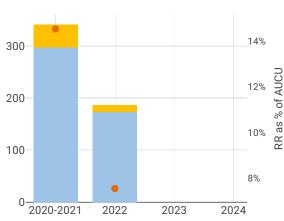


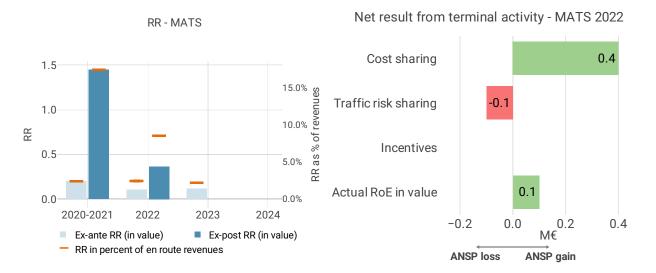
Cost exempt from cost sharing by item - 2022	€′000	€/SU
New and existing investments	-517.9	-17.38
Competent authorities and qualified entities costs	-9.0	-0.30
Eurocontrol costs	0.0	0.00
Pension costs	0.0	0.00
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	-526.9	-17.69

5.3.3 Regulatory result (RR)



Share of RR in AUCU





Focus on regulatory result

MATS net gain on activity in the Malta terminal charging zone in the year 2022

MATS reported a net gain of +2.0 M \in , as a combination of a gain of +2.1 M \in arising from the cost sharing mechanism, with a loss of -0.1 M \in 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 (+2.0 M) and the actual RoE (+0.1 M) amounts to +2.0 M (42.9% of the terminal revenues). The resulting ex-post rate of return on equity is 115.8%, which is higher than the 4.0% planned in the PP.