PRB | Performance review body of the single european sky

Performance Review Body Monitoring Report

Malta - 2021

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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

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

Exchange rate (1 EUR=)
2017: 1 EUR
2021: 1 EUR

Share of Union-wide:
- **traffic (TSUs) 2021** 0.8%
- **en route costs 2021** 0.3%

Share en route / terminal costs 2021 85% / 15%

En route charging zone(s)
Malta

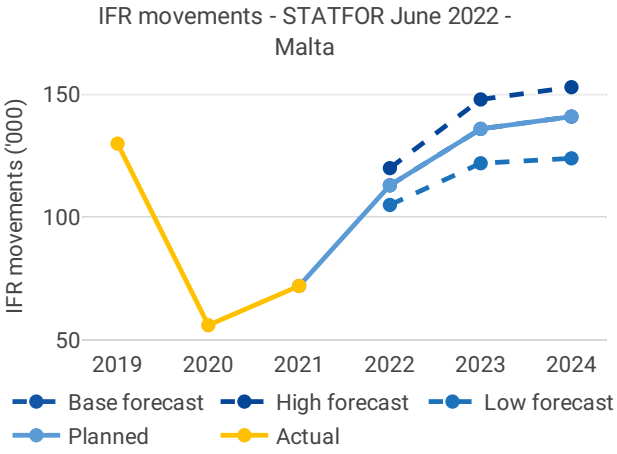
Terminal charging zone(s)
Malta

Main ANSP
- MATS

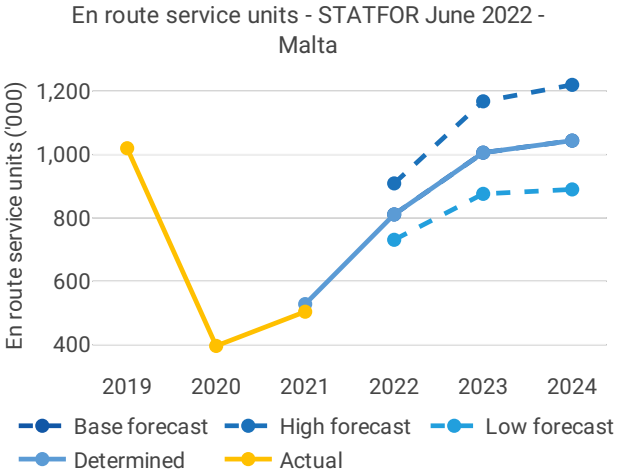
Other ANSPs
- Malta International Airport Plc.

MET Providers
–

1.2 Traffic (En route traffic zone)

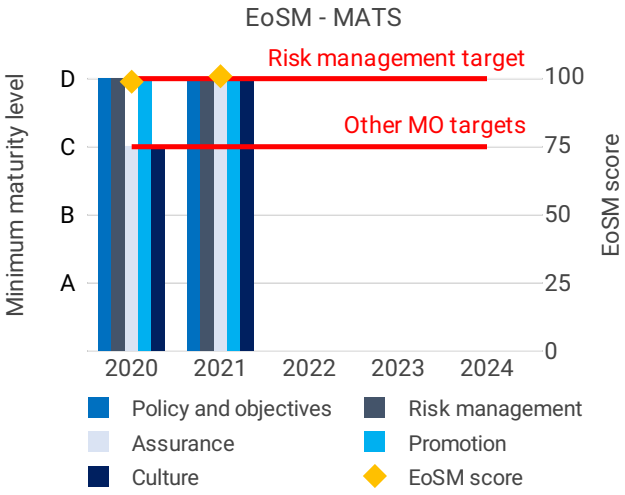


- Malta recorded 72K actual IFR movements in 2021, +29% compared to 2020 (56K).
- Actual 2021 IFR movements represent 55% of the actual 2019 level (130K).



- Malta recorded 504K actual en route service units in 2021, +27% compared to 2020 (396K).
- Actual 2021 service units represent 49% of the actual 2019 level (1,020K).

1.3 Safety (Main ANSP)

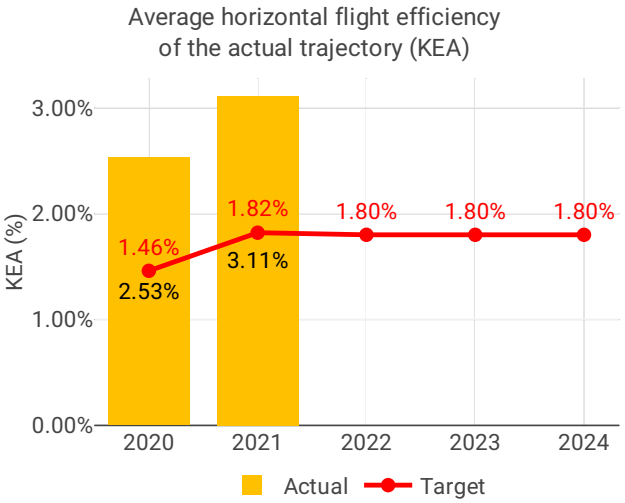


• MATS, that achieved the EoSM targets in 2020, demonstrated good safety performance and continued safety improvements over 2021. MATS exceeded the RP3 EoSM target in safety culture.

• Malta's runway incursion rate increased in 2021, which can be explained by the large increase in general aviation traffic. Specific mitigation actions were identified for the aerodrome users and ATCOs including constant monitoring, investigations, and ATCOs briefings to mitigate the risks and ensure that the occurrences are maintained at safe level.

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

1.4 Environment (Member State)



• Malta achieved a KEA performance of 3.11% compared to its target of 1.82% and did not contribute positively towards achieving the Union-wide target. Performance worsened by 23% compared to 2020.

• The NSA states that the KEA deterioration is caused by changes in traffic flow and intensity and by new data reported to the Network Manager by Turkey (affecting origin and destination considered for the calculation).

• However, the case of Turkish data reported to the Network Manager occurred in 2019. The effect was not restricted to Malta.

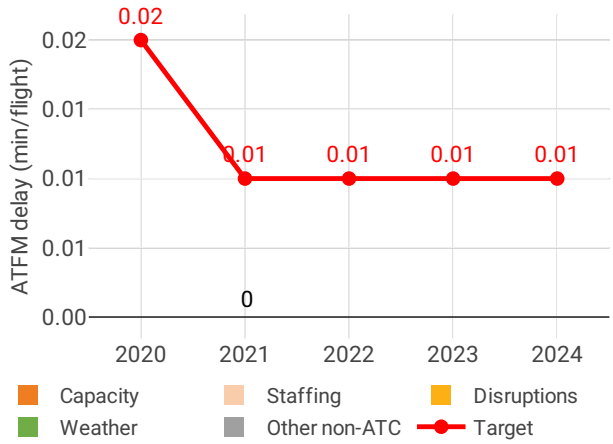
• Both KEP and SCR have been degrading since 2017 and are now the worst in five years.

• The share of CDO flights has remained similar over the last five years.

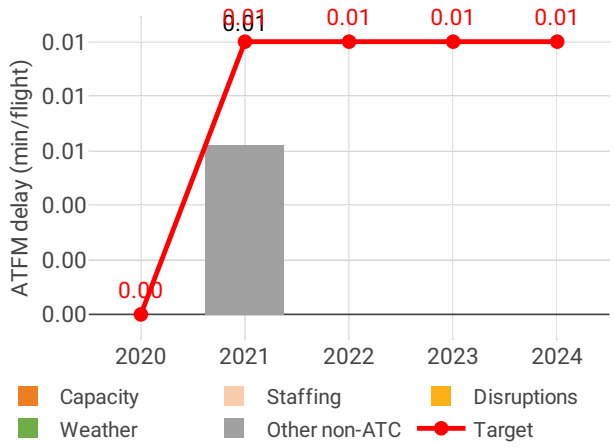
• Additional taxi out time and additional time in terminal airspace increased in comparison to 2020, but are still lower than pre-pandemic years.

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 2021, thus meeting the local breakdown value of 0.01.

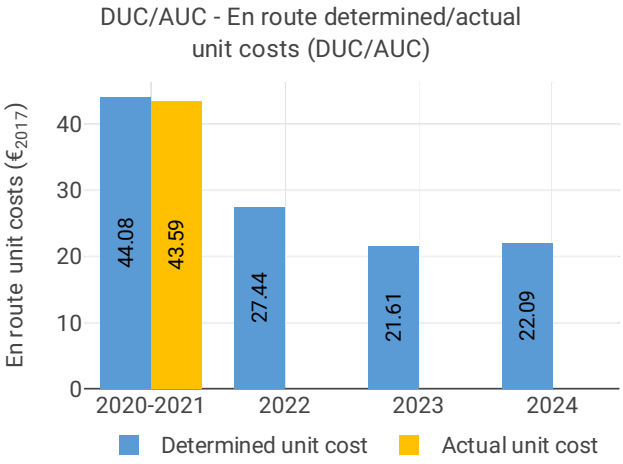
• En route ATFM delays in Malta were also zero on average during the past years.

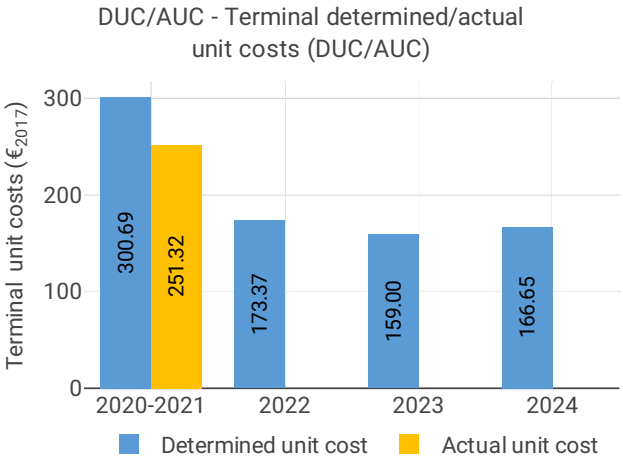
• Traffic is expected to grow, with 2019 levels likely being reached in 2023 (in high and base growth scenarios). A significant increase in the number of ATOCs in OPS is planned by 2022, no capacity issues are foreseen.

• The yearly total of sector opening hours in Malta ACC was 8,760, showing a 7.6% decrease compared to 2020. Sector opening hours are 28.3% below 2019 levels.

• Malta ACC registered 8.17 IFR movements per one sector opening hour in 2021, being 22.7% below 2019 levels.

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





• The en route 2020/2021 actual unit cost of Malta was 43.63 €2017, slightly lower (-1.0%) than the determined unit cost (44.08 €2017). The terminal actual unit cost was 275.44 €2017, -8.4% lower than the determined unit cost (300.69 €2017).

• The en route 2021 actual service units (504K) were -4.6% lower than determined (528K).

• In 2021, actual total costs of Malta were -1.5 M€2017 (-6.9%) lower compared to determined. The reduction was mainly driven by -0.5 M€2017 lower other operating costs (-6.8%), and -0.8 M€2017 lower depreciation costs (-31%). The NSA did not provide explanations for the variations of costs.

• MATS spent 2.8 M€2017 in 2021 related to costs of investments, significatively lower (-28%) than determined (3.9 M€2017), due to both a reduction on depreciation and cost of capital.

• The en route actual unit cost incurred by users in 2020/2021 was 44.79€, while the terminal actual unit cost incurred by users was 305.05€.

2 SAFETY - MALTA

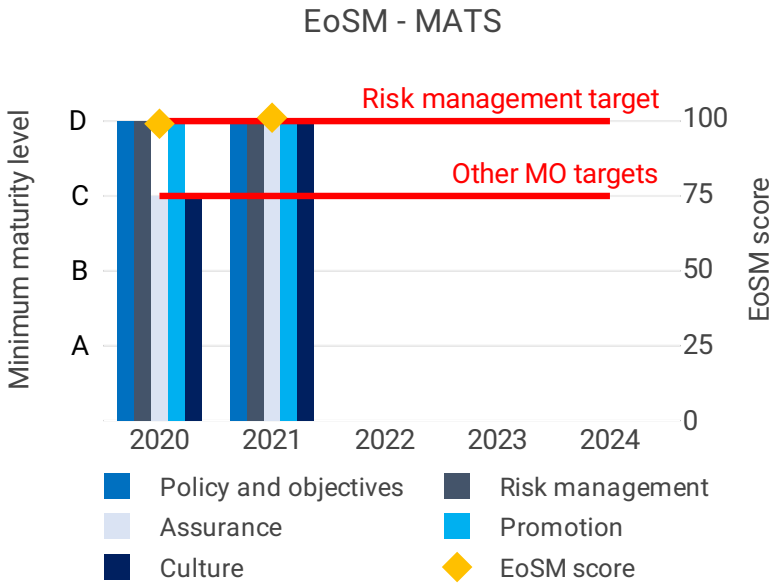
2.1 PRB monitoring

• MATS, that achieved the EoSM targets in 2020, demonstrated good safety performance and continued safety improvements over 2021. MATS exceeded the RP3 EoSM target in safety culture.

• Malta's runway incursion rate increased in 2021, which can be explained by the large increase in general aviation traffic. Specific mitigation actions were identified for the aerodrome users and ATCOs including constant monitoring, investigations, and ATCOs briefings to mitigate the risks and ensure that the occurrences are maintained at safe level.

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

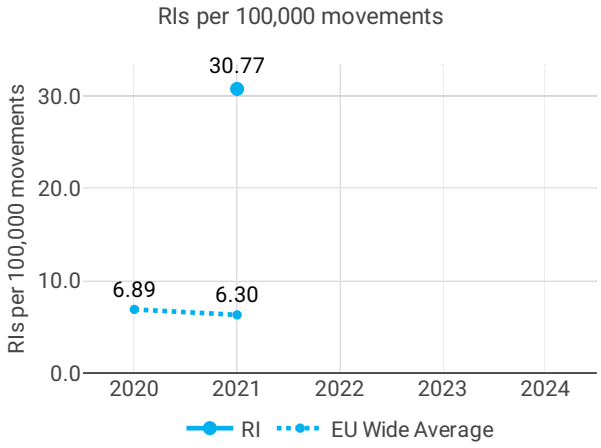
2.2 Effectiveness of Safety Management (EoSM) (KPI#1)

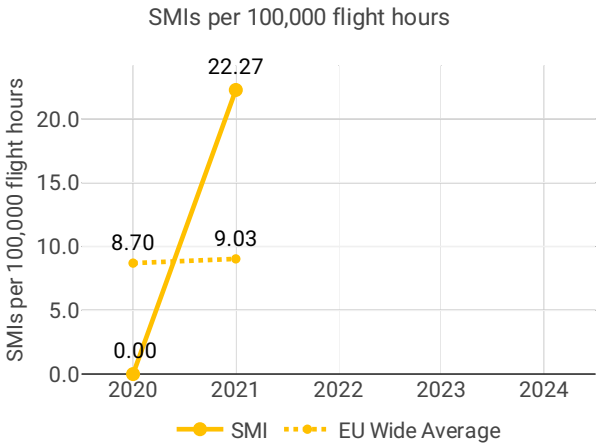


Focus on EoSM

All five EoSM components of the ANSP meet, or exceed, already the 2024 target level. The maximum level of maturity has been reached.

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





3 ENVIRONMENT - MALTA

3.1 PRB monitoring

• Malta achieved a KEA performance of 3.11% compared to its target of 1.82% and did not contribute positively towards achieving the Union-wide target. Performance worsened by 23% compared to 2020.

• The NSA states that the KEA deterioration is caused by changes in traffic flow and intensity and by new data reported to the Network Manager by Turkey (affecting origin and destination considered for the calculation).

• However, the case of Turkish data reported to the Network Manager occurred in 2019. The effect was not restricted to Malta.

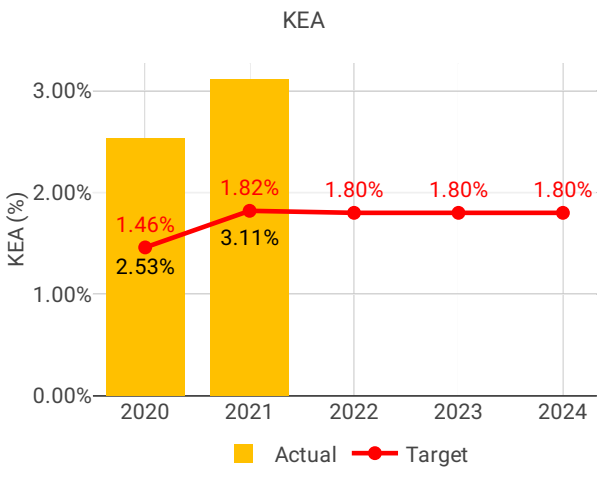
• Both KEP and SCR have been degrading since 2017 and are now the worst in five years.

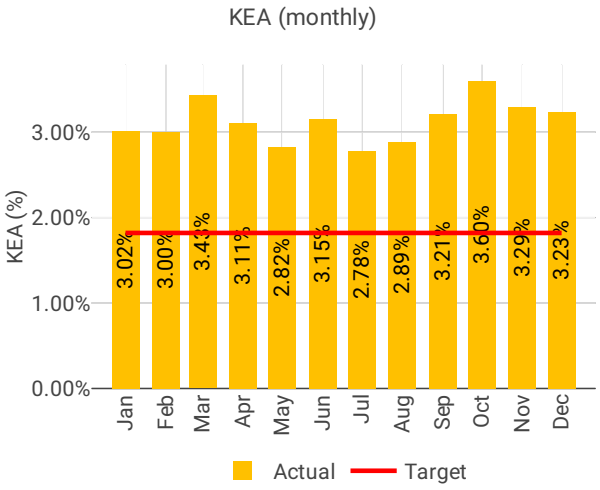
• The share of CDO flights has remained similar over the last five years.

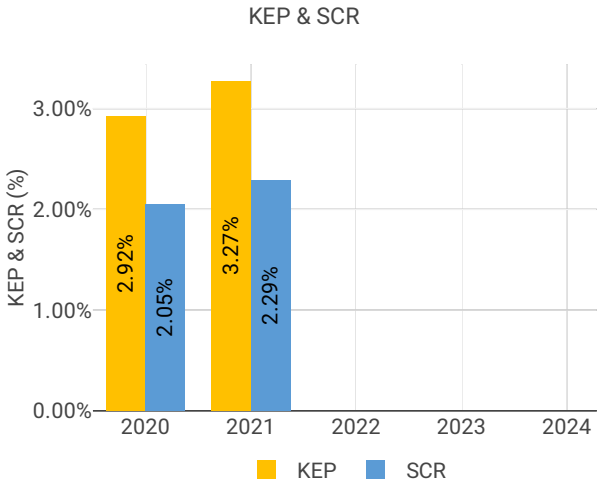
• Additional taxi out time and additional time in terminal airspace increased in comparison to 2020, but are still lower than pre-pandemic years.

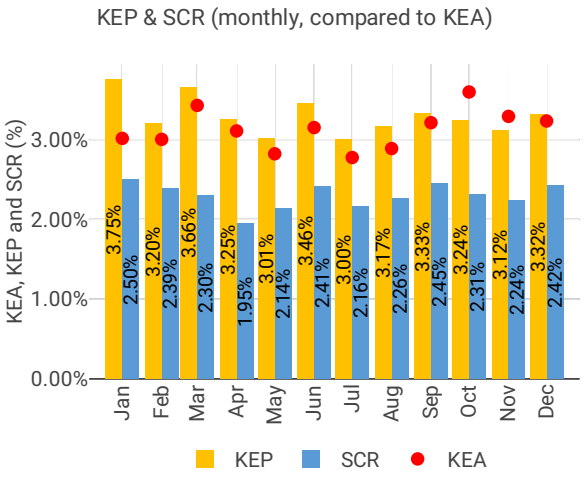
3.2 En route performance

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)



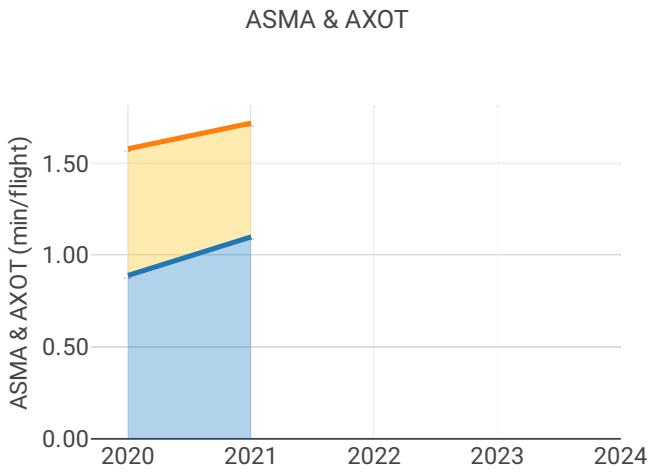


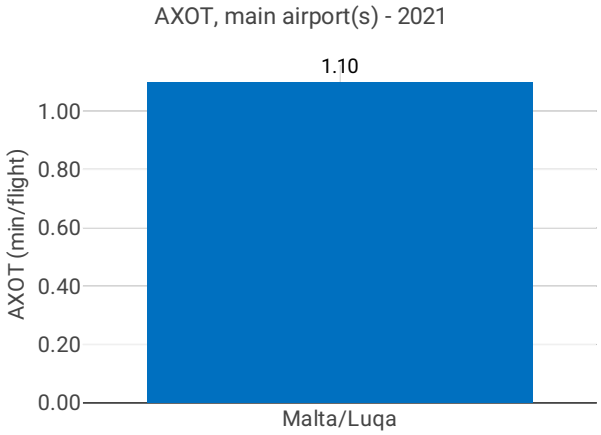


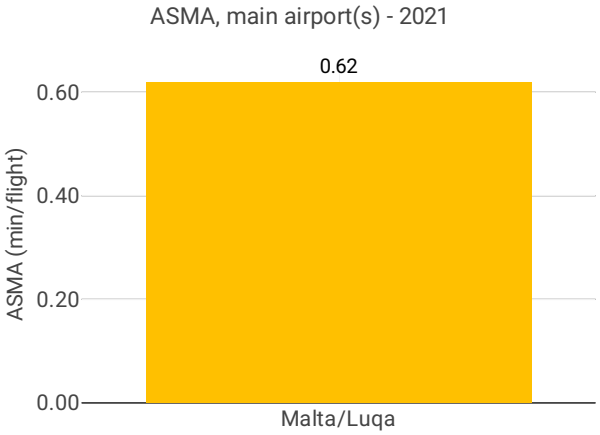


3.3 Terminal performance

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







Focus on ASMA & AXOT

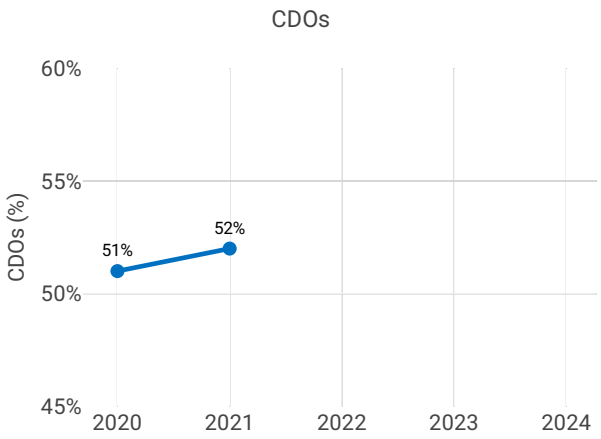
AXOT

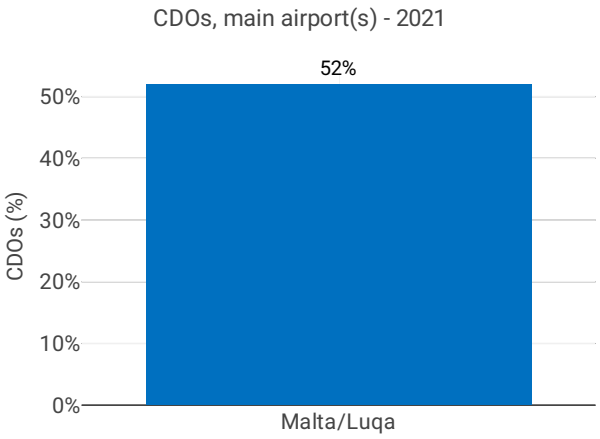
This indicator is not monitored for airports below 80 000 IFR movements average during the 2016-2018 period, so it is not monitored for any airport in this state.

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)





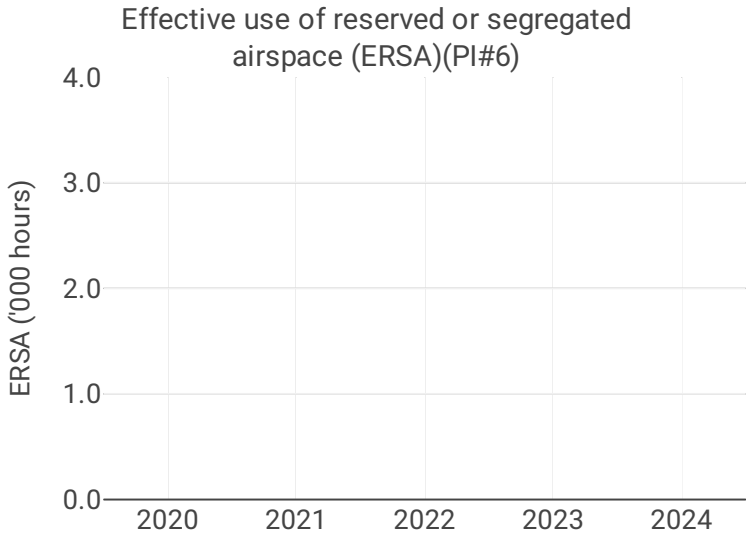
Focus CDOs

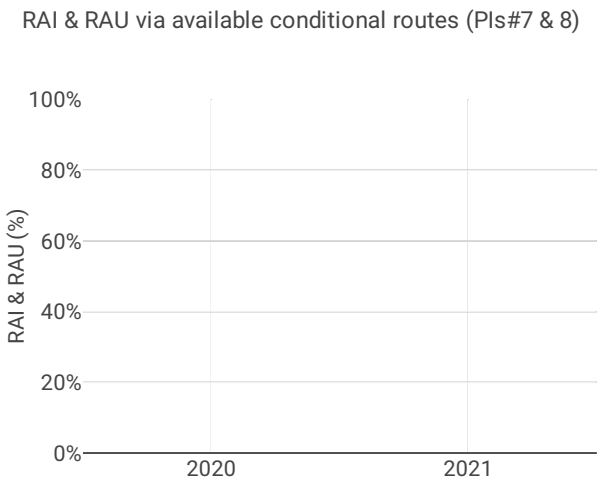
The share of CDO flights at Malta (LMML) increased very slightly to 51.9% which is well above the overall RP3 value in 2021 (30.5%) and in the higher range of all observed values in 2021.
The monthly values increased from March to values above 55% at the end of the year.

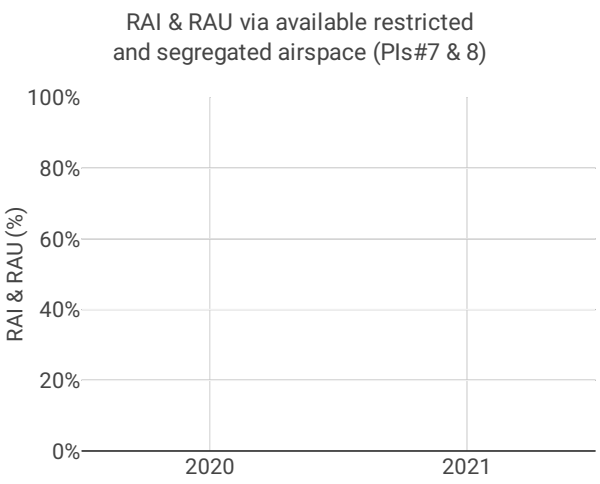
Airport level

	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	NA	NA	NA	0.69	0.62	NA	NA	NA	51%	52%	NA	NA	NA

3.4 Civil-Military dimension







Focus on Civil-Military dimension

Update on Military dimension of the plan

Negligible impact of military operations and training on either environment or capacity.

Military - related measures implemented or planned to improve capacity

No data available

Initiatives implemented or planned to improve PI#6

Airspace segregation is as requested by the military.

Initiatives implemented or planned to improve PI#7

Segregated areas are NOTAMed as Danger Areas and Restrictions / EU Regulations are applied. NSA monitoring and oversight activities to confirm effectiveness.

Initiatives implemented or planned to improve PI#8

Segregated areas are NOTAMed as Danger Areas and Restrictions / EU Regulations are applied.

4 CAPACITY - MALTA

4.1 PRB monitoring

• Malta registered zero minutes of average en route ATFM delay per flight during 2021, thus meeting the local breakdown value of 0.01.

• En route ATFM delays in Malta were also zero on average during the past years.

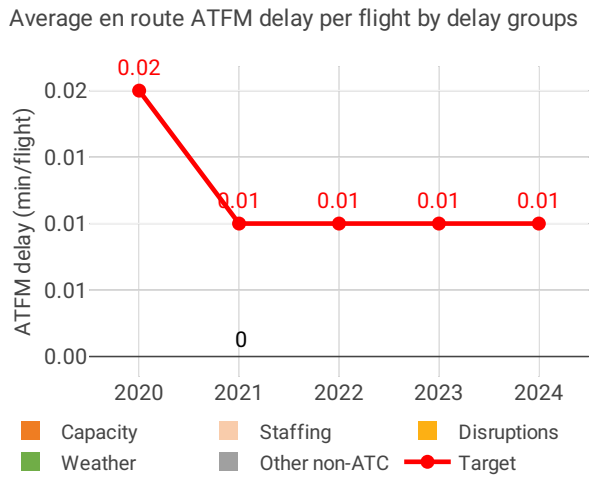
• Traffic is expected to grow, with 2019 levels likely being reached in 2023 (in high and base growth scenarios). A significant increase in the number of ATOCs in OPS is planned by 2022, no capacity issues are foreseen.

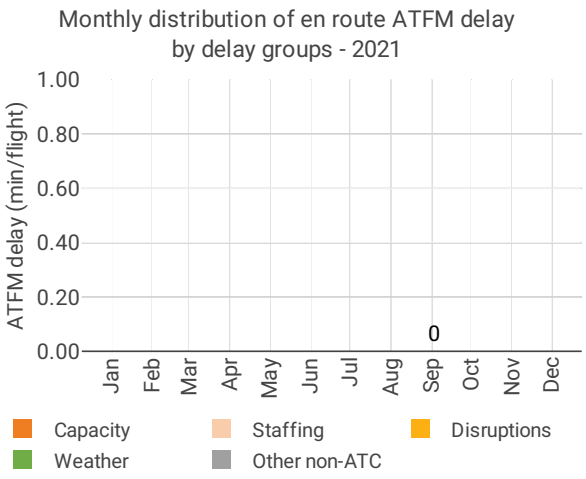
• The yearly total of sector opening hours in Malta ACC was 8,760, showing a 7.6% decrease compared to 2020. Sector opening hours are 28.3% below 2019 levels.

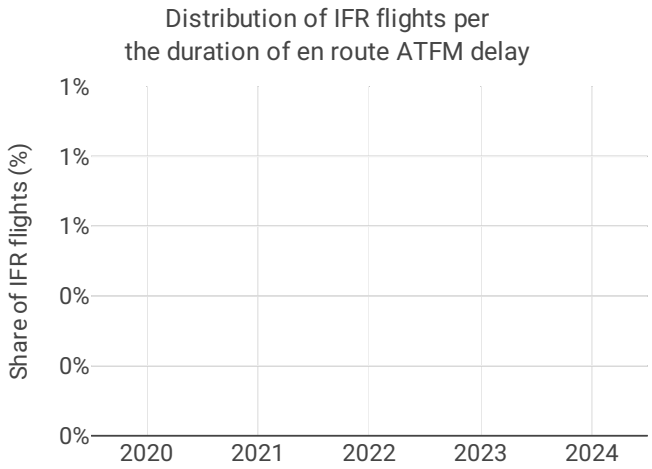
• Malta ACC registered 8.17 IFR movements per one sector opening hour in 2021, being 22.7% below 2019 levels.

4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)







Focus on en route ATFM delay

Summary of capacity performance

Malta experienced an increase in traffic from 56k flights in 2020 to 72k flights in 2021, with zero ATFM delay. However, traffic levels were still substantially below the 130k flights in 2019.

NSA's assessment of capacity performance

Capacity demands were low and therefore the forecasted target of 0.01 was not met.

Monitoring process for capacity performance

No data available

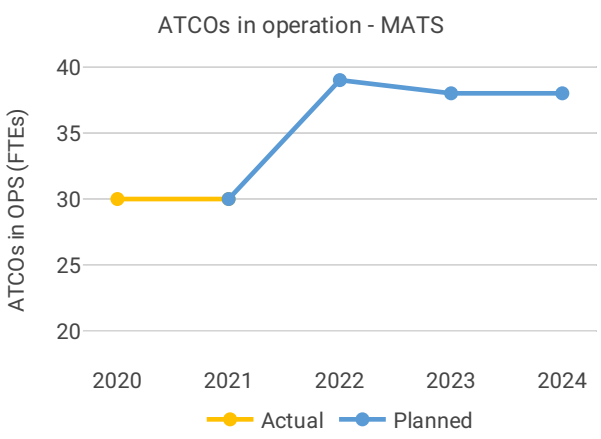
Capacity planning

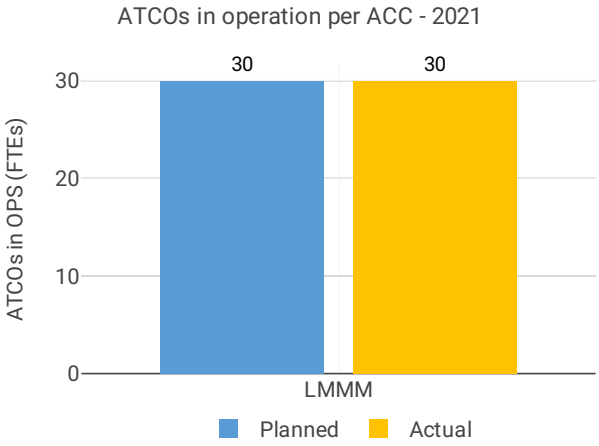
Sector demand is calculated on daily basis and during peaks of traffic, sectors are collapsed.

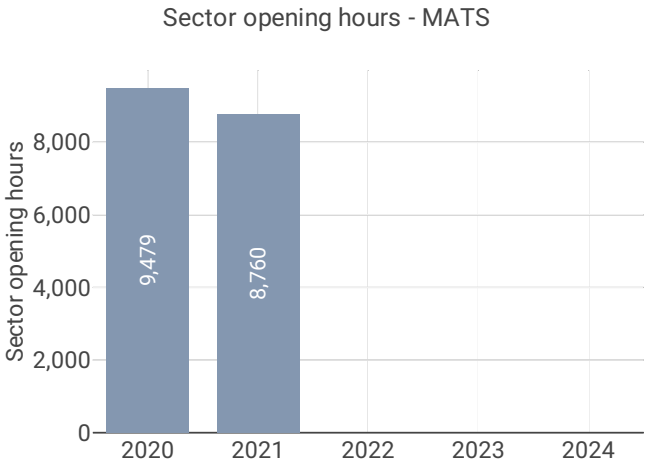
Application of Corrective Measures for Capacity (if applicable)

No data available

4.2.2 Other indicators





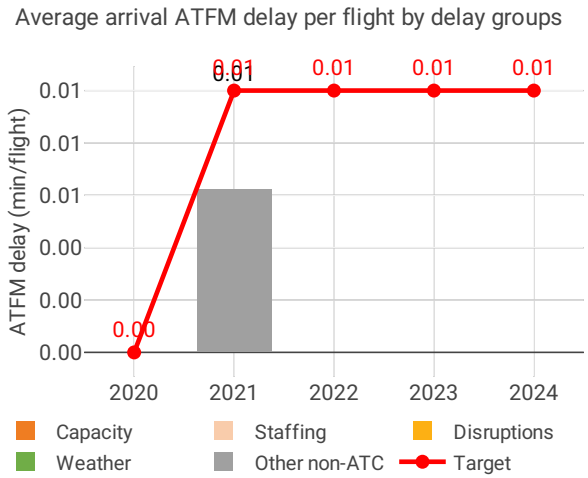


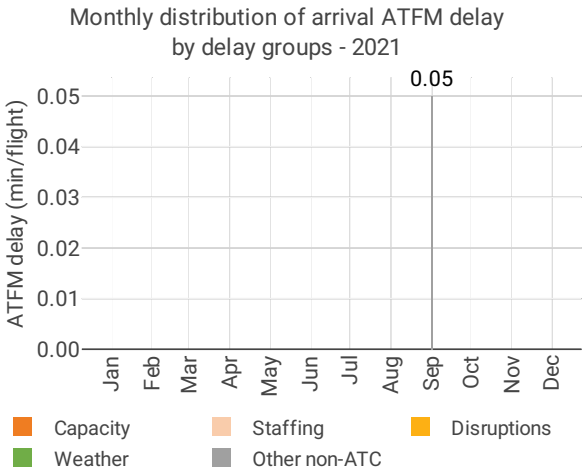
Focus on ATCOs in operations

N/A

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)





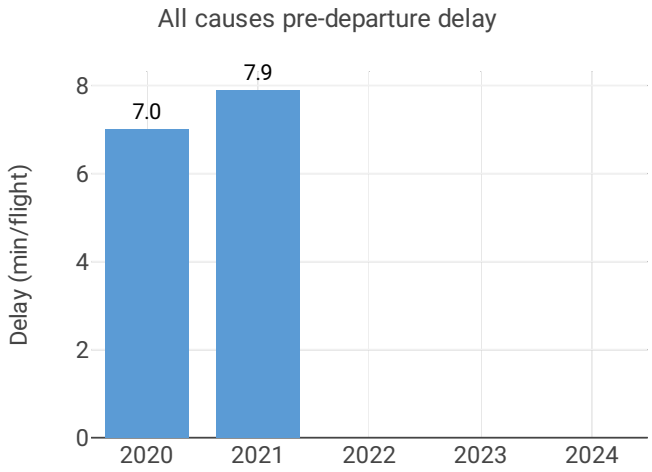
Focus on arrival ATFM delay

The scope of RP3 monitoring for Malta comprises the main airport (LMML),where traffic in 2021, regardless of an increase of 33% with respect to 2020, was still 44 % 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 2021 was 0.01 min/arr, compared to 0 min/arr in 2020.
ATFM slot adherence has deteriorated (2021: 96.6%; 2020: 97.1%).

Malta-Luqa (LMML) registered some delays in 2021, all in September and all attributed to special event. This resulted in an annual average for Malta of 0.01 min/arr.

The provisional national target on arrival ATFM delay in 2021 was met.
In accordance with Article 3 (3) (a) of Implementing Regulation (EU) 2020/1627: The incentive scheme shall cover only the calendar years 2022 to 2024.

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



Airport level

	Avg arrival ATFM delay (KPI#2)				Slot adherence (PI#1)			
Airport name	2020	2021	2022	2023	2020	2021	2022	2023
Malta/Luqa	NA	0.01	NA	NA	97.1%	96.6%	NA%	NA%

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

Focus on performance indicators at airport level

ATFM slot adherence

With the drastic drop in traffic, the share of regulated departures from Malta virtually disappeared until July 2021.
Malta's ATFM slot compliance was 96.6%, slightly worse than in 2020 (97.1%). With regard to the 3.4% of flights that did not adhere, 1.5% was early and 1.9% was late.
According to the Maltese monitoring report: *ATFM is monitored through the ANSP. The ANSP has an internal target of 95% compliance which is higher than the target stipulated in Article 11 of EC255. NMIR Statistics are monitored on weekly basis and investigations are carried out for major slot busts*.

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-EFFIENCY - MALTA

5.1 PRB monitoring

• The en route 2020/2021 actual unit cost of Malta was 43.63 €2017, slightly lower (-1.0%) than the determined unit cost (44.08 €2017). The terminal actual unit cost was 275.44 €2017, -8.4% lower than the determined unit cost (300.69 €2017).

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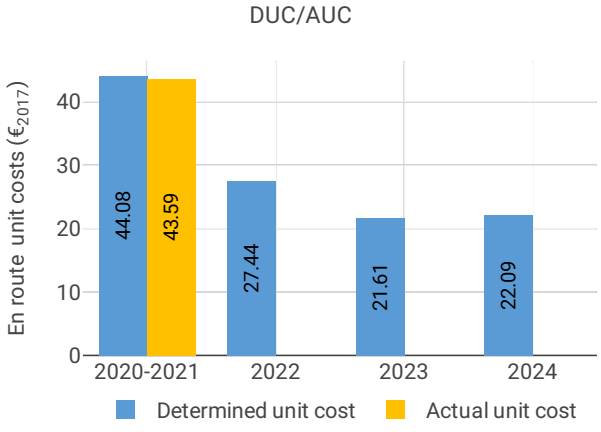
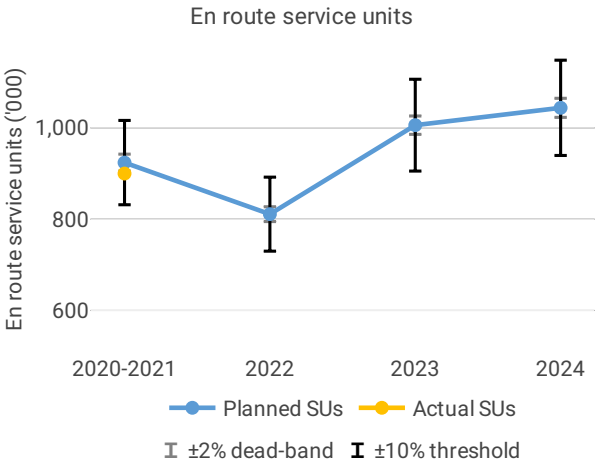
• MATS spent 2.8 M€2017 in 2021 related to costs of investments, significatively lower (-28%) than determined (3.9 M€2017), due to both a reduction on depreciation and cost of capital.

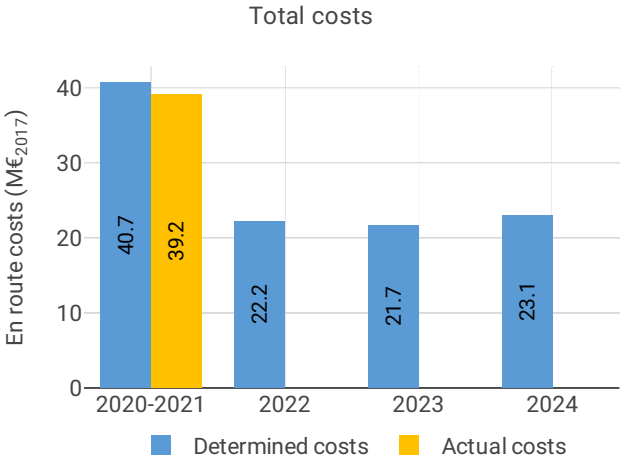
• The en route actual unit cost incurred by users in 2020/2021 was 44.79€, while the terminal actual unit cost incurred by users was 305.05€.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)

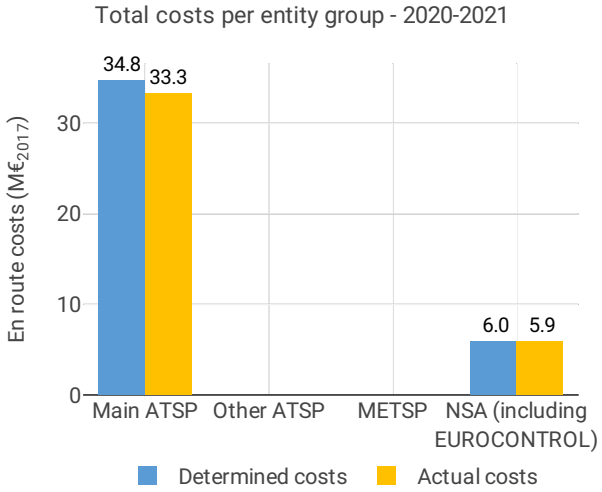


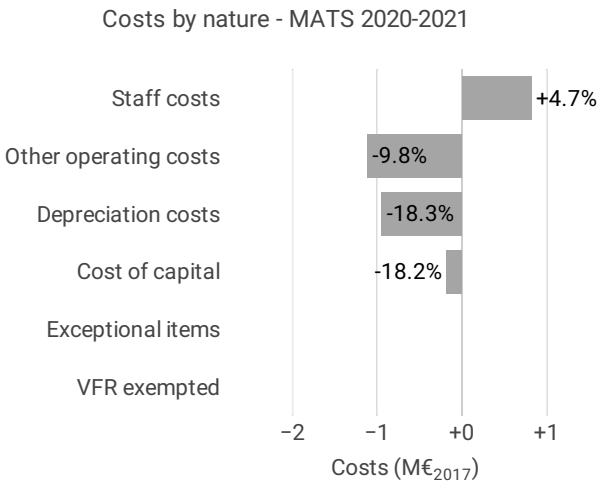




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	40	NA	NA	NA
Determined costs	42	24	24	26
Difference costs	-2	NA	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	NA	NA	NA
Actual inflation index	NA	NA	NA	NA
Difference inflation index (p.p.)	NA	NA	NA	NA





Focus on unit cost

AUC vs. DUC

In the combined year 2020-2021, the AUC was lower than the planned DUC (-1.0%, or -0.44€). This results from the combination of lower than planned TSUs (-2.6%) and lower than planned en route costs in real terms (-3.6%, or -1.5 M€2017).

En route service units

The difference between actual and planned TSUs (-2.6%) falls outside of the ±2% dead band. Hence, the resulting loss is shared between the ANSP and airspace users, with the ANSP bearing a loss of -0.8 M€.

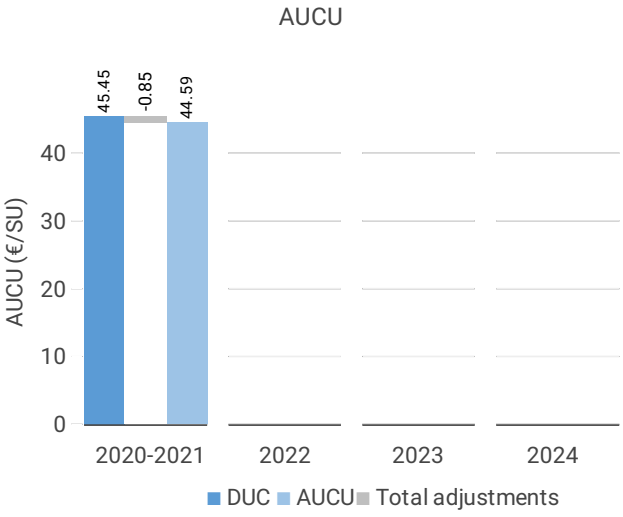
En route costs by entity

Actual real en route costs for 2020-2021 are -3.6% (-1.5 M€2017) lower than planned. This reflects the lower than planned costs for all the entities in the charging zone: main ANSP - MATS (-4.2%, or -1.5 M€2017) and the NSA/EUROCONTROL (-0.2%).

En route costs for the main ANSP at charging zone level

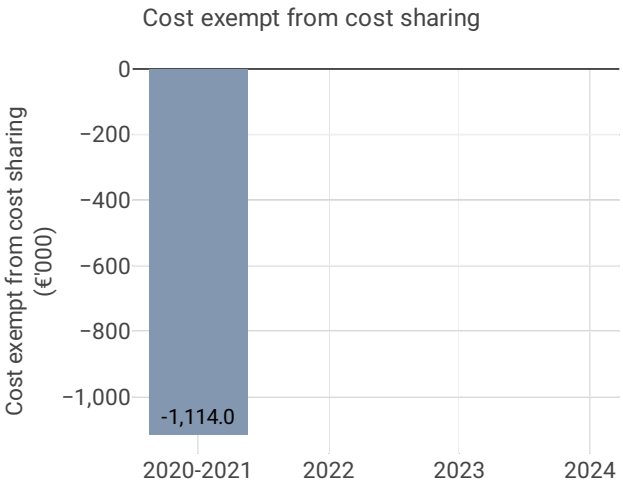
The lower than planed en route costs in real terms for MATS in 2020-2021 reflects a combination of:
- slightly higher staff costs (+0.1%);
- lower other operating costs (-4.3%);
- significantly lower depreciation costs (-16.3%); and,
- much lower cost of capital (-15.1%), reflecting lower than planned asset base.

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



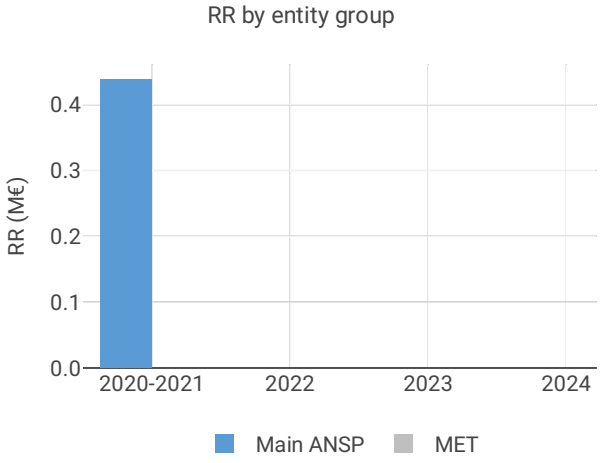
AUCU components (€/SU) – 2020-2021

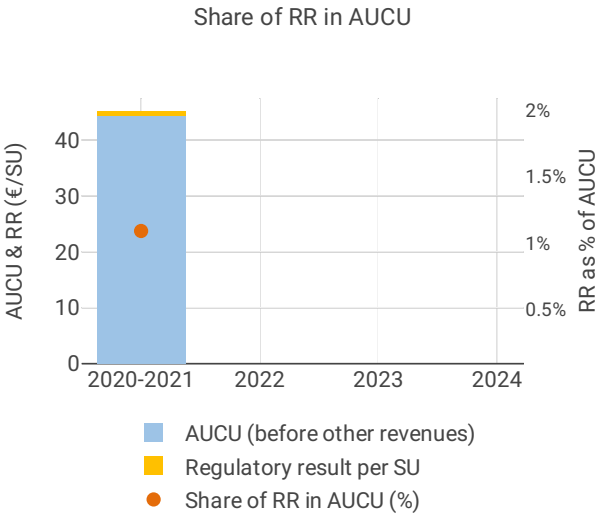
Components of the AUCU in 2020-2021	€/SU
DUC	**45.45**
Inflation adjustment	0.00
Cost exempt from cost-sharing	-1.24
Traffic risk sharing adjustment	0.17
Traffic adj. (costs not TRS)	0.21
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	0.00
Application of lower unit rate	0.00
Total adjustments	-0.85
AUCU	**44.59**
AUCU vs. DUC	**-1.9%**

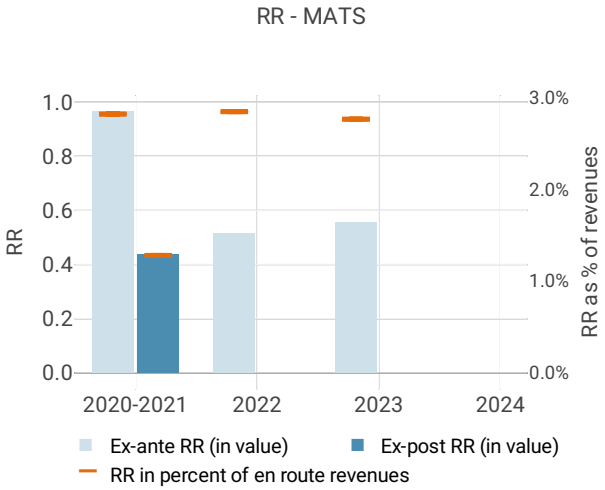


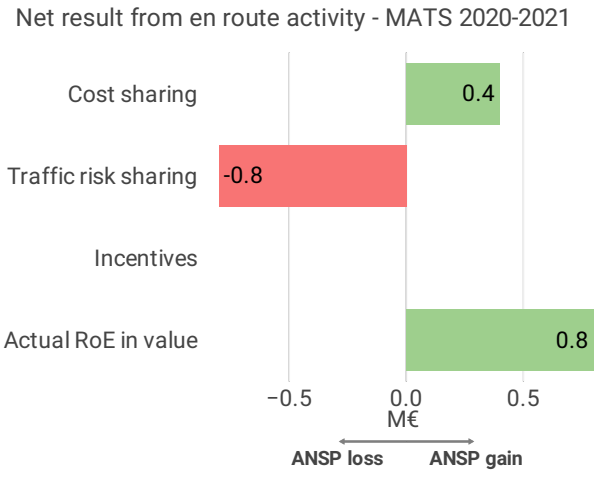
Cost exempt from cost sharing by item - 2020-2021	€'000	€/SU
New and existing investments	-1,023.0	-1.14
Competent authorities and qualified entities costs	-10.0	-0.01
Eurocontrol costs	-81.0	-0.09
Pension costs	0.0	0.00
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**-1,114.0**	**-1.24**

5.2.3 Regulatory result (RR)









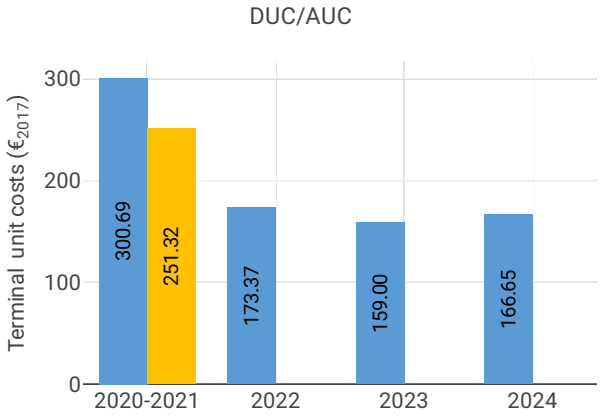
Focus on regulatory result

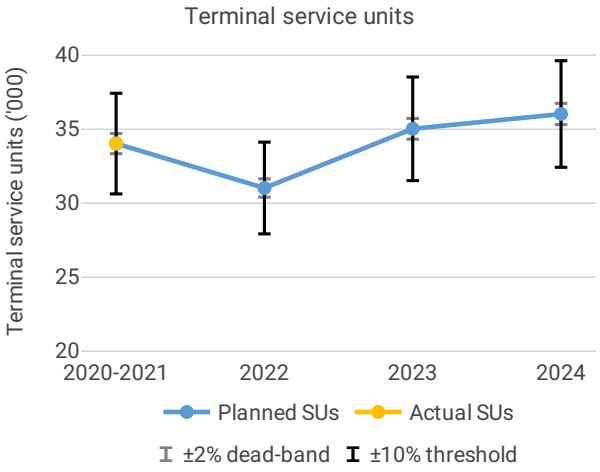
MATS net loss on en route activity in the Maltese charging zone in the combined year 2020-2021
MATS's net loss amounts to -0.2 M€, as a combination of a gain of +0.6 M€ arising from the cost sharing mechanism and a loss of -0.8 M€ arising from the traffic risk sharing mechanism.
MATS overall regulatory results (RR) for the en route activity
Ex-post, the overall RR taking into account the net loss from the en route activity mentioned above (-0.2

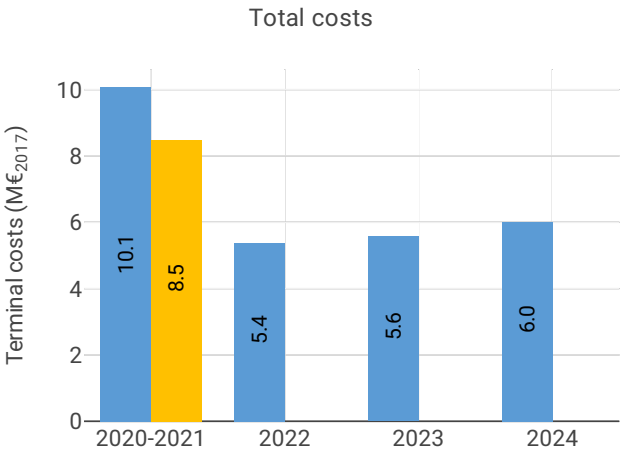
M€) and the actual RoE (+0.8 M€) amounts to +0.6 M€ (1.8% of the en route revenues). The resulting ex-post rate of return on equity is 3.4%, which is lower than the 4.4% planned in the PP.

5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)

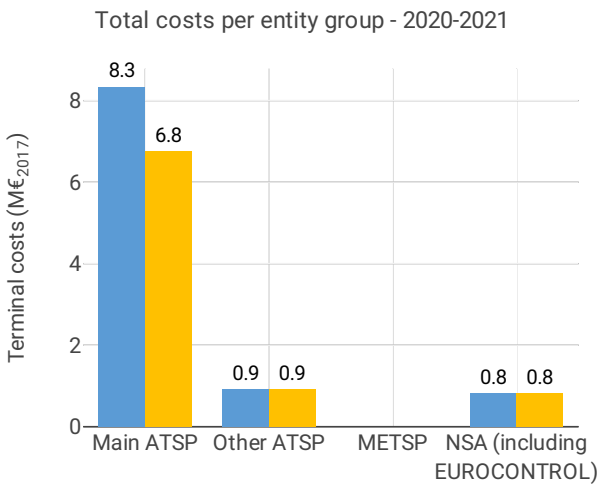


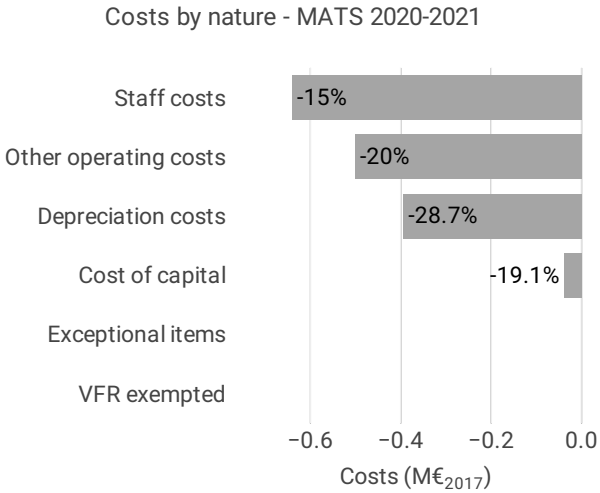




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	9	NA	NA	NA
Determined costs	10	6	6	7
Difference costs	-2	NA	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	NA	NA	NA
Actual inflation index	NA	NA	NA	NA
Difference inflation index (p.p.)	NA	NA	NA	NA





Focus on unit cost

AUC vs. DUC

In the combined year 2020-2021, the AUC for Malta TCZ was lower than the planned DUC (-8.4%, or -25.26€). This results from the combination of slightly higher than planned TNSUs (+0.8%) and lower than planned terminal costs in real terms (-7.7%, or -0.8 M€2017).

Terminal service units

The difference between actual and planned TNSUs (+0.8%) falls within the ±2% dead band. Hence, the resulting gain of 0.1 M€ is entirely retained by the main ANSP.

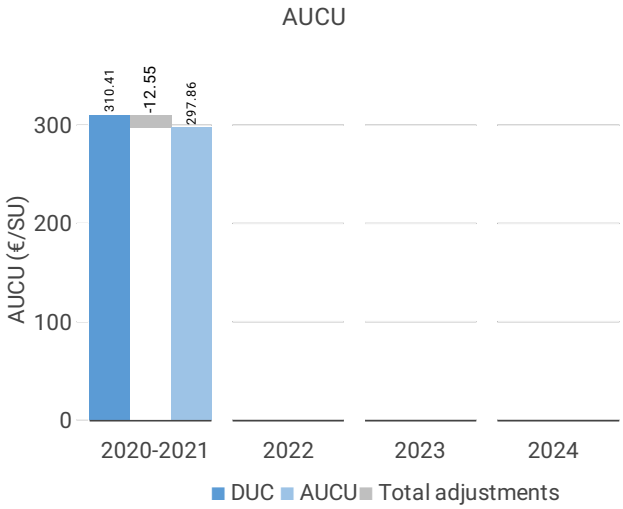
Terminal costs by entity

Actual real terminal costs for 2020-2021 in the Maltese TCZ are -7.7% (-0.8 M€2017) lower than planned. This reflects lower than planned costs for all the entities in the TCZ: the main ANSP - MATS (-9.1%, or -0.8 M€2017), other ANSP – MIA (-0.8%) and the costs for the NSA (-0.7%).

Terminal costs for the main ANSP at charging zone level

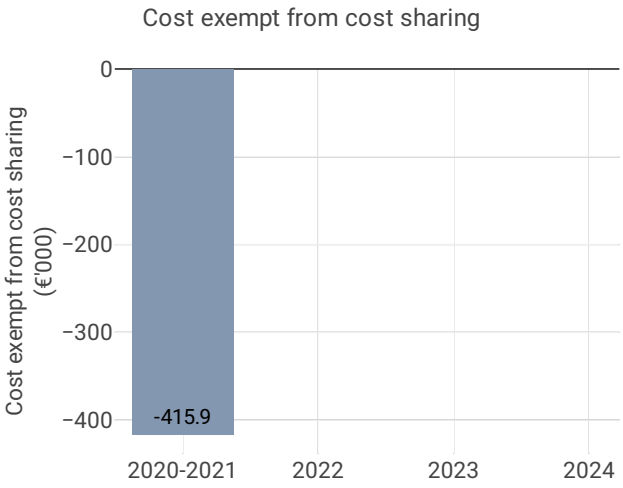
The lower than planned terminal costs in real terms for MATS in 2020-2021 reflects a combination of:
- lower staff costs (-1.9%);
- much lower other operating costs (-19.8%), which are understood to reflect cost-cutting measures implemented during the COVID-19 pandemic;
- lower depreciation costs (-10.9%) attributable to the fact that MATS had suspended all CAPEX projects during the pandemic; and,
- significantly lower cost of capital (-16.1%), which is understood to reflect lower than planned asset base.

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



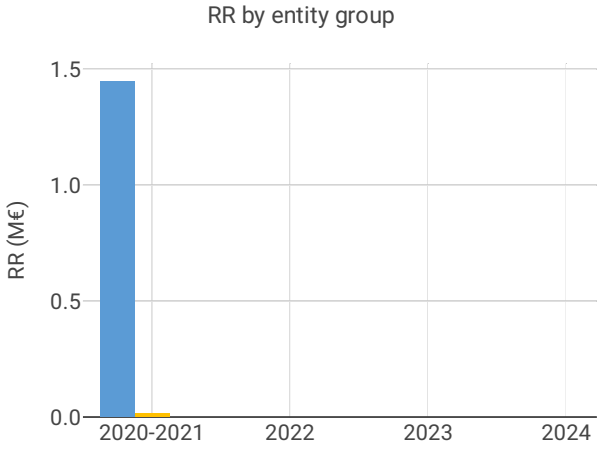
AUCU components (€/SU) – 2020-2021

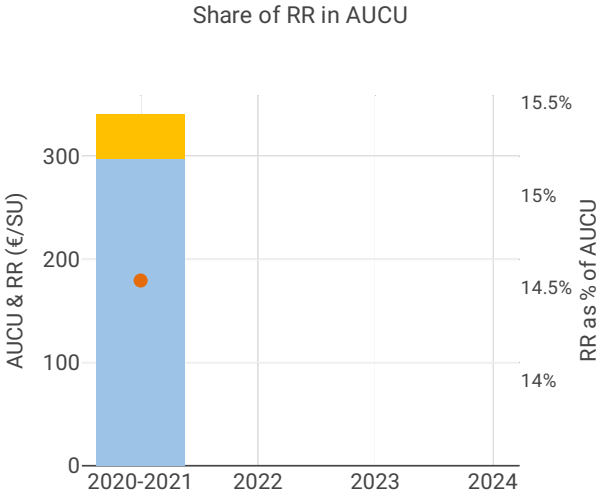
Components of the AUCU in 2020-2021	€/SU
DUC	**310.41**
Inflation adjustment	0.00
Cost exempt from cost-sharing	-12.31
Traffic risk sharing adjustment	0.00
Traffic adj. (costs not TRS)	-0.24
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	0.00
Application of lower unit rate	0.00
Total adjustments	-12.55
AUCU	**297.86**
AUCU vs. DUC	**-4.0%**

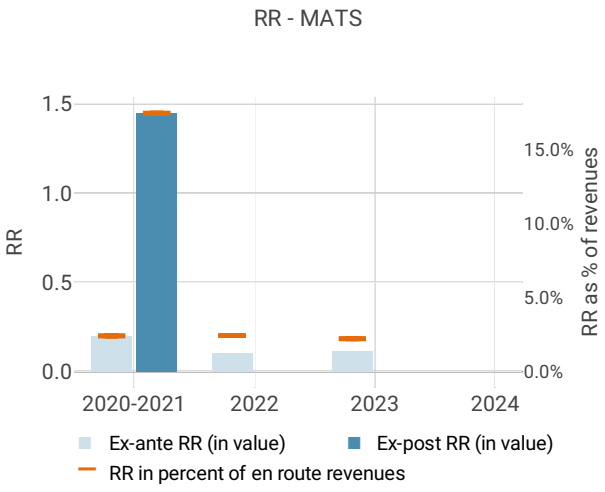


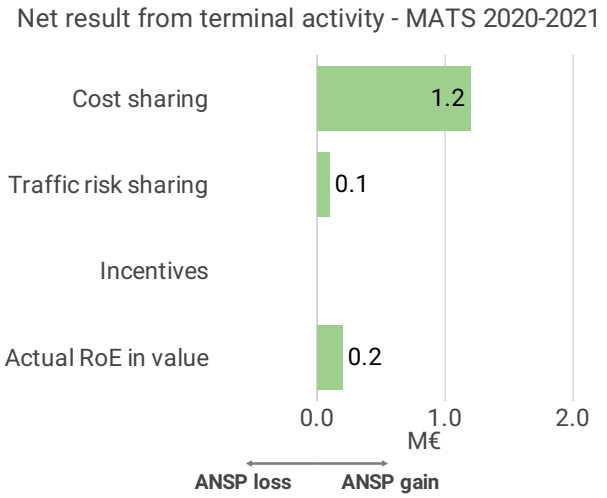
Cost exempt from cost sharing by item - 2020-2021	€'000	€/SU
New and existing investments	-409.9	-12.13
Competent authorities and qualified entities costs	-6.0	-0.18
Eurocontrol costs	0.0	0.00
Pension costs	0.0	0.00
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**-415.9**	**-12.31**

5.3.3 Regulatory result (RR)









Focus on regulatory result

MATS net gain on terminal activity in the Maltese TCZ in the combined year 2020-2021

MATS's net gain amounts to +0.7 M€, as a combination of a gain of +0.6 M€ arising from the cost sharing mechanism and a gain of +0.1 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 (+0.7 M€) and the actual RoE (+0.2 M€) amounts to +0.9 M€ (10.0% of the terminal revenues in TCZ). The

resulting ex-post rate of return on equity is 23.1%, which is much higher than the 4.4% planned in the PP.