



Performance Review Body Monitoring Report

Austria - 2020

This report is automatically generated from: sesperformance.eu

COPYRIGHT NOTICE AND DISCLAIMER	© European Union, 2025 This report has been prepared for the European Commission by the Performance Review Body of the Single European Sky (PRB). Reproduction is authorised provided the source is acknowledged. However, neither the European Commission, nor any person acting on its behalf, may be held responsible for the use which may be made of the information contained in this publication, or for any errors which may appear, despite careful preparation and checking.
--	---

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 - AUSTRIA	6
2.1	PRB monitoring	6
2.2	Effectiveness of Safety Management (EoSM) (KPI#1)	7
2.3	Occurrences - Rate of runway incursions (RIs) (PI#1) & Rate of separation minima infringements (SMIs) (PI#2)	7
3	ENVIRONMENT - AUSTRIA	7
3.1	PRB monitoring	7
3.2	En route performance	8
3.3	Terminal performance	9
3.4	Civil-Military dimension	10
4	CAPACITY - AUSTRIA	11
4.1	PRB monitoring	11
4.2	En route performance	12
4.3	Terminal performance	13
5	COST-EFFICIENCY - AUSTRIA	15
5.1	PRB monitoring	15
5.2	En route charging zone	16
5.3	Terminal charging zone	19

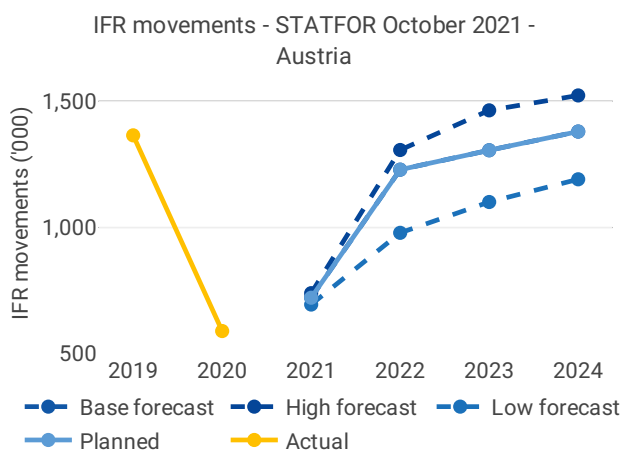
1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/774 of 13 April 2022

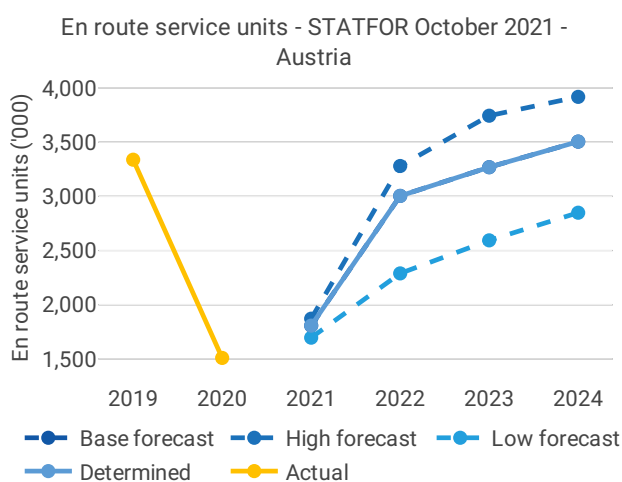
List of ACCs 1 Vienna ACC	Exchange rate (1 EUR=) 2017: 1 EUR 2020: 1 EUR	Main ANSP • Austro Control
No of airports in the scope of the performance plan: • ≥80'K 1 • <80'K 5	Share of Union-wide: • traffic (TSUs) 2020 2.9% • en route costs 2020 2.8%	Other ANSPs —
	Share en route / terminal costs 2020 83% / 17%	MET Providers —
	En route charging zone(s) Austria	
	Terminal charging zone(s) Austria	

1.2 Traffic (En route traffic zone)



- Austria recorded 590K actual IFR movements in 2020, -57% compared to 2019 (1,365K).

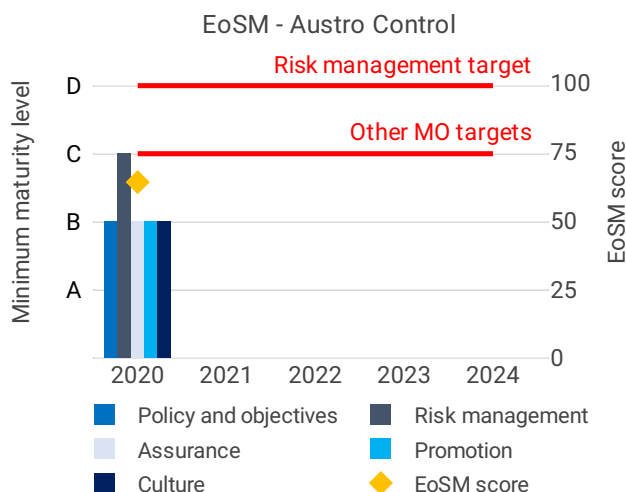
- The reduction in IFR movements for Austria is in line with the average reduction at Union-wide level (-57%).



- Austria recorded 1,509K actual en route service units in 2020, -55% compared to 2019 (3,338K).

- Austria service units reduced less than the average reduction at Union-wide level (-57%).

1.3 Safety (Main ANSP)



- Austro Control did not achieve the RP3 targets for the EoSM in any of the safety management objectives in 2020.

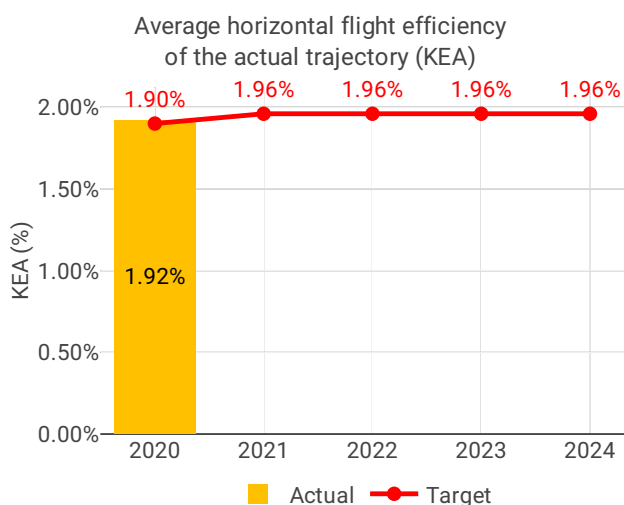
- Based on the maturity achieved at the end of RP2, the EoSM performance is lower than expected (Austro Control exceeded the targets in all management objectives and was among the best performing ANSPs in 2019). Austro Control needs to improve its maturity by one level on 15 out of 28 EoSM questions to achieve the RP3 targets.

- The improvements to achieve the next levels of maturity have been identified and included in Austro Control's specific improvement plan that will be

implemented during 2021.

- The overall safety performance of Austro Control is stable and the rate of occurrences are lower than previous years.
- Austro Control should improve its safety management system by implementing automated safety data recording systems.

1.4 Environment (Member State)



- Austria achieved a KEA performance of 1.92% compared to its reference value of 1.90% and, therefore, did not contribute positively towards achieving the Union-wide target.

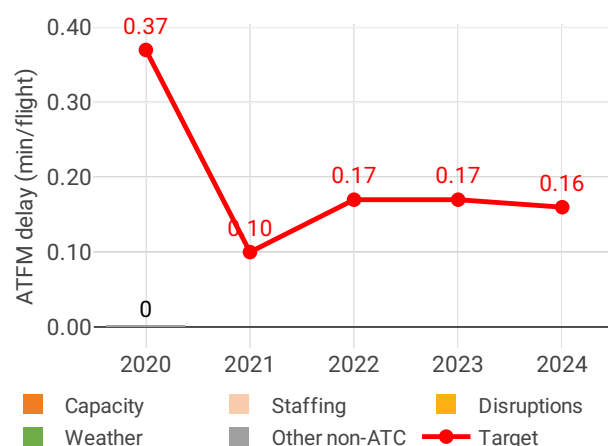
- The NSA explained that KEA is highly sensitive to traffic, which on some days increased to 80% of summer 2019 levels and caused KEA to exceed 2%. Moreover, adverse weather and airspace users' choice for longer routes were said to affect the results.

- However, the PRB notes that Austria's daily traffic variation data shows that it managed at 63% of its 2019 summer traffic levels. Thus, the reasoning is not consistent with the data.

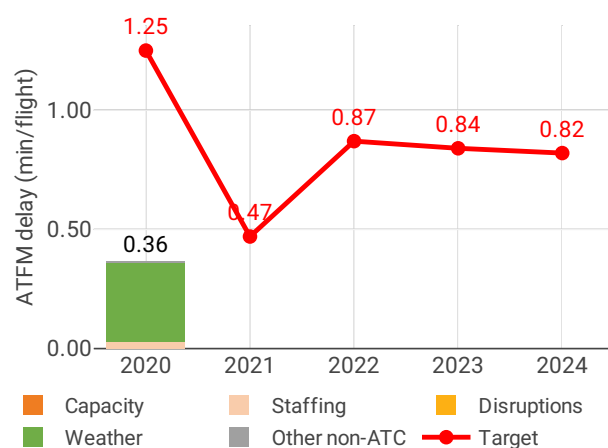
- Only one out of six Austrian airports that are regulated reported terminal data.
- While the share of flights operating CCO/CDO at Austrian airports improved in 2020 compared to 2019, the CCO performance was at a similar level as 2017 despite less terminal congestion. The additional time airspace users spent taxiing or holding in terminal airspace reduced by 36% compared to 2019.

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups



Average arrival ATFM delay per flight by delay groups



- Austro Control registered near to zero minute of average en route ATFM delay per flight during 2020, thus meeting the local breakdown value of 0.37.

- Delays must be considered in the context of the traffic evolution: IFR movements in 2020 were 57% below the 2019 levels in Austria.

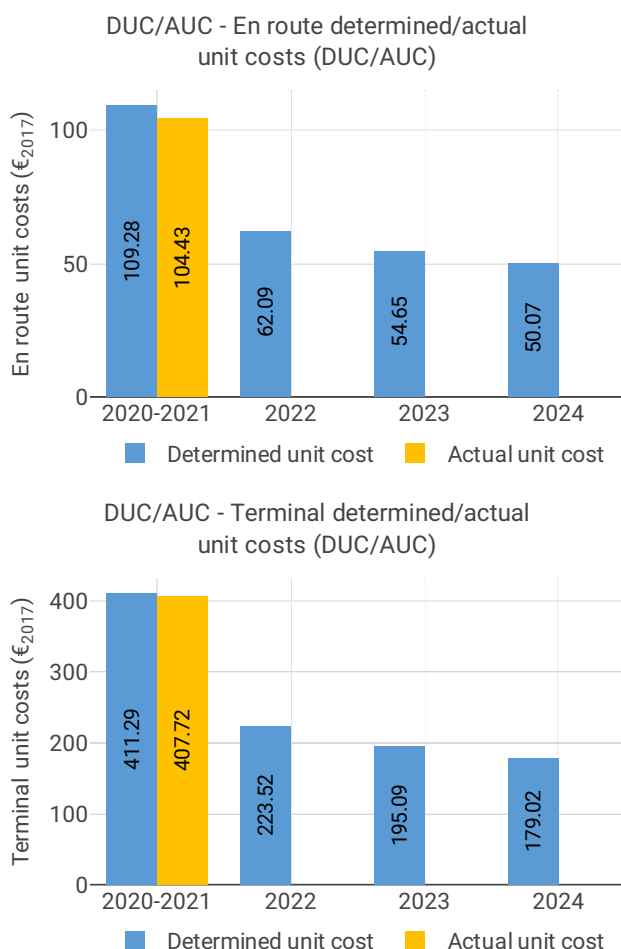
- The NSA reported that on-the-job training of ATCOs was interrupted due to the pandemic. This, together with the reported changes in maternity leave and some ATCOs leaving unexpectedly, resulted in almost 5% less ATCO FTEs than planned by the end of 2020.

- Based on the analysis of previous capacity profiles, the PRB estimates that Austria will face a capacity gap when IFR movements rise above 80% of 2019 levels. The PRB recommends that capacity improvement measures are implemented before traffic begins to recover.

- The yearly total of sector opening hours in Vienna ACC was 35,749, showing a 35.5% decrease compared to 2019.

- Vienna ACC registered 11.84 IFR movements per one sector opening hour in 2020, being 29.5% below 2019 levels.

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



- The 2020 actual service units (1,509K) were 55% lower than the actual service units in 2019 (3,325K).

- Austria had the second highest percentage saving in 2020 across Member States, reducing total costs in 2020 by 42 M€2017 (-20%) compared to 2019 actual costs. The greatest reduction has been staff costs, with a decrease of 46 M€2017 (-32%), due to reduction of overtime, salary, hiring freeze and public funding of short time work.

- Exceptional costs in 2020 are 5 M€2017 (+94%) higher compared to 2019 actual costs, in line with the 2019 draft performance plan (due to inclusion of cost exempt stemming from RP2).

- Austro Control spent 32 M€2017 in 2020 related to cost of investments, 5% less than planned in the 2019 draft performance plan (34 M€2017). The reduction is due to a lower cost of capital driven by a lower asset base.

2 SAFETY - AUSTRIA

2.1 PRB monitoring

- Austro Control did not achieve the RP3 targets for the EoSM in any of the safety management objectives in 2020.

- Based on the maturity achieved at the end of RP2, the EoSM performance is lower than expected (Austro Control exceeded the targets in all management objectives and was among the best performing ANSPs in 2019). Austro Control needs to improve its maturity by one level on 15 out of 28 EoSM questions to achieve the RP3 targets.

- The improvements to achieve the next levels of maturity have been identified and included in Austro Control's specific improvement plan that will be implemented during 2021.

- The overall safety performance of Austro Control is stable and the rate of occurrences are lower than previous years.

- Austro Control should improve its safety management system by implementing automated safety data recording systems.

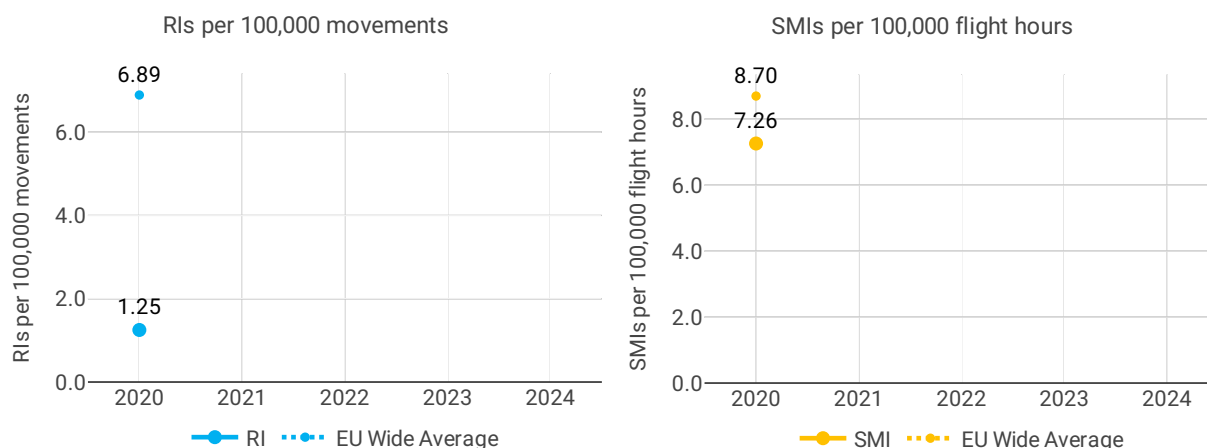
2.2 Effectiveness of Safety Management (EoSM) (KPI#1)



Focus on EoSM

All EoSM components are below 2024 EoSM target levels. Improvements in safety management are still expected in all components during RP3 to achieve 2024 targets.

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



3 ENVIRONMENT - AUSTRIA

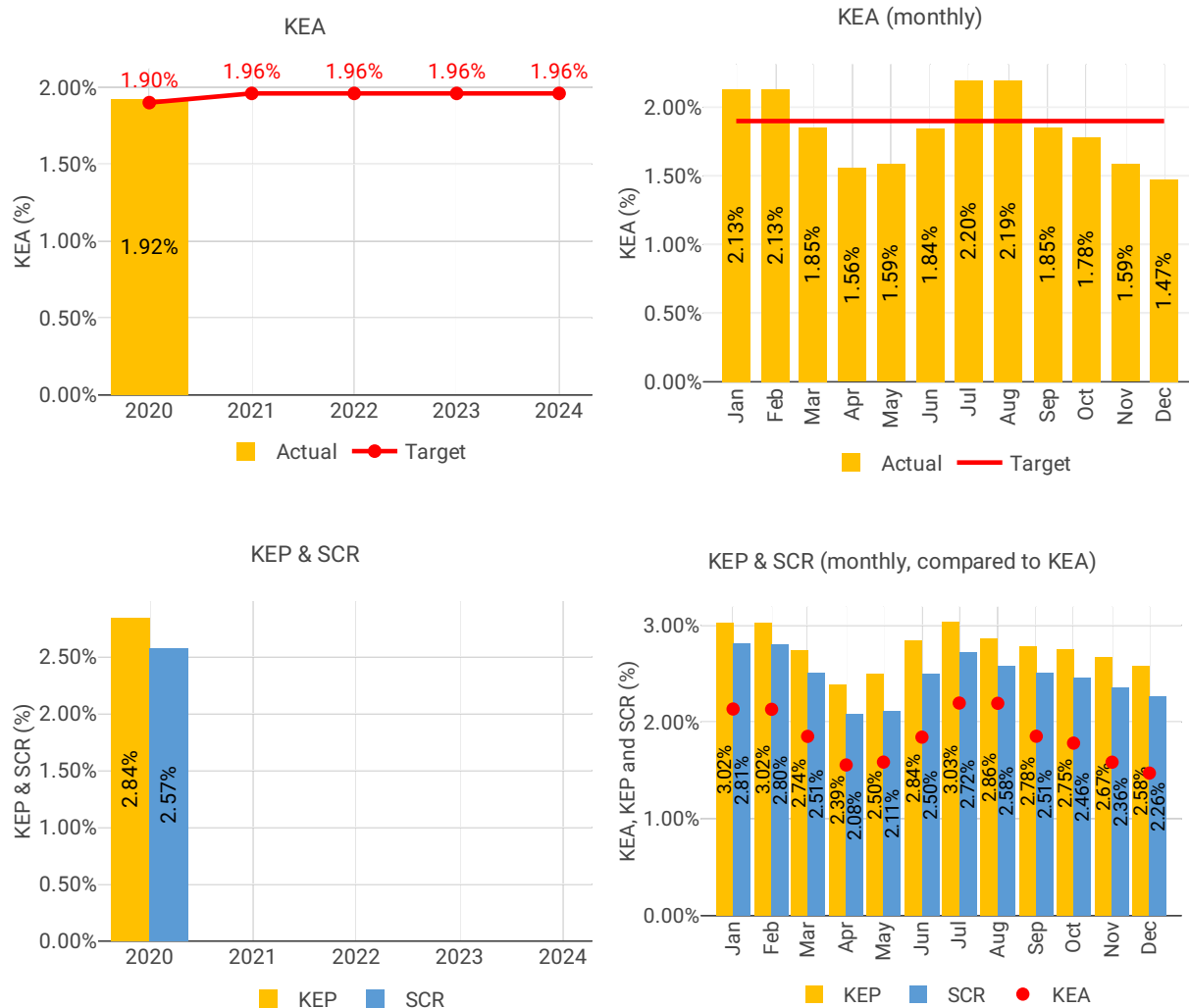
3.1 PRB monitoring

- Austria achieved a KEA performance of 1.92% compared to its reference value of 1.90% and, therefore, did not contribute positively towards achieving the Union-wide target.
- The NSA explained that KEA is highly sensitive to traffic, which on some days increased to 80% of summer 2019 levels and caused KEA to exceed 2%. Moreover, adverse weather and airspace users' choice for longer routes were said to affect the results.
- However, the PRB notes that Austria's daily traffic variation data shows that it managed at 63% of its 2019 summer traffic levels. Thus, the reasoning is not consistent with the data.

- Only one out of six Austrian airports that are regulated reported terminal data.
- While the share of flights operating CCO/CDO at Austrian airports improved in 2020 compared to 2019, the CCO performance was at a similar level as 2017 despite less terminal congestion. The additional time airspace users spent taxiing or holding in terminal airspace reduced by 36% compared to 2019.

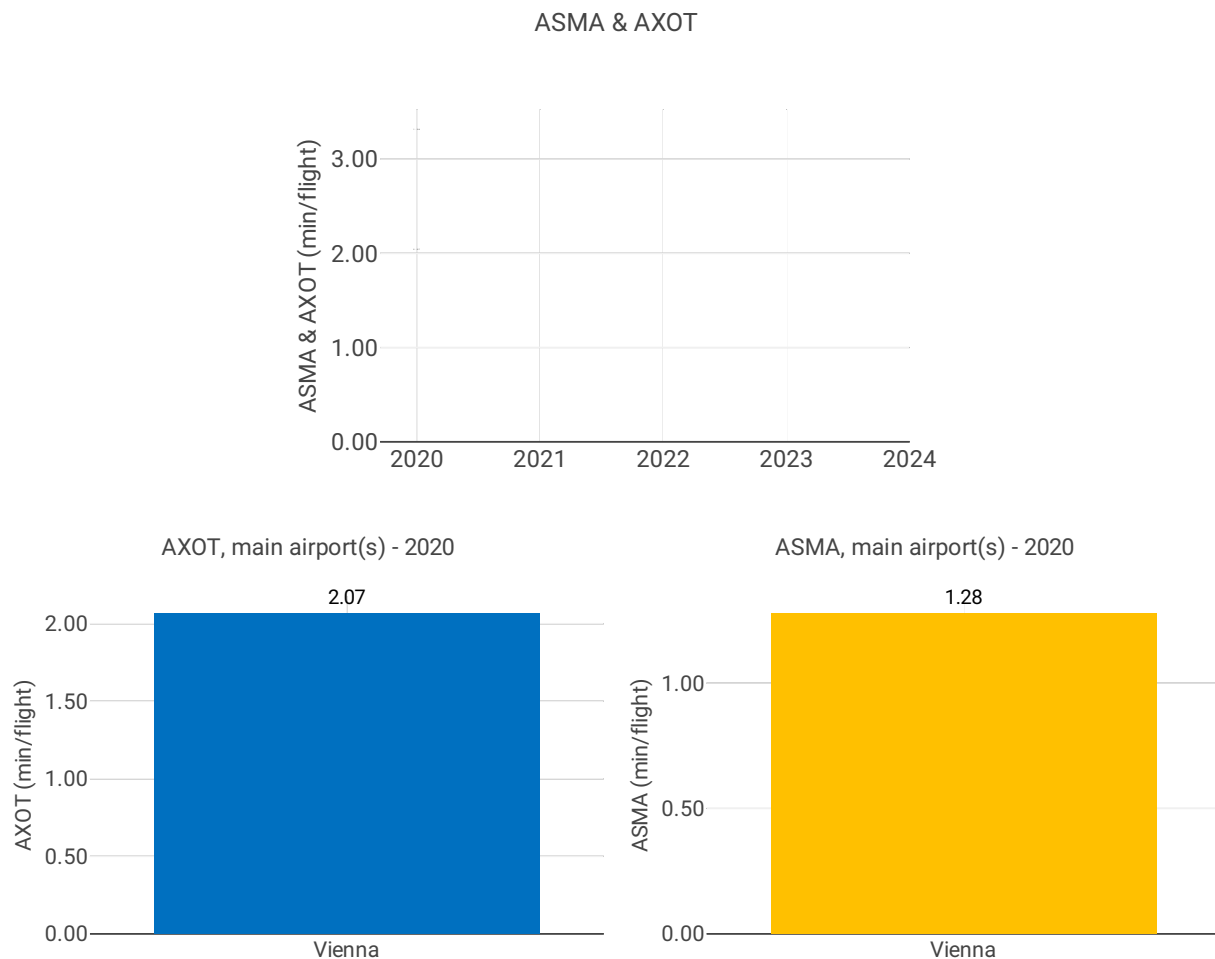
3.2 En route performance

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 Vienna significantly lowered (LOWW; 2019: 3.1 min/dep.; 2020: 2.07 min/dep.)

This 2.07 min/dep. annual average was driven by very high additional times in January (probably related to de-icing procedures). In fact since April and until November, the additional times were around 1 min/dep.

According to the Austrian monitoring report: *AMAN/DMAN coupling will be considered as one measure to optimize taxi-out times. Moreover, due to the closure of gates and blocked areas, taxi out times take partially longer than in pre-COVID times.*

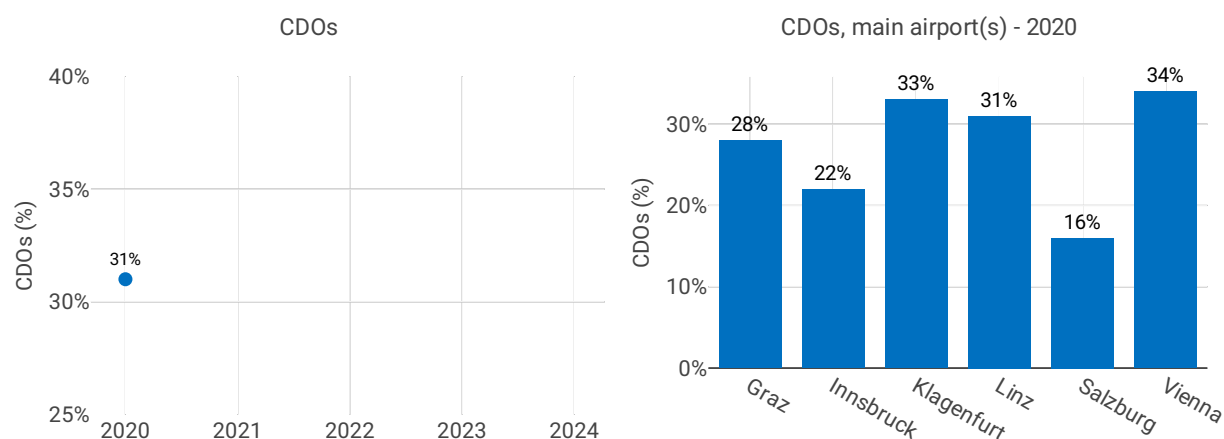
ASMA

In a similar way to the additional taxi-out times, the additional times in the terminal airspace around Vienna were very impacted by the reduction in traffic as of April, resulting in a 40% reduction in the annual average (LOWW; 2019: 2.13 min/arr.; 2020: 1.28 min/arr.)

The additional ASMA times remained well under 0.5 min/arr. between April and July, and below one min/arr. between August and November.

According to the Austrian monitoring report: *AMAN/DMAN coupling will be considered as one measure to optimize additional time in terminal airspace*

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



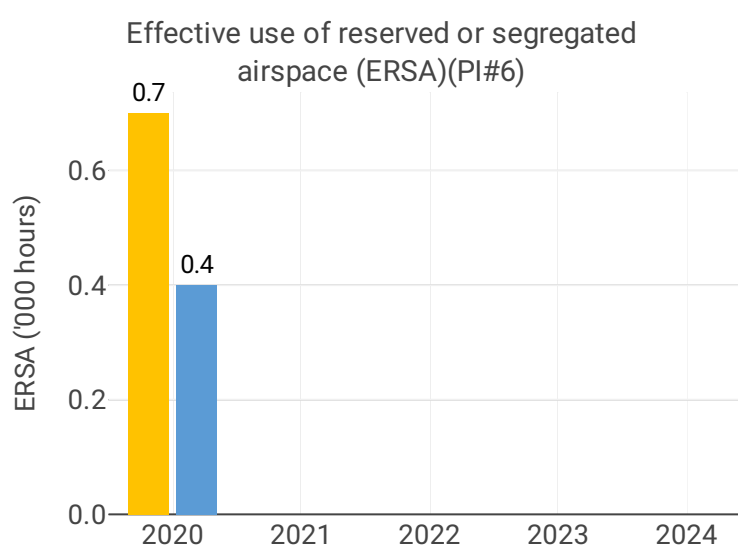
Focus CDOs

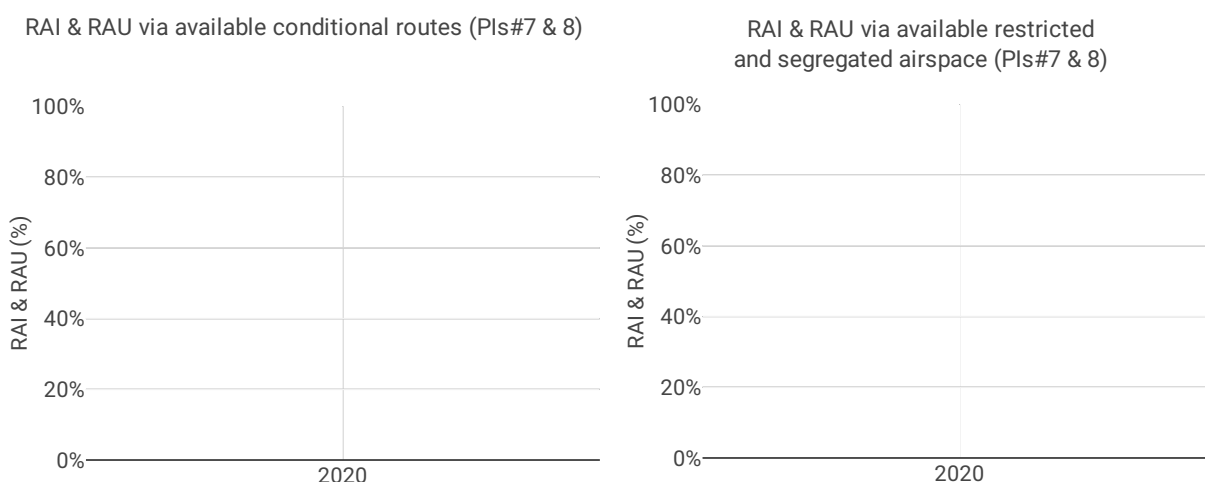
Vienna (LOWW), being the major airport in Austria, has the highest share of CDO flights in Austria: 34.4% which is slightly higher than the overall RP3 value in 2020 (32.5%).

The other airports have 20-30% of CDO flights, except for Salzburg (LOWS): 15.9%.

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
Vienna	2.07	NA	NA	NA	NA	1.28	NA	NA	NA	NA	34%	NA	NA	NA	NA
Graz	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28%	NA	NA	NA	NA
Innsbruck	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22%	NA	NA	NA	NA
Klagenfurt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	33%	NA	NA	NA	NA
Linz	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31%	NA	NA	NA	NA
Salzburg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16%	NA	NA	NA	NA

3.4 Civil-Military dimension





Focus on Civil-Military dimension

Update on Military dimension of the plan

The impact of military dimension on the environment KPA is very low, due to a very elaborate flexible handling of all flights crossing military areas. There is no impact, from the military dimension, on the capacity KPA so far. The planning of airspace use at pre-tactical level is done via the civil / military joint unit Airspace Management Cell (AMC).

Military - related measures implemented or planned to improve environment and capacity

No data available

Initiatives implemented or planned to improve PI#6

Close cooperation between ACC and MIL Control Centre is part of continuous improvement to achieve a dynamic and flexible Use of Airspace

Initiatives implemented or planned to improve PI#7

No data available

Initiatives implemented or planned to improve PI#8

No data available

4 CAPACITY - AUSTRIA

4.1 PRB monitoring

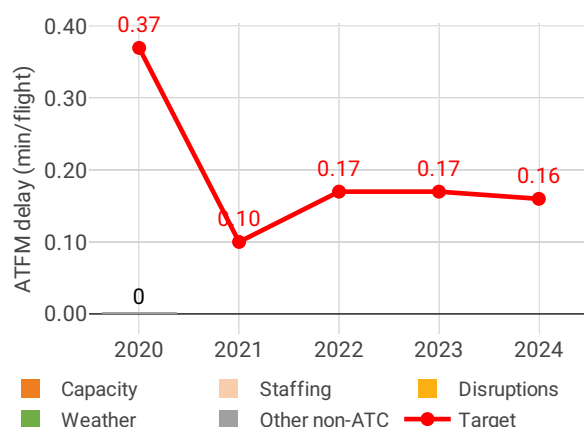
- Austro Control registered near to zero minute of average en route ATFM delay per flight during 2020, thus meeting the local breakdown value of 0.37.
- Delays must be considered in the context of the traffic evolution: IFR movements in 2020 were 57% below the 2019 levels in Austria.
- The NSA reported that on-the-job training of ATCOs was interrupted due to the pandemic. This, together with the reported changes in maternity leave and some ATCOs leaving unexpectedly, resulted in almost 5% less ATCO FTEs than planned by the end of 2020.
- Based on the analysis of previous capacity profiles, the PRB estimates that Austria will face a capacity gap when IFR movements rise above 80% of 2019 levels. The PRB recommends that capacity improvement measures are implemented before traffic begins to recover.
- The yearly total of sector opening hours in Vienna ACC was 35,749, showing a 35.5% decrease compared to 2019.

- Vienna ACC registered 11.84 IFR movements per one sector opening hour in 2020, being 29.5% below 2019 levels.

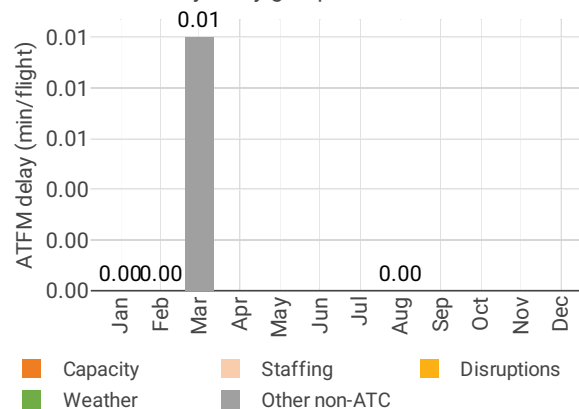
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

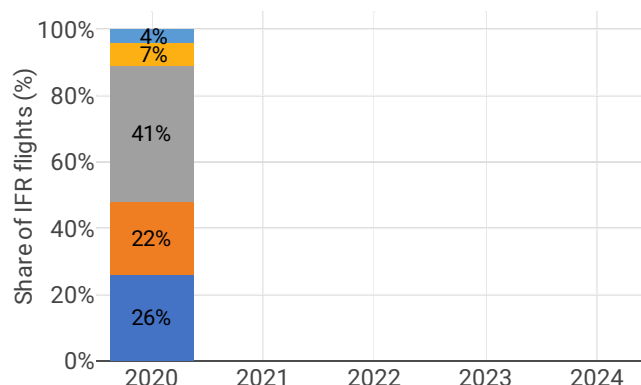
Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2020



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



Focus on en route ATFM delay

Summary of capacity performance

The Vienna FIR experienced a traffic reduction of 57% from 2019 levels, to 590k flights. The traffic level was accommodated with negligible en route ATFM delays to airspace users.

NSA's assessment of capacity performance

No ATFM delays were produced due to reduced COVID 19 traffic and optimum measures of arranging operational ATCO resources.

Monitoring process for capacity performance

Apart from permanent ATFCM processes in place, monitoring traffic during the strategic, pre-tactical, and tactical phase, post OPS analyses are regularly [performed].

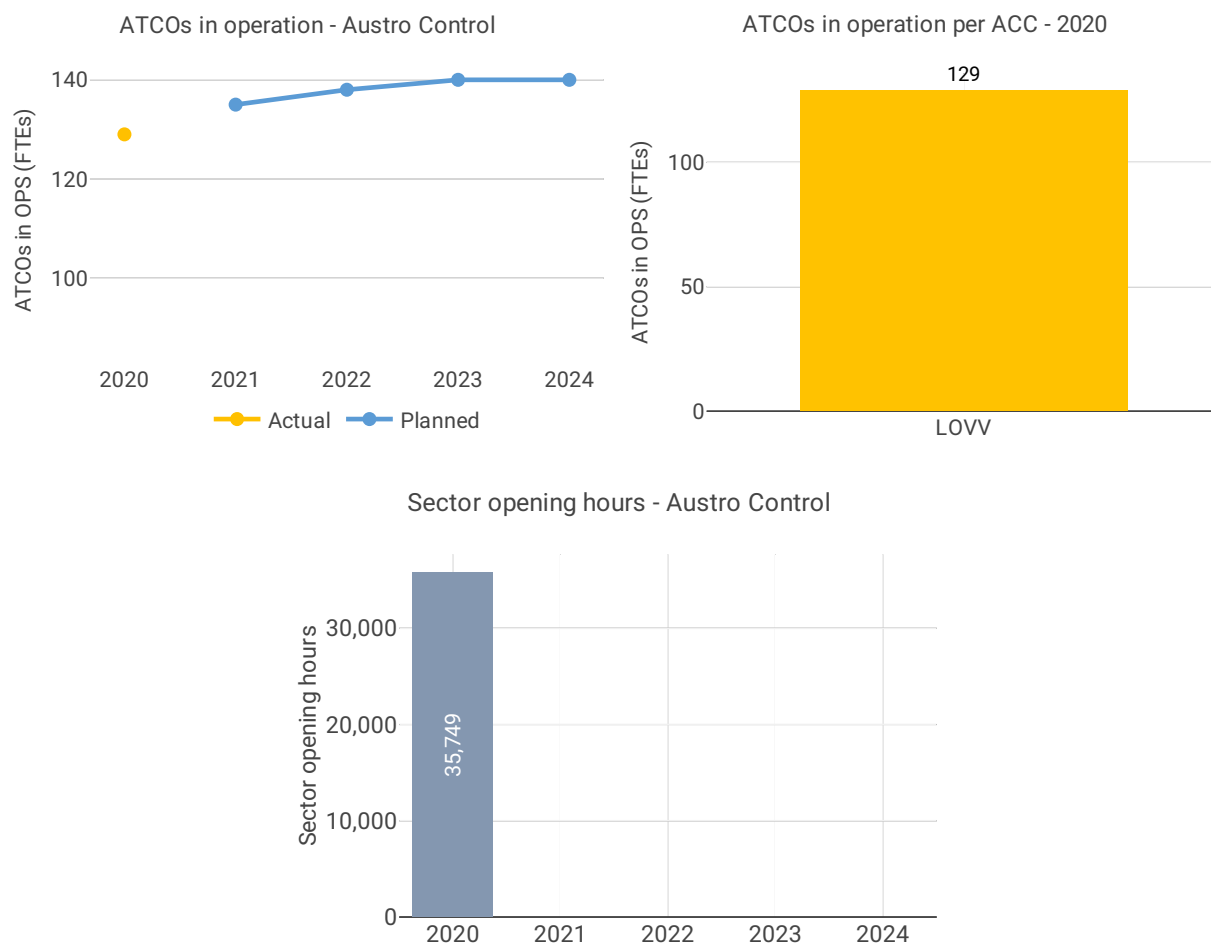
Capacity planning

Capacity planning process considering traffic forecasts, ATCO resources, ATS procedures and ATM System evolution is in place and accordingly executed.

Application of Corrective Measures for Capacity (if applicable)

No data available

4.2.2 Other indicators

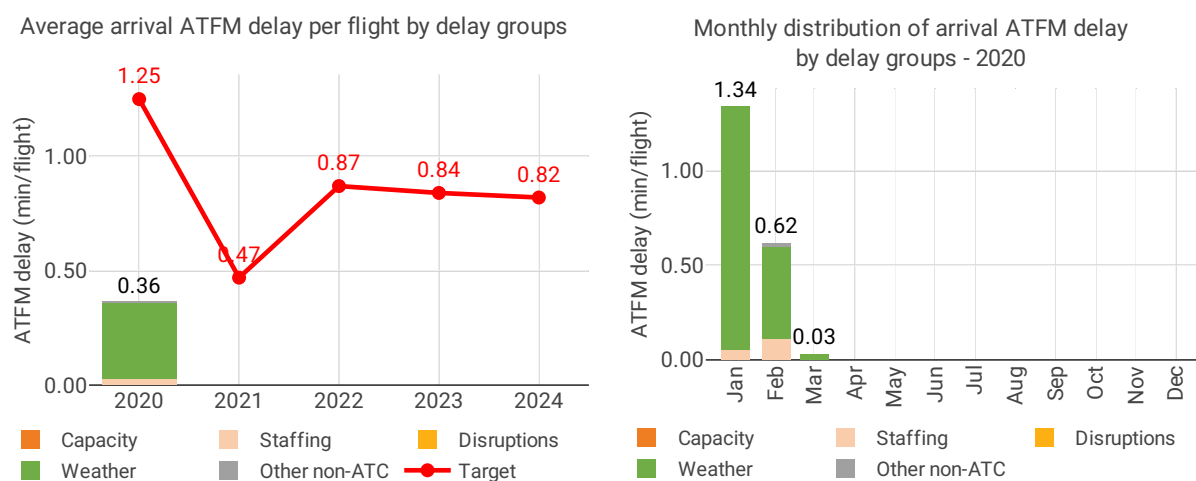


Focus on ATCOs in operations

Factors influencing no of ATCOs include: maternity leave and return; reduced number of ATCOs starting OJT (due COVID) and unexpected departure of 2.5 FTEs

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)



Focus on arrival ATFM delay

Austria identified six airports as subject to RP3 monitoring. According to the traffic figures at these 4 airports, only Vienna (LOWW) must be monitored for pre-departure delays.

The Airport Operator Data Flow, necessary for the monitoring of these pre-departure delays, is correctly established where required and the monitoring of all capacity indicators can be performed.

Traffic at the ensemble of these airports decreased by 59% in 2020. The drastic reduction in traffic as of the month of April had a direct impact on the ATFM measures at Austrian airports where arrival ATFM delays have totally disappeared since then.

Slot adherence was well above 90% for most of these airports except for Salzburg (LOWS) where it was slightly under 90%.

The national average arrival ATFM delay at Austrian airports in 2020 was 0.36 min/arr, significantly lower than the 0.71 min/arr in 2019 (-48%).

Only Vienna, Innsbruck and Salzburg registered delays in 2020, all in the first trimester of the year.

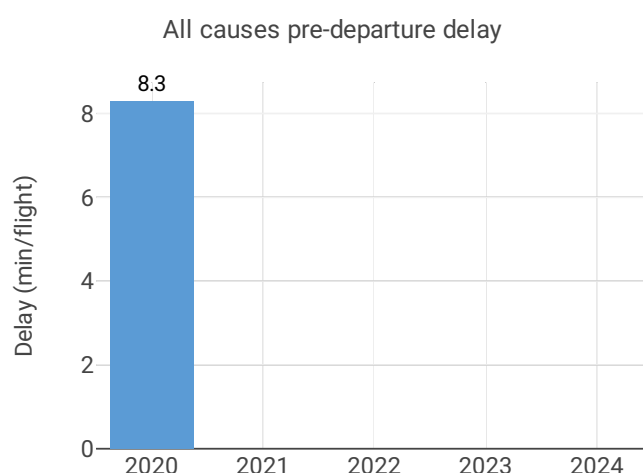
At Vienna (LOWW: 2019: 0.91 min/arr.; 2020: 0.49 min/arr.) 91% of these delays were attributed to weather and 8% to ATC staffing issues.

Delays at Innsbruck and Graz were all related to weather.

The provisional national target on arrival ATFM delay in 2020 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

Airport name	Avg arrival ATFM delay (KPI#2)				Slot adherence (PI#1)			
	2020	2021	2022	2023	2020	2021	2022	2023
Graz	NA	NA	NA	NA	98.5%	NA%	NA%	NA%
Innsbruck	0.18	NA	NA	NA	93.9%	NA%	NA%	NA%
Klagenfurt	NA	NA	NA	NA	97.6%	NA%	NA%	NA%
Linz	NA	NA	NA	NA	100.0%	NA%	NA%	NA%
Salzburg	0.04	NA	NA	NA	88.4%	NA%	NA%	NA%
Vienna	0.49	NA	NA	NA	97.4%	NA%	NA%	NA%

Airport name	ATC pre departure delay (PI#2)				All causes pre departure delay (PI#3)			
	2020	2021	2022	2023	2020	2021	2022	2023
Graz	NA	NA	NA	NA	NA	NA	NA	NA
Innsbruck	NA	NA	NA	NA	NA	NA	NA	NA
Klagenfurt	NA	NA	NA	NA	NA	NA	NA	NA
Linz	NA	NA	NA	NA	NA	NA	NA	NA
Salzburg	NA	NA	NA	NA	NA	NA	NA	NA
Vienna	0.75	NA	NA	NA	8.3	NA	NA	NA

Focus on performance indicators at airport level

ATFM slot adherence

With the drastic drop in traffic, the share of regulated departures from Austrian airports virtually disappeared as of April. The annual figures are therefore driven by the performance in the first trimester.

Most Austrian airports showed adherence above 90% and the national average was 95.8%. With regard to the 4.2% of flights that did not adhere, 3.2% was early and 1% was late.

According to the Austrian monitoring report: *Due to reduced aerodrome capacity down to 40% of the regular capacity offer, revised procedures are currently applied due to COVID19. Details are subject to investigation.*

ATC pre-departure delay

Vienna is the only Austrian airport subject to the monitoring of this indicator. The performance has notably improved with respect to the previous year (LOWW; 2019: 1.56 min/dep.; 2020: 0.75 min/dep.)

According to the Austrian monitoring report:

Due to reduced aerodrome capacity down to 40% of the regular capacity offer, revised procedures are currently applied due to COVID19.

- *limited airport infrastructure due to COVID19 (reduced number of gates) leads to accumulation at the remaining gates*
- *from some gates aircraft are pushed back on the taxiway which is possibly blocked by taxiing aircraft*
- *crews calling before the TSAT window are delayed until the beginning of the TSAT window (strict compliance with CDM rules) which might be coded as ATC delay by concerned crews*
- *in 2020 before COVID19 restrictions the demand has exceeded the capacity at certain times*

All causes pre-departure delay

Vienna is the only Austrian airport subject to the monitoring of this indicator.

The total (all causes) delay in the actual off block time at Vienna in 2020 was 8.27 min/dep. The higher delays per flight were observed in the second trimester of the year, due to the lower traffic and extraordinary circumstances. In November and December there was also a significant increase at most of these airports.

This performance indicator has been introduced in the performance scheme for the first time this year, so no evolution with respect to 2019 can be analysed.

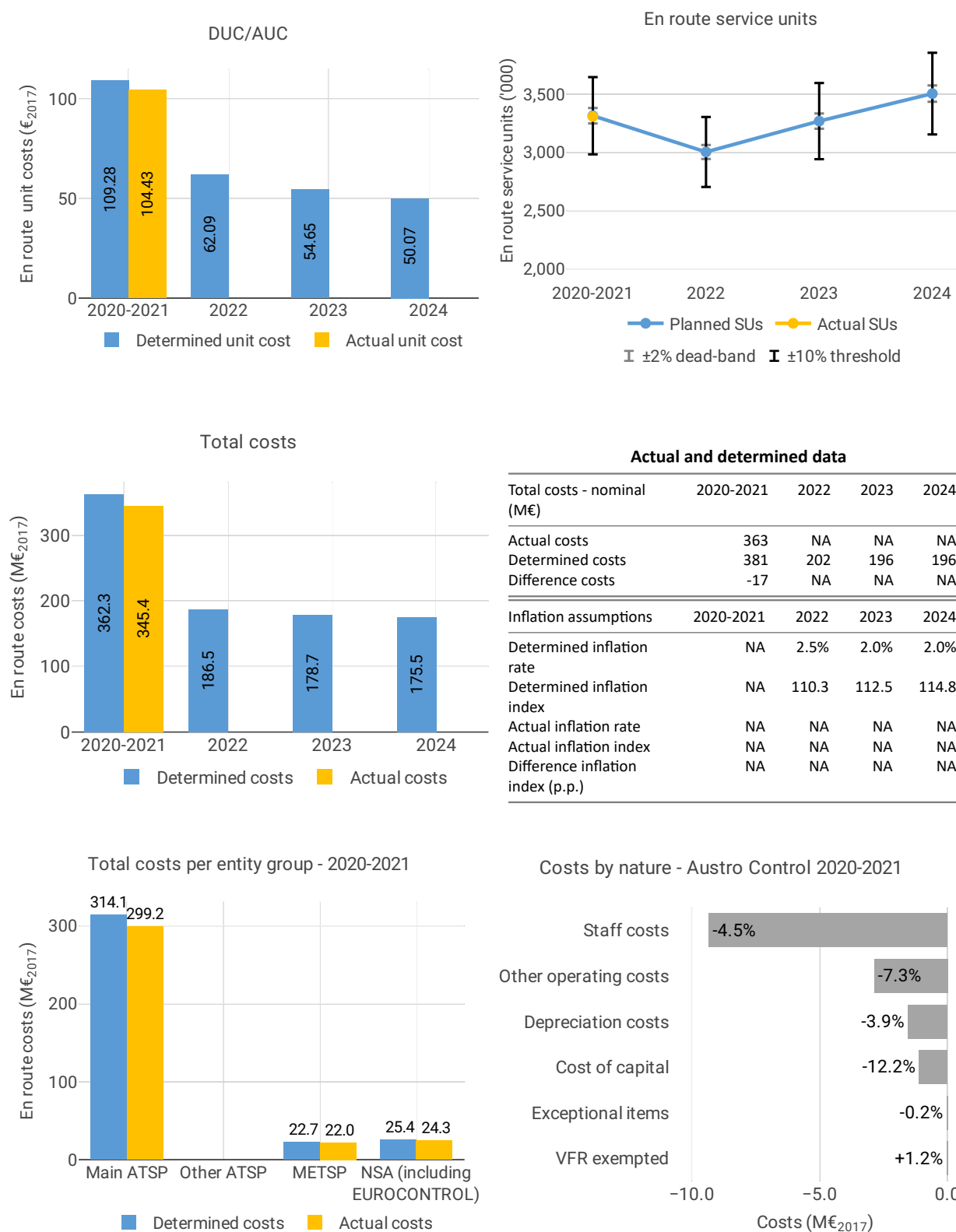
5 COST-EFFICIENCY - AUSTRIA

5.1 PRB monitoring

- The 2020 actual service units (1,509K) were 55% lower than the actual service units in 2019 (3,325K).
- Austria had the second highest percentage saving in 2020 across Member States, reducing total costs in 2020 by 42 M€2017 (-20%) compared to 2019 actual costs. The greatest reduction has been staff costs, with a decrease of 46 M€2017 (-32%), due to reduction of overtime, salary, hiring freeze and public funding of short time work.
- Exceptional costs in 2020 are 5 M€2017 (+94%) higher compared to 2019 actual costs, in line with the 2019 draft performance plan (due to inclusion of cost exempt stemming from RP2).
- Austro Control spent 32 M€2017 in 2020 related to cost of investments, 5% less than planned in the 2019 draft performance plan (34 M€2017). The reduction is due to a lower cost of capital driven by a lower asset base.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)



Focus on unit cost

AUC vs. DUC

In the combined year 2020-2021, the AUC was -4.4% (or -4.85 €2017) lower than the planned DUC. This results from the combination of slightly lower than planned TSUs(-0.2%) and lower than planned en route costs in real terms (-4.6%, or -16.8 M€2017).

En route service units

The difference between actual and planned TSUs (-0.2%) falls within the $\pm 2\%$ dead band. Hence the resulting loss of revenue is borne by the ANSP.

En route costs by entity

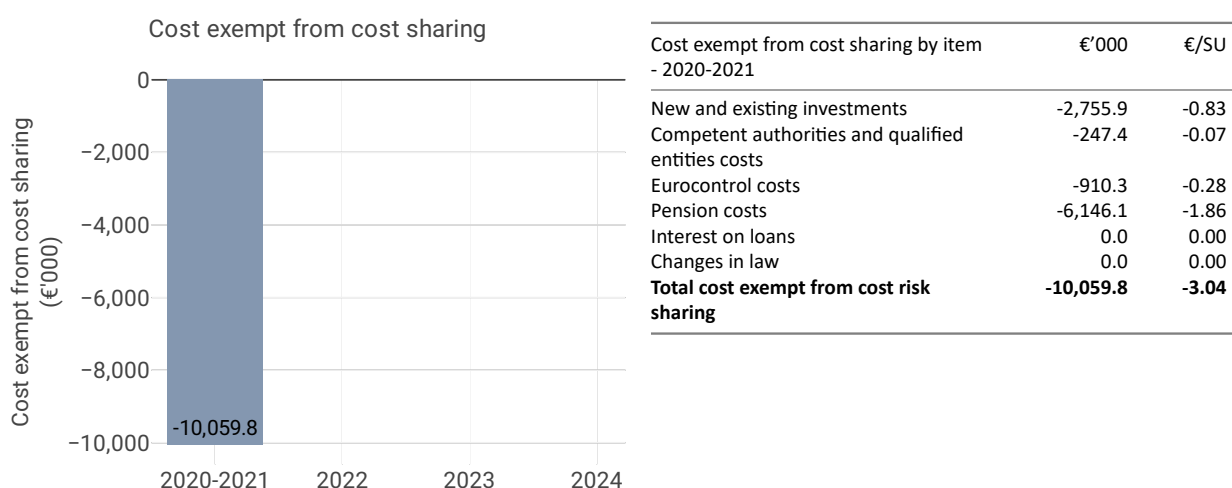
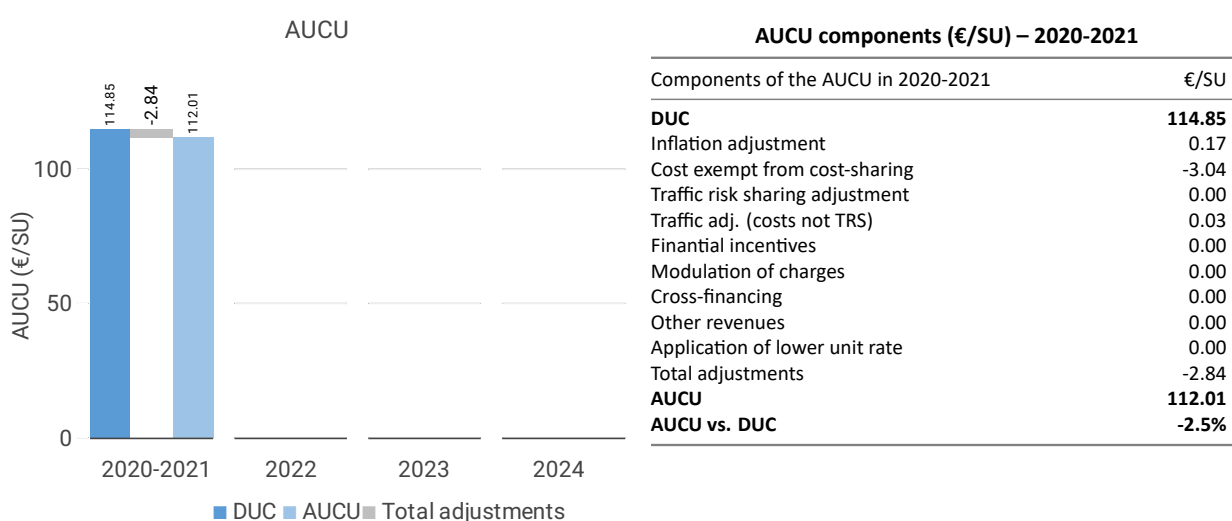
Actual real en route costs are -4.6% (-16.8 M€2017) lower than planned. This is mainly driven by the lower costs of the main ANSP - Austro Control (-4.7%, or -14.9 M€2017 for ATM/CNS/AIS and SAR services) and (-3.3%, or -0.8 M€2017 for meteorological services). NSA/EUROCONTROL costs were -4.6% lower than planned.

En route costs for the main ANSP at charging zone level

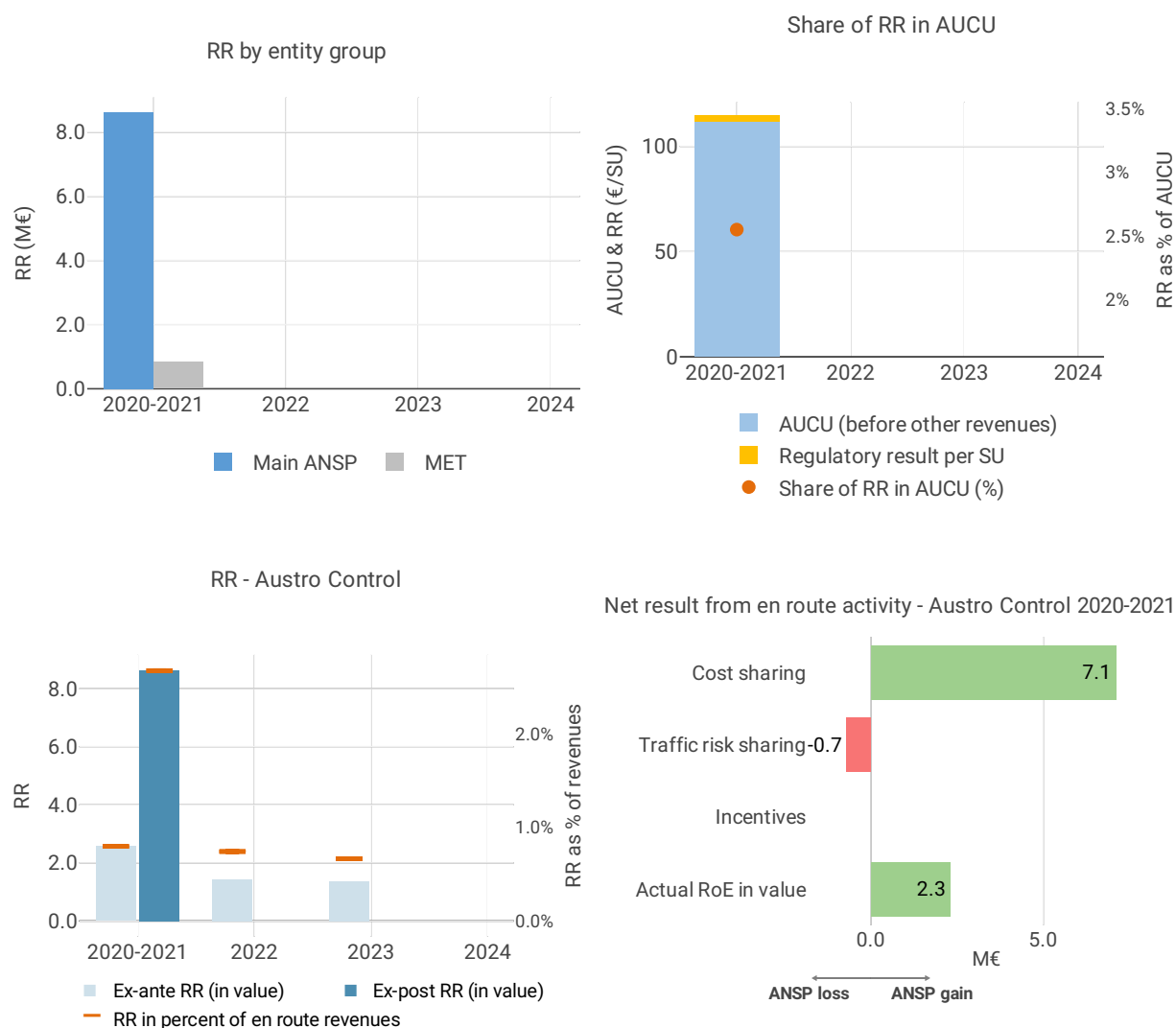
The lower than planned en route costs in real terms for Austro Control (-4.7%, or -14.9 M€2017, excluding the costs for meteorological services) result from:

- lower staff costs (-4.5%); “due to cost containment measures of Austria including reduction of overtime, salary and hiring freeze and one time effects such as short time”;
- lower other operating costs (-7.3%); “due to cost containment measures of Austria such as reduction of travel expenses, non-operational training and much more”;
- lower depreciation (-3.9%) and cost of capital (-12.2%) reflecting delayed investments due to the impact of COVID-19; and,
- slightly higher than planned deduction for VFR exempted flights (+1.2%).

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



5.2.3 Regulatory result (RR)



Focus on regulatory result

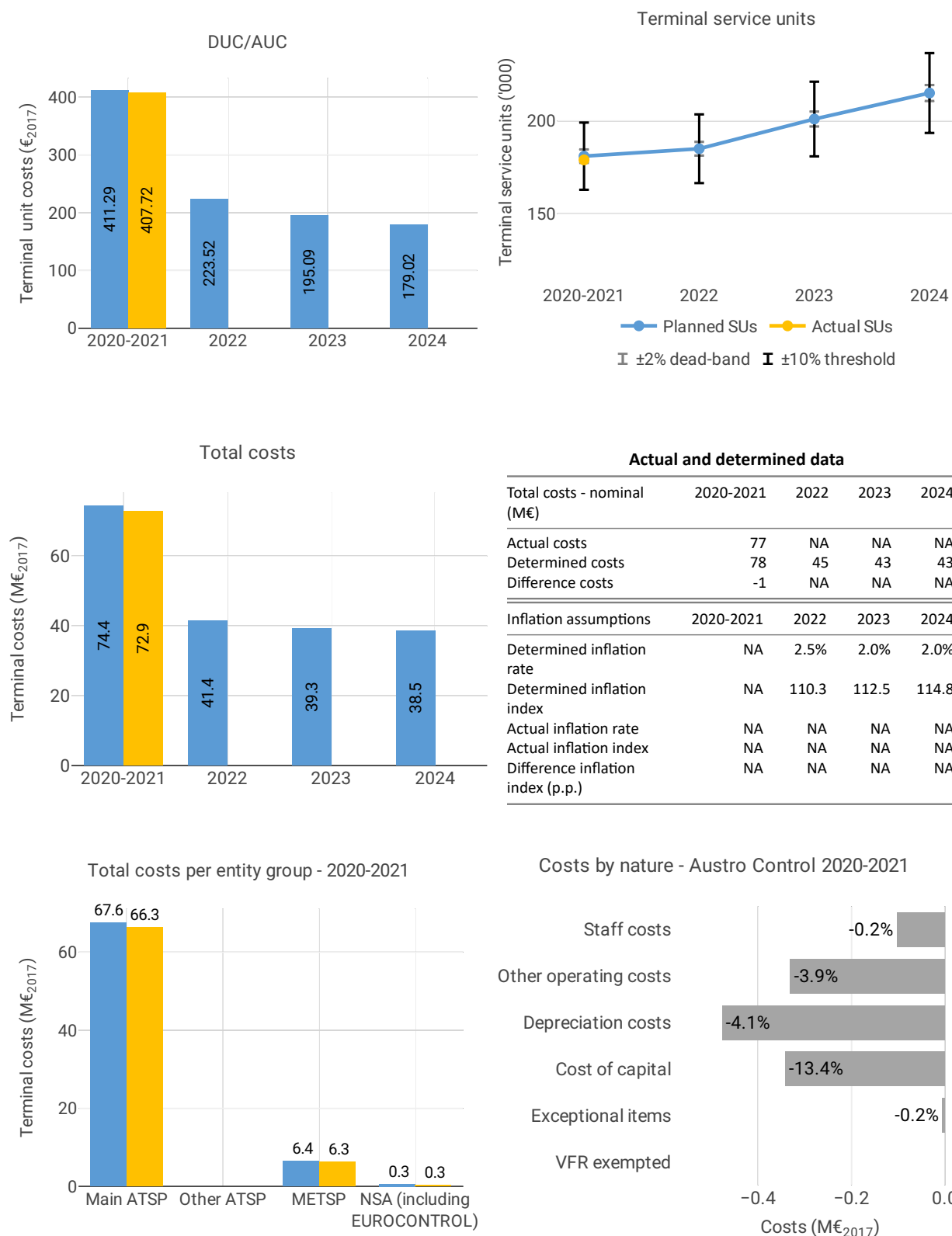
Austro Control net gain on activity in Austrian en route charging zone in the combined year 2020-2021
Austro Control generated a net gain of +6.4 M€, resulting from a gain of +7.1 M€ arising from the cost sharing mechanism and a loss of -0.7 M€ arising from the traffic risk sharing mechanism.

Austro Control overall regulatory results (RR) for the en route activity (see Note 2 above)

Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+6.4 M€) and the actual RoE (+2.3 M€) amounts to +8.6 M€ (2.7% of the en route revenues). The resulting ex-post rate of return on equity is 27.9%, which is significantly higher than the 7.3% planned in the PP.

5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)



Focus on unit cost

AUC vs. DUC

In the combined year 2020-2021, the AUC was -0.9% (or -3.57 €₂₀₁₇) lower than the planned DUC. This results from the combination of lower than planned TNSUs (-1.1%) and lower than planned terminal costs in real terms (-2.0%, or -1.5 M€₂₀₁₇).

Terminal service units

The difference between actual and planned TNSUs (-1.1%) falls within the $\pm 2\%$ dead band. Hence the resulting loss of revenue is borne by the ANSP.

Terminal costs by entity

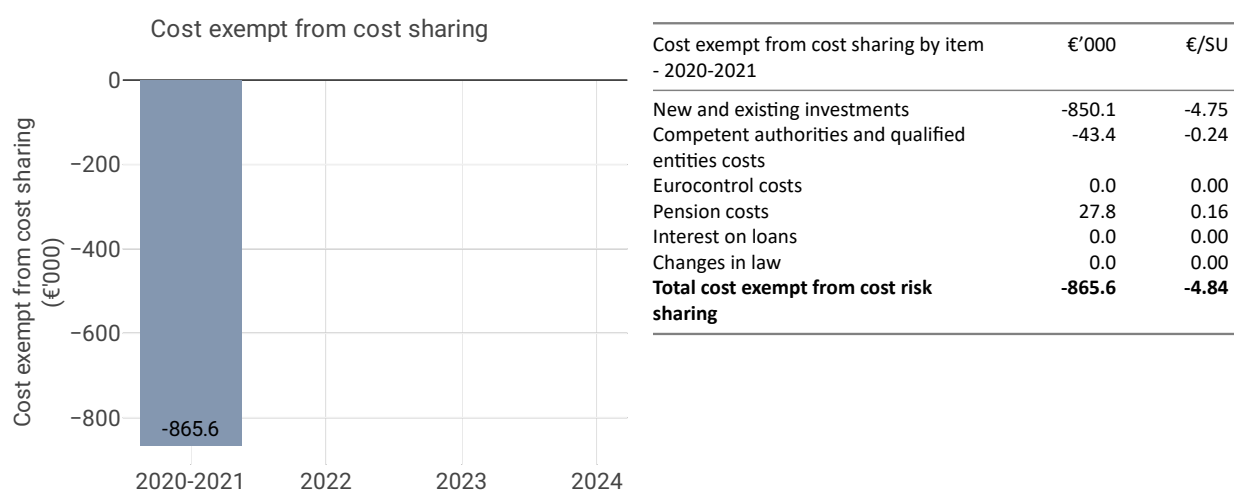
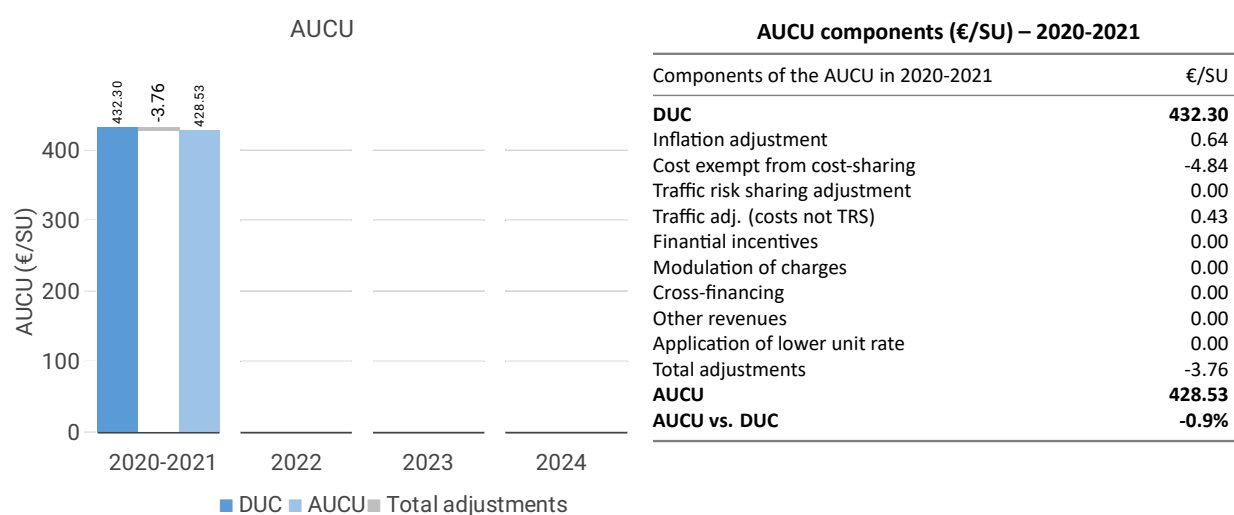
Actual real terminal costs are -2.0% (-1.5 M€2017) lower than planned. This is mainly driven by the lower costs of the main ANSP - Austro Control (-1.9%, or -1.3 M€2017 for ATM/CNS/AIS costs) and (-2.3%, or -0.1 M€2017 for MET costs). NSA costs were -13.7% lower than planned.

Terminal costs for the main ANSP at charging zone level

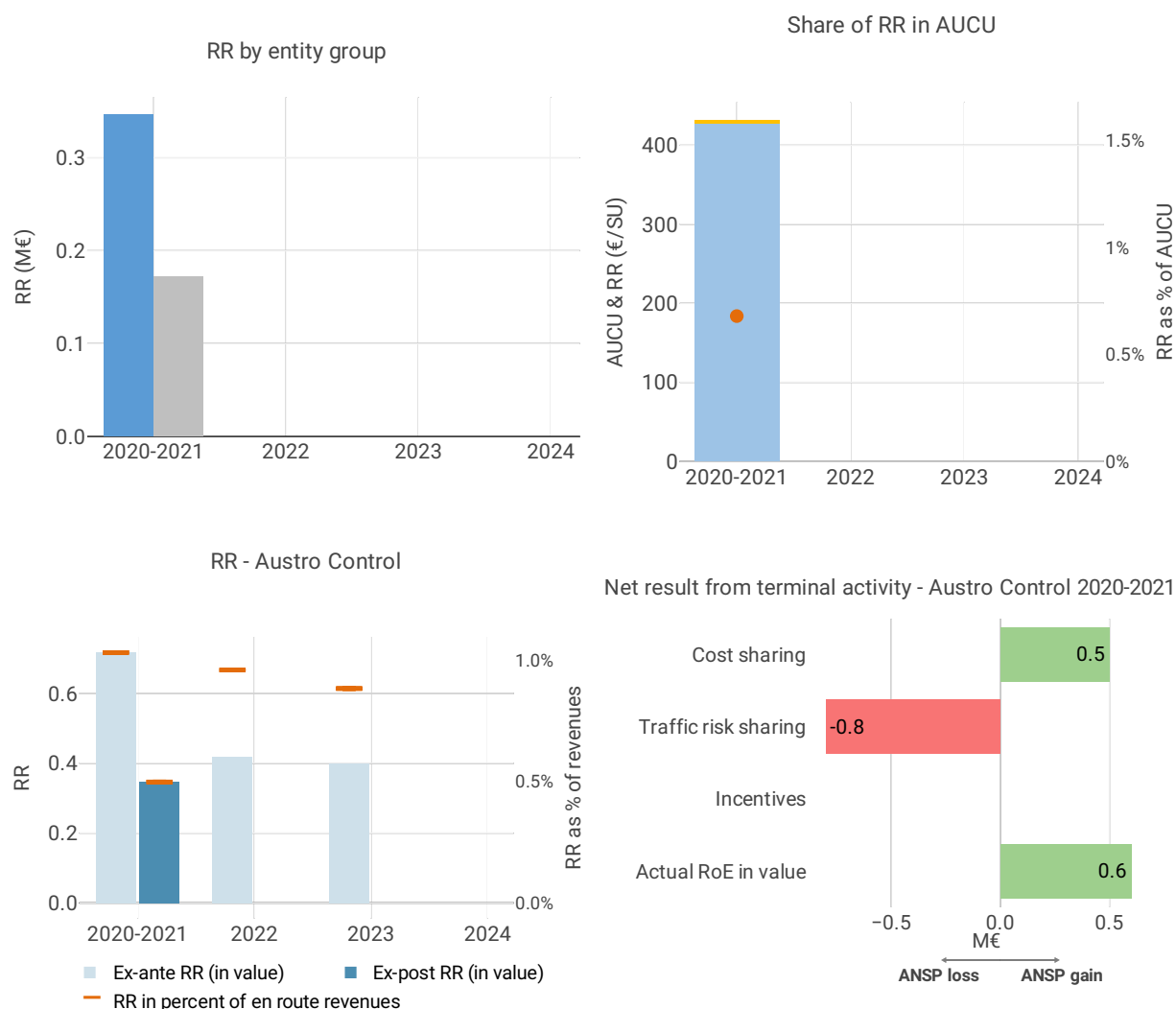
The lower than planned terminal costs in real terms for Austro Control (-1.9%, or -1.3 M€2017, excluding the costs for meteorological services) result from:

- slightly lower staff costs (-0.2%);
- lower other operating costs (-3.9%); “due to cost containment measures of Austria such as reduction of travel expenses, non-operational training and much more”; and,
- lower depreciation (-4.1%) and cost of capital (-13.4%) reflecting delayed investments due to the impact of COVID-19; and,
- slightly lower exceptional costs (-0.2%).

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



5.3.3 Regulatory result (RR)



Focus on regulatory result

Austro Control net loss on activity in Austrian terminal charging zone in the combined year 2020-2021

Austro Control generated a net loss of -0.3 M€, resulting from a gain of +0.5 M€ arising from the cost sharing mechanism and a loss of -0.8 M€ arising from the traffic risk sharing mechanism.

Austro Control overall regulatory results (RR) for the terminal activity (see Note 2 above)

Ex-post, the overall RR taking into account the net loss from the terminal activity mentioned above (-0.3 M€) and the actual RoE (+0.6 M€) amounts to +0.3 M€ (0.5% of the terminal revenues). The resulting ex-post rate of return on equity is 4.1%, which is lower than the 7.3% planned in the PP.