PRB | Performance review body of the single european sky

Performance Review Body Monitoring Report

Croatia - 2021

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1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/764 of 13 April 2022

List of ACCs 1
Zagreb ACC

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

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

Share of Union-wide:
- **traffic (TSUs) 2021** 2.3%
- **en route costs 2021** 1.3%

Share en route / terminal costs 2021 100% / 0%

En route charging zone(s)
Croatia

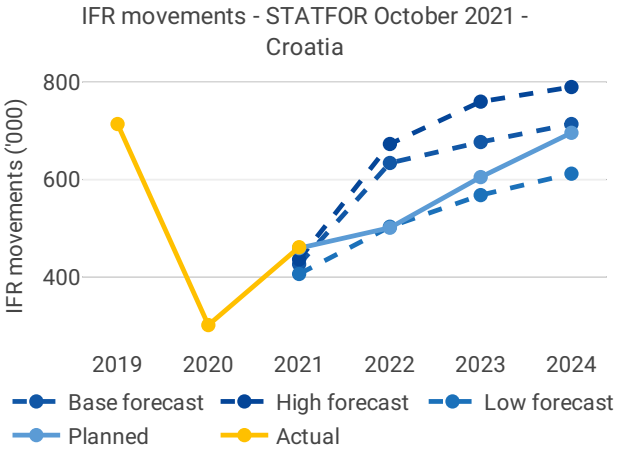
Terminal charging zone(s)
–

Main ANSP
- Croatia Control

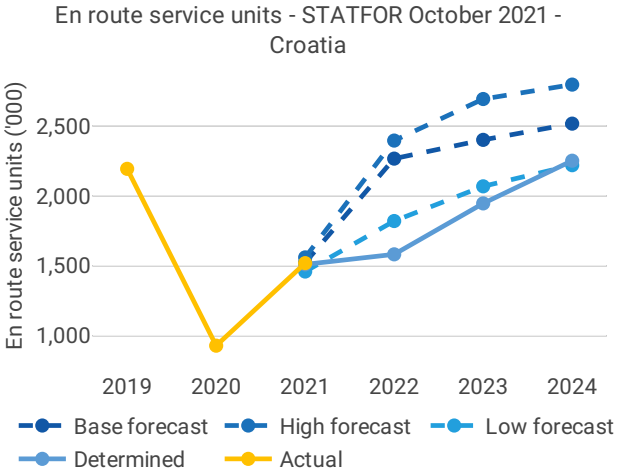
Other ANSPs
–

MET Providers
–

1.2 Traffic (En route traffic zone)

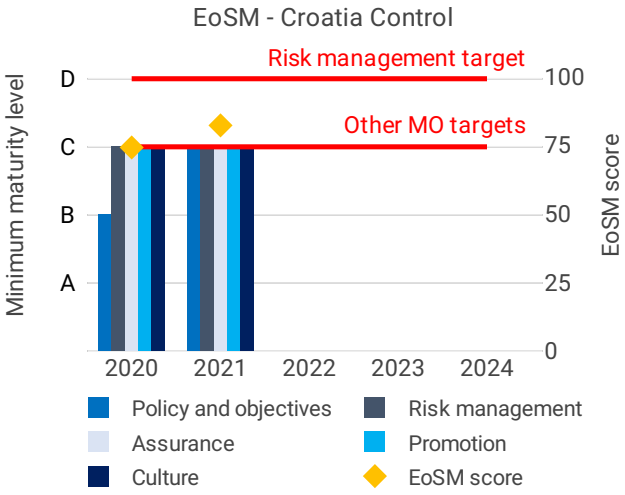


- Croatia recorded 461K actual IFR movements in 2021, +53% compared to 2020 (301K).
- Actual 2021 IFR movements were +0.4% above the plan (459K).
- Actual 2021 IFR movements represent 65% of the actual 2019 level (714K).



- Croatia recorded 1,519K actual en route service units in 2021, +63% compared to 2020 (929K).
- Actual 2021 service units were +0.6% above the plan (1,510K).
- Actual 2021 service units represent 69% of the actual 2019 level (2,193K).

1.3 Safety (Main ANSP)



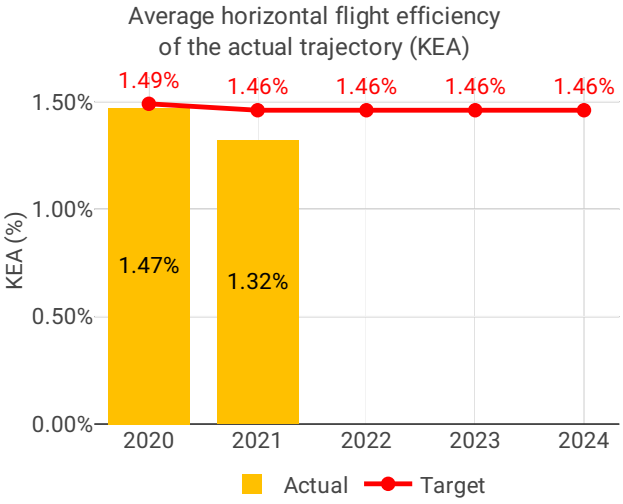
• Croatia Control improved performance in safety policy and objectives area and consequently achieved the target in 2021. Croatia Control still needs to improve in the area of risk management. Proactive safety management system established at CCL gives confidence that the ANSP will achieve the targets before the end of RP3. The Croatian NSA monitors safety performance of CCL via its continuous oversight function.

• Croatia recorded a stable performance with respect to the safety occurrences with increased in rate of runway incursions (RIs) and no occurrences of separation minima infringements (SMIs) in 2021.

• Croatia monitors safety performance using specific safety tools, including the automated safety data recording systems for the recording of separation minima infringements.

• Croatia Control should improve its safety management by implementing automated safety data recording systems for runway incursions.

1.4 Environment (Member State)



• Croatia continues to meet the KEA target for the fifth year in a row and its performance is the best since 2017, despite the traffic increased compared to 2020.

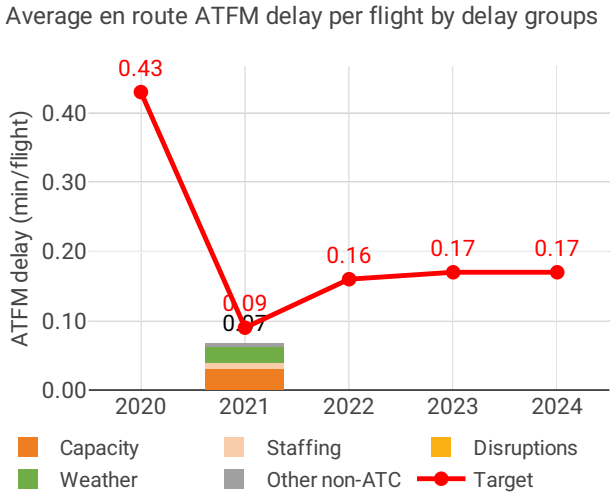
• The extension of SECSI FRA to Albania and North Macedonia further increased flight efficiency in the cross border free route airspace area in South-east Europe.

• Croatia improved SCRs and further improved KEP by 0.19 p.p..

• SCR and KEP values are similar, meaning airspace users plan routes that are very close to the shortest available.

• Croatia has no airports that are regulated under the RP3 performance and charging scheme.

1.5 Capacity (Member State)



• Croatia registered 0.07 minutes of average en route ATFM delay per flight during 2021, thus meeting the local breakdown value of 0.09. The delays accrued in the period between July and September during the 2021 summer traffic recovery with ATC capacity, weather, and ATC staffing being the main delay causes.

• Delays should be considered in the context of lower traffic: in Croatia, IFR movements in 2021 were 35% lower than in 2019.

• Traffic is expected to grow with 2019 levels likely being reached in 2022 (in high growth scenario) or by 2024 (in base growth scenario). An increase in the number of ATCOs in OPS is planned during RP3 enabling Croatia to prepare for the traffic recovery.

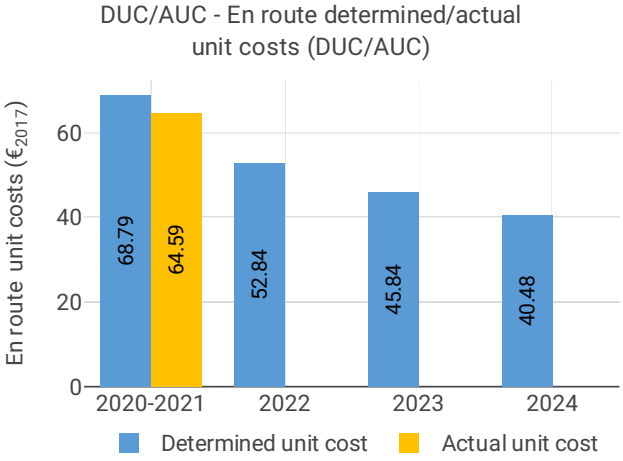
• Delays were highest in July and August, mostly driven by adverse weather conditions and ATC Capacity issues.

• The share of delayed flights with delays longer than 15 minutes in Croatia decreased by 28.32 p.p. compared to 2020 and was lower than 2019 values.

• The yearly total of sector opening hours in Zagreb ACC was 24,761, showing a 22.6% increase compared to 2020. Sector opening hours are 32.6% below 2019 levels.

• Zagreb ACC registered 17.60 IFR movements per one sector opening hour in 2021, being 3.5% below 2019 levels.

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



• The en route 2020/2021 actual unit cost of Croatia was 65.22 €2017, -6.1% lower than the determined unit cost (69.46 €2017). Croatia does not have a terminal charging zone.

• The en route 2021 actual service units (1,519K) were in line with the determined service units (1,510K).

• The en route 2021 actual total costs were -9.8 M€2017 (-12%) lower than determined. The significant decrease was mainly attributable to lower staff costs (-5.1 M€2017, or -10%) and other operating costs (-3.8 M€2017, or -20%) mainly due to: (i) higher inflation than planned; and (ii) continuation of the cost containment measures from 2020 (e.g. salary cuts, decrease trainings, etc.). The NSA should provide an analysis of the impact on future performance caused by the significantly lower than determined staff costs.

• Croatia Control spent 11 M€2017 in 2021 related to costs of investments, -10% less than determined (13 M€2017) due to delays in the investment plan in order to preserve liquidity.

• The discrepancies regarding total costs and costs of investments are significant, especially as the performance plan has been submitted at the end of 2021. The PRB invites the NSA to analyse the discrepancies and identify their reasons, including potential inaccurate planning and possible misusing of the regulatory framework to finance the liquidity.

• The en route actual unit cost incurred by users in 2020/2021 was 65.86€.

2 SAFETY - CROATIA

2.1 PRB monitoring

• Croatia Control improved performance in safety policy and objectives area and consequently achieved the target in 2021. Croatia Control still needs to improve in the area of risk management. Proactive safety management system established at CCL gives confidence that the ANSP will achieve the targets before the end of RP3. The Croatian NSA monitors safety performance of CCL via its continuous oversight function.

• Croatia recorded a stable performance with respect to the safety occurrences with increased in rate of runway incursions (RIs) and no occurrences of separation minima infringements (SMIs) in 2021.

• Croatia monitors safety performance using specific safety tools, including the automated safety data recording systems for the recording of separation minima infringements.

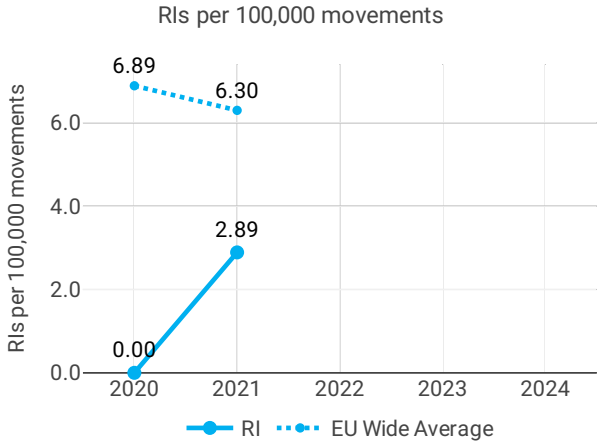
• Croatia Control should improve its safety management by implementing automated safety data recording systems for runway incursions.

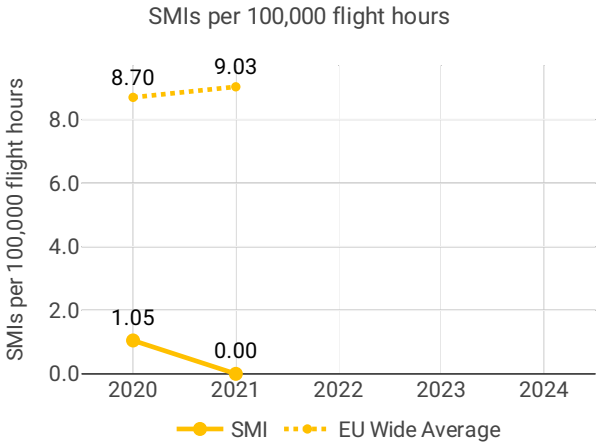
2.2 Effectiveness of Safety Management (EoSM) (KPI#1)

Focus on EoSM

Four out of five EoSM components of the ANSP meet the 2024 target level. This year , it is observed improvement in one component ("Safety Policy and Objectives") that has achieved the target. Only "Safety Risk Management" is below 2024 target levels and are expected to improve in the next years of RP3. Three questions of this component are still below target.

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





3 ENVIRONMENT - CROATIA

3.1 PRB monitoring

• Croatia continues to meet the KEA target for the fifth year in a row and its performance is the best since 2017, despite the traffic increased compared to 2020.

• The extension of SECSI FRA to Albania and North Macedonia further increased flight efficiency in the cross border free route airspace area in Southeast Europe.

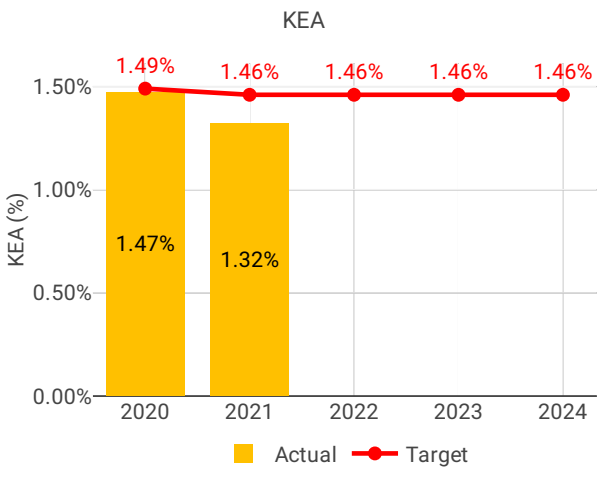
• Croatia improved SCRs and further improved KEP by 0.19 p.p..

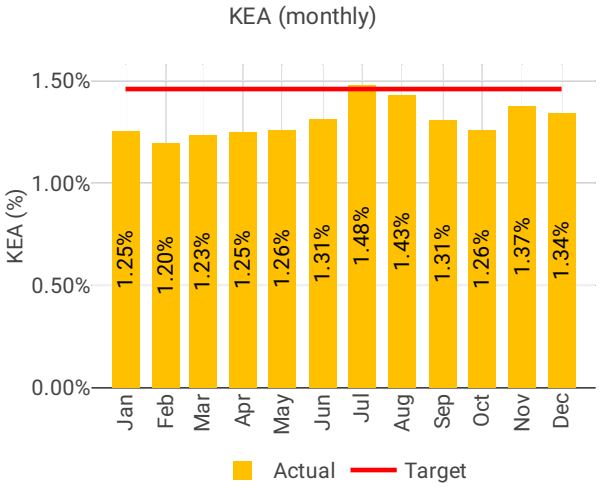
• SCR and KEP values are similar, meaning airspace users plan routes that are very close to the shortest available.

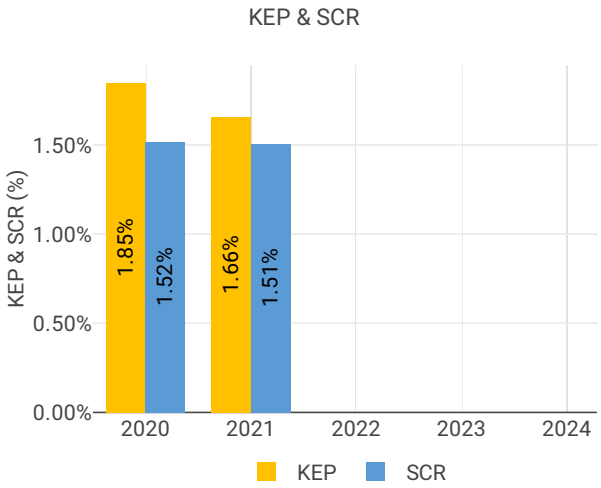
• Croatia has no airports that are regulated under the RP3 performance and charging scheme.

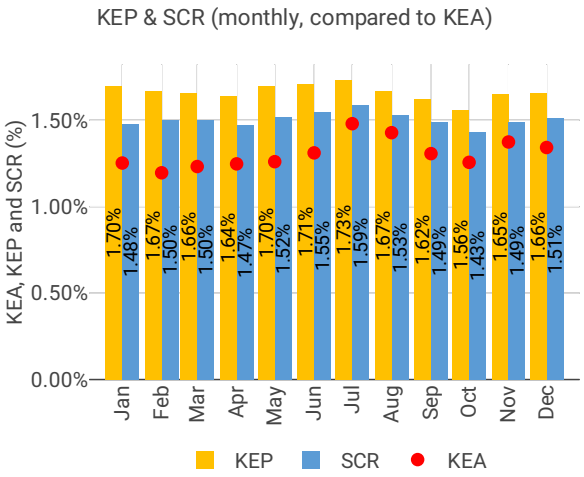
3.2 En route performance

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)

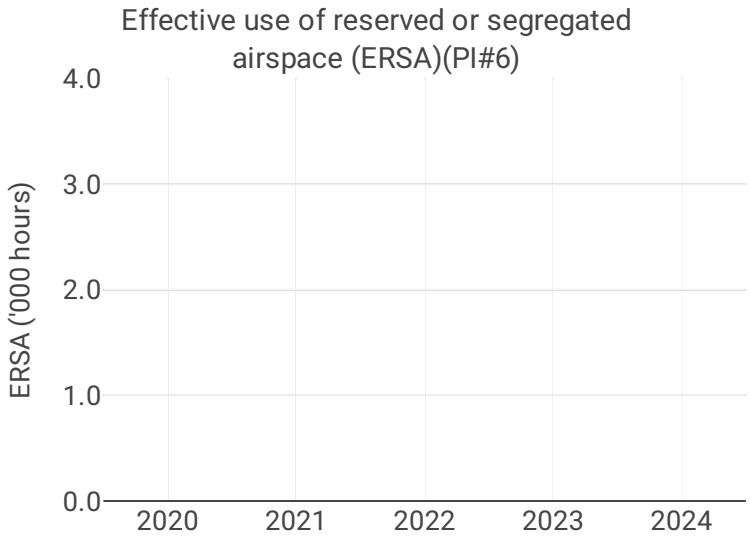


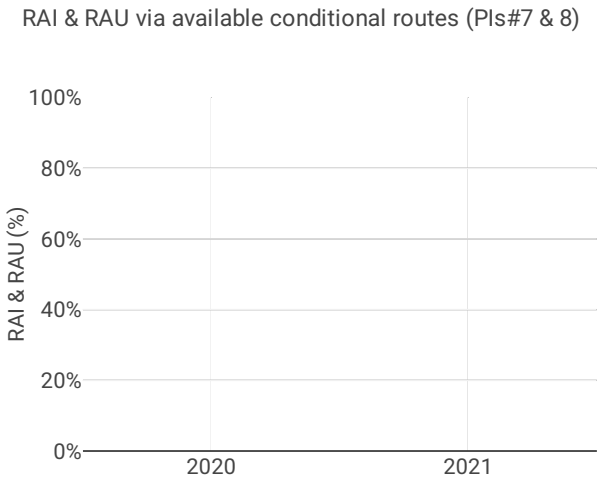


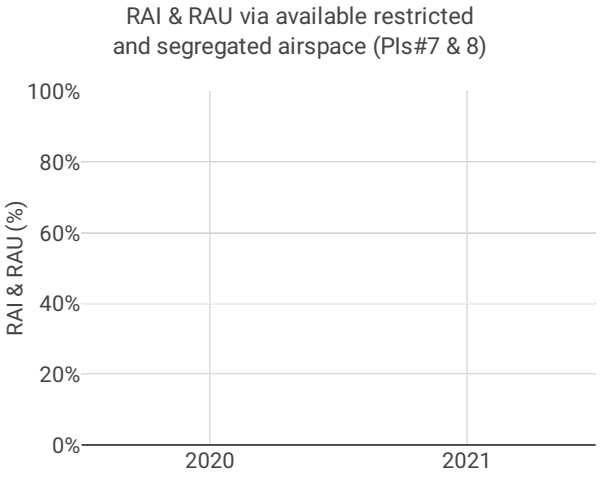




3.3 Civil-Military dimension







Focus on Civil-Military dimension

Update on Military dimension of the plan

The analysis can not be provided due to reason that all required data for ENV PI #6, PI #7 and PI #8 are not yet available on the NM/PRU dashboards nor delivered by NM upon request.

Military - related measures implemented or planned to improve capacity

FUA restrictions and CDRs have been implemented which are managed by AMC on ASM Level 2 and notified to NM but were sparsely used or required due to significant decrease of military activities and air traffic affected by COVID-19 crisis.

Initiatives implemented or planned to improve PI#6

The Network Manager shall provide on a monthly basis the data required for the monitoring of this indicator for monitoring referred to Regulation (EU) 2019/317 point 6 of Annex VI.
Data regarding ratio has been received from NM upon request but the data regarding hours allocated and used have not been delivered by NM nor are available on the NM/PRU dashboards.
The data per ACC are not yet available on the NM/PRU dashboards for local level nor have been delivered by NM upon request and can not be monitored at local level.

Initiatives implemented or planned to improve PI#7

The Network Manager shall provide on a monthly basis the data required for the monitoring of this indicator for monitoring referred to Regulation (EU) 2019/317 point 6 of Annex VI.
Data regarding ratio has been received from NM upon request but the data regarding hours allocated and used have not been delivered by NM nor are available on the NM/PRU dashboards.
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Initiatives implemented or planned to improve PI#8

The Network Manager shall provide on a monthly basis the data required for the monitoring of this indicator for monitoring referred to Regulation (EU) 2019/317 point 6 of Annex VI.
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4 CAPACITY - CROATIA

4.1 PRB monitoring

• Croatia registered 0.07 minutes of average en route ATFM delay per flight during 2021, thus meeting the local breakdown value of 0.09. The delays accrued in the period between July and September during the 2021 summer traffic recovery with ATC capacity, weather, and ATC staffing being the main delay causes.

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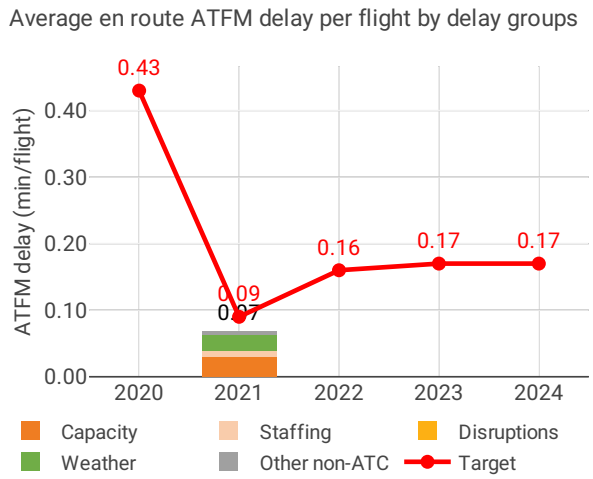
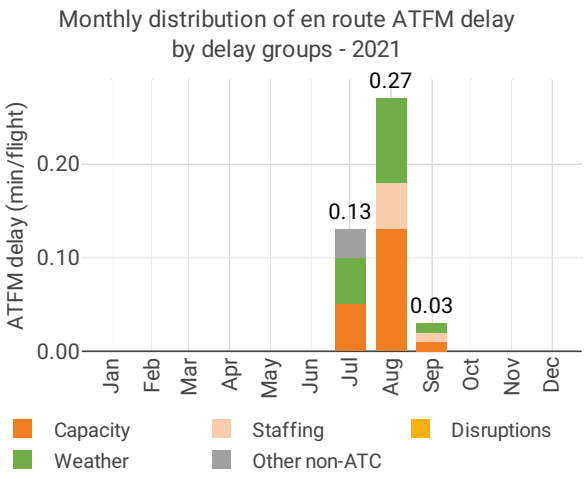
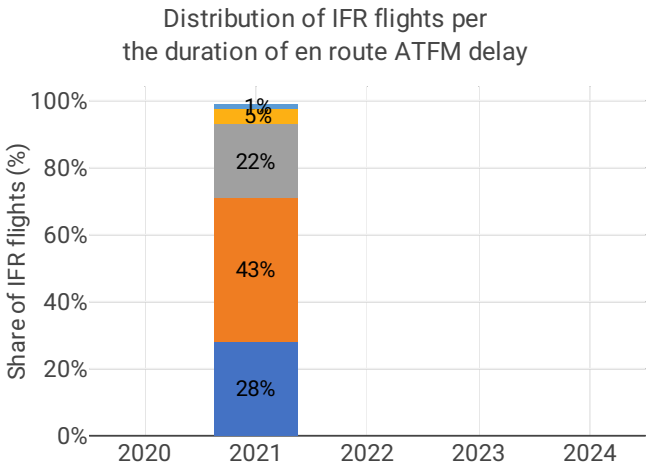
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)







Focus on en route ATFM delay

Summary of capacity performance

Croatia experienced an increase in traffic from 301k flights in 2020 to 461k flights in 2021. However, traffic levels were still substantially below the 714k flights in 2019.
In 2021, Croatia had 30k minutes of ATFM delay - the vast majority of which were in August (21k). There were 77k flights in August 2021. For comparison in September 2019 there were 83k minutes of delay for just over 76k flights.

NSA's assessment of capacity performance

The results are in line with traffic indicators and expectations. In the pandemic year 2021 there were some challenges for LDZO ACC capacities. Limitations occurred occasionally during summer season due to unplanned increase of traffic demand in peak hours.

Monitoring process for capacity performance

Monitoring of all available KPI's and PI's is done through the PRU portal which is considered as the main source of information.

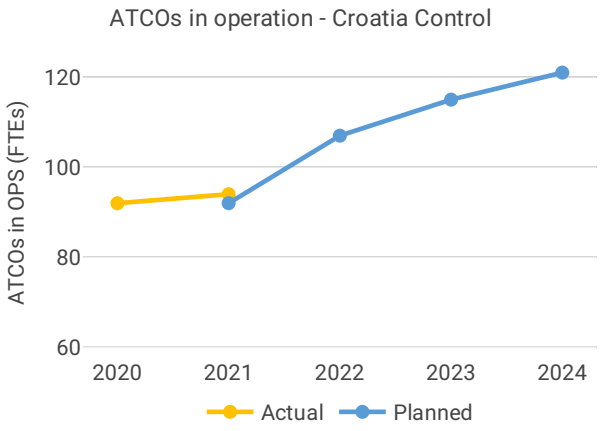
Capacity planning

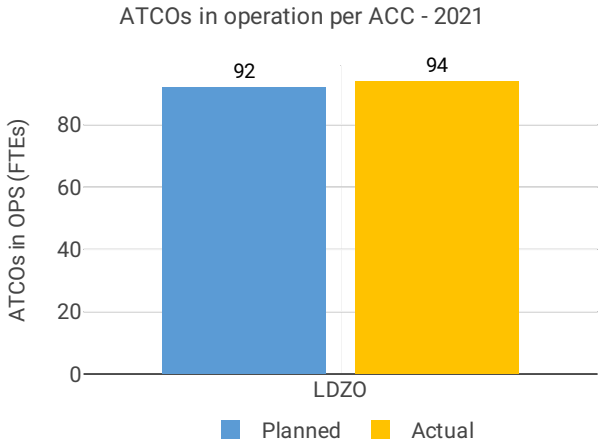
Capacity planning is done in line with NM's initiative for development of a rolling NOP document in which short-term capacity and demand on the Network level is described. The expected traffic outlook is given for six weeks ahead and revised weekly, while capacity is adapted to traffic demand and reported to NM which assesses the efficiency for planned period. In the planning process on local level, several departments are involved in strategic and tactical development of the plan.

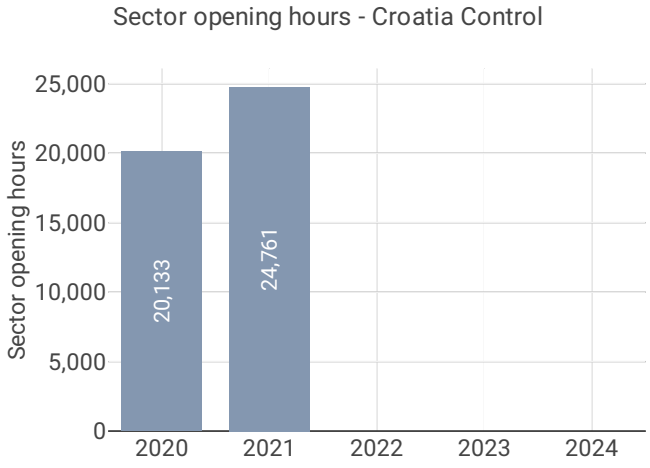
Application of Corrective Measures for Capacity (if applicable)

No data available

4.2.2 Other indicators







Focus on ATCOs in operations

Increase in the ATCO in OPS FTE is mainly due to lower than planned retirement rate coupled with increased ATCO in OPS utilisation following traffic recovery during summer months.

5 COST-EFFIENCY - CROATIA

5.1 PRB monitoring

• The en route 2020/2021 actual unit cost of Croatia was 65.22 €2017, -6.1% lower than the determined unit cost (69.46 €2017). Croatia does not have a terminal charging zone.

• The en route 2021 actual service units (1,519K) were in line with the determined service units (1,510K).

• The en route 2021 actual total costs were -9.8 M€2017 (-12%) lower than determined. The significant decrease was mainly attributable to lower staff costs (-5.1 M€2017, or -10%) and other operating costs

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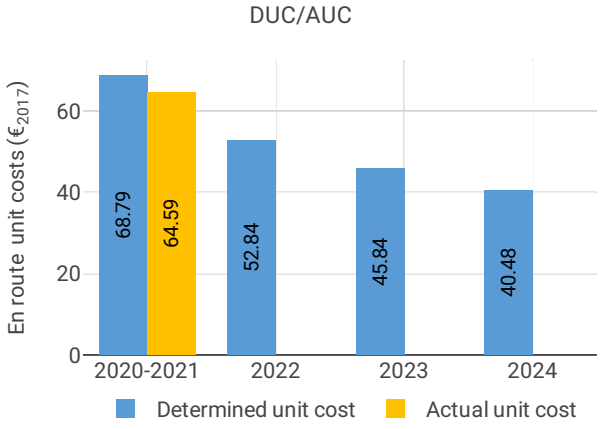
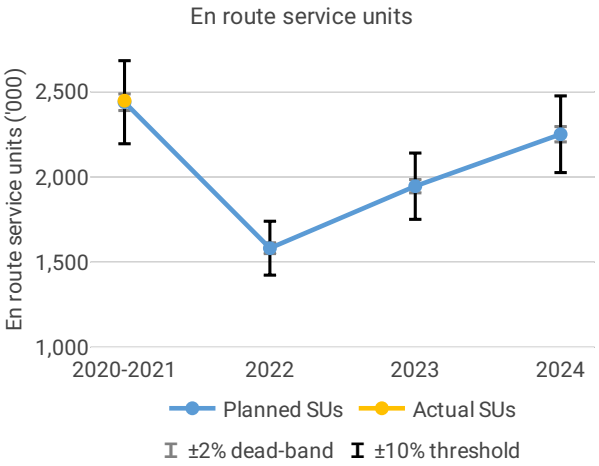
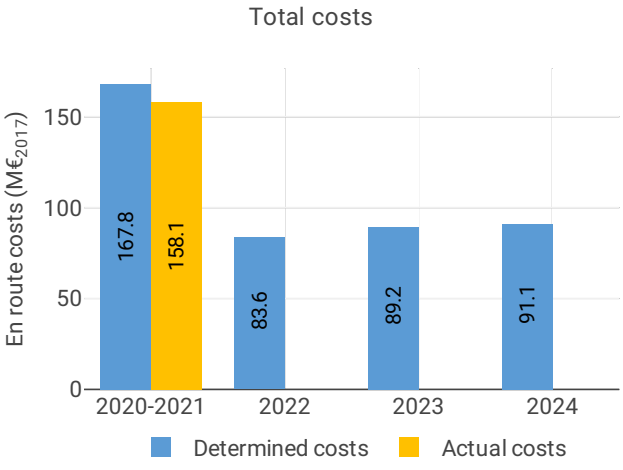
• The en route actual unit cost incurred by users in 2020/2021 was 65.86€.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)

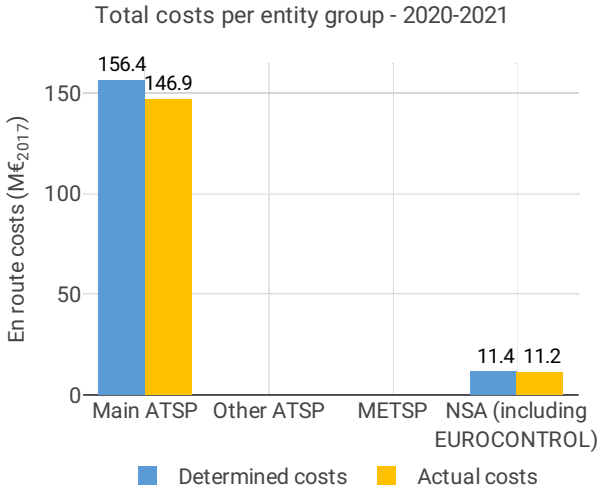


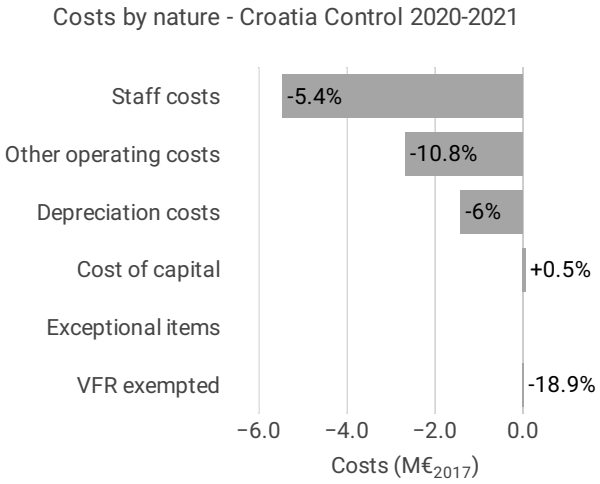




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	162	NA	NA	NA
Determined costs	171	86	94	97
Difference costs	-9	NA	NA	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	1.1%	1.9%	2.2%
Determined inflation index	NA	104.3	106.3	108.7
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 en route AUC (486.67 HRK2017 or 65.22 €2017) was lower by -6.1% (-31.62 HRK2017 or -4.24 €2017) comparing with the DUC (518.29 HRK2017 or 69.46 €2017). This was mainly the effect of the lower than planned en route costs in real terms (-5.8%, -73.0 MHRK2017 or -9.8 M€2017).

En route service units

The actual TSUs slightly exceed the planned level (+0.3%) and is within the ±2% dead-band which result in additional gains kept by the ANSP.

En route costs by entity

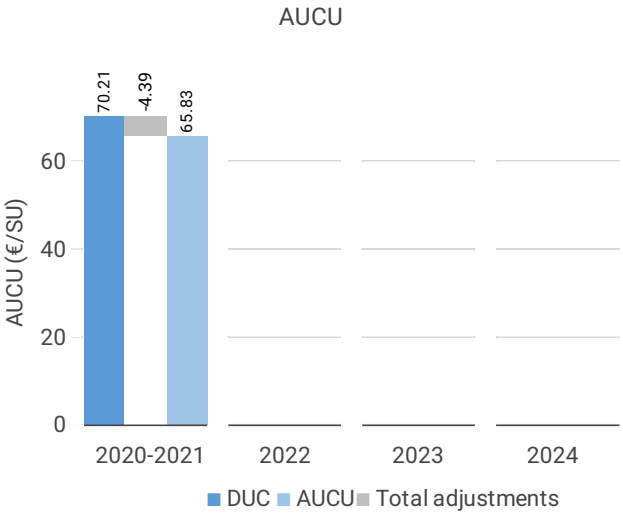
Actual en route costs are -5.8% lower than planned (-9.8 M€2017) which is mainly driven by the lower costs for Croatia Control (-6.1% or -9.6 M€2017). Actual 2020-2021 NSA/EUROCONTROL costs are lower by -1.7% (or 0.2 M€2017).

En route costs for the main ANSP at charging zone level

The lower than planned en route costs in real terms for Croatia Control (-6.1%, or -9.6 M€2017) result from:

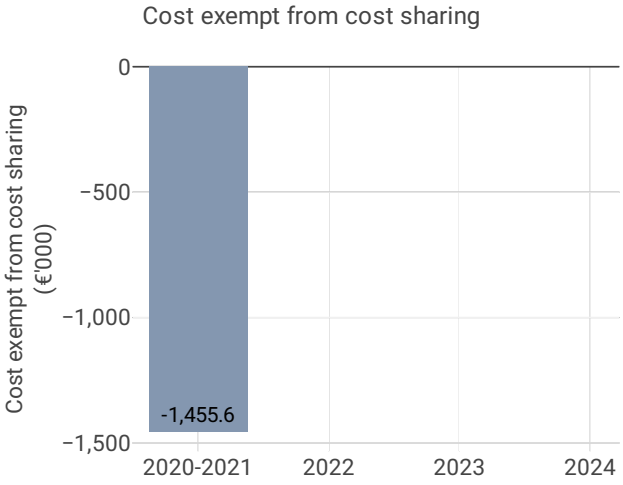
- lower than planned, by -5.4% (-5.5 M€2017) en route staff costs mainly resulting from the hiring freeze and salary cuts;
- lower en-route other operating costs (by -10.8% or -2.7 M€2017), due to the limitation of expenses, including staff trainings, business trips and maintenance expenses;
- lower, by -6.0% (-1.4 M€2017) depreciation due to redefinition of CAPEX planning;
- slightly higher, by +0.5% (+0.04 M€2017) cost of capital; and,
- lower deduction of costs of exempted VFR flights (-18.9%).

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



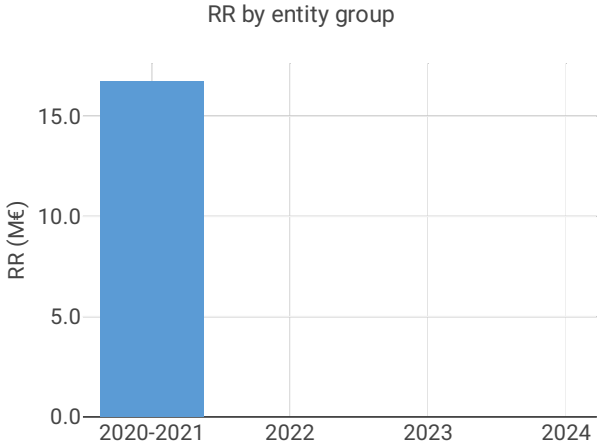
AUCU components (€/SU) – 2020-2021

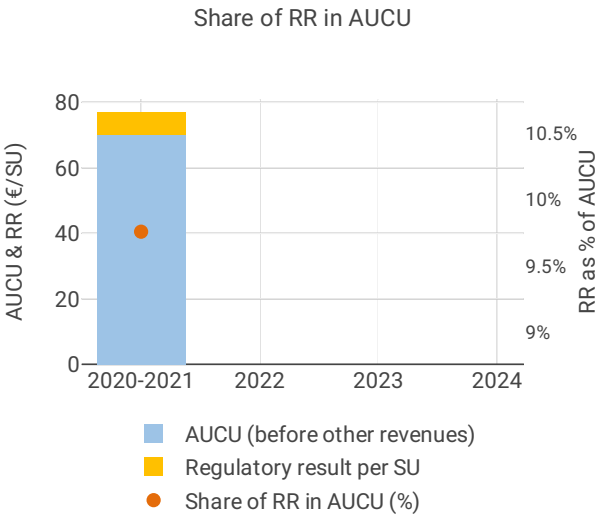
Components of the AUCU in 2020-2021	€/SU
DUC	**70.21**
Inflation adjustment	0.52
Cost exempt from cost-sharing	-0.59
Traffic risk sharing adjustment	0.00
Traffic adj. (costs not TRS)	-0.03
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-4.28
Application of lower unit rate	0.00
Total adjustments	-4.39
AUCU	**65.83**
AUCU vs. DUC	**-6.2%**

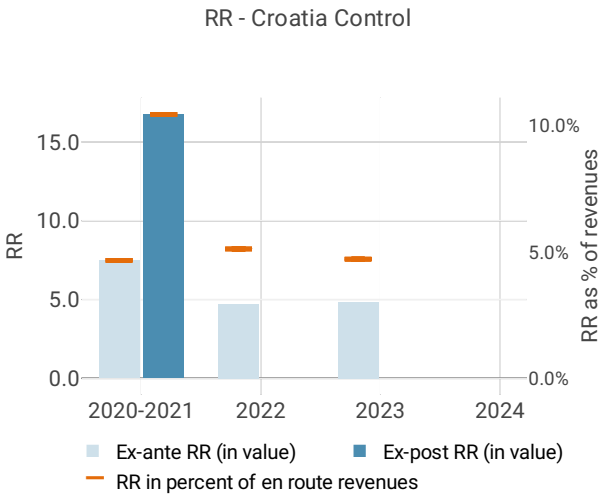


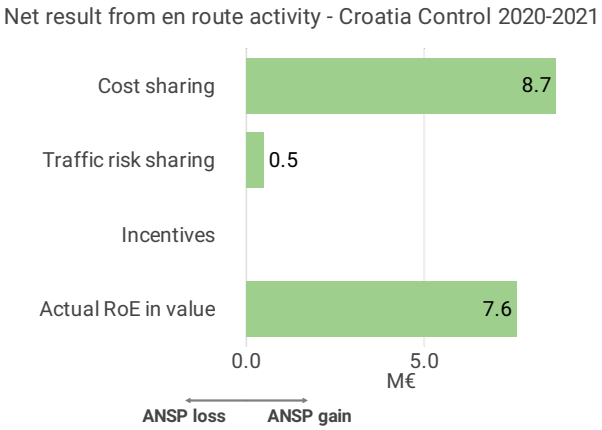
Cost exempt from cost sharing by item - 2020-2021	€'000	€/SU
New and existing investments	-1,260.4	-0.51
Competent authorities and qualified entities costs	91.0	0.04
Eurocontrol costs	-286.2	-0.12
Pension costs	0.0	0.00
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**-1,455.6**	**-0.59**

5.2.3 Regulatory result (RR)









Focus on regulatory result

Croatia Control net gain on activity in the en route charging zone in the combined year 2020-2021
Croatia Control's net gain amounts to +69.1 MHRK or +9.2 M€, mainly due to gains of +65.2 MHRK from the cost sharing mechanism, and gains of +3.9 MHRK from the traffic risk sharing mechanism.
Croatia Control 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 (+9.2M€) and the actual RoE (+57.1 MHRK or +7.6 M€) amounts to +126.2 MHRK or + 16.8 M€ (10.4% of the en route revenues). The resulting ex-post rate of return on equity is 13.5% which is higher than the 6.1% planned in the PP.