



Performance Review Body Monitoring Report

Slovakia - 2022

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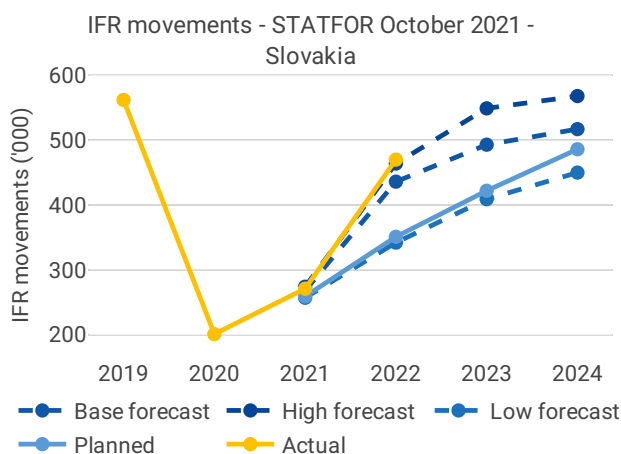
1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/768 of 13 April 2022

List of ACCs	1	Exchange rate (1 EUR=)		Main ANSP	
Bratislava ACC		2017: 1 EUR		• LPS SR	
		2022: 1 EUR			
No of airports in the scope of the performance plan:		Share of Union-wide:		Other ANSPs	
• ≥80'K	0	• traffic (TSUs) 2022	0.9%	–	
• <80'K	0	• en route costs 2022	0.8%	MET Providers	
		Share en route / terminal costs 2022	100% / 0%	• SHMU	
		En route charging zone(s)			
		Slovakia			
		Terminal charging zone(s)			
		–			

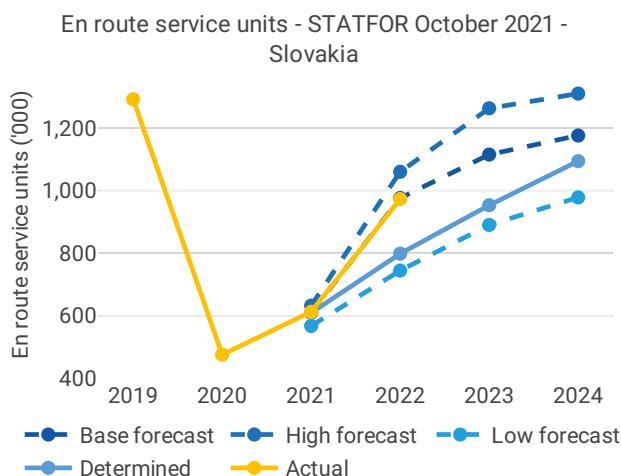
1.2 Traffic (En route traffic zone)



- Slovakia recorded 470K actual IFR movements in 2022, +74% compared to 2021 (271K).

- Actual 2022 IFR movements were +34% above the plan (351K).

- Actual 2022 IFR movements represent 84% of the actual 2019 level (562K).



- Slovakia recorded 973K actual en route service units in 2022, +59% compared to 2021 (612K).

- Actual 2022 service units were +22% above the plan (798K).

- Actual 2022 service units represent 75% of the actual 2019 level (1,292K).

1.3 Safety (Main ANSP)



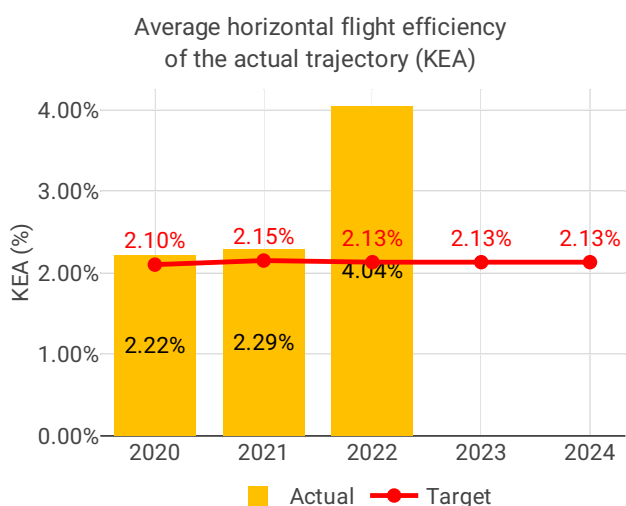
- In 2022, LPS failed to maintain the planned level for safety assurance and degraded its performance to level B due to a reorganisation of safety functions. LPS should ensure that adequate resources are in place to implement improvements to allow the attainment of the target again. LPS has achieved the RP3 target levels for the other four management objectives in advance of their plan.

- Slovakia recorded stable performance with respect to safety occurrences, with no occurrences recorded for runway incursions or for separation minima infringements. The NSA closely monitored the separation minima infringements throughout

the year and established acceptable and tolerable levels of safety.

- LPS could improve its safety management by implementing automated safety data recording systems for runway incursions.

1.4 Environment (Member State)



- Slovakia achieved a KEA performance of 4.04% compared to its target of 2.13% and did not contribute positively towards achieving the Union-wide target. KEA worsened by 1.75 p.p. compared to 2021.

- The NSA states that despite the plan to implement H24 cross-border FRA, LPS SR will have limited scope for additional improvement in KEA. Additionally, the most impact on KEA is derived from the significant shift in trajectories due to Russia's war of aggression against Ukraine.

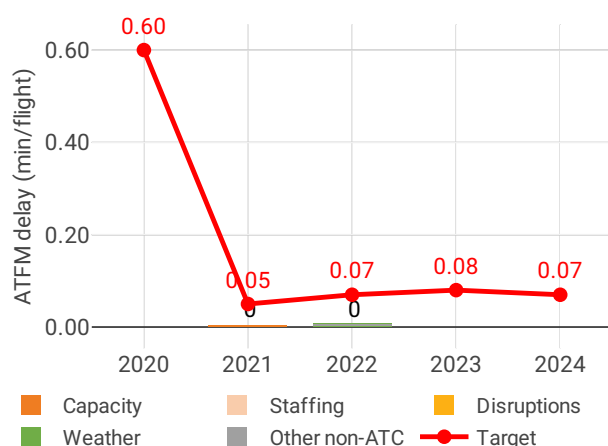
- Both KEP and SCR worsened in 2022 and were at their highest values in the past five years.

- Slovakia has no airports that are regulated under

the RP3 performance and charging scheme.

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups



- Slovakia registered 0.00 minutes of average en route ATFM delay per flight during 2022, which has been adjusted to zero, thus achieving the local target value of 0.07.

- The average number of IFR movements was 16% below 2019 levels in Slovakia in 2022.

- The number of ATCOs in OPS is expected to increase by 9% by the end of RP3 in Bratislava ACC with the actual value being above the 2022 plan.

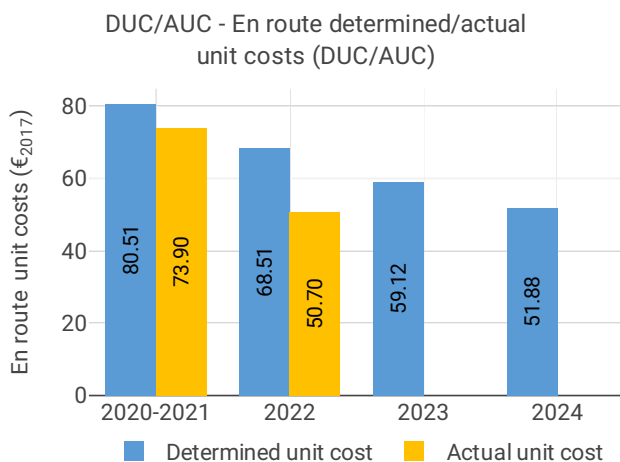
- Delays were highest between July and September, driven by adverse weather conditions and ATC Capacity issues.

- The share of delayed flights with delays longer than 15 minutes in Slovakia increased by 38.31 p.p. compared to 2021 and was lower than 2019 values.

- The yearly total of sector opening hours in Bratislava ACC was 22,709 in 2022, showing a 26.7% increase compared to 2021. Sector opening hours are 3.7% below 2019 levels.

- Bratislava ACC registered 21.97 IFR movements per one sector opening hour in 2022, being 4.8% above 2019 levels.

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



- The en route 2022 actual unit cost of Slovakia was 50.66 €2017, -26% lower than the determined unit cost (68.51 €2017). Slovakia does not have a terminal charging zone.

- The en route 2022 actual service units (973K) were +22% higher than the determined service units (798K).

- The en route 2022 actual total costs were 5.4 M€2017 (-10%) lower than planned. The significant increases in depreciation and cost of capital partially offset the decrease in total costs. The decrease was mainly attributable to lower staff costs

(-5.3 M€2017, or -15%) due to the non-payment of the variable salaries, a COVID-19 measure already taken in 2020 (for cashflow reasons).

- Slovakia presented a deviation from the criteria to achieve capacity targets, which was considered justified. Considering that costs are significantly lower and that the 2022 en route capacity targets have not been achieved, the PRB invites the NSA to analyse the discrepancies and identify their reasons, and the Member State to rectify the situation to ensure that the additional means granted through the capacity deviation are used to address the capacity issues.

- LPS SR spent 8.1 M€2017 in 2022 related to costs of investments, +27% more than determined (6.3 M€2017). The NSA explains that the increase is due to the fact that determined costs of investments were lowered in the plan by the amount underspent in RP2.

- The en route actual unit cost incurred by users in 2022 was 68.58€.

2 SAFETY - SLOVAKIA

2.1 PRB monitoring

- In 2022, LPS failed to maintain the planned level for safety assurance and degraded its performance to level B due to a reorganisation of safety functions. LPS should ensure that adequate resources are in place to implement improvements to allow the attainment of the target again. LPS has achieved the RP3 target levels for the other four management objectives in advance of their plan.
- Slovakia recorded stable performance with respect to safety occurrences, with no occurrences recorded for runway incursions or for separation minima infringements. The NSA closely monitored the separation minima infringements throughout the year and established acceptable and tolerable levels of safety.
- LPS could improve its safety management by implementing automated safety data recording systems for runway incursions.

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



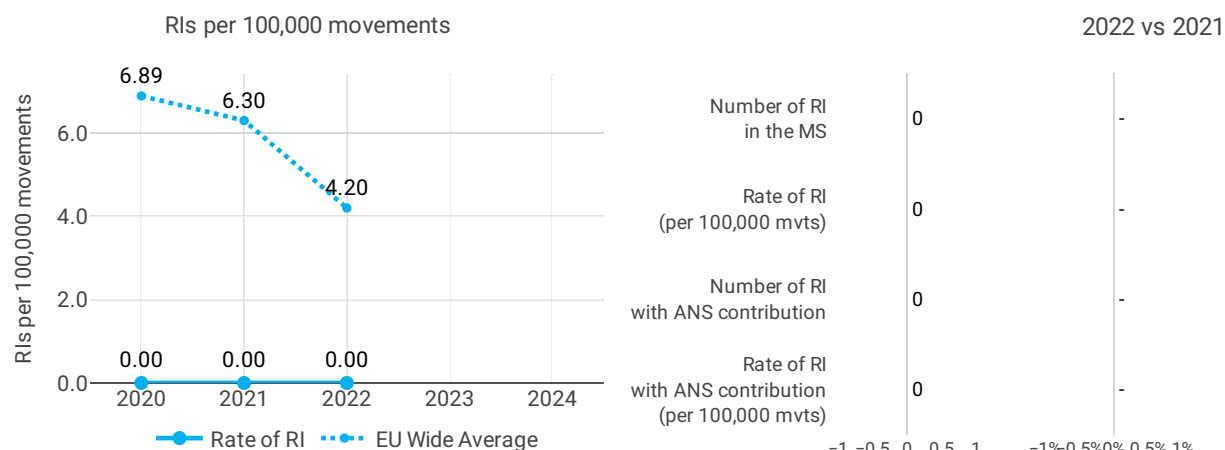
Focus on EoSM

Four EoSM components of the ANSP meet, already the RP3 target level. Compared with 2021, in 2022 some degradation was observed for three questions in “Safety Assurance” reducing component maturity from level C to level B, and consequently the ANSP no longer achieves the RP3 target for this component.

Detailed information on Safety performance monitoring for the year 2022 are included in Performance Review Body Monitoring Report 2022, Annex III – Safety report

2.3 Safety occurrences

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



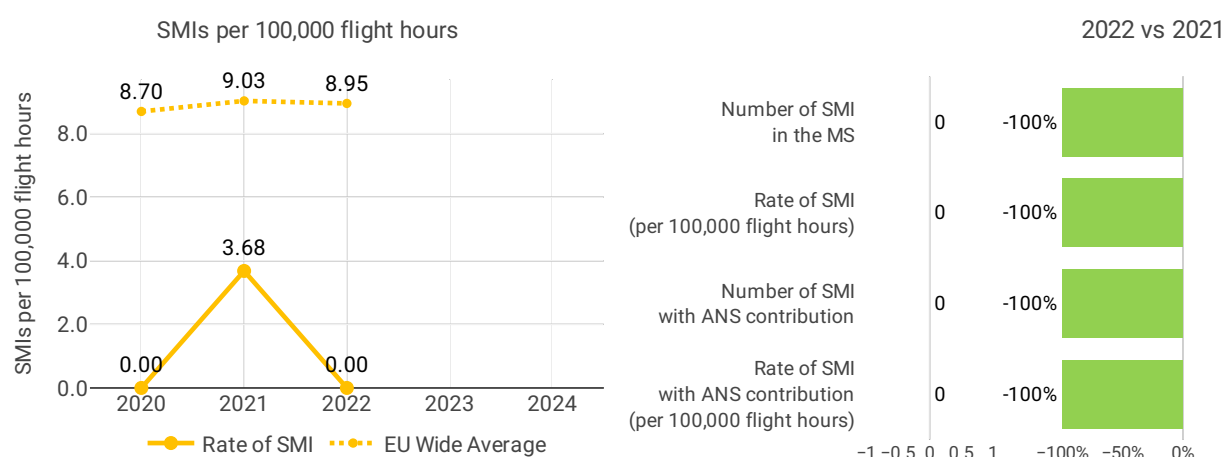
Rate of RIs per 100,000 airport movements - Slovakia

#	Airport name	APT movements	Number of RI	Rate RI per 100,000
1	Bratislava	0	NA	NA

Focus on runway incursions

Detailed information on Safety performance monitoring for the year 2022 are included in Performance Review Body Monitoring Report 2022, Annex III – Safety report

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



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

#	ANSP	Flight hours					Number of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	LPS SR	41,055	54,376	86,171	NA	NA	0	2	0	NA	NA

#	ANSP	Rate of SMI per 100,000 flight hours					% variation in rate of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	LPS SR	0.0	3.7	0.0	NA	NA	NA	0%	-100%	NA	NA

Focus on separation minima

Detailed information on Safety performance monitoring for the year 2022 are included in Performance Review Body Monitoring Report 2022, Annex III – Safety report

2.3.3 Quality of occurrences reporting

Detailed information on Safety performance monitoring for the year 2022 are included in Performance Review Body Monitoring Report 2022, Annex III – Safety report

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

2022	
For RIs	For SMIs
X	✓

Detailed information on Safety performance monitoring for the year 2022 are included in Performance Review Body Monitoring Report 2022, Annex III – Safety report

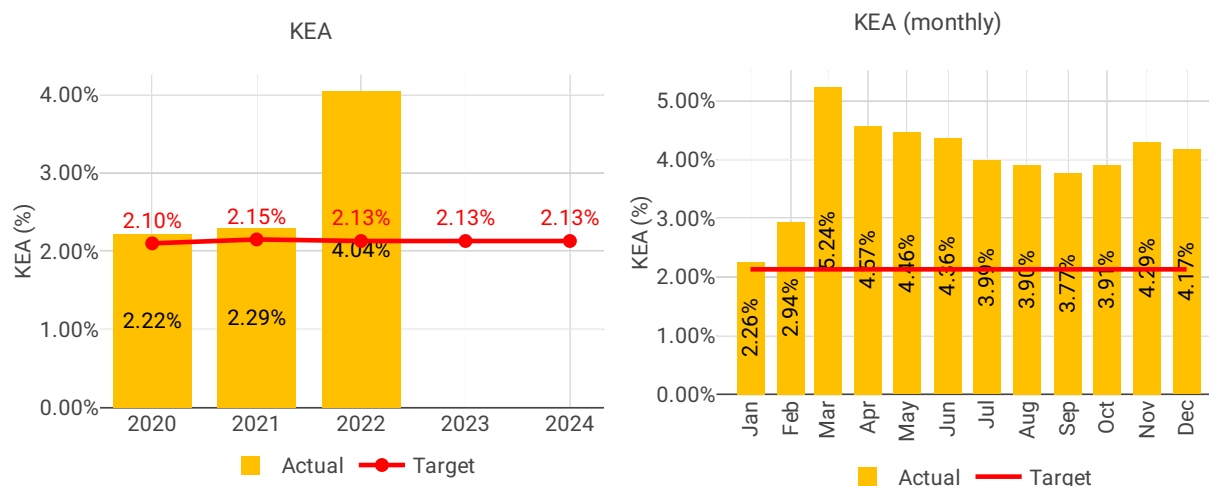
3 ENVIRONMENT - SLOVAKIA

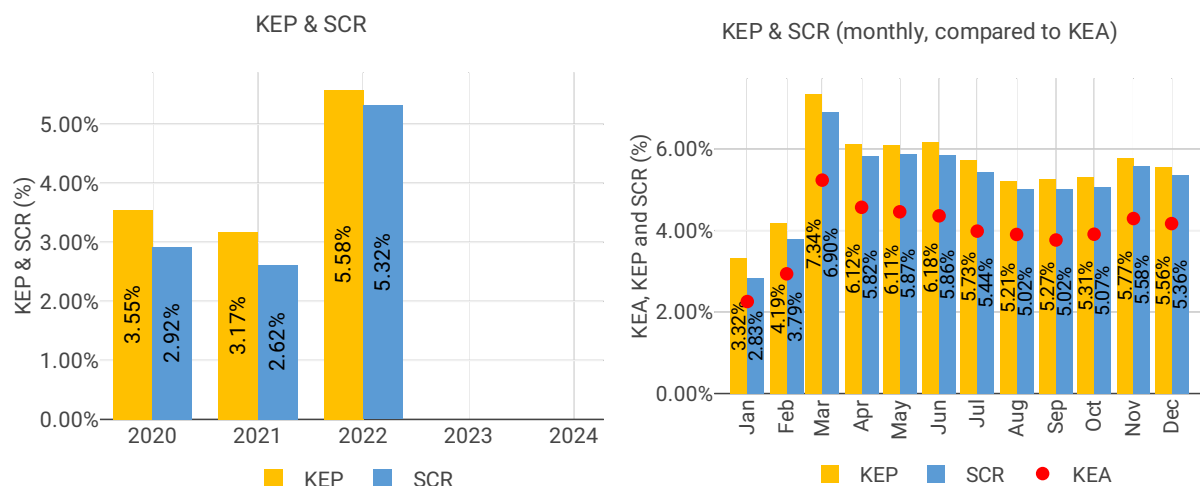
3.1 PRB monitoring

- Slovakia achieved a KEA performance of 4.04% compared to its target of 2.13% and did not contribute positively towards achieving the Union-wide target. KEA worsened by 1.75 p.p. compared to 2021.
- The NSA states that despite the plan to implement H24 cross-border FRA, LPS SR will have limited scope for additional improvement in KEA. Additionally, the most impact on KEA is derived from the significant shift in trajectories due to Russia's war of aggression against Ukraine.
- Both KEP and SCR worsened in 2022 and were at their highest values in the past five years.
- Slovakia has no airports that are regulated under the RP3 performance and charging scheme.

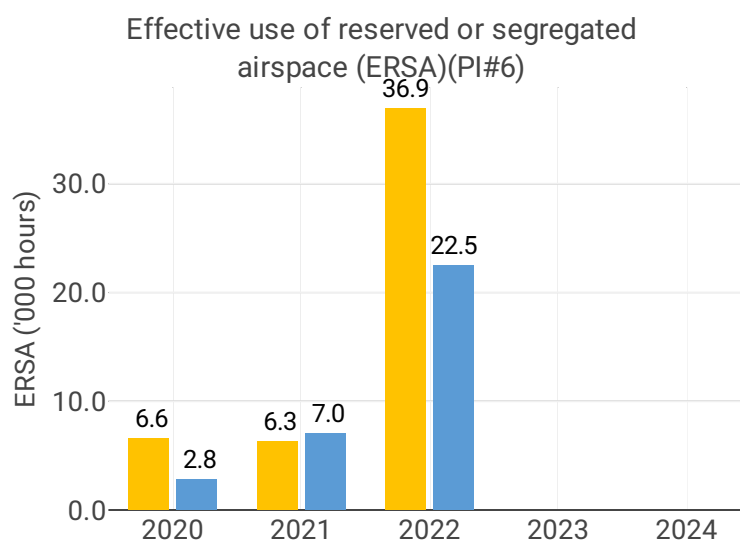
3.2 En route performance

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)

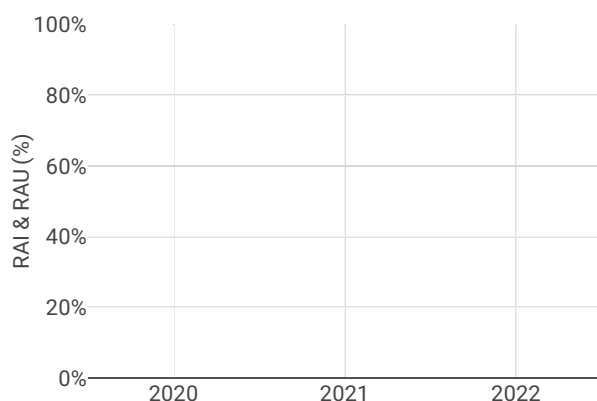




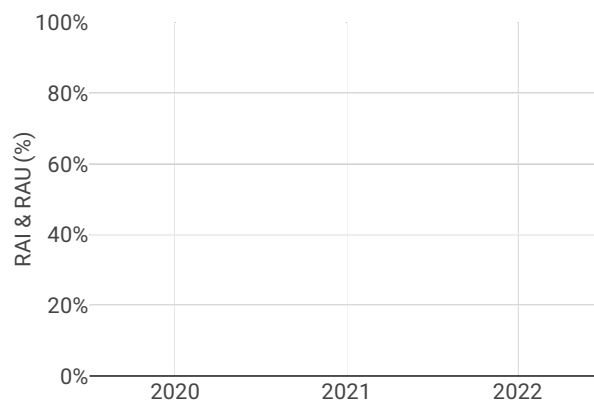
3.3 Civil-Military dimension



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



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



Focus on Civil-Military dimension

Update on Military dimension of the plan

Closure of Ukrainian airspace and to establishment of military transit corridors has caused a significant shift of traffic flows to the west with the extraordinary de-tour impacting of KEA indicator.

Additional information related to Russia's war of aggression against Ukraine

Due to unavailability of Ukrainian and Russian airspace, traffic originally planned to fly via Ukraine and long-haul flights to Asia moved to eastern part of FIR Bratislava. In 2022 average delay per flight was

below target limit, mainly because of opening more sectors than originally planned. Due to establishment of military transit corridors, capacity below FL335 was reduced by 30%.

Military - related measures implemented or planned to improve capacity

No data available.

Initiatives implemented or planned to improve PI#6

PRISMIL CURA was fully implemented.

Initiatives implemented or planned to improve PI#7

PRISMIL CURA was fully implemented.

Initiatives implemented or planned to improve PI#8

PRISMIL CURA was fully implemented.

4 CAPACITY - SLOVAKIA

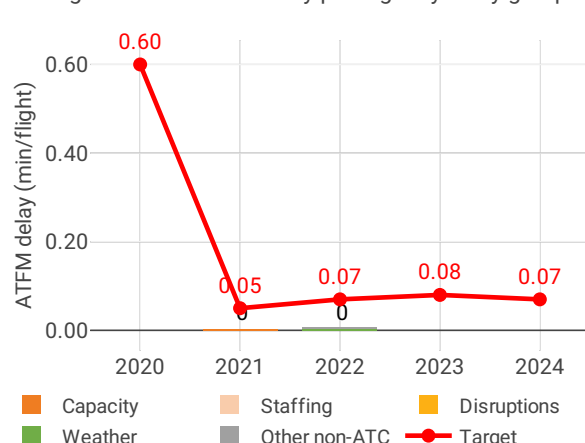
4.1 PRB monitoring

- Slovakia registered 0.00 minutes of average en route ATFM delay per flight during 2022, which has been adjusted to zero, thus achieving the local target value of 0.07.
- The average number of IFR movements was 16% below 2019 levels in Slovakia in 2022.
- The number of ATCOs in OPS is expected to increase by 9% by the end of RP3 in Bratislava ACC with the actual value being above the 2022 plan.
- Delays were highest between July and September, driven by adverse weather conditions and ATC Capacity issues.
- The share of delayed flights with delays longer than 15 minutes in Slovakia increased by 38.31 p.p. compared to 2021 and was lower than 2019 values.
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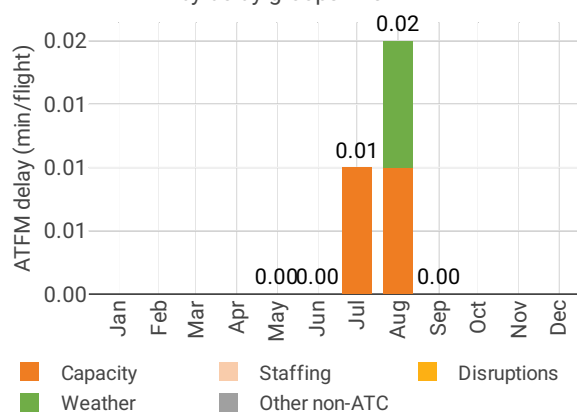
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

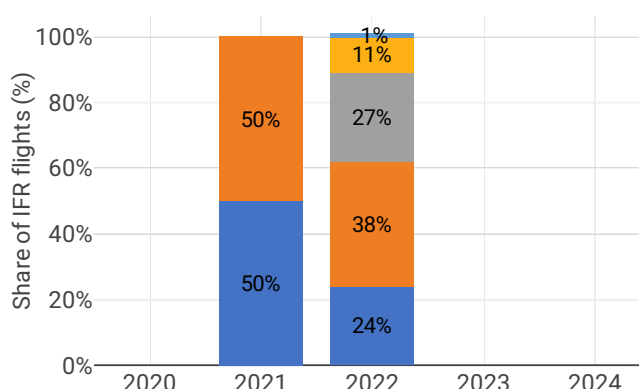
Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2022



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



Focus on en route ATFM delay

Summary of capacity performance

Slovakia experienced an increase in traffic from 271k flights in 2021 to 470k flights in 2022.

12k minutes of en route ATFM delay originating in the Bratislava ACC were re-attributed to DFS (10k) and DSNA (2k) via the NM post operations delay attribution process, according to the NMB agreement for eNM/S22 measures, to ameliorate capacity shortfalls in both Karlsruhe UAC and Reims ACC.

Following the above reattribution of delays, Bratislava ACC had almost zero remaining ATFM delays in 2022.

NSA's assessment of capacity performance

In terms of IFR movements, the actual level of traffic exceeded the forecasted level by approximately 10%. With traffic level exceeding forecasted volume LPS SR, š. p. was set to start recovering from the pandemic-caused crisis in economic terms.

Target has been met with a recorded delay of 0.03 minutes per flight (0.07 min/flight required).

Monitoring process for capacity performance

Analysis on strategical, pretactical and post ops level is being done on regular basis using Eurocontrol's 6 weeks traffic forecast, NMIR Tool, Eurocontrol's ACC Dashboard and our internal rostering tool to monitor and ensure that provided capacity meets traffic demand.

Capacity planning

During the period of 2018-2022 ATFM delay per flight was always below target limit and we expect this trend to continue in next years. No capacity issues are foreseen for RP3 in the baseline traffic growth scenario.

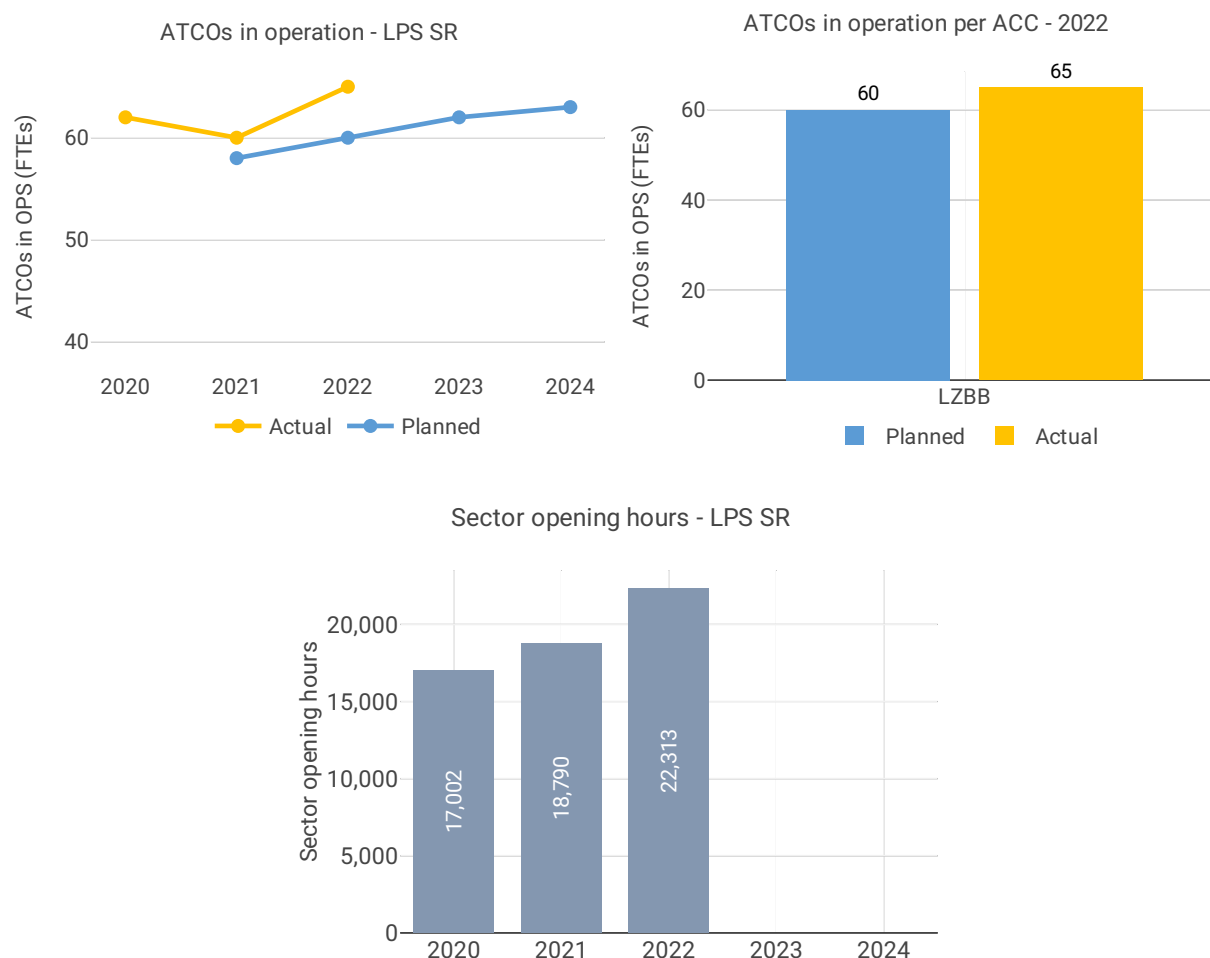
Application of Corrective Measures for Capacity (if applicable)

Additional Information Related to Russia's War of Aggression Against Ukraine Due to unavailability of Ukrainian and Russian airspace, traffic originally planned to fly via Ukraine and long-haul flights to Asia moved to eastern part of FIR Bratislava. In 2022 average delay per flight was below target limit, mainly because of opening more sectors than originally planned.

Due to establishment of military transit corridors, capacity below FL335 was reduced by 30%.

Shifts were boosted by adding more personnel, thus we were able to keep more sectors opened during the day and late evening. This was only possible due to air traffic controllers accepting working extra hours and hugely improved covid situation.

4.2.2 Other indicators



Focus on ATCOs in operations

N/A

5 COST-EFFICIENCY - SLOVAKIA

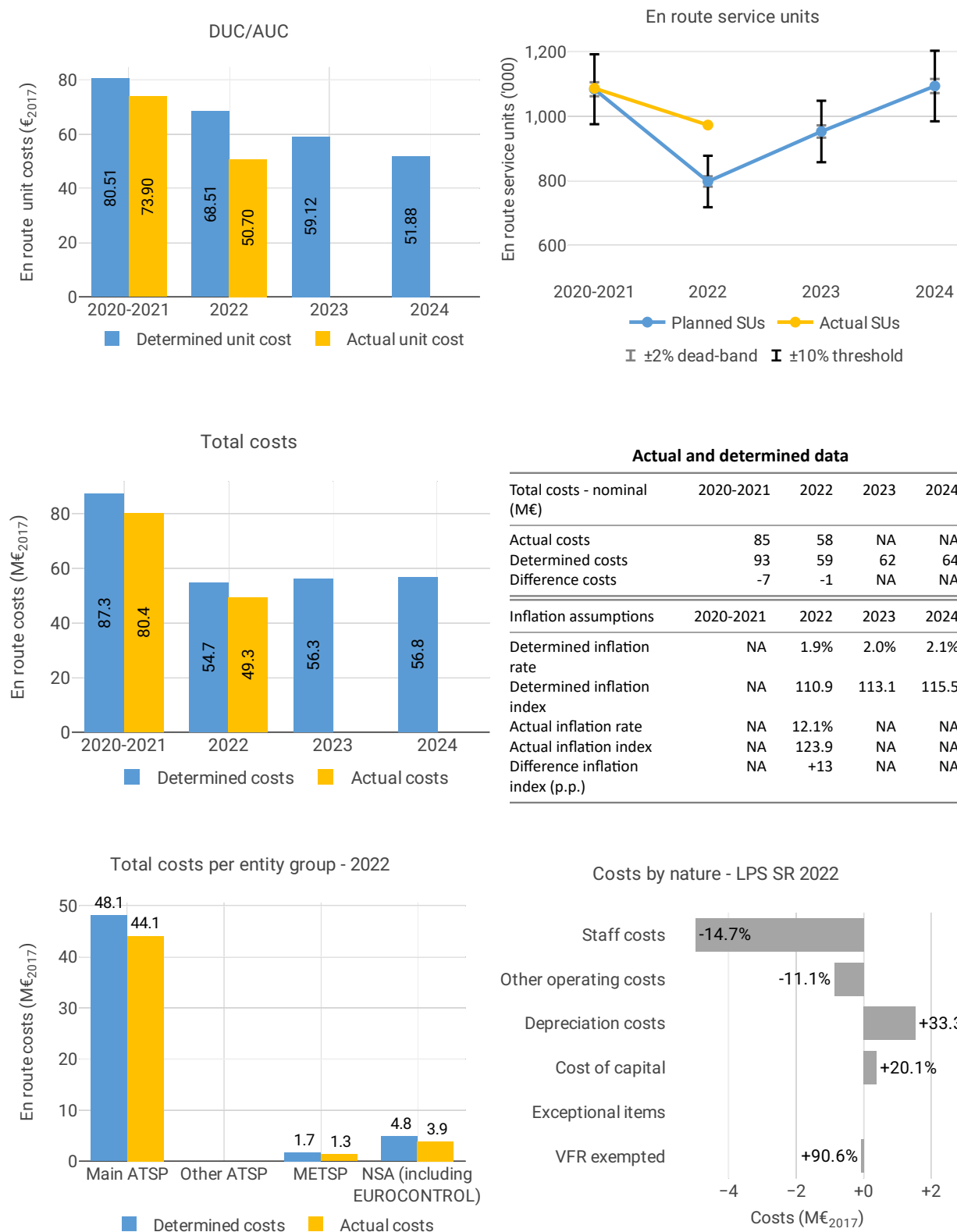
5.1 PRB monitoring

- The en route 2022 actual unit cost of Slovakia was 50.66 €2017, -26% lower than the determined unit cost (68.51 €2017). Slovakia does not have a terminal charging zone.
- The en route 2022 actual service units (973K) were +22% higher than the determined service units (798K).
- The en route 2022 actual total costs were 5.4 M€2017 (-10%) lower than planned. The significant increases in depreciation and cost of capital partially offset the decrease in total costs. The decrease was mainly attributable to lower staff costs (-5.3 M€2017, or -15%) due to the non-payment of the variable salaries, a COVID-19 measure already taken in 2020 (for cashflow reasons).
- Slovakia presented a deviation from the criteria to achieve capacity targets, which was considered justified. Considering that costs are significantly lower and that the 2022 en route capacity targets have not been achieved, the PRB invites the NSA to analyse the discrepancies and identify their reasons, and the Member State to rectify the situation to ensure that the additional means granted through the capacity deviation are used to address the capacity issues.
- LPS SR spent 8.1 M€2017 in 2022 related to costs of investments, +27% more than determined (6.3 M€2017). The NSA explains that the increase is due to the fact that determined costs of investments were lowered in the plan by the amount underspent in RP2.

- The en route actual unit cost incurred by users in 2022 was 68.58€.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)



Focus on unit cost

AUC vs. DUC

In 2022, the en route AUC was -26.1% (or -17.85 €2017) lower than the planned DUC. This results from the combination of significantly higher than planned TSUs (+21.9%) and significantly lower than planned en route costs in real terms (-9.9%, or -5.4 M€2017). It should be noted that actual inflation index in 2022 was +13.0 p.p. higher than planned.

En route service units

The difference between actual and planned TSUs (+21.9%) falls outside the $\pm 10\%$ threshold foreseen in the traffic risk sharing mechanism. The resulting gain of additional en route revenues is therefore shared between the ANSP and the airspace users, with the ANSP (LPS) retaining an amount of +1.9 M€2017.

En route costs by entity

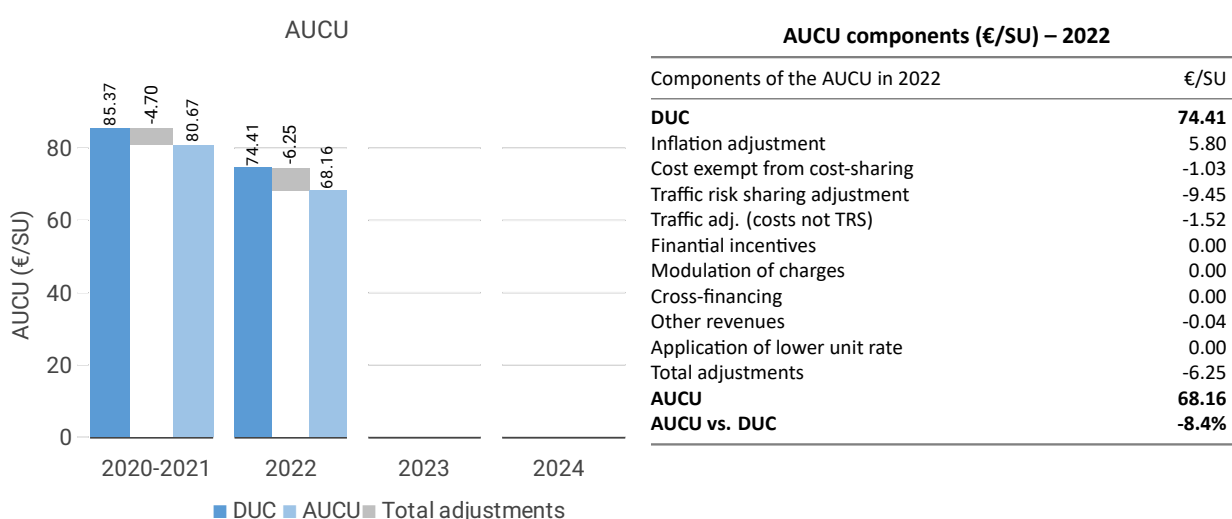
Actual real en route costs are -9.9% (-5.4 M€2017) lower than planned. This is the result of lower costs for the main ANSP, LPS (-8.3%, or -4.0 M€2017), the NSA/EUROCONTROL (-21.4%, or -1.0 M€2017) and the MET service provider (-22.0%, or -0.4 M€2017).

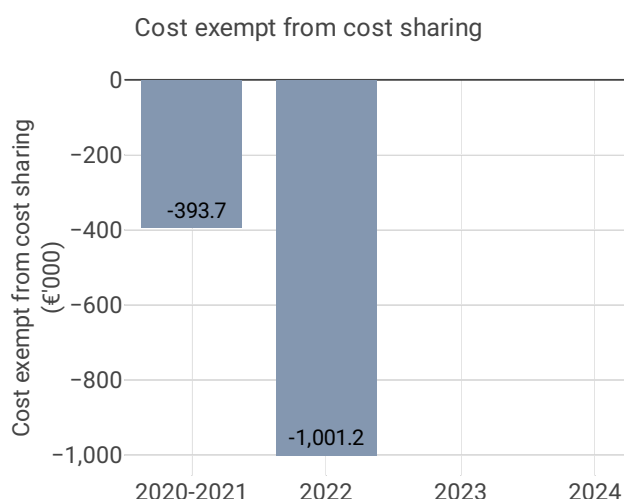
En route costs for the main ANSP at charging zone level

Significantly lower than planned en route costs in real terms for LPS in 2022 (-8.3%, or -4.0 M€2017) result from:

- Significantly lower staff costs (-14.7%), which is the result of continuation of various cost containment measures, including non-payment of some variable wage components. This result is also impacted by higher actual inflation index (+13.0 p.p.).
- Significantly lower other operating costs (-11.1%), mainly due to inflation index impact (+13.0 p.p.).
- Significantly higher depreciation (+33.3%). This is the effect of lowering the determined depreciation costs by 1.3 M€ of the unrealized investment from RP2.
- Significantly higher cost of capital (+20.1%), due to the increase in the value of the asset base together with the increase in the interest rate on loan.
- Significantly higher deduction for VFR exempted flights (+90.6%).

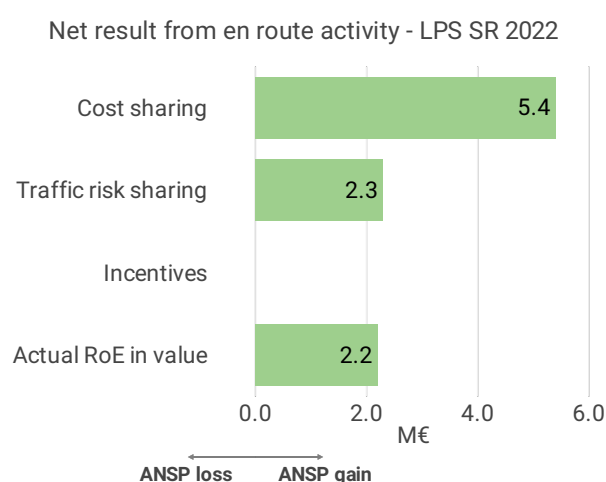
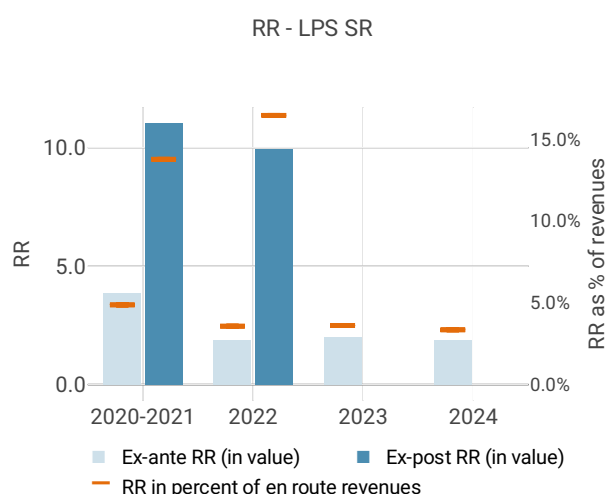
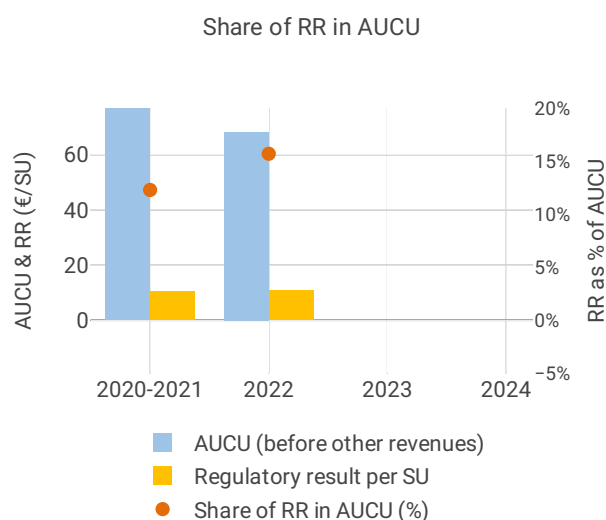
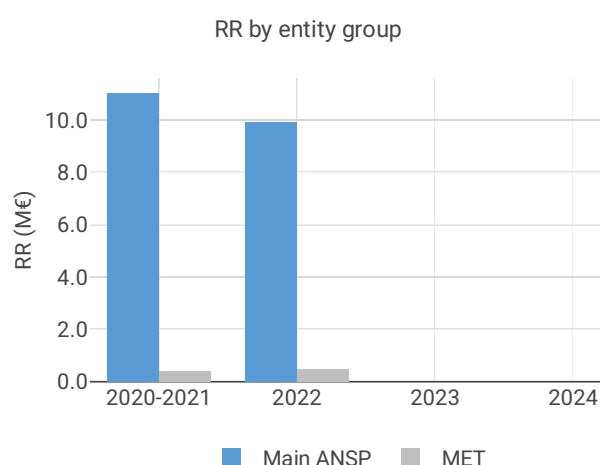
5.2.2 Actual unit cost incurred by the users (AUCU) (PI#1)





Cost exempt from cost sharing by item - 2022	€'000	€/SU
New and existing investments	0.0	0.00
Competent authorities and qualified entities costs	-296.1	-0.30
Eurocontrol costs	-705.1	-0.73
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	-1,001.2	-1.03

5.2.3 Regulatory result (RR)



Focus on regulatory result

LPS net gain on activity in the Slovakia en route charging zone in the year 2022

LPS reported a net gain of +8.2 M€, as a combination of a gain of +5.8 M€ arising from the cost sharing mechanism, with a gain of +2.3 M€ arising from the traffic risk sharing mechanism.

LPS 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 (+8.2 M€) and the actual RoE (+2.2 M€) amounts to +10.4 M€ (17.1% of the en route revenues). The resulting ex-post rate of return on equity is 23.8%, which is higher than the 5.1% planned in the PP.