

Performance Review Board

Monitoring Report

Slovakia - 2024



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Contents

| | | |
|----------|--|-----------|
| 1 | OVERVIEW | 2 |
| 1.1 | Contextual information..... | 2 |
| 1.2 | Traffic (En route traffic zone) | 2 |
| 1.3 | Safety (Main ANSP) | 3 |
| 1.4 | Environment (Member State) | 4 |
| 1.5 | Capacity (Member State)..... | 4 |
| 1.6 | Cost-efficiency (En route/Terminal charging zone(s)) | 5 |
| 2 | SAFETY - SLOVAKIA | 7 |
| 2.1 | PRB monitoring | 7 |
| 2.2 | Effectiveness of Safety Management (EoSM) (KPI#1) | 7 |
| 2.3 | Safety occurrences..... | 8 |
| 2.4 | Use of automated safety data recording system (ASDRS) (PI#3) | 9 |
| 3 | ENVIRONMENT - SLOVAKIA | 10 |
| 3.1 | PRB monitoring | 10 |
| 3.2 | En route performance | 10 |
| 3.3 | Civil-Military dimension | 11 |
| 4 | CAPACITY - SLOVAKIA | 12 |
| 4.1 | PRB monitoring | 12 |
| 4.2 | En route performance | 12 |
| 5 | COST-EFFICIENCY - SLOVAKIA | 15 |
| 5.1 | PRB monitoring | 15 |
| 5.2 | En route charging zone | 15 |

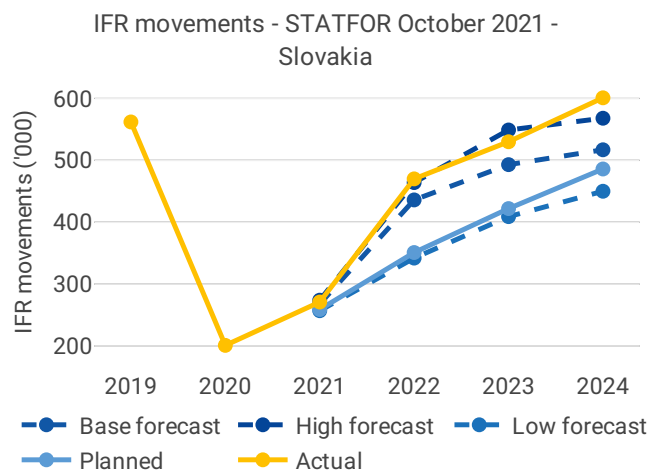
1 OVERVIEW

1.1 Contextual information

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

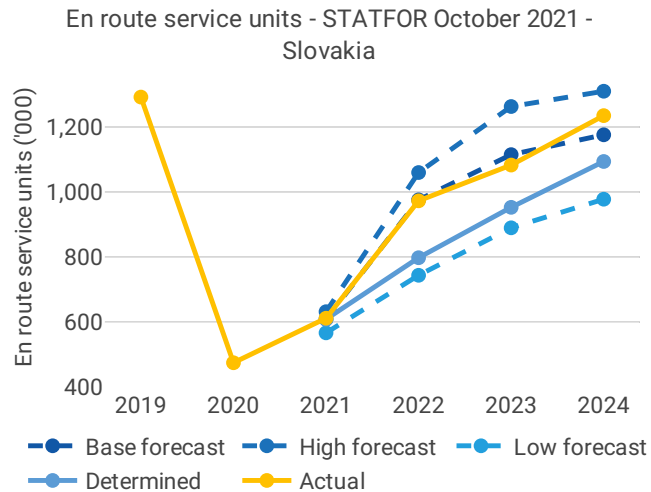
| | | |
|---|---|--------------------------------|
| List of ACCs 1 Bratislava ACC | Exchange rate (1 EUR=) 2017: 1 EUR 2024: 1 EUR | Main ANSP • LPS SR |
| No of airports in the scope of the performance plan: • ≥80'K 0 • <80'K 0 | Share of Union-wide: • traffic (TSUs) 2024 0.9% • en route costs 2024 1.0% | Other ANSPs - |
| | Share en route / terminal costs 2024 100% / 0% | MET Providers • SHMU |
| | En route charging zone(s) Slovakia | |
| | Terminal charging zone(s) - | |

1.2 Traffic (En route traffic zone)



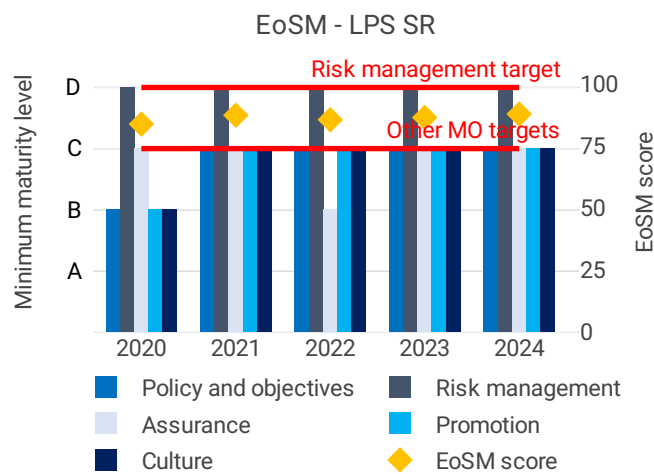
- Slovakia recorded 601K actual IFR movements in 2024, +13.4% compared to 2023 (530K).
- Actual 2024 IFR movements were +23.7% above the plan (486K).
- Actual 2024 IFR movements are +6.9% above the actual 2019 level (562K).





- Slovakia recorded 1,235K actual service units in 2024, +14.0% compared to 2023 (1,083K).
- Actual 2024 service units were +12.9% above the plan (1,094K).
- Actual 2024 service units represent 96% of the actual 2019 level (1,292K).

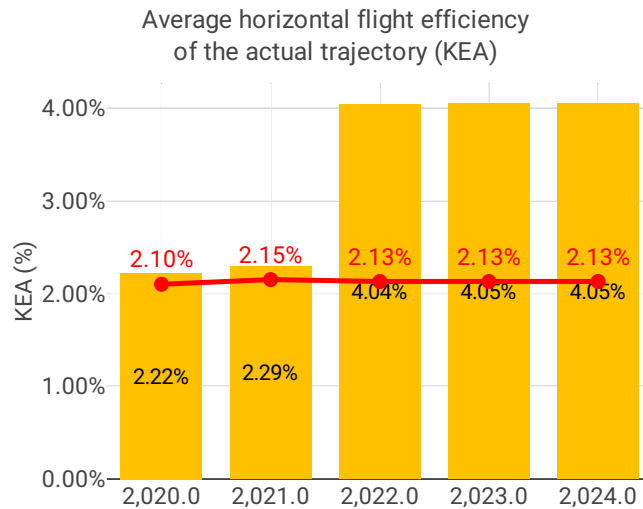
1.3 Safety (Main ANSP)



- LPS achieved the RP3 targets for all Management Objectives in 2023 and maintained the level in 2024.
- Slovakia recorded higher rates of both runway incursions and separation minima infringements in 2024 compared with 2023, continuing the upwards trends.

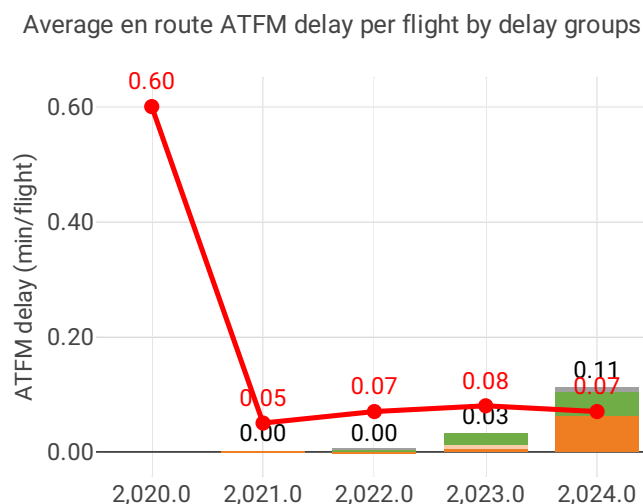


1.4 Environment (Member State)



- Slovakia achieved a KEA performance of 4.05% compared to its target of 2.13% and did not contribute positively towards achieving the Union-wide target.
- The NSA states that the most significant impact on KEA from the shift in trajectories due to Russia's war of aggression against Ukraine.
- Both KEP and SCR improved compared to 2023. Despite the KEA target being missed, KEA improved in 2024. Additionally, the improvement in SCR shows that Slovakia has enhanced the environmental efficiency of its airspace when accounting for impacts outside of its control.
- Slovakia has no airports that are regulated under the performance and charging scheme.

1.5 Capacity (Member State)

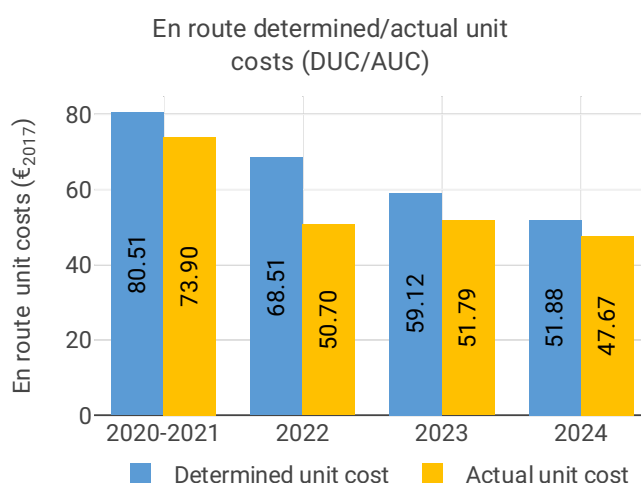


- Slovakia registered 0.13 minutes of average en route ATFM delay per flight during 2024, which has been adjusted to 0.11 during the post-ops adjustment process, thus not achieving the local target value of 0.07. Delays in Slovakia increased by 0.08 minutes per flight year-on-year.



- The majority of delays were generated between June and August, mostly driven by ATC Capacity issues and adverse weather conditions.
- The share of delayed flights with delays longer than 15 minutes in Slovakia increased by 14 percentage points compared to 2023 and was higher than 2019 values.
- The average number of IFR movements was 7% above 2019 levels in Slovakia in 2024.
- The number of ATCOs in OPS is 68, being over the 2024 plan in Bratislava by 5 FTEs.
- The yearly total of sector opening hours in Bratislava ACC was 26,594, showing a 8.3% increase compared to 2023. Sector opening hours are 8.3% above 2019 levels.
- Bratislava ACC registered 22.02 IFR movements per one sector opening hour in 2024, being 1.1% below 2019 levels.

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



- The en route 2024 actual unit cost of Slovakia was 47.67€2017, -8.1% lower than the determined unit cost (51.88€2017). Slovakia does not have a terminal charging zone.
- The en route 2024 actual service units of Slovakia (1.2M) were +13% higher than the determined service units (1.1M).
- The en route 2024 actual total costs were +2.1M€2017, (+3.7%) higher than determined. This difference is mainly driven by higher staff costs and depreciation costs. The staff costs for LPS SR were +1.5M€2017, (+4.3%) higher than the determined costs mainly due to inflation adjustments negotiated with the unions, as well as staff recruitment.
- LPS SR costs of investments were 9.7M€2017 in 2024, +21% higher than determined (8.0M€2017). The NSA stated that this is due to higher depreciation, as determined depreciation costs were lowered to account for unrealised investments in RP2. In addition, cost of capital increase is due to higher values of the asset base and the interest rate of loan.
- The en route actual unit cost incurred by users in 2024 was 62.56€ (+7.8% higher than the 2024 DUC). The difference between the AUCU and the DUC is driven by the positive inflation adjustment.



- Slovakia's RP3 performance plan included justifications for a deviation to achieve the RP3 capacity targets. The main measures included recruiting of new ATCOs. Slovakia has not submitted a detailed report of the capacity-related measures implemented. However, the number of ATCOs in operation at the end of RP3 is below the plan. Slovakia should reimburse to airspace users the excess funds received by ANSPs for measures not implemented.

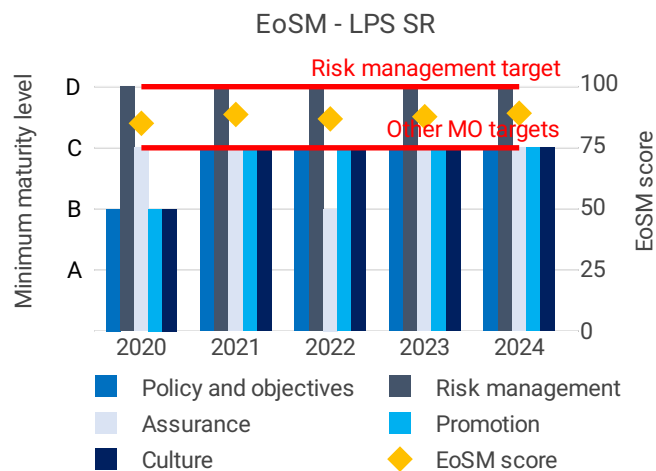


2 SAFETY - SLOVAKIA

2.1 PRB monitoring

- LPS achieved the RP3 targets for all Management Objectives in 2023 and maintained the level in 2024.
- Slovakia recorded higher rates of both runway incursions and separation minima infringements in 2024 compared with 2023, continuing the upwards trends.

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



Focus on EoSM

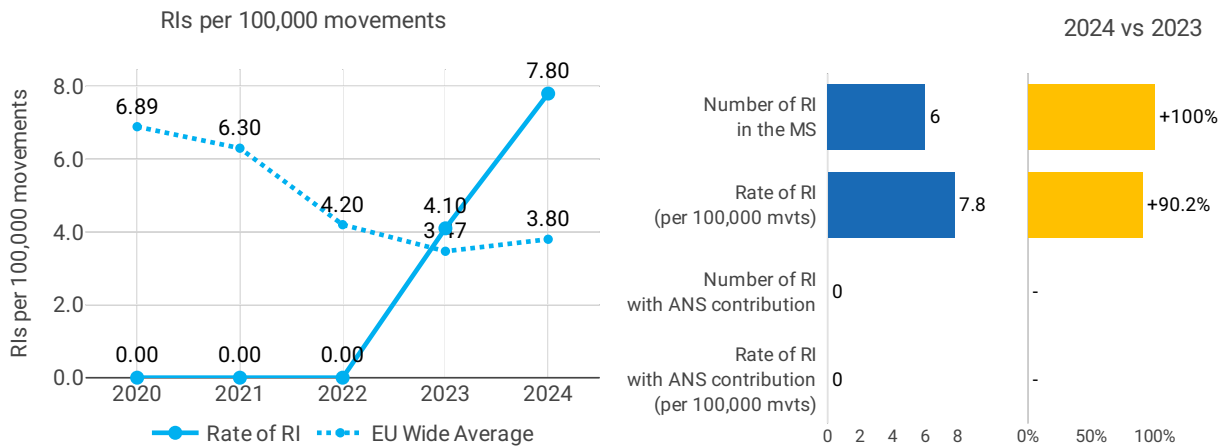
All five EoSM components of the ANSP meet the RP3 target level. The level was improved for one question for “Safety Policy and Objectives” component compared with 2023.

LPS achieved the RP3 targets for all Management Objectives in 2023 and maintained the level in 2024. In 2024, the ANSP further improved its SMS by integrating the human factors component and enhancing the training framework through the expansion of the human factor team and the broadening of related activities across operational areas.



2.3 Safety occurrences

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



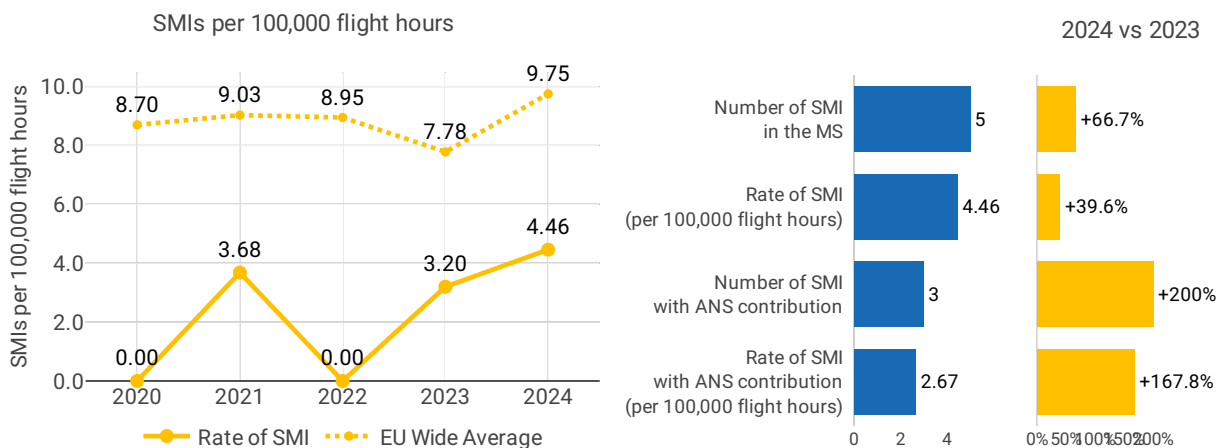
| Rate of RIs per 100,000 airport movements - Slovakia | | | | |
|--|--------------|---------------|--------------|---------------------|
| # | Airport name | APT movements | Number of RI | Rate RI per 100,000 |
| 1 | Bratislava | 0 | 0 | NA |

Focus on runway incursions

Up and until 2022, Slovakia reported no RIs at the Member State level or at the ANSP level. In 2023, RIs were reported with a further increase in numbers and the rate of RIs at the Member State level in both years exceeding the Union-wide average. RIs occurred at the smaller airports.

The NSA monitors RIs continuously throughout the year. No measures are mentioned in the monitoring report to address the increase in rates.

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



| Rate of SMI with ANS contribution per 100,000 flight hours | | | | | | | | | | | |
|--|--------|--------------|--------|--------|---------|---------|----------------|------|------|------|------|
| | | Flight hours | | | | | Number of SMIs | | | | |
| # | ANSP | 2020 | 2021 | 2022 | 2023 | 2024 | 2020 | 2021 | 2022 | 2023 | 2024 |
| 1 | LPS SR | 41,055 | 54,376 | 86,171 | 100,173 | 112,204 | 0 | 2 | 0 | 1 | 3 |

| | | Rate of SMI per 100,000 flight hours | | | | | % variation in rate of SMIs | | | | |
|---|--------|--------------------------------------|------|------|------|------|-----------------------------|------|-------|------|-------|
| # | ANSP | 2020 | 2021 | 2022 | 2023 | 2024 | 2020 | 2021 | 2022 | 2023 | 2024 |
| 1 | LPS SR | 0 | 4 | 0 | 1 | 3 | | 0% | -100% | 0% | +168% |

Focus on separation minima

The number of SMIs at the Member State level was generally low during RP3, with an increase to 3 in 2024. The rate of SMIs remains below the Union-wide average.

The NSA monitors SMIs continuously throughout the year and has established monitoring ALS/TLS. The NSA considers the trend of the SMI at a steady level.

2.3.3 Quality of occurrences reporting

The number of occurrences reported at Member State level seems consistent with the occurrences reported at the ANSP level for SMIs and RIs.

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

| Use of automated safety data recording system - 2024 | |
|--|----------|
| For RIs | For SMIs |
| X | ✓ |



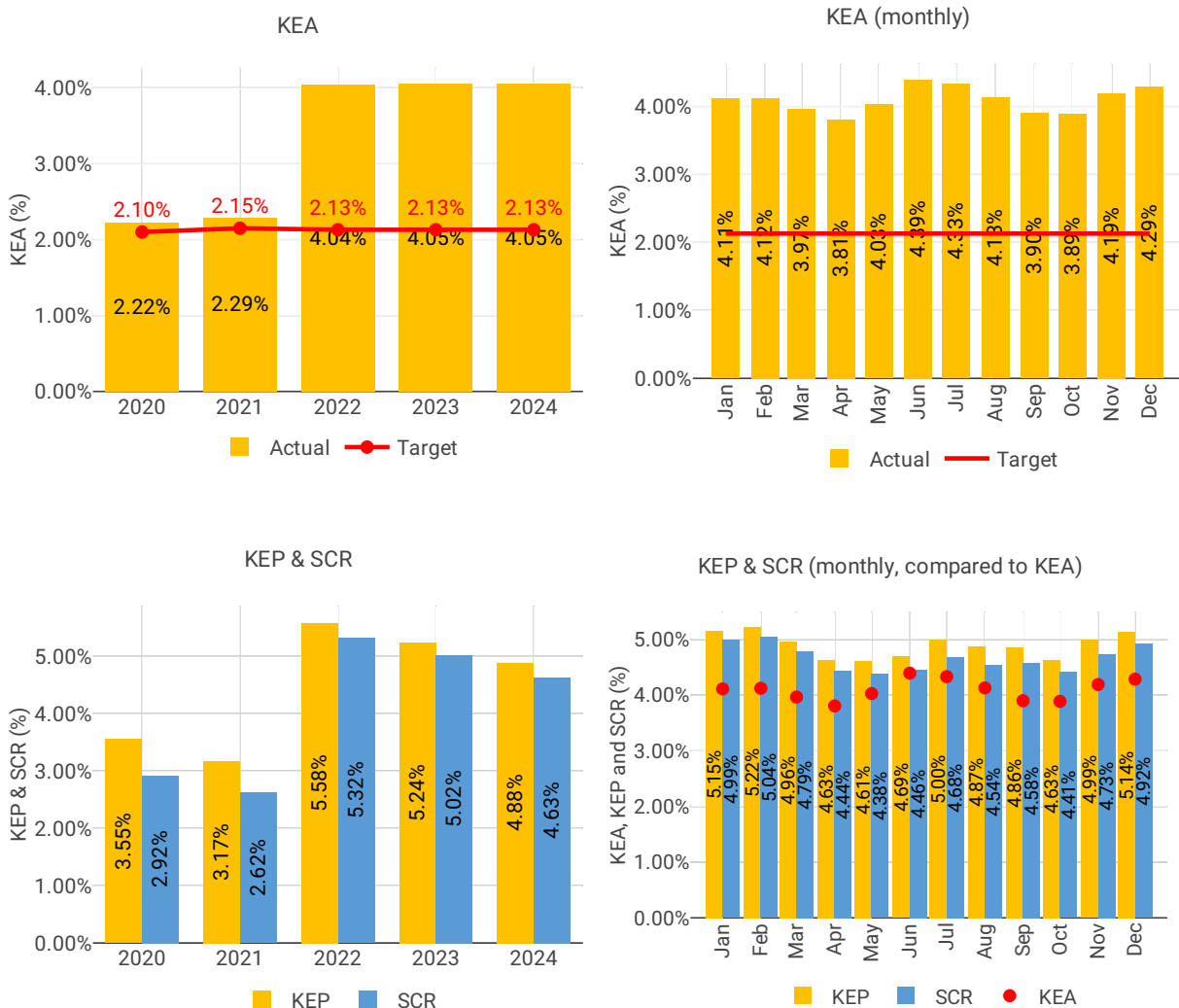
3 ENVIRONMENT - SLOVAKIA

3.1 PRB monitoring

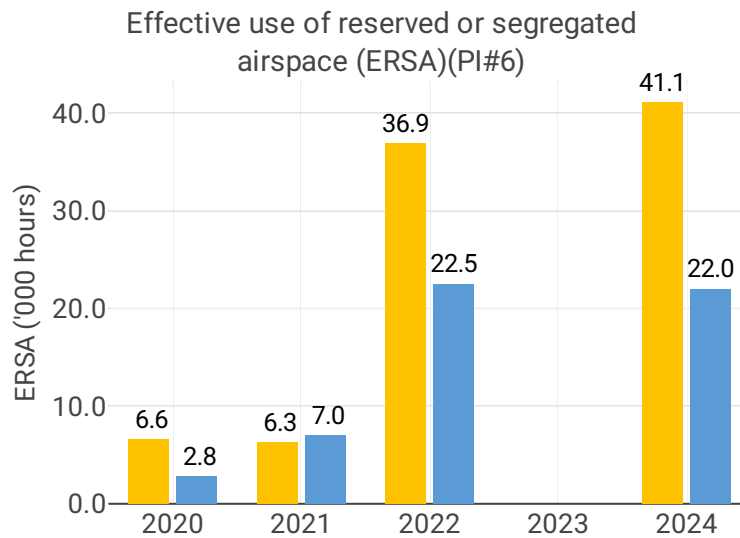
- Slovakia achieved a KEA performance of 4.05% compared to its target of 2.13% and did not contribute positively towards achieving the Union-wide target.
- The NSA states that the most significant impact on KEA from the shift in trajectories due to Russia’s war of aggression against Ukraine.
- Both KEP and SCR improved compared to 2023. Despite the KEA target being missed, KEA improved in 2024. Additionally, the improvement in SCR shows that Slovakia has enhanced the environmental efficiency of its airspace when accounting for impacts outside of its control.
- Slovakia has no airports that are regulated under the performance and charging scheme.

3.2 En route performance

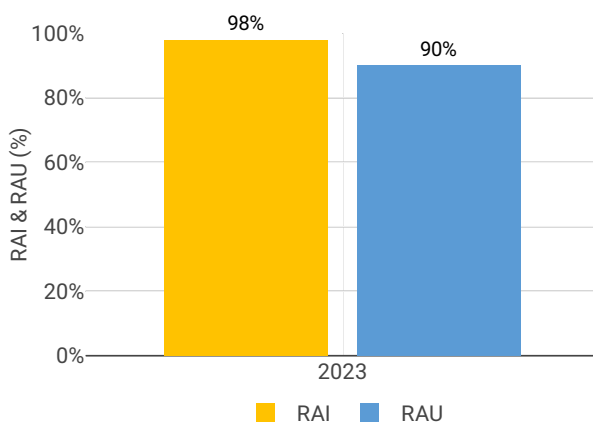
3.2.1 Horizontal flight efficiency of the actual trajectory (KEA) (KPI#1), of the last filed flight plan (KEP) (PI#1) & shortest constrained route (SCR) (PI#2)



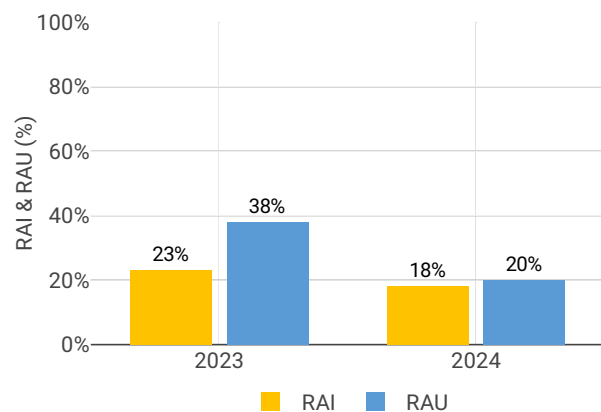
3.3 Civil-Military dimension



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.

Military - related measures implemented or planned to improve capacity

n/a

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

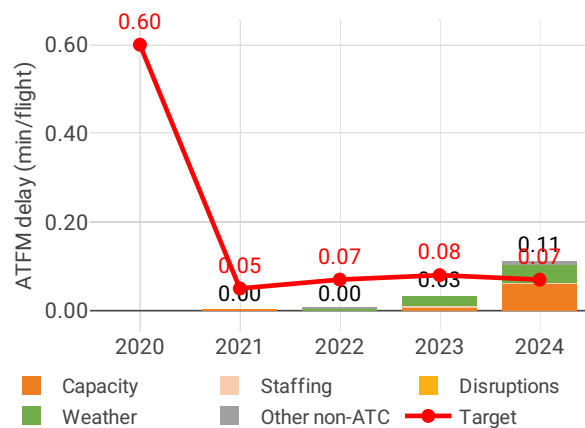
4.1 PRB monitoring

- Slovakia registered 0.13 minutes of average en route ATFM delay per flight during 2024, which has been adjusted to 0.11 during the post-ops adjustment process, thus not achieving the local target value of 0.07. Delays in Slovakia increased by 0.08 minutes per flight year-on-year.
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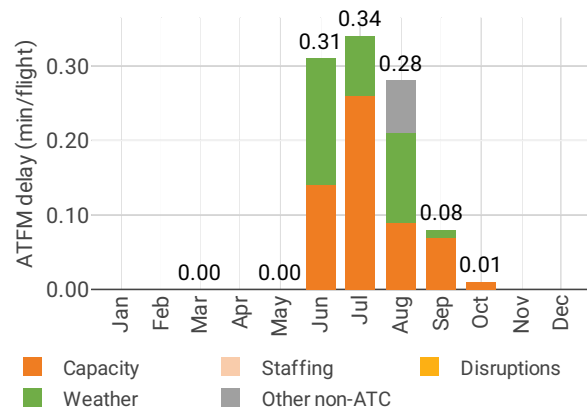
4.2 En route performance

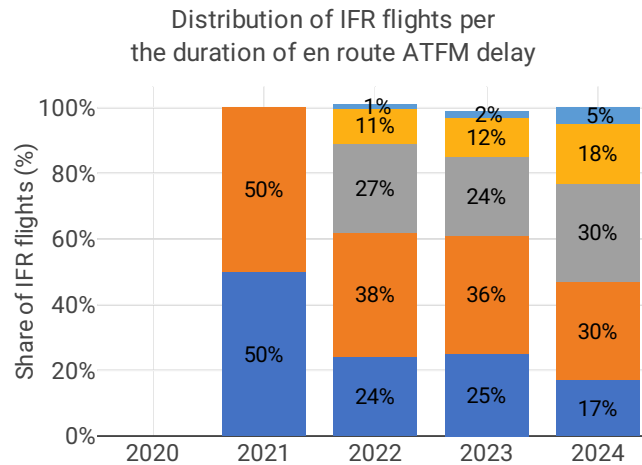
4.2.1 En route ATFM delay (KPI#1)

Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2024





Focus on en route ATFM delay

Summary of capacity performance

Slovakia experienced an increase in traffic from 530k flights in 2023 with 17k minutes of en route ATFM delay, to 601k flights in 2024 with 67k minutes of en route ATFM delay. In 2019, Slovakia handled 562k flights with 40k minutes of ATFM delay.

There were an additional 10k minutes of delay originating in Slovakia that were re-attributed to DFS (9k) and HungaroControl (<1k) via the NM post operations delay attribution process, according to the NMB agreement for eNM/S24 measures, to ameliorate capacity shortfalls in Karlsruhe UAC and Budapest ACC.

NSA's assessment of capacity performance

In 2024 traffic volume in terms of IFR movements actual volume exceeded number of IFR movements included in the revised performance plan by 13%. Operational situation in Slovak airspace also continued to be impacted by the war in Ukraine.

Target was not met. The average delay per flight was 0.21 minutes per flight in Summer 2024. Despite the increased traffic (24%), there was a minor deviation from target 0,04 per flight. Based on increased traffic ANSP started modification of the Bratislava CTA.

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

The average delay per flight was 0.21 minutes per flight in Summer 2024. 58 % of the Summer delays were due to the reason ATC Capacity, 36 % due to Weather and 6 % due to Airspace Management.



Application of Corrective Measures for Capacity (if applicable)

Some of the delays were due to weather (36%) and some were due to a significant increase in traffic. The initial forecast for 2024 was 486,000 flights versus the actual 601,044 flights, representing a 24% increase in traffic.

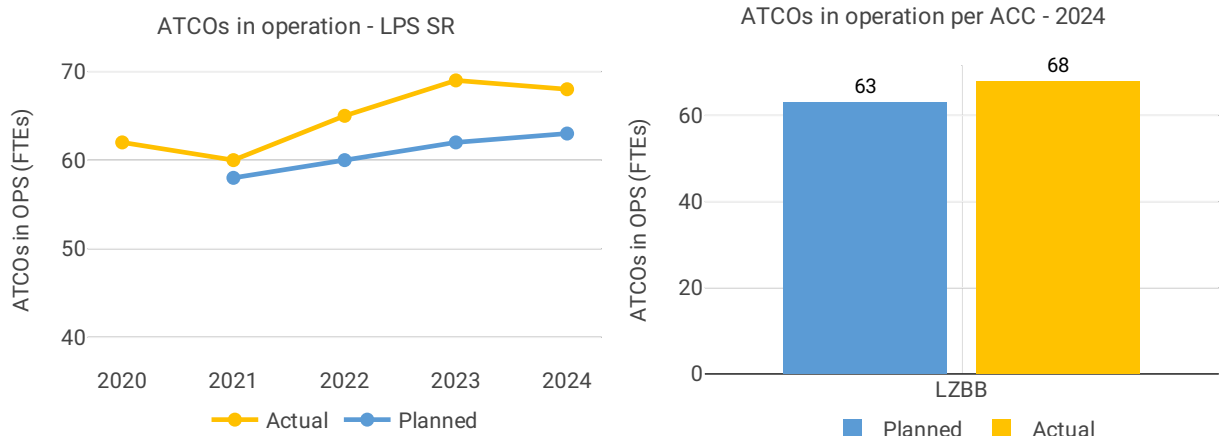
The ANSP is implementing the following measure to remedy the situation: CTA Bratislava modification - the modification of the Bratislava CTA is related to the introduction of sector configurations with horizontal division - will be implemented in 2026.

En route Capacity Incentive Scheme

LPS SR: Slovakia uses an incentive scheme based only on delays attributed to C,R,S,T,M & P delay codes. The CRSTMP target was set at 0.03 minutes per flight and the actual performance is reported as 0.07 minutes per flight (CRSTMP only), leading to a financial penalty for the ANSP of €564 549.

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.

4.2.2 Other indicators



Focus on ATCOs in operations

n/a



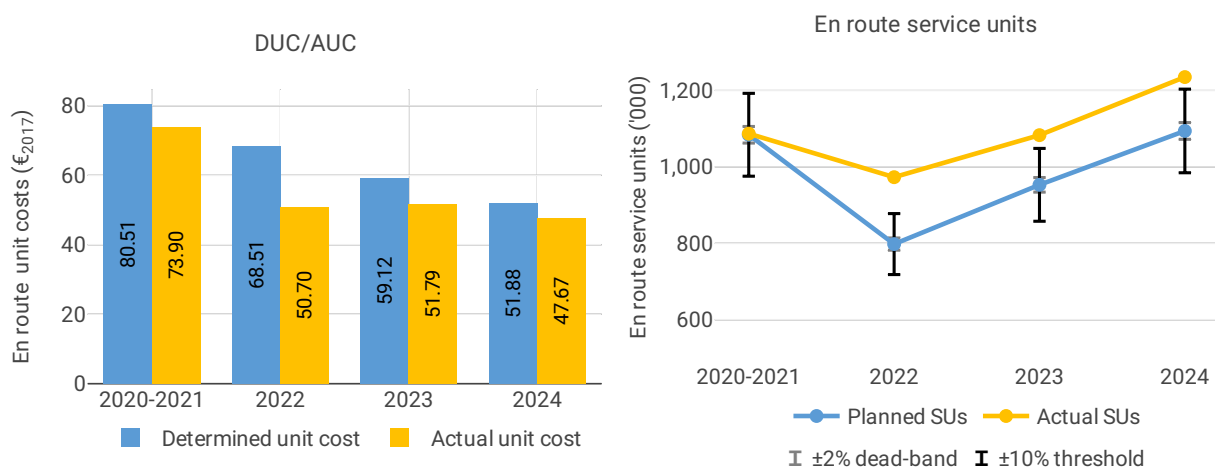
5 COST-EFFICIENCY - SLOVAKIA

5.1 PRB monitoring

- The en route 2024 actual unit cost of Slovakia was 47.67€2017, -8.1% lower than the determined unit cost (51.88€2017). Slovakia does not have a terminal charging zone.
- The en route 2024 actual service units of Slovakia (1.2M) were +13% higher than the determined service units (1.1M).
- The en route 2024 actual total costs were +2.1M€2017, (+3.7%) higher than determined. This difference is mainly driven by higher staff costs and depreciation costs. The staff costs for LPS SR were +1.5M€2017, (+4.3%) higher than the determined costs mainly due to inflation adjustments negotiated with the unions, as well as staff recruitment.
- LPS SR costs of investments were 9.7M€2017 in 2024, +21% higher than determined (8.0M€2017). The NSA stated that this is due to higher depreciation, as determined depreciation costs were lowered to account for unrealised investments in RP2. In addition, cost of capital increase is due to higher values of the asset base and the interest rate of loan.
- The en route actual unit cost incurred by users in 2024 was 62.56€ (+7.8% higher than the 2024 DUC). The difference between the AUCU and the DUC is driven by the positive inflation adjustment.
- Slovakia's RP3 performance plan included justifications for a deviation to achieve the RP3 capacity targets. The main measures included recruiting of new ATCOs. Slovakia has not submitted a detailed report of the capacity-related measures implemented. However, the number of ATCOs in operation at the end of RP3 is below the plan. Slovakia should reimburse to airspace users the excess funds received by ANSPs for measures not implemented.

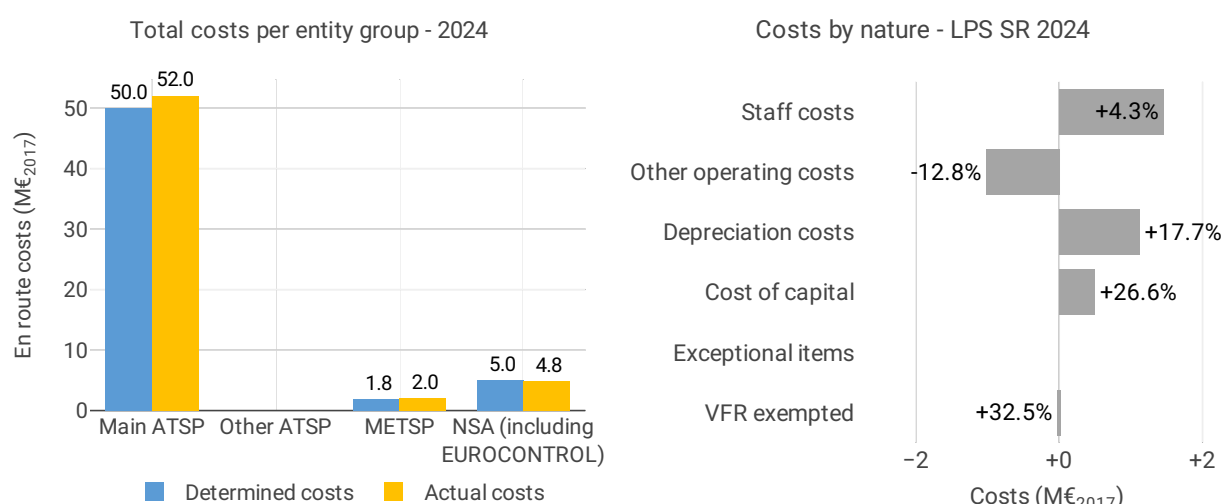
5.2 En route charging zone

5.2.1 Unit cost (KPI#1)



| Actual and determined data | | | | |
|----------------------------|-----------|------|------|------|
| Total costs - nominal (M€) | 2020-2021 | 2022 | 2023 | 2024 |
| Actual costs | 85 | 58 | 72 | 77 |
| Determined costs | 93 | 59 | 62 | 64 |
| Difference costs | -7 | -1 | 10 | 14 |

| Inflation assumptions | 2020-2021 | 2022 | 2023 | 2024 |
|-----------------------------------|-----------|-------|-------|-------|
| Determined inflation rate | NA | 1.9% | 2.0% | 2.1% |
| Determined inflation index | NA | 110.9 | 113.1 | 115.5 |
| Actual inflation rate | NA | 12.1% | 11.0% | 3.2% |
| Actual inflation index | NA | 123.9 | 137.5 | 141.9 |
| Difference inflation index (p.p.) | NA | +13 | +24.4 | +26.4 |



Focus on unit cost

AUC vs. DUC

In 2024, the en route AUC was -8.1% (or -4.22 €2017) lower than the planned DUC. This results from the combination of significantly higher than planned TSUs (+12.9%) and higher than planned en route costs in real terms (+3.7%, or +2.1 M€2017). It should be noted that the actual inflation index in 2024 was +26.4 p.p. higher than planned.

En route service units

The difference between actual and planned TSUs (+12.9%) 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 (see the main ANSP gain in Box 11).

En route costs by entity

Actual real en route costs are +3.7% (+2.1 M€2017) higher than planned. This is the result of higher costs for the main ANSP, LPS (+4.1%, or +2.1 M€2017) and the MET service provider (+9.8%, or +0.2 M€2017) and lower costs for the NSA/EUROCONTROL (-2.7%, or -0.1 M€2017).



En route costs for the main ANSP at charging zone level

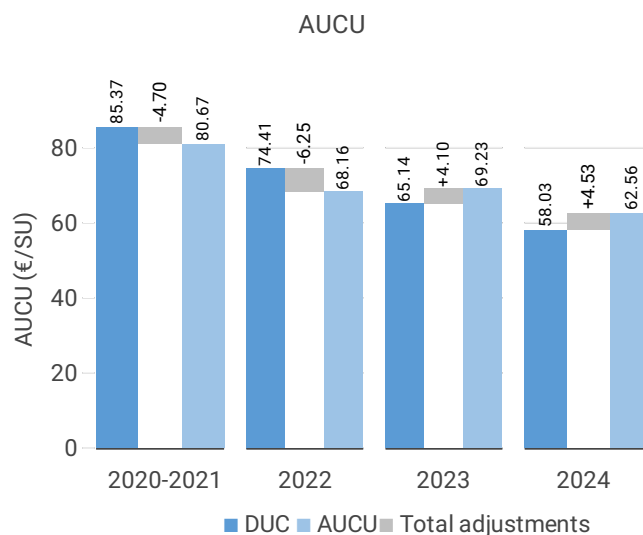
Higher than planned en route costs in real terms for LPS in 2024 (+4.1%, or +2.1 M€2017) result from:

- Higher staff costs (+4.3%) which are reported to result from “*inflation adjustments as negotiated with the Unions as a consequence of high inflation recorded both in 2022 and 2023*”,
- Significantly lower other operating costs (-12.8%) in real terms due to higher than planned inflation index (+26.4 p.p.) since, in nominal terms, other operating costs exceeded the plan (+7.1%) reflecting “*higher than forecasted inflation rates*”,
- Significantly higher depreciation (+17.7%), reflecting mainly the fact that determined depreciation costs were reduced by -1.3 M€ to account for unrealized investments in the RP2, and
- Significantly higher cost of capital (+26.6%) reflecting the higher “*value of the asset base and also the increase in the interest rate of loans*”.

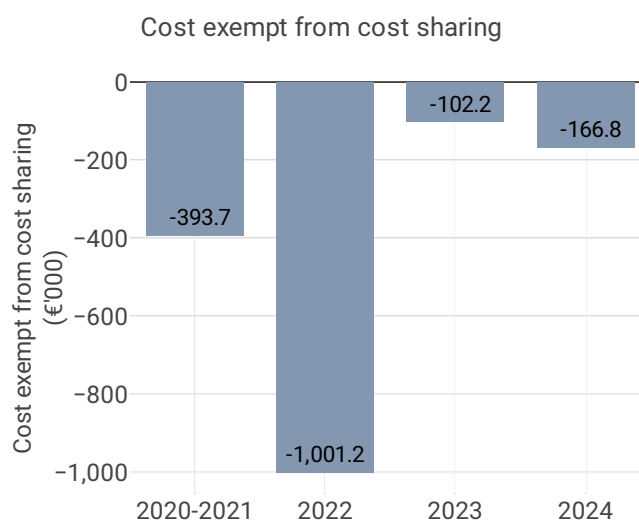
RP3 summary

When considering the whole of RP3 (2020-2024) for Slovakia en route charging zone, actual TSUs are +11.4% higher than planned, while actual costs in real terms are -4.1% lower than the determined costs (some -10.4 M€2017). As a result, the weighted average actual unit cost over RP3 (55.88 €2017) is -13.9% lower than planned in the PP (64.91 €2017).

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



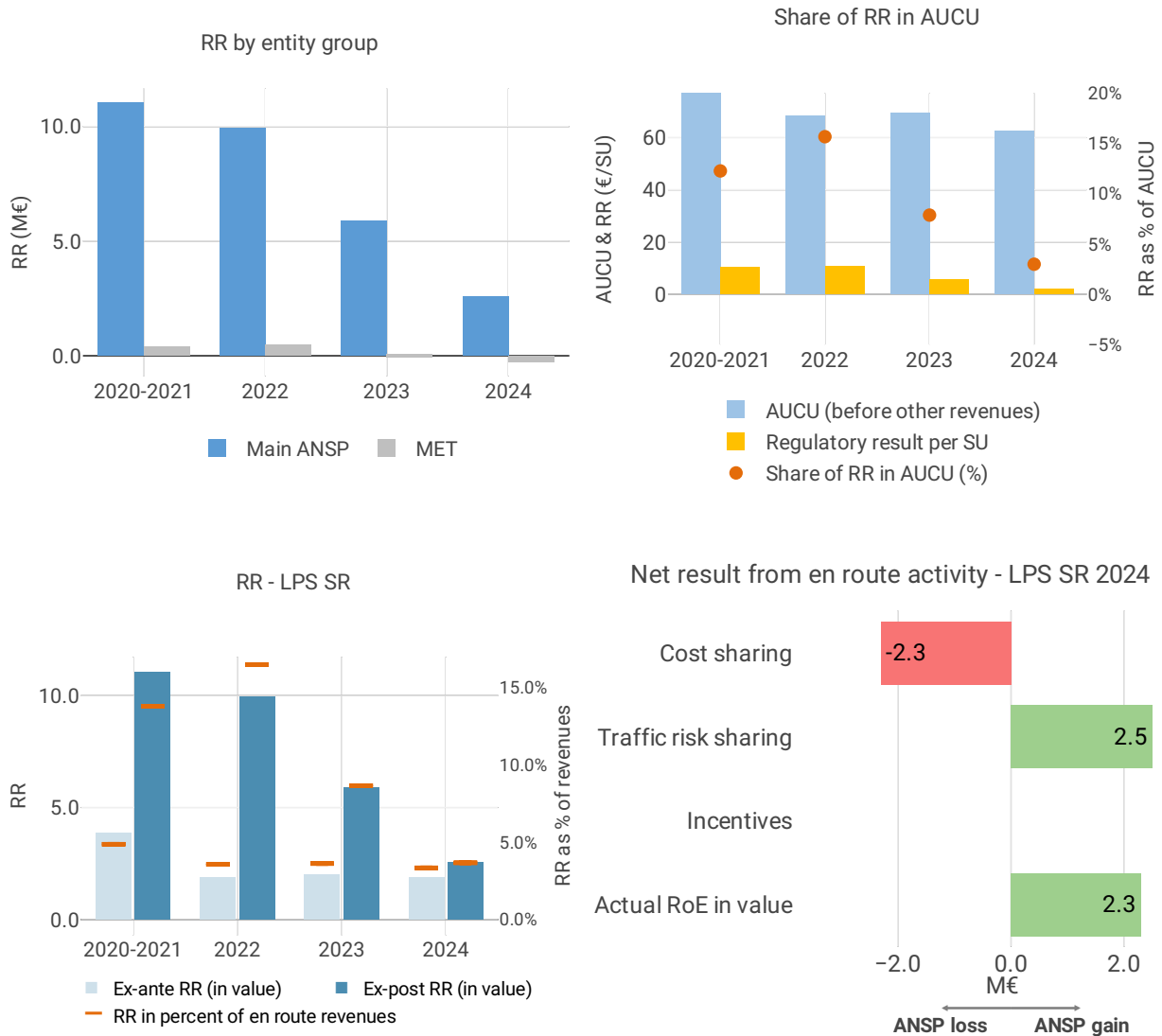
| AUCU components (€/SU) – 2024 | |
|---------------------------------------|---------------|
| Components of the AUCU in 2024 | €/SU |
| DUC | 58.03 |
| Inflation adjustment | 9.31 |
| Cost exempt from cost-sharing | -0.14 |
| Traffic risk sharing adjustment | -3.87 |
| Traffic adj. (costs not TRS) | -0.74 |
| Financial incentives | 0.00 |
| Modulation of charges | 0.00 |
| Cross-financing | 0.00 |
| Other revenues | -0.04 |
| Application of lower unit rate | 0.00 |
| Total adjustments | 4.53 |
| AUCU | 62.56 |
| AUCU vs. DUC | + 7.8% |



| Cost exempt from cost sharing – 2024 | | |
|---|---------------|--------------|
| Cost exempt from cost sharing by item - 2024 | €'000 | €/SU |
| New and existing investments | 0.0 | 0.00 |
| Competent authorities and qualified entities costs | 191.8 | 0.16 |
| Eurocontrol costs | -324.0 | -0.26 |
| Pension costs | 0.0 | 0.00 |
| Interest on loans | -34.7 | -0.03 |
| Changes in law | 0.0 | 0.00 |
| Total cost exempt from cost risk sharing | -166.8 | -0.14 |



5.2.3 Regulatory result (RR)



Focus on regulatory result

LPS net gain/loss on activity in the Slovakia en route charging zone in the year 2024

LPS reported a net gain of +0.2 M€, as a combination of a loss of -2.3 M€ arising from the cost sharing mechanism, with a gain of +2.5 M€ arising from the traffic risk sharing mechanism.

LPS overall regulatory result (RR) for the en route activity

Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+0.2 M€) and the actual RoE (+2.3 M€) amounts to +2.6 M€ (3.7% of the en route revenues). The resulting ex-post rate of return on equity is 5.2%, which is higher than the 4.7% planned in the PP.

RP3 summary

When considering the whole of RP3 (2020-2024), LPS generated a cumulative gain in respect of cost sharing of +11.1 M€, as actual total costs for RP3 were lower than planned. The traffic



risk sharing mechanism generated a gain of +7.5 M€. Adding the actual RoE (+10.8 M€ over RP3) leads to an overall regulatory result of +29.4 M€, which corresponds to an average ex-post rate of return on equity of 13.0% (compared to 4.8% initially planned in the PP).

