



Performance Review Body Monitoring Report

Slovakia - 2023

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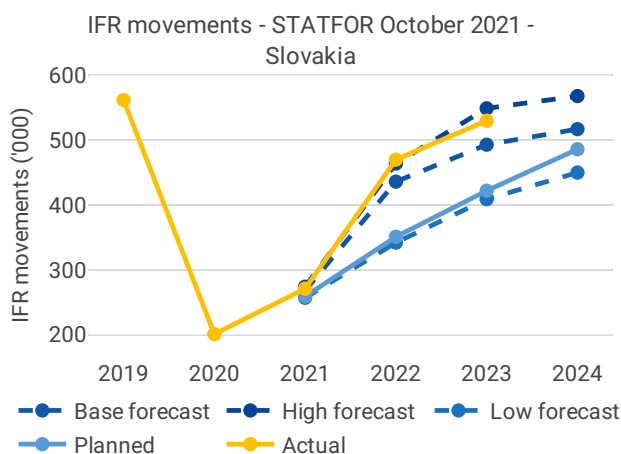
1 OVERVIEW

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	
		2023: 1 EUR			
No of airports in the scope of the performance plan:		Share of Union-wide:		Other ANSPs	
• ≥80'K	0	• traffic (TSUs) 2023	0.9%	–	
• <80'K	0	• en route costs 2023	0.9%	MET Providers	
		Share en route / terminal costs 2023	100% / 0%	• SHMU	
		En route charging zone(s)			
		Slovakia			
		Terminal charging zone(s)			
		–			

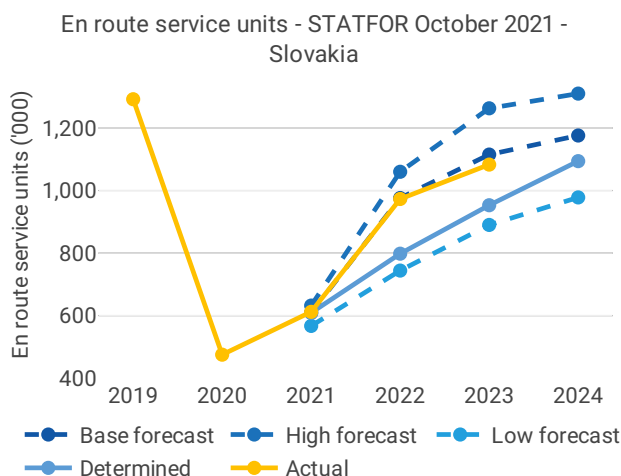
1.2 Traffic (En route traffic zone)



- Slovakia recorded 530K actual IFR movements in 2023, +13% compared to 2022 (470K).

- Actual 2023 IFR movements were +26% above the plan (422K).

- Actual 2023 IFR movements represent 94% of the actual 2019 level (562K).



- Slovakia recorded 1,083K actual en route service units in 2023, +11% compared to 2022 (973K).

- Actual 2023 service units were +14% above the plan (953K).

- Actual 2023 service units represent 84% of the actual 2019 level (1,292K).

1.3 Safety (Main ANSP)

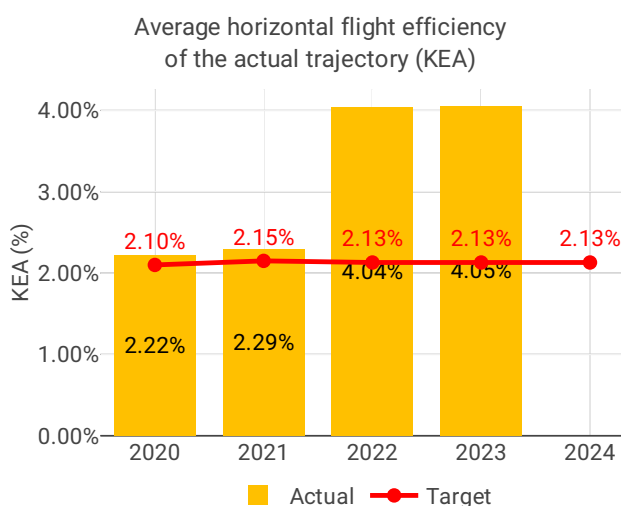


- LPS improved its performance for safety assurance in 2023 and as a result achieved the RP3 targets for all management objectives.

- Slovakia recorded stable performance with respect to safety occurrences, with higher rate of runway incursions and separation minima infringements. The NSA closely monitored the separation minima infringements throughout the year and established acceptable and tolerable levels of safety.

- LPS do not use automated safety data recording systems for runway incursions.

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

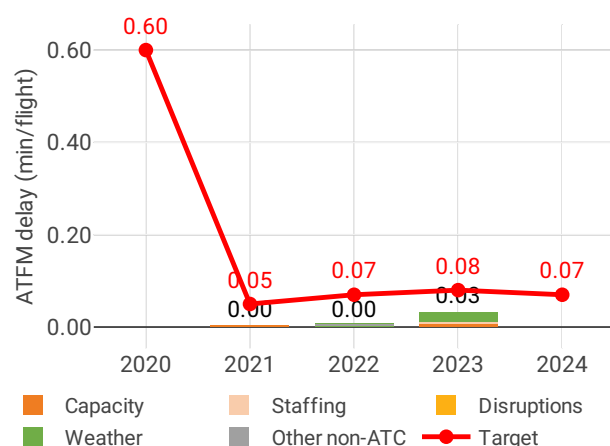
- Both KEP and SCR improved compared to 2022. Despite the KEA target being missed, the improvement in SCR shows that Slovakia has improved the environmental efficiency of its airspace when ac-

counting for impacts outside of its control.

- Slovakia has no airports that are regulated under the performance and charging scheme.

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups



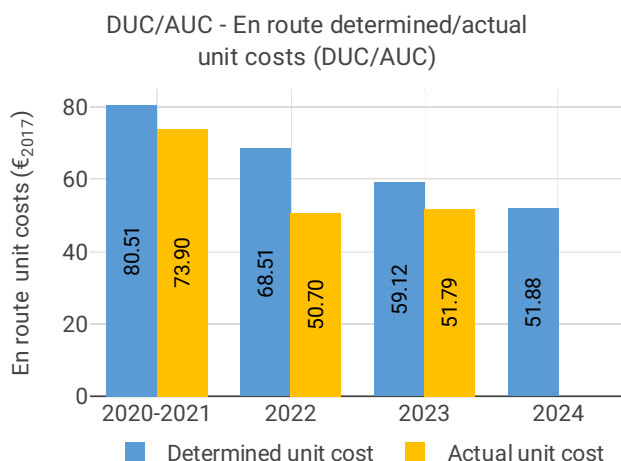
- Slovakia registered 0.04 minutes of average en route ATFM delay per flight during 2023 which has been adjusted to 0.03 during the post-ops adjustment process, thus achieving the local target value of 0.08. Delays in Slovakia increased by 0.03 minutes per flight year-on-year.

- Delays were highest in July, mostly driven by adverse weather conditions.

- The share of delayed flights with delays longer than 15 minutes in Slovakia increased by 0.5 p.p. compared to 2022 and was lower than 2019 values.

- The average number of IFR movements was 6% below 2019 levels in Slovakia in 2023.
- The number of ATCOs in OPS is expected to increase by 9% by 2024, with the actual value being over the 2023 plan in Bratislava by 7 FTEs.
- The yearly total of sector opening hours in Bratislava ACC was 24,551, showing a 10% increase compared to 2022. Sector opening hours are 0.1% below 2019 levels.
- Bratislava ACC registered 21.02 IFR movements per one sector opening hour in 2023, being 5.5% below 2019 levels.

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



- The en route 2023 actual unit cost of Slovakia was 51.54 €2017, -13% lower than the determined unit cost (59.12 €2017). Slovakia does not have a terminal charging zone.

- The en route 2023 actual service units (1.1M) were +14% higher than the determined service units (1.0M).

- The en route 2023 actual total costs were -0.5 M€2017 (-0.9%) lower than determined. This was mainly due to an underspend in other operating costs (-2.2 M€2017 or -17%). However, the NSA did not provide explanations for this underspend.

- LPS SR spent 9.7 M€2017 in 2023 related to costs of investments, +31% more than determined (7.5 M€2017), primarily due to the higher prices for new assets, which have been affected by inflation.
- The en route actual unit cost incurred by users in 2023 was 69.92€ (+7.3% above the 2023 DUC).

2 SAFETY - SLOVAKIA

2.1 PRB monitoring

- LPS improved its performance for safety assurance in 2023 and as a result achieved the RP3 targets for all management objectives.

- Slovakia recorded stable performance with respect to safety occurrences, with higher rate of runway incursions and separation minima infringements. The NSA closely monitored the separation minima infringements throughout the year and established acceptable and tolerable levels of safety.
- LPS do not use automated safety data recording systems for runway incursions.

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



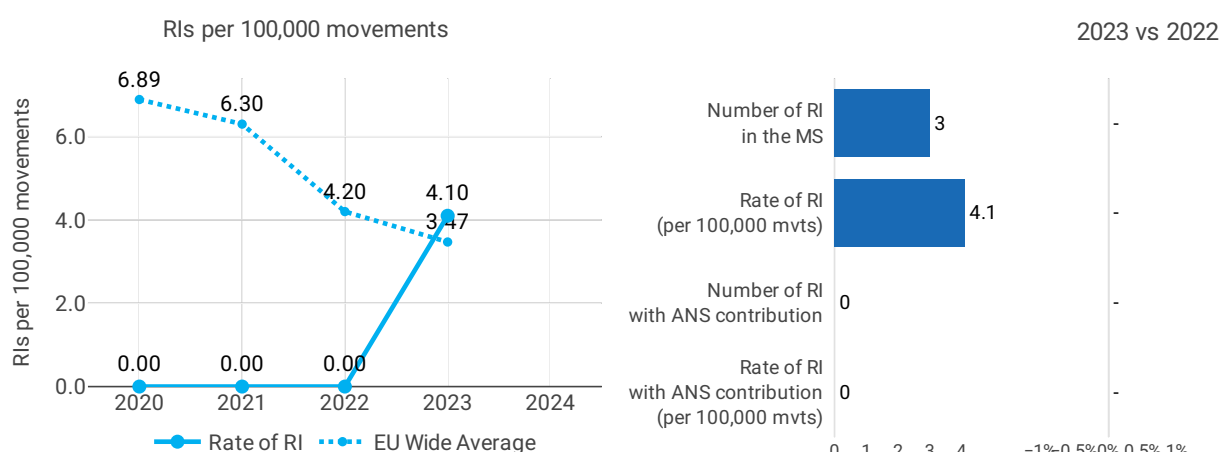
Focus on EoSM

The ANSP improved “Safety Assurance” component over 2023 and consequently meet the RP3 target level for all five EoSM components.

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

2.3 Safety occurrences

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



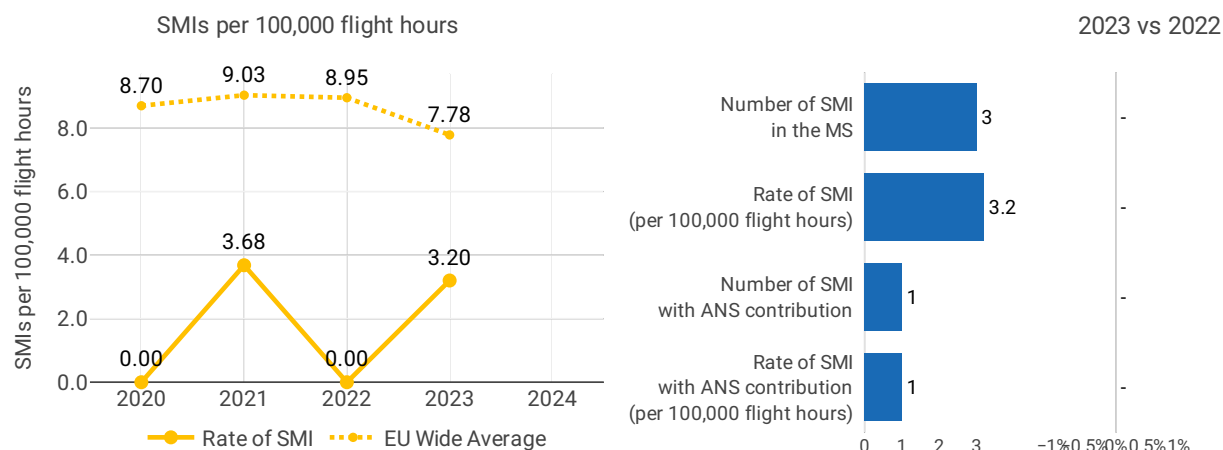
Rate of RIs per 100,000 airport movements - Slovakia

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

Focus on runway incursions

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – 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	100,173	NA	0	2	0	1	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	1.0	NA	NA	0%	-100%	0%	NA

Focus on separation minima

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

2.3.3 Quality of occurrences reporting

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

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

2023	
For RIs	For SMIs
X	✓

Detailed information on Safety performance monitoring for the year 2023 are included in Performance Review Body Monitoring Report 2023, Annex I – Safety report

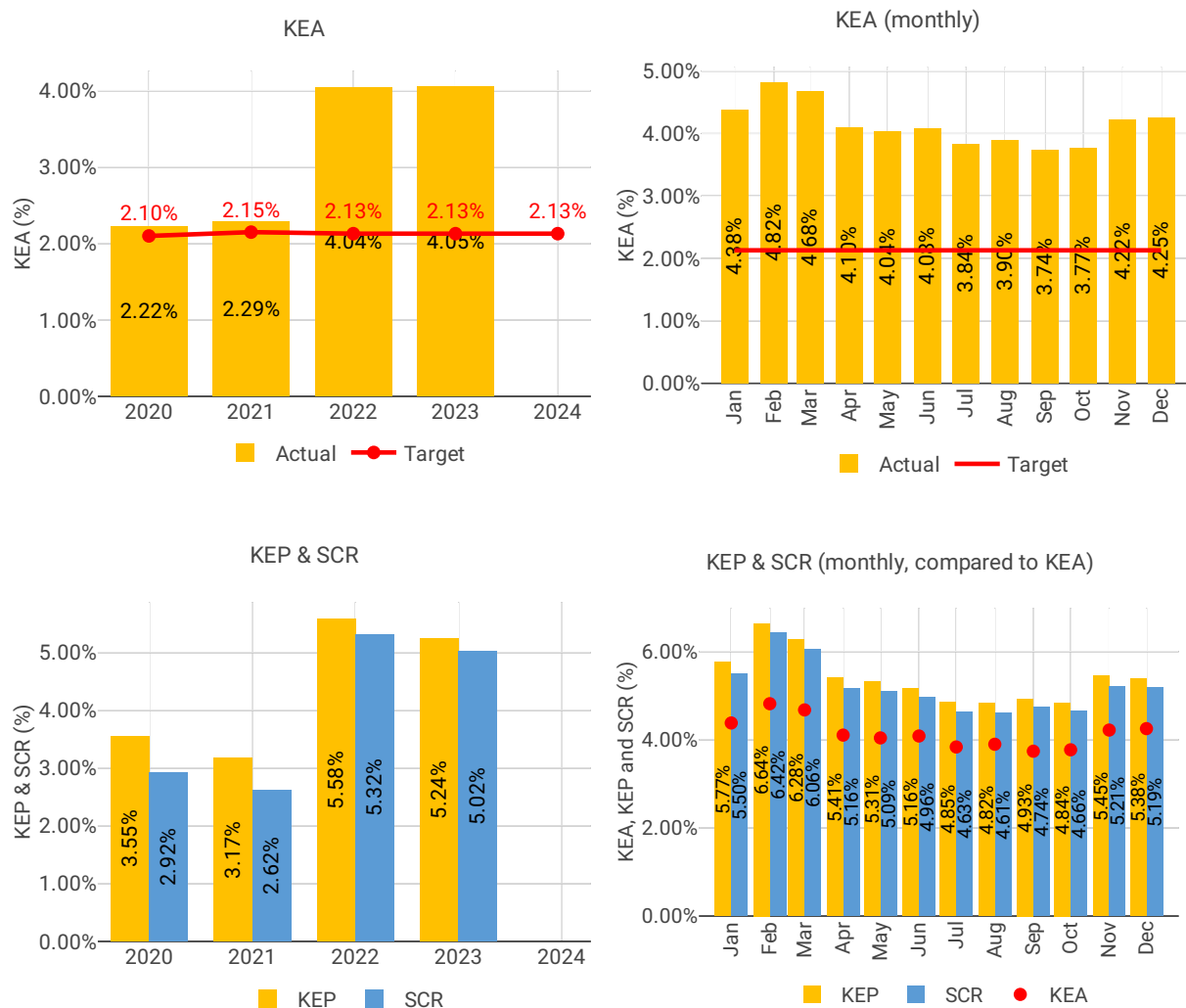
3 ENVIRONMENT - SLOVAKIA

3.1 PRB monitoring

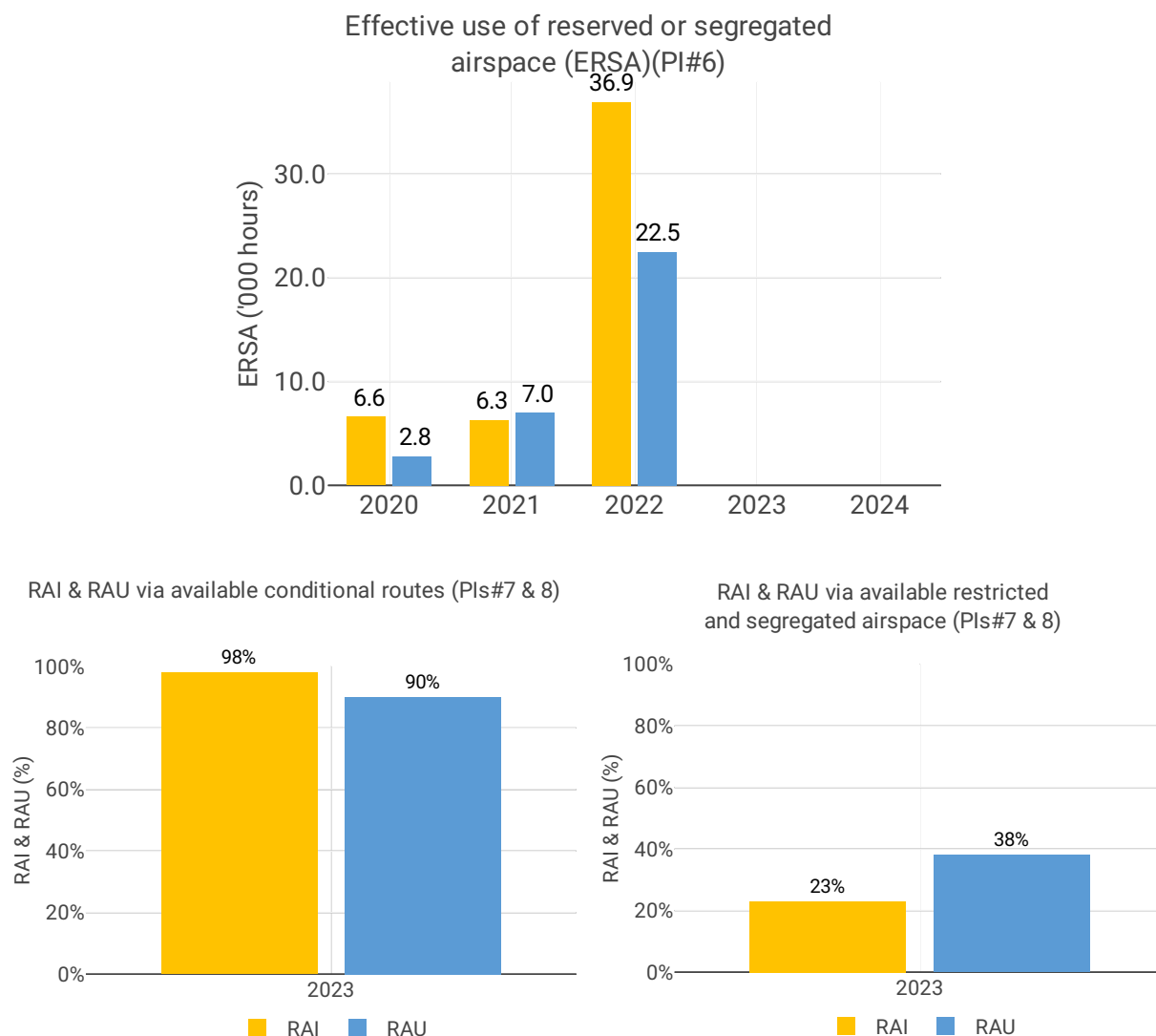
- Slovakia achieved a KEA performance of 4.05% compared to its target of 2.13% and did not contribute positively towards achieving the Union-wide target.
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- Both KEP and SCR improved compared to 2022. Despite the KEA target being missed, the improvement in SCR shows that Slovakia has improved 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



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

Military corridors triggered a negative impact on airspace complexity and airspace availability.

Initiatives implemented or planned to improve PI#6

No data available.

Initiatives implemented or planned to improve PI#7

No data available.

Initiatives implemented or planned to improve PI#8

No data available.

4 CAPACITY - SLOVAKIA

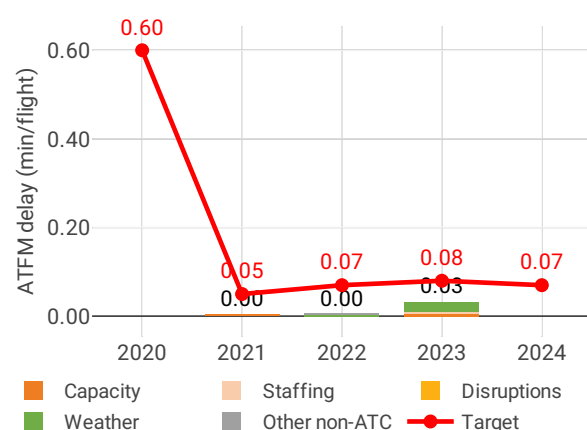
4.1 PRB monitoring

- Slovakia registered 0.04 minutes of average en route ATFM delay per flight during 2023 which has been adjusted to 0.03 during the post-ops adjustment process, thus achieving the local target value of 0.08. Delays in Slovakia increased by 0.03 minutes per flight year-on-year.
- Delays were highest in July, mostly driven by adverse weather conditions.
- The share of delayed flights with delays longer than 15 minutes in Slovakia increased by 0.5 p.p. compared to 2022 and was lower than 2019 values.
- The average number of IFR movements was 6% below 2019 levels in Slovakia in 2023.
- The number of ATCOs in OPS is expected to increase by 9% by 2024, with the actual value being over the 2023 plan in Bratislava by 7 FTEs.
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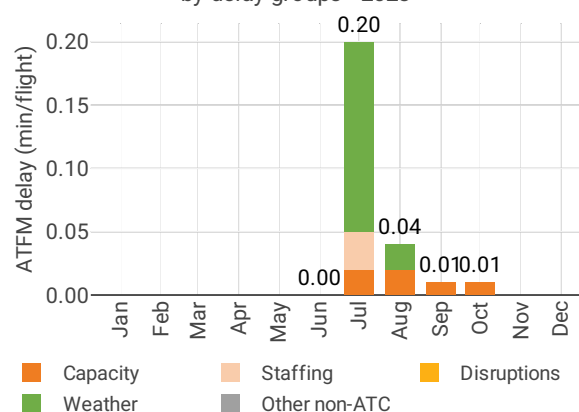
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

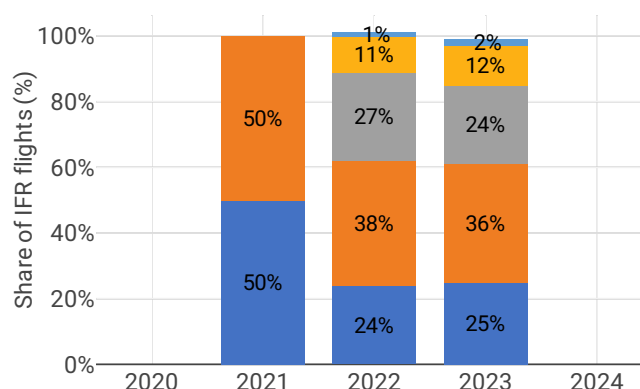
Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2023



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 470k flights in 2022, with <2k minutes of en route ATFM delay, to 530k flights in 2023 with 17k minutes of en route ATFM delay. In 2019, Slovakia handled 562k flights with 40k minutes of ATFM delay.

There was an additional 5k minutes of delay originating in Slovakia that were re-attributed to DFS via the NM post operations delay attribution process, according to the NMB agreement for eNM/S23 measures, to ameliorate capacity shortfalls in Karlsruhe UAC.

NSA's assessment of capacity performance

in terms of IFR movements actual volume exceeded number of IFR movements included in the revised performance plan by almost 26%. Operational situation in Slovak airspace also continued to be impacted by the war in Ukraine. Target has been met with a recorded delay of 0.03 minutes per flight (0.08 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 2022-2023 ATFM delay per flight was always below target limit. 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)

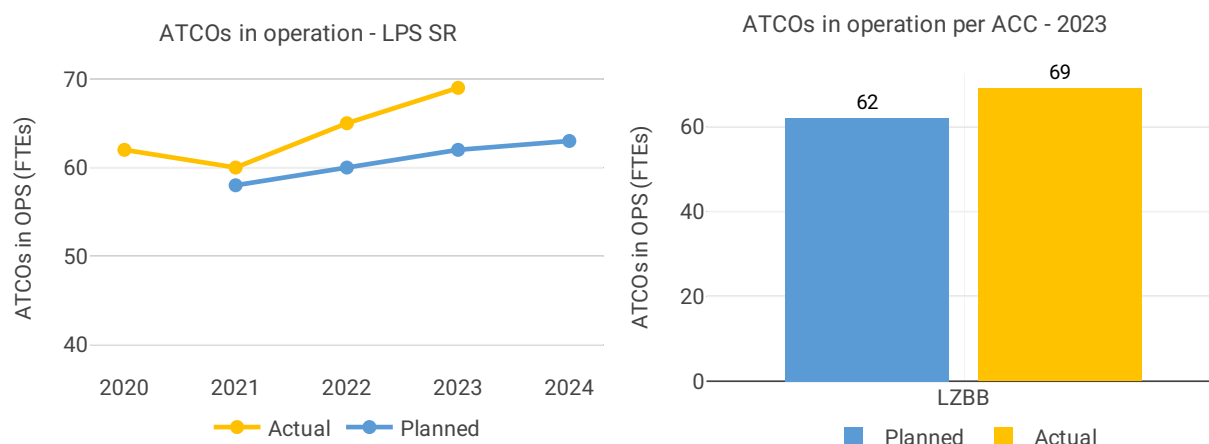
Not applicable.

Additional Information Related to Russia's War of Aggression Against Ukraine The situation in Ukraine is not new. ATCOs have enough skills and experiences how to manage the situation. They are urged not deviate the flight from the vertical/lateral profile stated in the flight plan, unless weather, safety or other technical reason (in relation to KEA). No reduction in sector capacities.

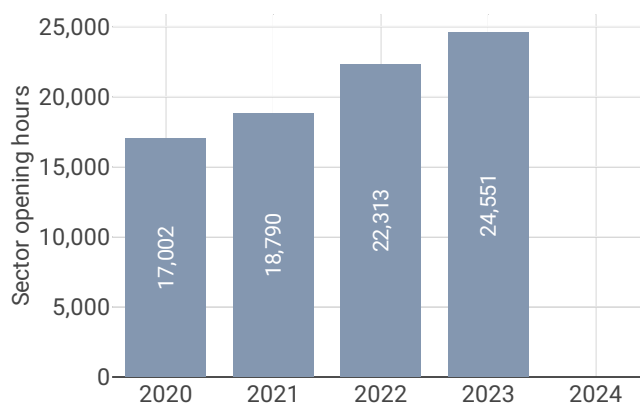
En route Capacity Incentive Scheme

LPS SR: Slovakia uses an incentive scheme based only on delays attributed to C,R,S,T,M & P delay codes. The national target was set at 0.06 minutes per flight and the actual performance is reported as 0.03 minutes per flight (CRSTMP only). This results in a reported bonus of 138,101 €. 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



Sector opening hours - LPS SR



Focus on ATCOs in operations

N/A

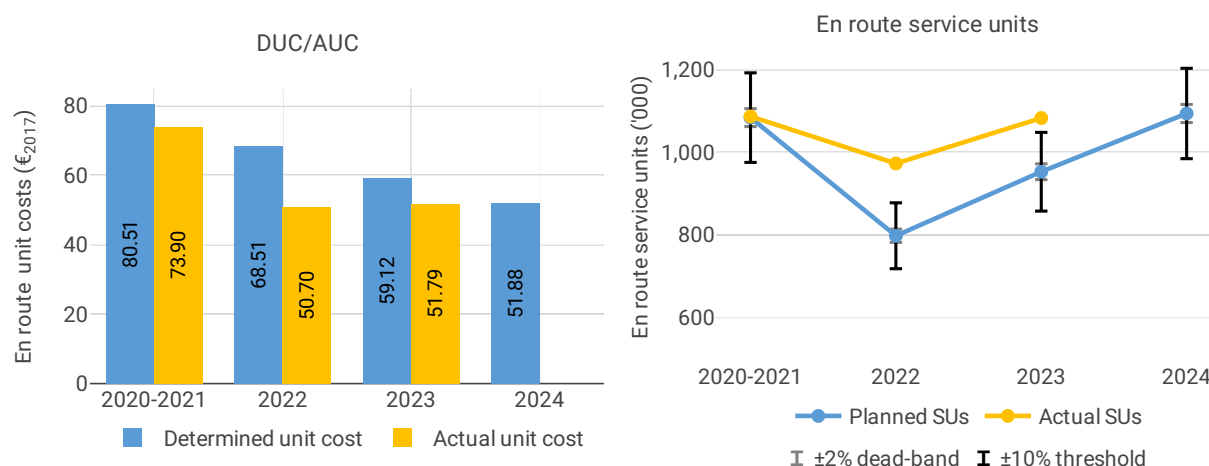
5 COST-EFFICIENCY - SLOVAKIA

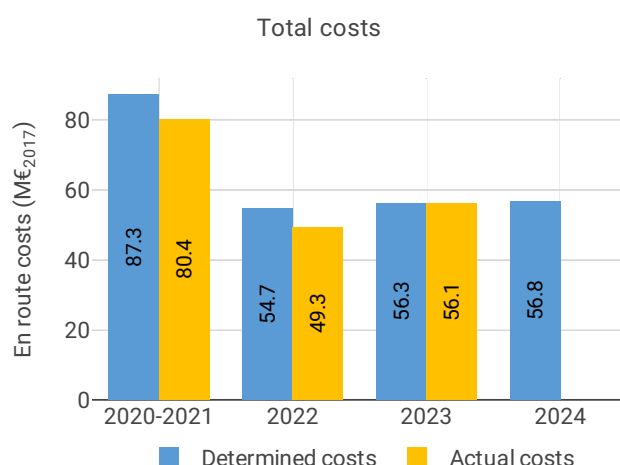
5.1 PRB monitoring

- The en route 2023 actual unit cost of Slovakia was 51.54 €2017, -13% lower than the determined unit cost (59.12 €2017). Slovakia does not have a terminal charging zone.
- The en route 2023 actual service units (1.1M) were +14% higher than the determined service units (1.0M).
- The en route 2023 actual total costs were -0.5 M€2017 (-0.9%) lower than determined. This was mainly due to an underspend in other operating costs (-2.2 M€2017 or -17%). However, the NSA did not provide explanations for this underspend.
- LPS SR spent 9.7 M€2017 in 2023 related to costs of investments, +31% more than determined (7.5 M€2017), primarily due to the higher prices for new assets, which have been affected by inflation.
- The en route actual unit cost incurred by users in 2023 was 69.92€ (+7.3% above the 2023 DUC).

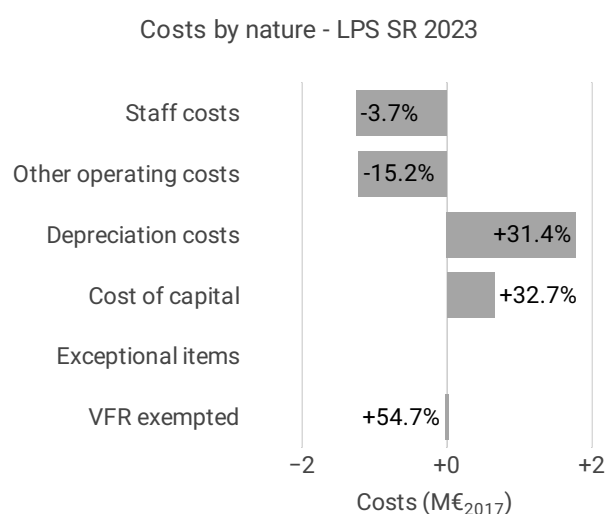
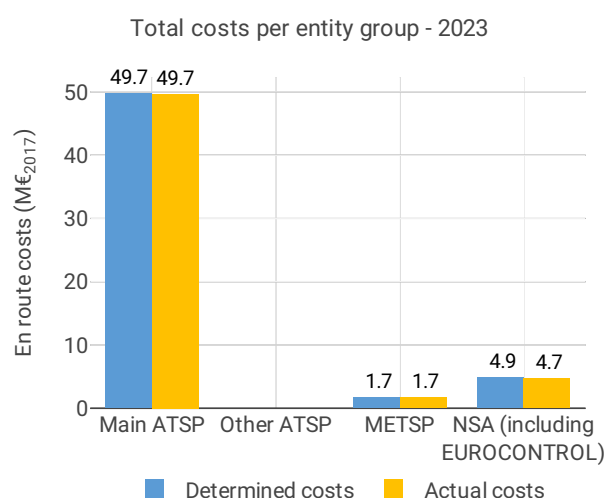
5.2 En route charging zone

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	NA
Determined costs	93	59	62	64
Difference costs	-7	-1	10	NA
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%	NA
Actual inflation index	NA	123.9	137.5	NA
Difference inflation index (p.p.)	NA	+13	+24.4	NA



Focus on unit cost

AUC vs. DUC

In 2023, the en route AUC was -12.8% (or -7.57 €2017) lower than the planned DUC. This results from the combination of significantly higher than planned TSUs (+13.7%) and slightly lower than planned en route costs in real terms (-0.9%, or -0.5 M€2017). It should be noted that actual inflation index in 2023 was +24.4 p.p. higher than planned.

En route service units

The difference between actual and planned TSUs (+13.7%) falls outside the ±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.

En route costs by entity

Actual real en route costs are -0.9% (-0.5 M€2017) lower than planned. This is the result of lower costs for the NSA/EUROCONTROL (-8.4%, or -0.4 M€2017), the main ANSP, LPS (-0.1%, or -0.1 M€2017) and the MET service provider (-1.6%, or 0.03 M€2017).

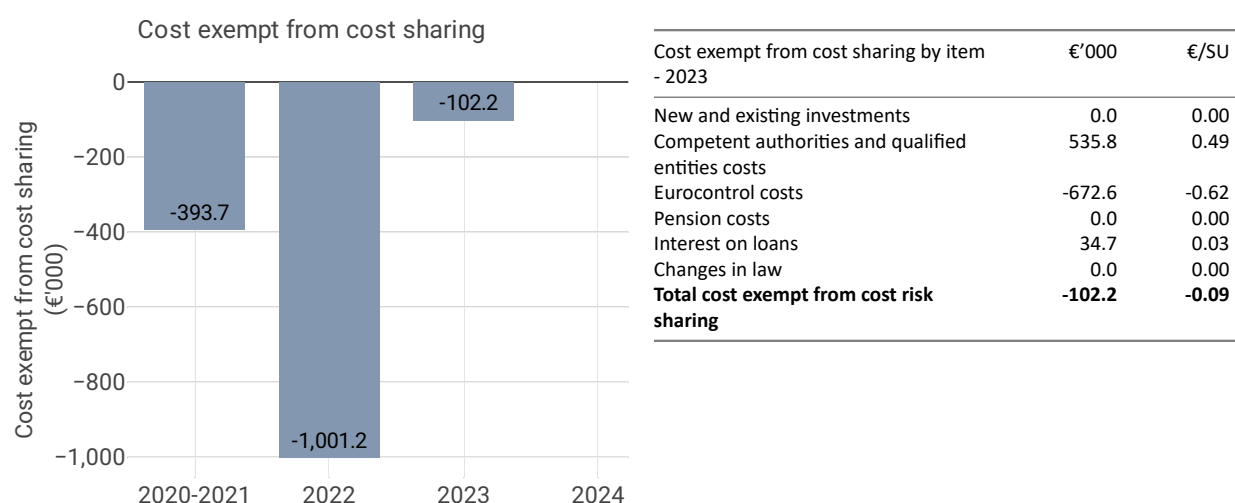
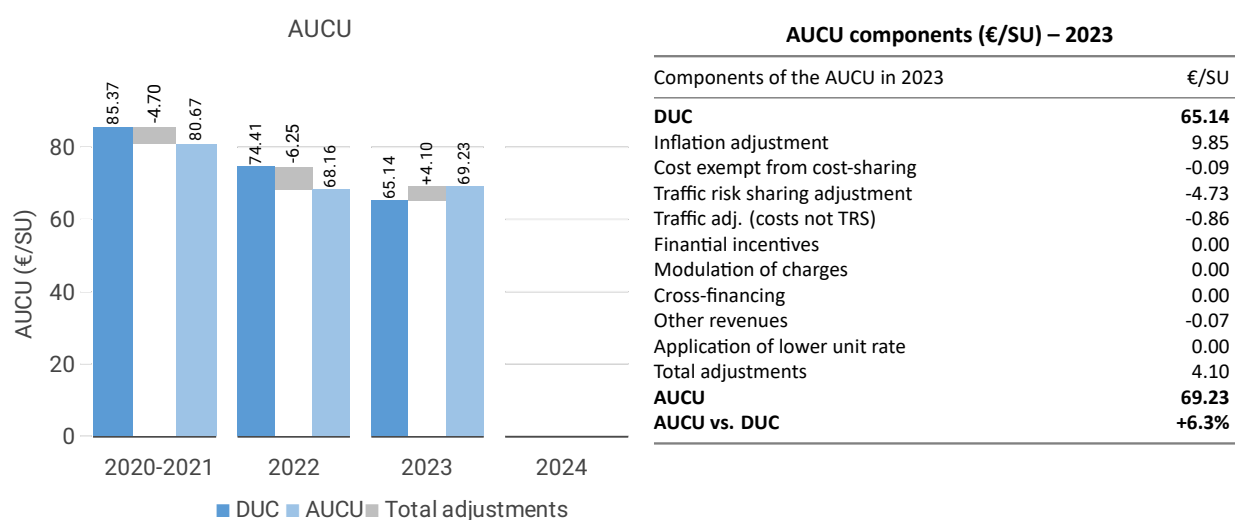
En route costs for the main ANSP at charging zone level

Consistent with planned en route costs in real terms for LPS in 2023 (-0.1%, or -0.1 M€2017) result from:

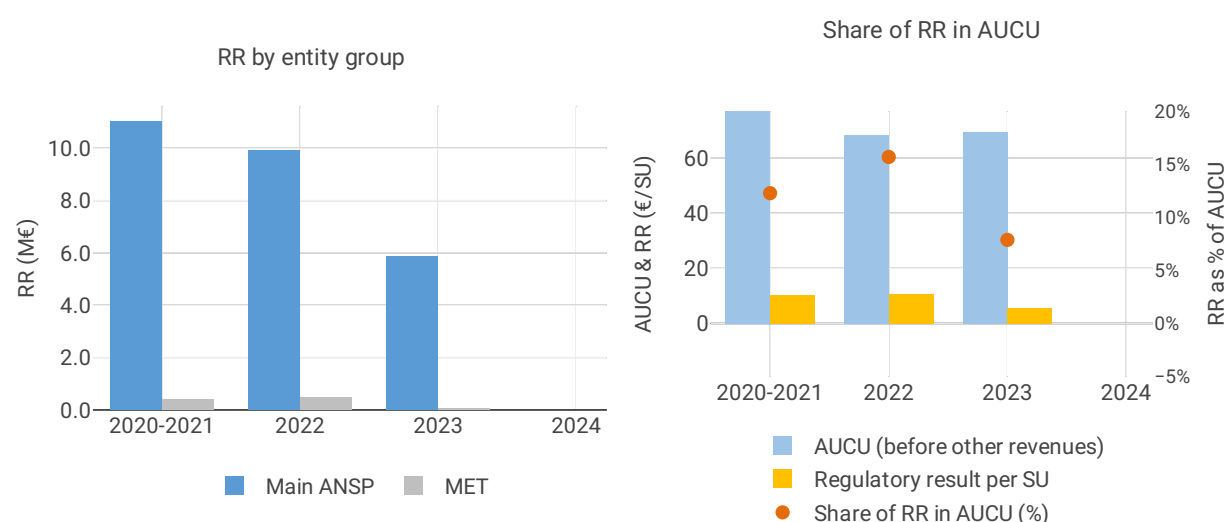
- Lower staff costs in real terms (-3.7%), but higher in nominal terms (+17.1%) due to inflation, which was negotiated in the union contract;
- Significantly lower other operating costs in real terms (-15.2%), but higher in nominal terms (+3.1%);
- Significantly higher depreciation costs (+31.4%) due to a €1.3M reduction for the 2023 unit rate calculation resulted from RP2 carry-over, but also higher inflation that impacted the prices of the new assets;

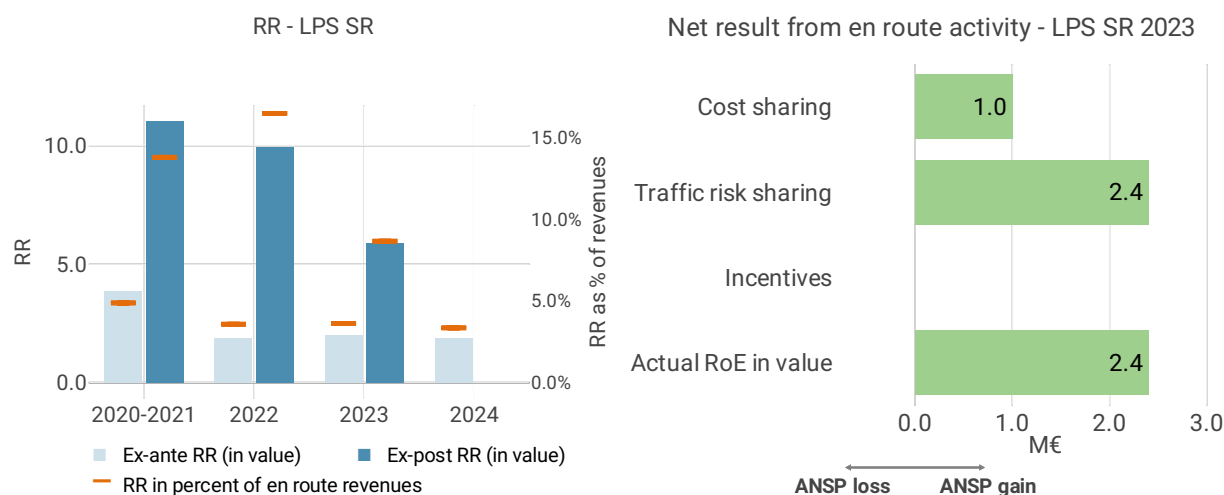
- Significantly higher cost of capital (+32.7%) due to a higher value of the asset base and a higher than expected interest rate on the loan (EURIBOR 3M);
- Significantly higher deduction for VFR exempted flights (+54.7%).

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



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 2023

LPS reported a net gain of +4.5 M€, as a combination of a gain of +2.0 M€ arising from the cost sharing mechanism, with a gain of +2.4 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 (+4.5 M€) and the actual RoE (+2.4 M€) amounts to +6.9 M€ (10.0% of the en route revenues). The resulting ex-post rate of return on equity is 14.0%, which is higher than the 4.9% planned in the PP.