PRB | Performance review body of the single european sky

Performance Review Body Monitoring Report

Latvia - 2022

This report is automatically generated from: sesperformance.eu

Performance Review Body of the Single European Sky | Rue de la Fusée 96, Office 50.659, 1130 Brussels
Office Telephone: +32 (0)2 234 7824 | cathy.mannion@prb.eusinglesky.eu | prb-office@prb.eusinglesky.eu | eu-single-sky.transport.ec.europa.eu

TABLE OF CONTENTS

1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/2426 of 5 December 2022

List of ACCs 1
Riga ACC

No of airports in the scope of the performance plan:
- **≥80'K** 0
- **<80'K** 3

Exchange rate (1 EUR=)
2017: 1 EUR
2022: 1 EUR

Share of Union-wide:
- **traffic (TSUs) 2022** 0.4%
- **en route costs 2022** 0.3%

Share en route / terminal costs 2022 75% / 25%

En route charging zone(s)
Latvia

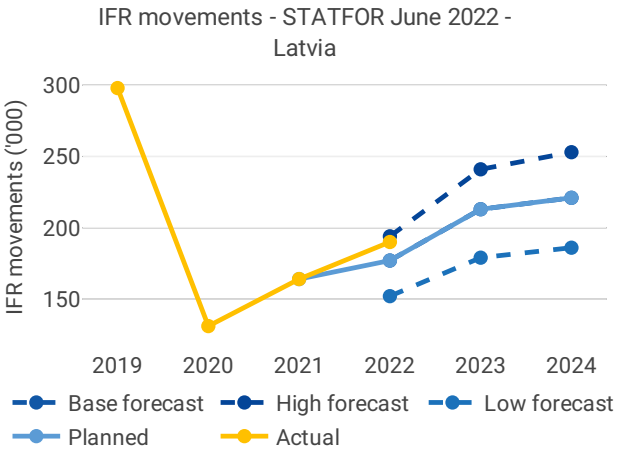
Terminal charging zone(s)
Latvia

Main ANSP
- LGS

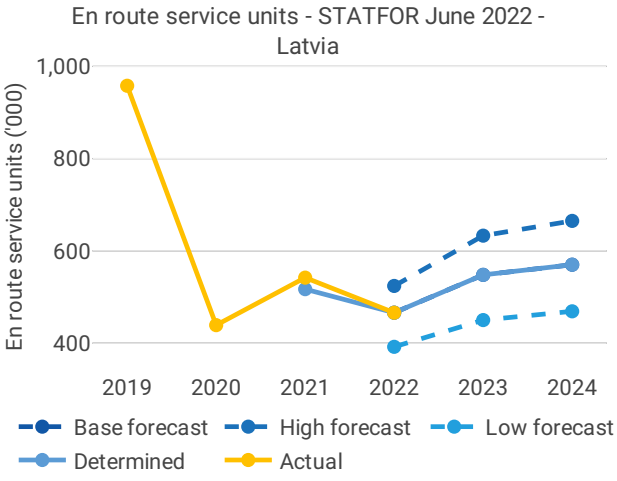
Other ANSPs
–

MET Providers
- LVĢMC

1.2 Traffic (En route traffic zone)

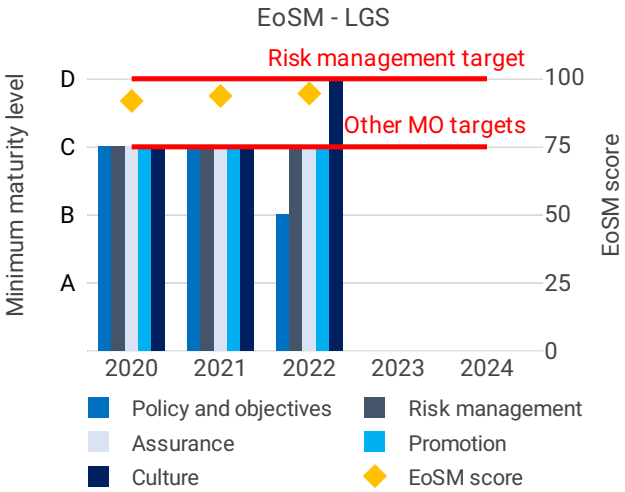


- Latvia recorded 190K actual IFR movements in 2022, +16% compared to 2021 (164K).
- Actual 2022 IFR movements were +7.2% above the plan (177K).
- Actual 2022 IFR movements represent 64% of the actual 2019 level (298K).



- Latvia recorded 466K actual en route service units in 2022, -14% compared to 2021 (542K).
- Actual 2022 service units were in line with the plan (466K).
- Actual 2022 service units represent 49% of the actual 2019 level (958K).

1.3 Safety (Main ANSP)



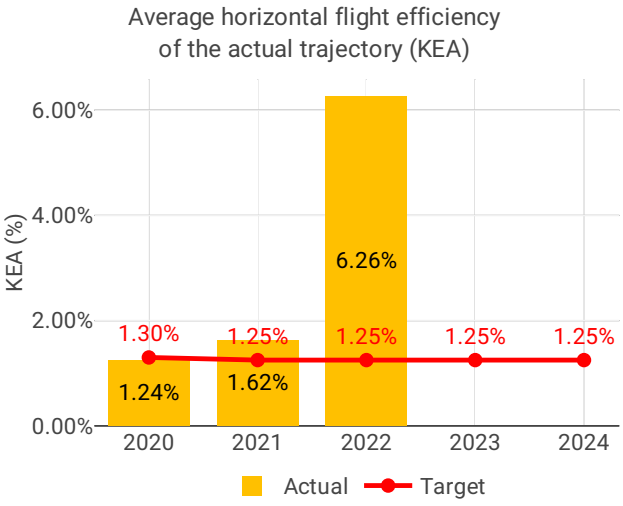
• Due to a single deficiency in the emergency and contingency response exercise, LGS failed to maintain the previously achieved RP3 target for safety objectives and policy. The additional measures to return on target for this specific management objective were identified and the NSA was confident that the ANSP will achieve level D in the coming year.

• LGS commenced a systematic assessment of the safety function to identify the necessary changes to improve its performance in relation to the safety risk management objective.

• Latvia recorded stable performance with respect to safety risks with no runway incursions and a single separation minima infringement in 2022.

• LGS uses specific safety recording tools for separation minima infringements and runway incursions, and is one of the few ANSPs that does so.

1.4 Environment (Member State)



• Latvia achieved a KEA performance of 6.26% compared to its target of 1.25% and did not contribute positively to the Union-wide target. KEA performance further worsened by 4.64 p.p. in comparison to 2021.

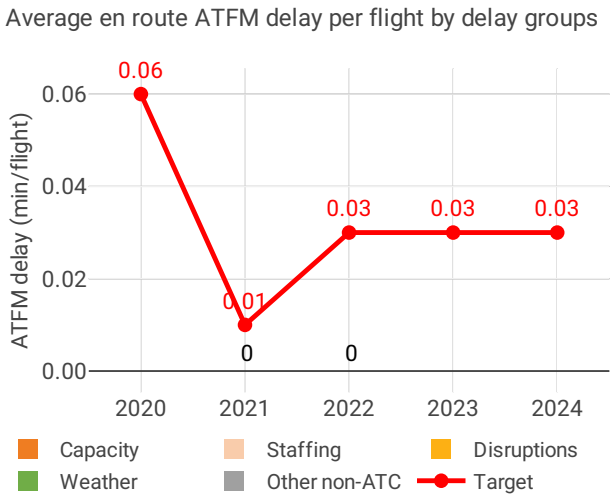
• The KEA deterioration was due to significant route extensions as a result of Russia's war of aggression against Ukraine.

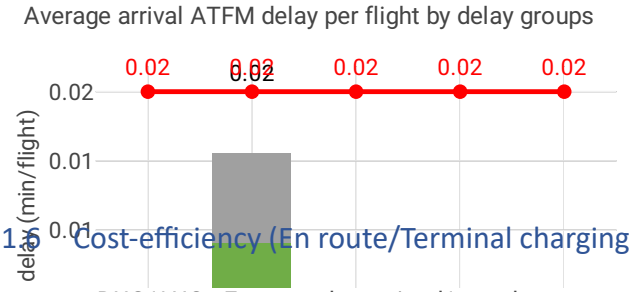
• Both KEP and SCR followed the same trend and worsened in comparison with 2021's performance.

• The share of CDO flights increased by 15.05% compared to 2021.

• During 2022, additional time in terminal airspace decreased from 0.52 to 0.33 min/flight, while additional taxi out time increased from 2.74 to 2.82 min/flight.

1.5 Capacity (Member State)





• Latvia registered zero minutes of average en route ATFM delay per flight during 2022, thus achieving the local target value of 0.03.

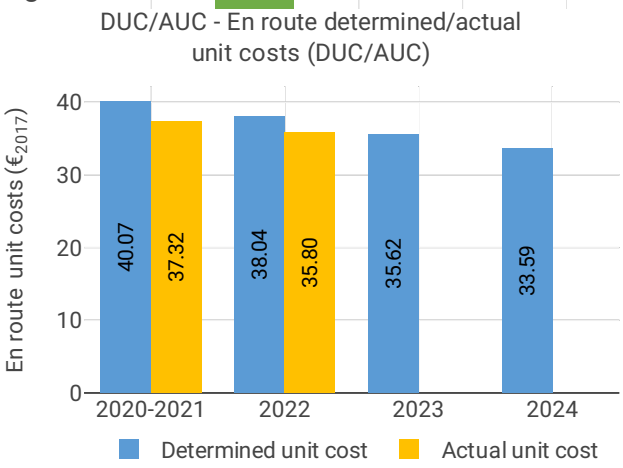
• The average number of IFR movements was 37% below 2019 levels in Latvia in 2022.

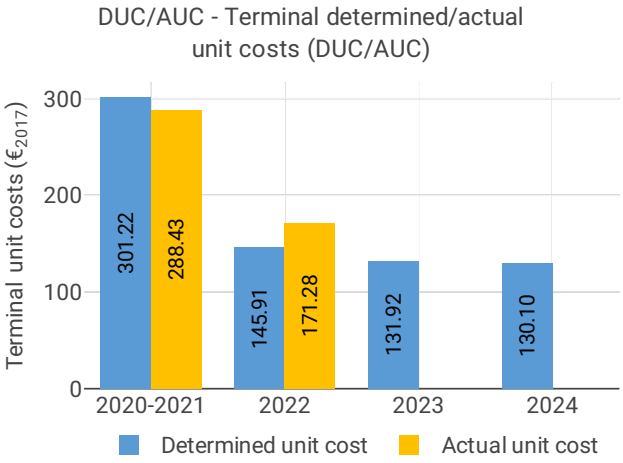
• The number of ATCOs in OPS is not expected to change significantly by the end of RP3, with the actual plan remaining below the 2022 plan in Riga ACC.

• The yearly total of sector opening hours in Riga ACC was 6,912 in 2022, showing a 7.1% increase compared to 2021. Sector opening hours are 19.4% below 2019 levels.

• Riga ACC registered 20.12 IFR movements per one sector opening hour in 2022, being 5.2% below 2019 levels.

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





• The en route 2022 actual unit cost of Latvia was 35.77 €2017, 6.0% lower than the determined unit cost (38.04 €2017). The terminal 2022 actual unit cost was 171.28 €2017, 17% higher than the determined unit cost (145.91 €2017).

• The en route 2022 actual service units (466K) were equal to the determined service units.

• The en route 2022 actual total costs were 1.1 M€2017 (-6.0%) lower than determined. The reduction in total cost was due to the lower staff (-0.8 M€2017, or -8.1%) and other operating costs (-0.5 M€2017 or, -12%) mainly as a result of higher inflation than anticipated and cost containment measures due to Russia's war of aggression against Ukraine.

• LGS spent 6.2 M€2017 in 2022 related to costs of investments, 6.6% more than determined (5.8 M€2017). The NSA explained that the increase was mainly due to commissioning of several investments.

• The en route actual unit cost incurred by users in 2022 was 44.43€, while the terminal actual unit cost incurred by users was 174.54€.

2 SAFETY - LATVIA

2.1 PRB monitoring

• Due to a single deficiency in the emergency and contingency response exercise, LGS failed to maintain the previously achieved RP3 target for safety objectives and policy. The additional measures to return on target for this specific management objective were identified and the NSA was confident that the ANSP will achieve level D in the coming year.

• LGS commenced a systematic assessment of the safety function to identify the necessary changes to improve its performance in relation to the safety risk management objective.

• Latvia recorded stable performance with respect to safety risks with no runway incursions and a single separation minima infringement in 2022.

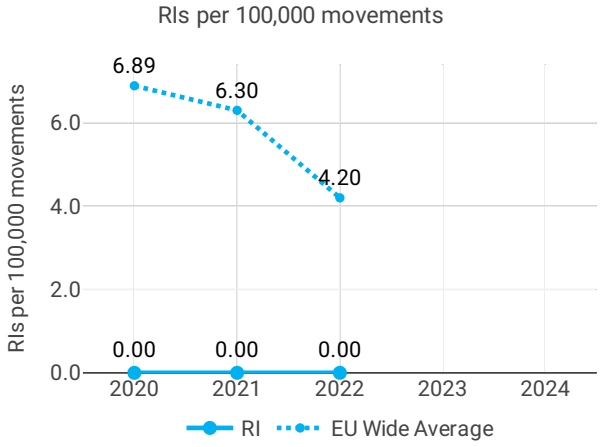
• LGS uses specific safety recording tools for separation minima infringements and runway incursions, and is one of the few ANSPs that does so.

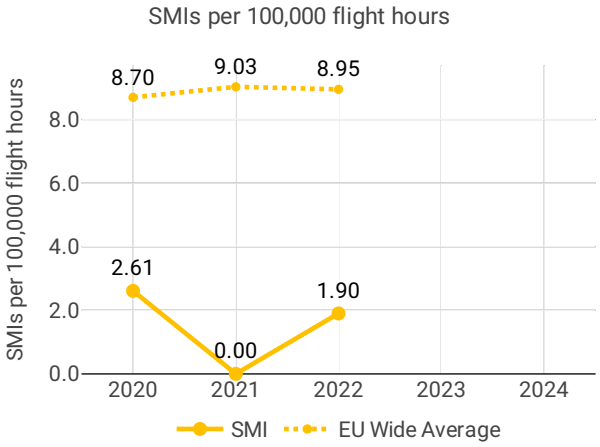
2.2 Effectiveness of Safety Management (EoSM) (KPI#1)

Focus on EoSM

Three out of five EoSM components of the ANSP meet the RP3 target level. One question need to improve to reach RP3 target for "Safety Risk Management". Compared with 2021, in 2022 degradation was observed in maturity level for "Safety Policy and Objectives" for one question, reducing the achieved level from C to B and consequently not achieving the target for this component.

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





3 ENVIRONMENT - LATVIA

3.1 PRB monitoring

• Latvia achieved a KEA performance of 6.26% compared to its target of 1.25% and did not contribute positively to the Union-wide target. KEA performance further worsened by 4.64 p.p. in comparison to 2021.

• The KEA deterioration was due to significant route extensions as a result of Russia's war of aggression against Ukraine.

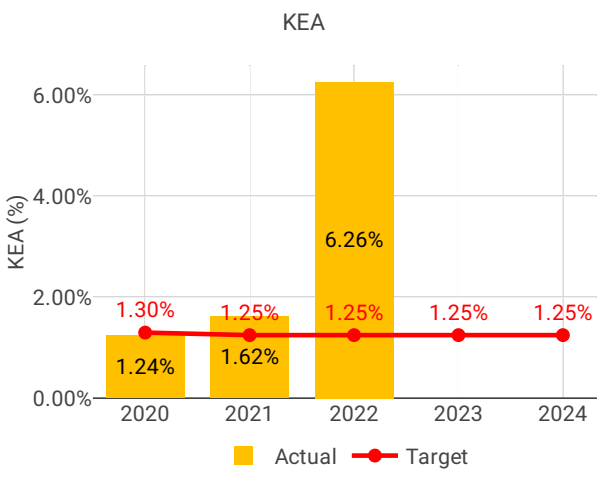
• Both KEP and SCR followed the same trend and worsened in comparison with 2021's performance.

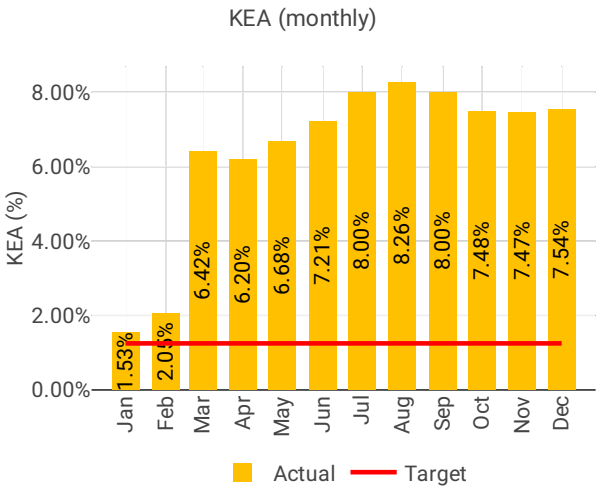
• The share of CDO flights increased by 15.05% compared to 2021.

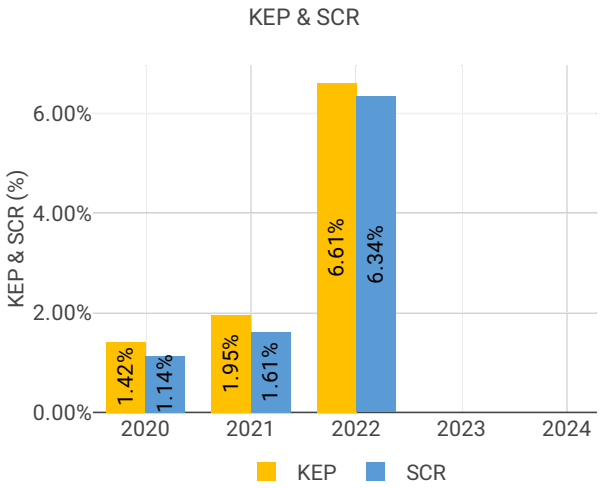
• During 2022, additional time in terminal airspace decreased from 0.52 to 0.33 min/flight, while additional taxi out time increased from 2.74 to 2.82 min/flight.

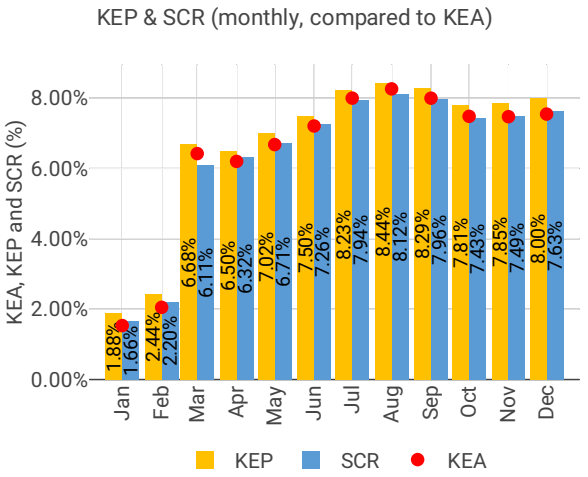
3.2 En route performance

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



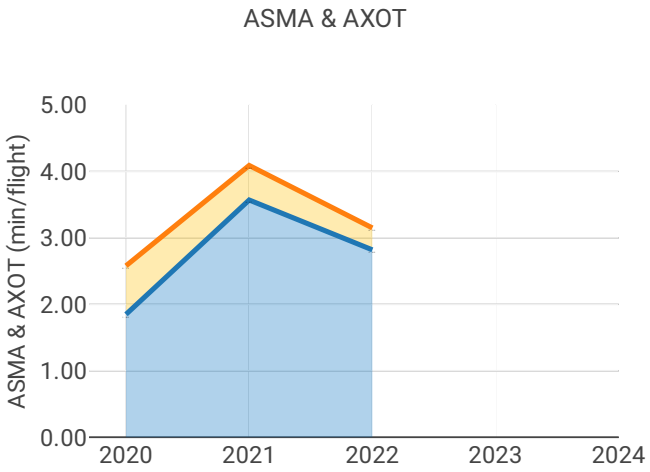


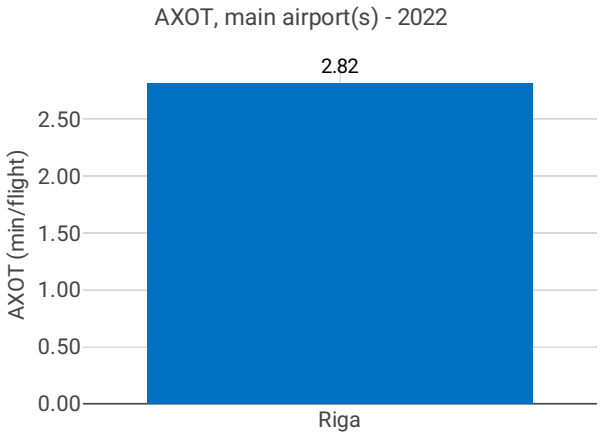


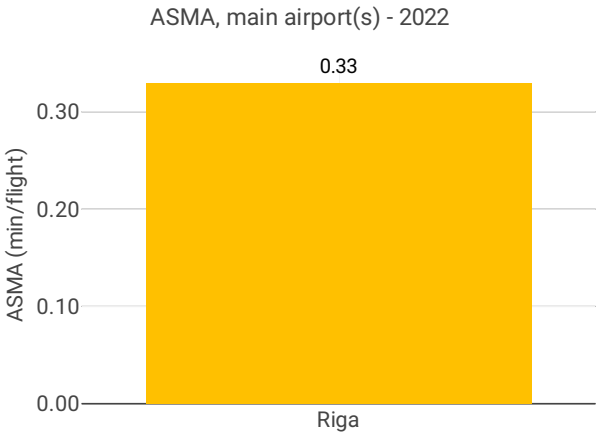


3.3 Terminal performance

3.3.1 Additional taxi-out time (AXOT) (PI#3) & Arrival Sequencing and Metering Area (ASMA) time (PI#4)







Focus on ASMA & AXOT

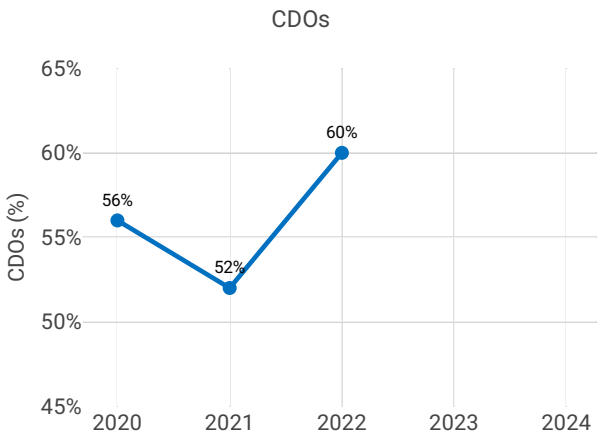
AXOT

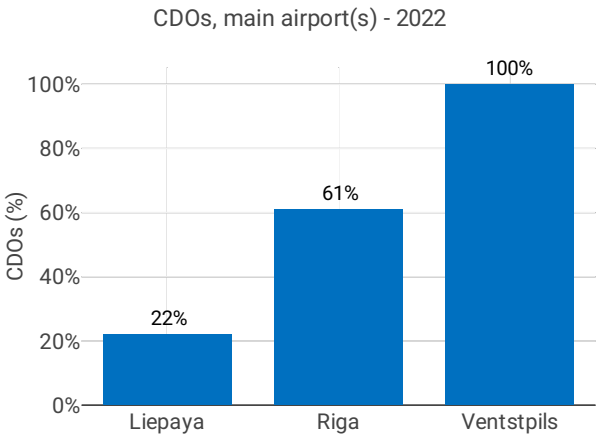
This indicator is not monitored for airports below 80 000 IFR movements average during the 2016-2018 period, so it is not monitored for any airport in this state.

ASMA

This indicator is not monitored for airports below 80 000 IFR movements average during the 2016-2018 period, so it is not monitored for any airport in this state.

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





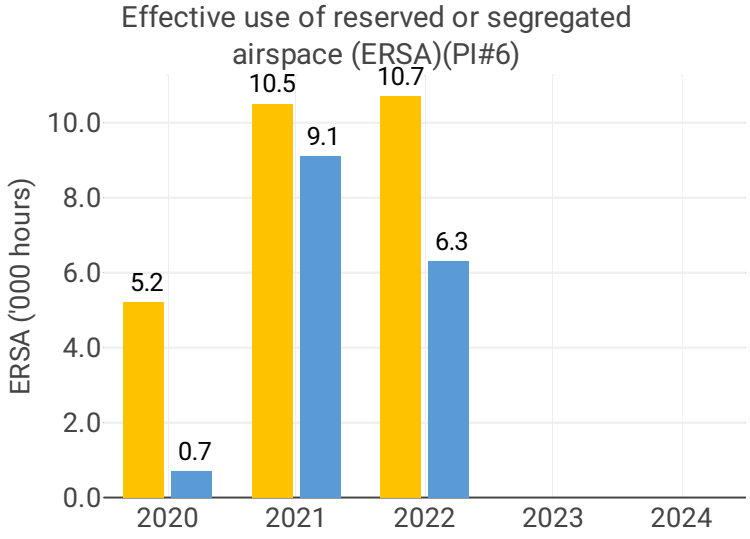
Focus CDOs

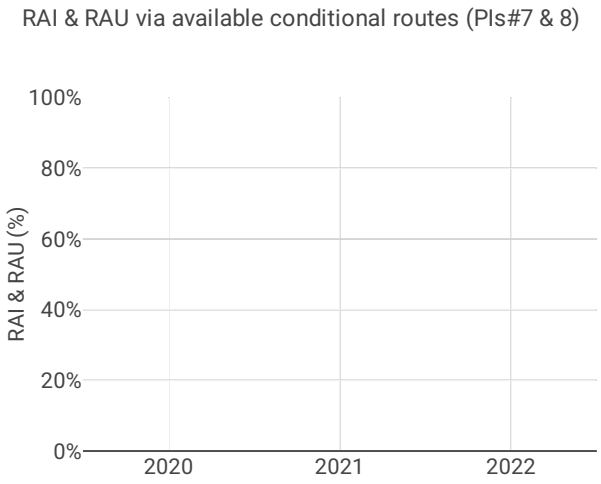
The shares of CDO flights have increased at all airports in Latvia.
Ventstpils had only 1 detected flight in 2022. This flight was considered a CDO flight so Ventstpils has a share of 100% CDO.
Riga and Ventstpils have values well above the overall RP3 value in 2022 (29.0%).According to the Latvian monitoring report: *Continuous Decent operations have been implemented at Riga airport in 2021. Monitoring is performed by Riga Airport and data is shared in Environment work group of Riga Airport, in which the CAA also participates.*
EVLA airport is served by AFIS only and during certain working hours while EVVA airport has no ATS, they do not have CDOs.

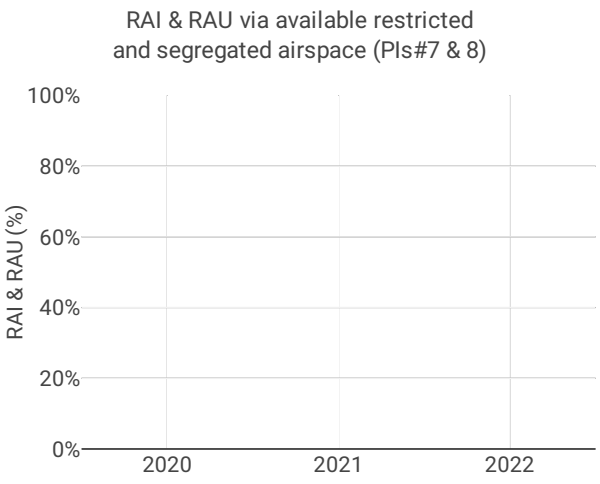
Airport level

	Additional taxi-out time (PI#3)					Additional ASMA time (PI#4)					Share of arrivals applying CDO (PI#5)				
Airport Name	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Riga	1.85	3.57	2.82	NA	NA	0.73	0.52	0.33	NA	NA	56%	53%	61%	NA	NA
Liepaya	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	66%	20%	22%	NA	NA
Ventstpils	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50%	88%	100%	NA	NA

3.4 Civil-Military dimension







Focus on Civil-Military dimension

Update on Military dimension of the plan

No impact of military on capacity has been identified. Current decrease in air traffic due to sanctions on Russia and Belorussia and flexible arrangements between the LGS and the National Armed Forces allow for environmentally friendly flight trajectories and it reduces the impact to capacity.

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

In general, military training activities have increased over the past years. At the same time, civmil airspace design and airspace use flexibility provisions between the NAF and LGS ensure that there's no impact on scheduled air traffic.

New large military FUA areas over Eastern part of the Riga FIR, next to Russian Federation and Belorussia, have been established.

Military - related measures implemented or planned to improve capacity

Each new long term or short term area for military purposes undergoes airspace design analysis with respect to impact on major air traffic flows as to not to disrupt them or to change their vertical dimensions dynamically, if necessary.

Close cooperation between Latvian ANSP and the Latvian military.

Initiatives implemented or planned to improve PI#6

Existing LGS and NAF airspace booking and airspace use procedures are continuously being updated. This data includes all FUA areas, including those being active for 24/7 for longer periods of time, but not on continuous basis. Due to involvement of military units from different countries, individual airspace planning and airspace use capabilities are not the same each year and do not ensure the same consistent performance in airspace use, even if planned through the Latvian NAF.

The results of the assessment are also shared with the Military Aviation Administration for further review.

Initiatives implemented or planned to improve PI#7

FRA has been implemented in 2015.

Initiatives implemented or planned to improve PI#8

FRA in Riga FIR was implemented in 2015.

4 CAPACITY - LATVIA

4.1 PRB monitoring

• Latvia registered zero minutes of average en route ATFM delay per flight during 2022, thus achieving the local target value of 0.03.

• The average number of IFR movements was 37% below 2019 levels in Latvia in 2022.

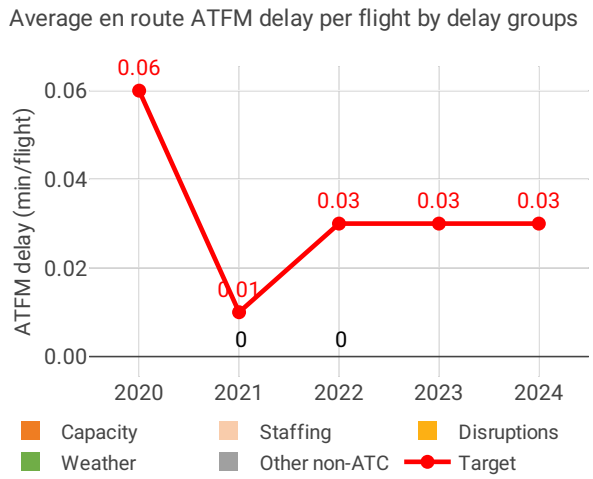
• The number of ATCOs in OPS is not expected to change significantly by the end of RP3, with the actual plan remaining below the 2022 plan in Riga ACC.

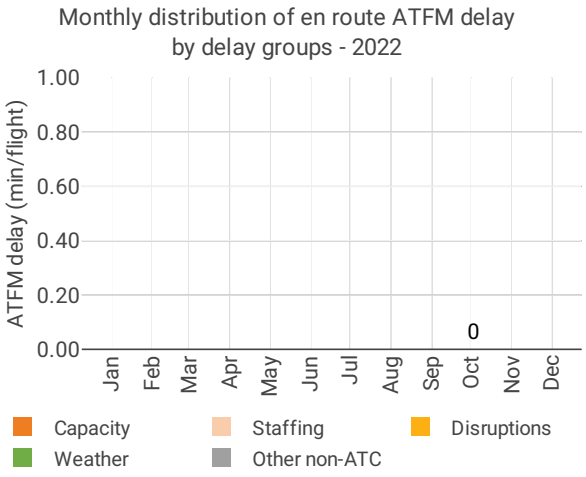
• The yearly total of sector opening hours in Riga ACC was 6,912 in 2022, showing a 7.1% increase compared to 2021. Sector opening hours are 19.4% below 2019 levels.

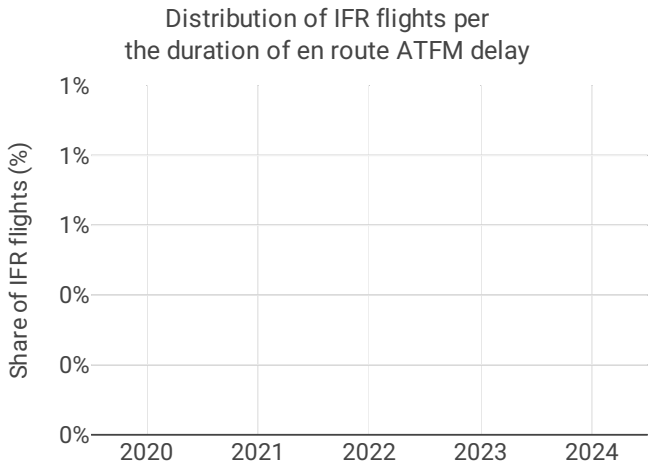
• Riga ACC registered 20.12 IFR movements per one sector opening hour in 2022, being 5.2% below 2019 levels.

4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)







Focus on en route ATFM delay

Summary of capacity performance

Latvia experienced an increase in traffic from 163k flights in 2021, with zero ATFM delay, to 190k flights in 2022, also with zero en route ATFM delay.
Traffic levels were still substantially below the 295k flights in 2019.

NSA's assessment of capacity performance

After two years of COVID-19 pandemic, along with the other Baltic states, Latvia was hot by the aftermath of Russian invasion in Ukraine. Sanctions imposed by EU, along with the sanctions imposed by Russia against EU, changed the traffic flows dramatically.
Traffic flow between Russia to Europe stopped, while the Europe ↔ China and Europe ↔ SE Asia segments dramatically dropped. Due to restrictions on overflying EU airspace, Russian aircraft operators started to fly over high seas in the Baltic sea in order to connect Kaliningrad to mainland Russia. This increased the traffic in Latvian delegated airspace, but has a negative impact on the receivables of the ANSP.
Due to Russian invasion in Ukraine and the EU sanctions against the Russia and Belorussia, air traffic flows have remained at approximately 60% of 2019 air traffic level.
No capacity issues have been identified.

Monitoring process for capacity performance

Capacity monitoring takes place during annual inspections, in addition to regular monthly statistical data sent by the LGS to the LV CAA.

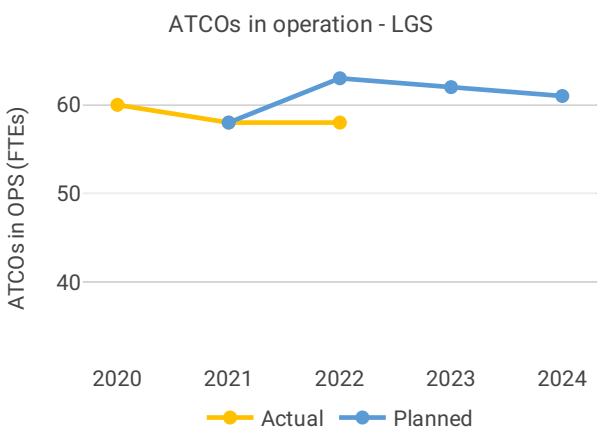
Capacity planning

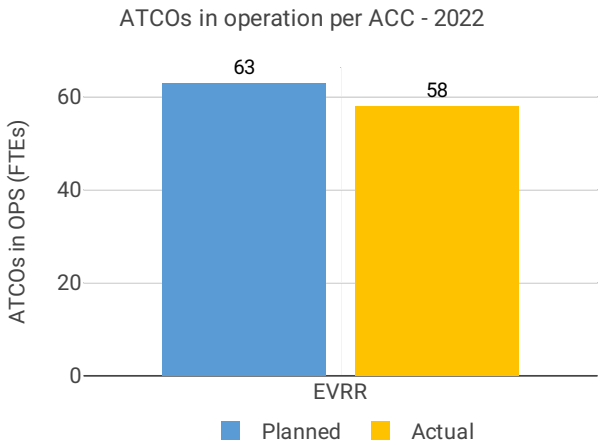
Capacity planning measures by LGS are checked during annual inspections.

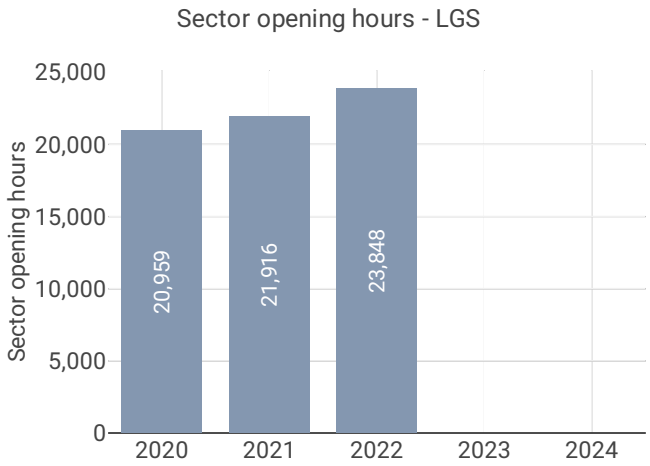
Application of Corrective Measures for Capacity (if applicable)

No data available

4.2.2 Other indicators





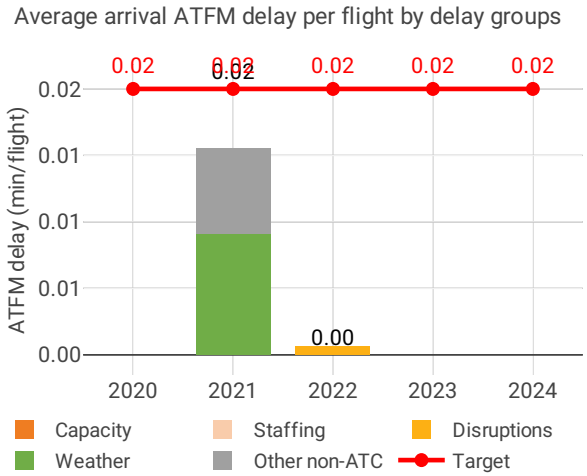


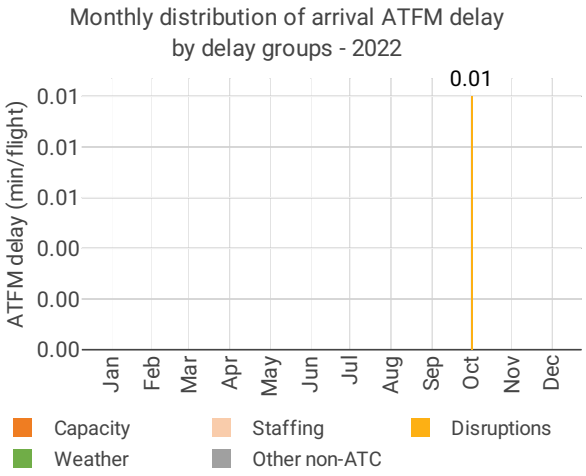
Focus on ATCOs in operations

N/A

4.3 Terminal performance

4.3.1 Arrival ATFM delay (KPI#2)





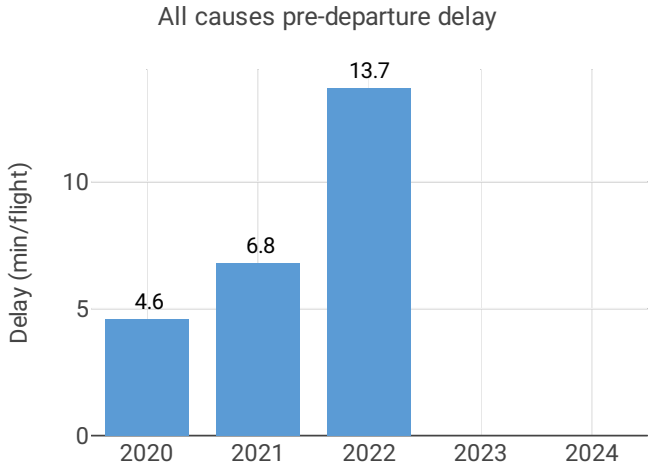
Focus on arrival ATFM delay

Latvia identified 4 airports as subject to RP3 monitoring. In accordance with IR (EU) 2019/317 and the traffic figures at these 4 airports, pre-departure delays are not monitored and the capacity performance monitoring focuses on arrival ATFM delay and slot adherence.
Traffic at these Latvian airports in 2022 was still 36% lower than in 2019, regardless of a 43% increase with respect to 2021.
Average arrival ATFM delays in 2022 was 0.00 min/arr, compared to 0.02 min/arr in 2021.
ATFM slot adherence has improved (2022: 99.6%; 2021: 98.8%).

Average arrival ATFM delays in 2022 were zero at all three Latvian airports.3. Arrival ATFM Delay – National TargetThe national target on arrival ATFM delay in 2022 was met.

Riga's ATFM slot compliance was 99.6%, a further improvement with respect to the already good value in 2021 (98.8%). With regard to the 0.4% of flights that did not adhere, 0.3% was early and 0.1% was late.
EVVA did not have any regulated departures and EVLA had only 4, with a 100% slot adherence.
According to the Latvian monitoring report: *LGS provides to the CAA monthly summary of the ATFM slot adherence data. In comparison to previous years, ATFM slot adherence has remained very high.*

4.3.2 Other terminal performance indicators (PI#1-3)



Airport level

	Avg arrival ATFM delay (KPI#2)				Slot adherence (PI#1)			
Airport name	2021	2022	2023	2020	2021	2022	2023	2020
Liepaya	NA	NA	NA	NA	100.0%	100.0%	NA%	NA
Riga	0.02	0.00	NA	NA	98.8%	99.6%	NA%	98.4%

	ATC pre departure delay (PI#2)				All causes pre departure delay (PI#3)			
Airport name	2021	2022	2023	2020	2021	2022	2023	2020
Liepaya	NA	NA	NA	NA	NA	NA	NA	NA
Riga	0.03	0.02	NA	NA	6.8	13.7	NA	4.6

Focus on performance indicators at airport level

ATFM slot adherence

This indicator is not monitored for airports below 80 000 IFR movements annual average during the 2016-2018 period, so it is not monitored for any airport in Latvia.

ATC pre-departure delay

This indicator is not monitored for airports below 80 000 IFR movements annual average during the 2016-2018 period, so it is not monitored for any airport in Latvia.

All causes pre-departure delay

No data available: airport operator data flow not established, or more than two months of missing / non-validated data

5 COST-EFFIENCY - LATVIA

5.1 PRB monitoring

• The en route 2022 actual unit cost of Latvia was 35.77 €2017, 6.0% lower than the determined unit cost (38.04 €2017). The terminal 2022 actual unit cost was 171.28 €2017, 17% higher than the determined unit cost (145.91 €2017).

• The en route 2022 actual service units (466K) were equal to the determined service units.

• The en route 2022 actual total costs were 1.1 M€2017 (-6.0%) lower than determined. The reduction in total cost was due to the lower staff (-0.8 M€2017, or -8.1%) and other operating costs (-0.5 M€2017

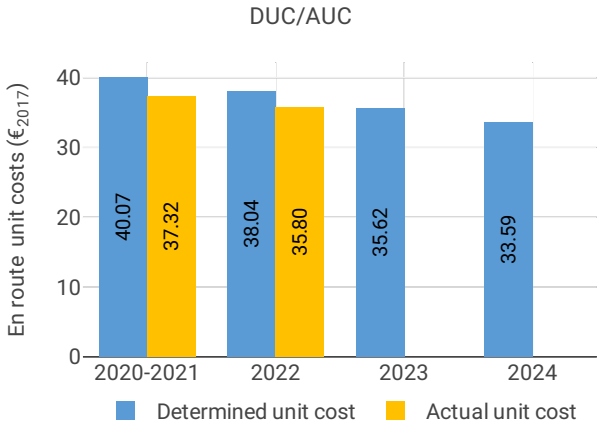
or, -12%) mainly as a result of higher inflation than anticipated and cost containment measures due to Russia's war of aggression against Ukraine.

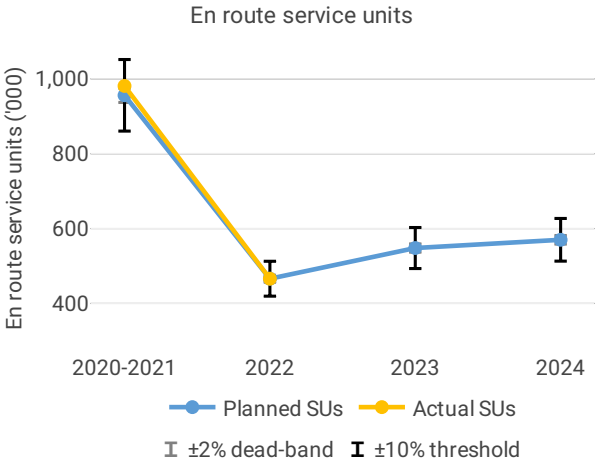
• LGS spent 6.2 M€2017 in 2022 related to costs of investments, 6.6% more than determined (5.8 M€2017). The NSA explained that the increase was mainly due to commissioning of several investments.

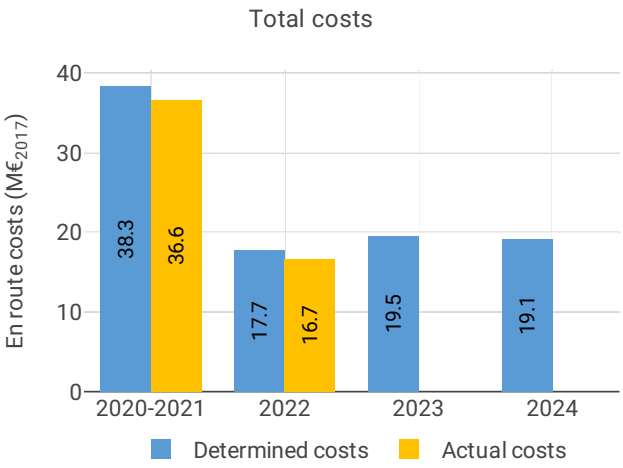
• The en route actual unit cost incurred by users in 2022 was 44.43€, while the terminal actual unit cost incurred by users was 174.54€.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)

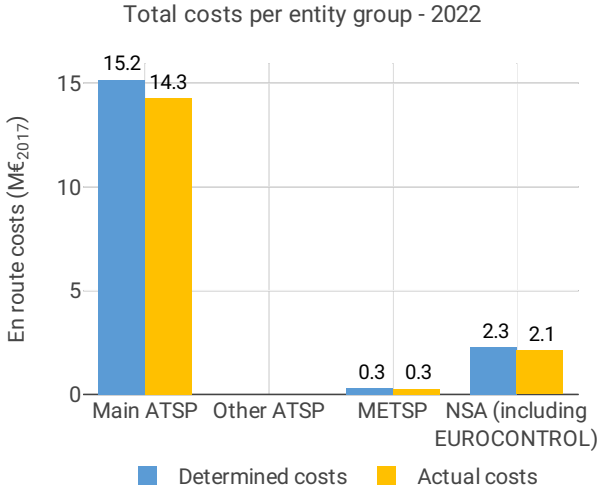


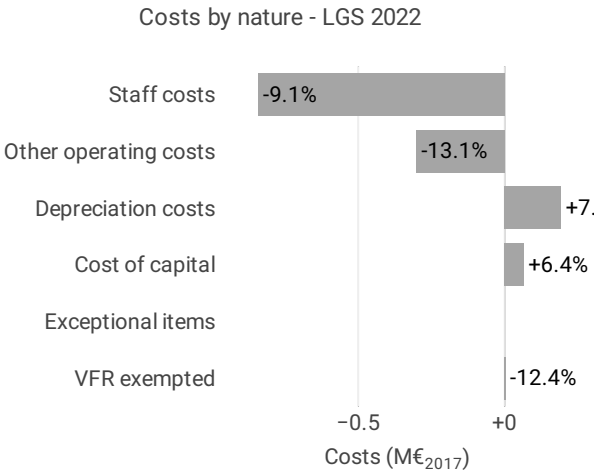




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	38	20	NA	NA
Determined costs	40	20	23	23
Difference costs	-2	0	NA	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	10.0%	3.9%	3.1%
Determined inflation index	NA	119.7	124.3	128.1
Actual inflation rate	NA	17.2%	NA	NA
Actual inflation index	NA	127.5	NA	NA
Difference inflation index (p.p.)	NA	+7.8	NA	NA





Focus on unit cost

AUC vs. DUC

In 2022, the en route AUC was -6.0% (or -2.27 €2017) lower than the planned DUC. This results from the combination of significantly lower than planned en route costs in real terms (-6.0%, or -1.1 M€2017) and TSUs that are in line with the plan. It should be noted that actual inflation index in 2022 was +7.8 p.p. higher than planned.

En route service units

The difference between actual and planned TSUs (-0.1%) falls inside the ±2% dead band. Hence loss of en route revenues is borne by the ANSPs .

En route costs by entity

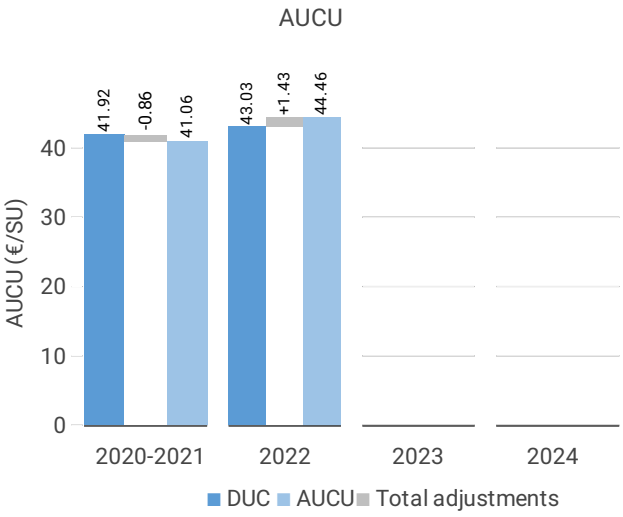
Actual real en route costs are -6.0% (-1.1 M€2017) lower than planned. This is the result of lower costs for the main ANSP, LGS (-5.8%, or -0.9 M€2017), the NSA/EUROCONTROL (-7.4%, or -0.2 M€2017) and the MET service provider (-6.6%, or -0.02 M€2017).

En route costs for the main ANSP at charging zone level

Significantly lower than planned en route costs in real terms for LGS in 2022 (-5.8%, or -0.9 M€2017) result from:

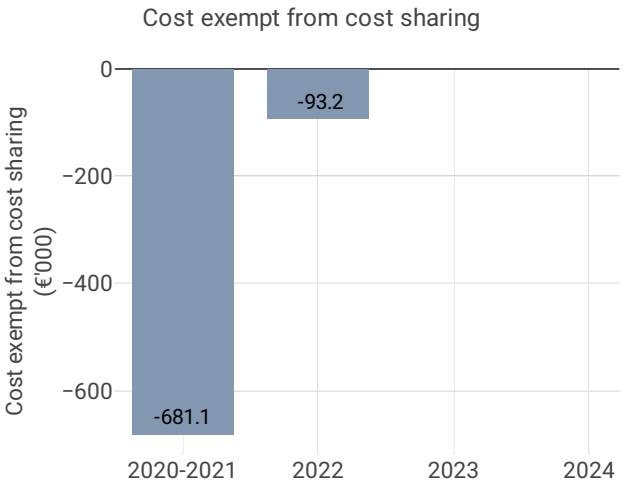
- Significantly lower staff costs (-9.1%), mainly due to the war in Ukraine, which did not allow a return to pre-COVID situation and had an impact on staff plan and on reallocation of costs between En-route and Terminal, based on Activity Based Costing method.
- Significantly lower other operating costs (-13.1%), resulting from austerity measures required by the new crisis situation (ATCOs training courses cancelled, reduction of direct spending for ATCOs…).
- Significantly higher depreciation (+7.4%), due to the commissioning of several large investment projects, mostly related to ATS and launched before the pandemic. A number of unplanned investments for the ACC also resulted in higher-than-expected costs.
- Significantly higher cost of capital (+6.4%). This can be explained by the fact that a number of investments were commissioned slightly earlier than planned, resulting in higher costs.
- Significantly lower deduction for VFR exempted flights (-12.4%).

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



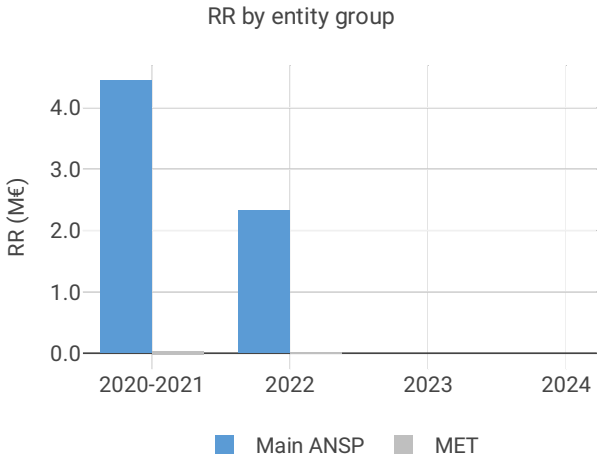
AUCU components (€/SU) – 2022

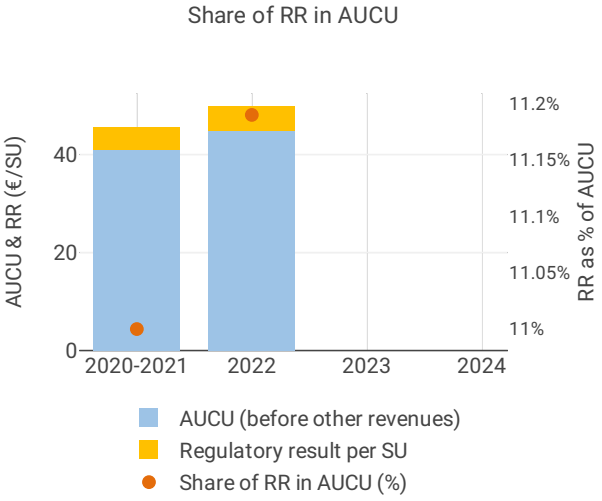
Components of the AUCU in 2022	€/SU
DUC	**43.03**
Inflation adjustment	1.99
Cost exempt from cost-sharing	-0.20
Traffic risk sharing adjustment	0.00
Traffic adj. (costs not TRS)	0.01
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-0.36
Application of lower unit rate	0.00
Total adjustments	1.43
AUCU	**44.46**
AUCU vs. DUC	**+3.3%**

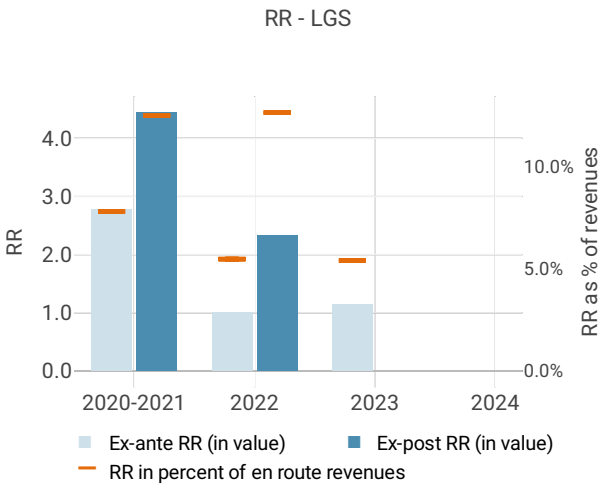


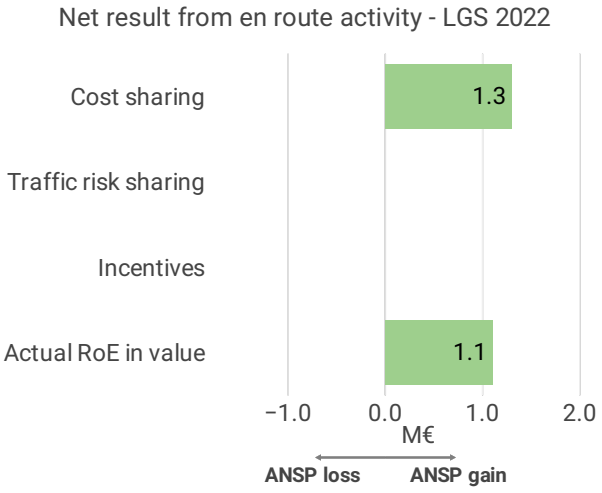
Cost exempt from cost sharing by item - 2022	€'000	€/SU
New and existing investments	112.1	0.24
Competent authorities and qualified entities costs	-61.0	-0.13
Eurocontrol costs	-92.6	-0.20
Pension costs	-51.7	-0.11
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**-93.2**	**-0.20**

5.2.3 Regulatory result (RR)









Focus on regulatory result

LGS net gain on activity in the Latvia en route charging zone in the year 2022

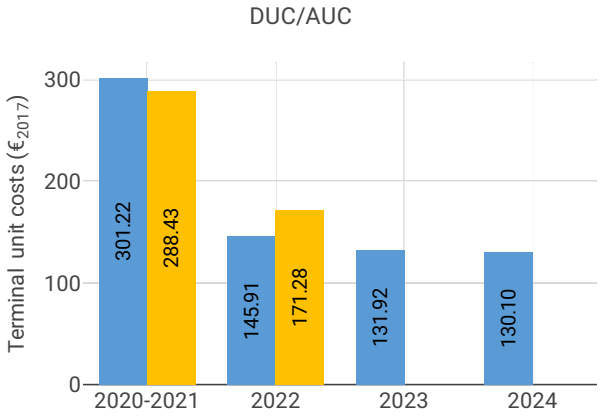
LGS reported a net gain of +1.3 M€, as a combination of a gain of +1.3 M€ arising from the cost sharing mechanism, with a loss of -0.01 M€ arising from the traffic risk sharing mechanism.

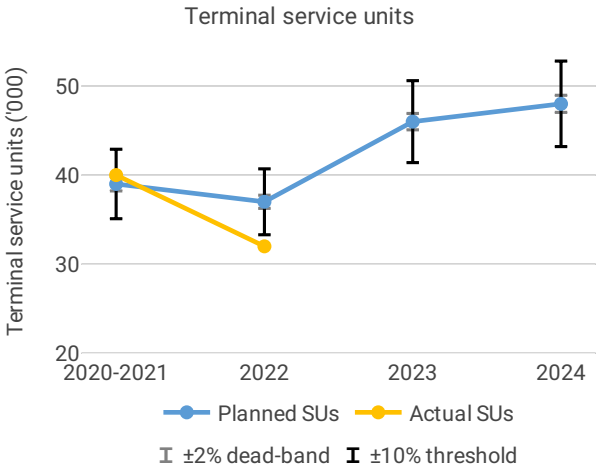
LGS overall regulatory results (RR) for the en route activity

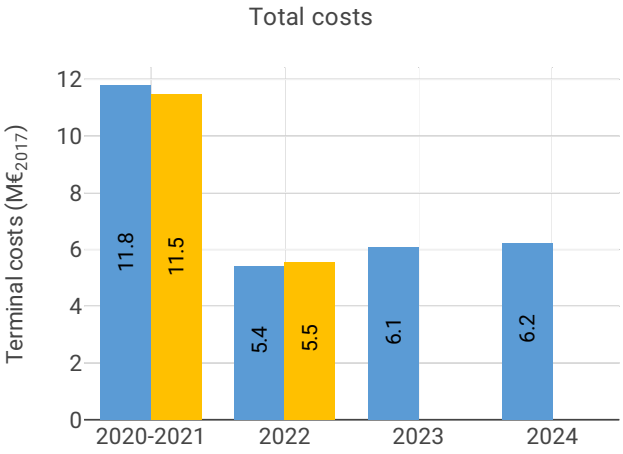
Ex-post, the overall RR taking into account the net gain from the en route activity mentioned above (+1.3 M€) and the actual RoE (+1.1 M€) amounts to +2.3 M€ (12.6% of the en route revenues). The resulting ex-post rate of return on equity is 10.8%, which is higher than the 5.0% planned in the PP.

5.3 Terminal charging zone

5.3.1 Unit cost (KPI#1)

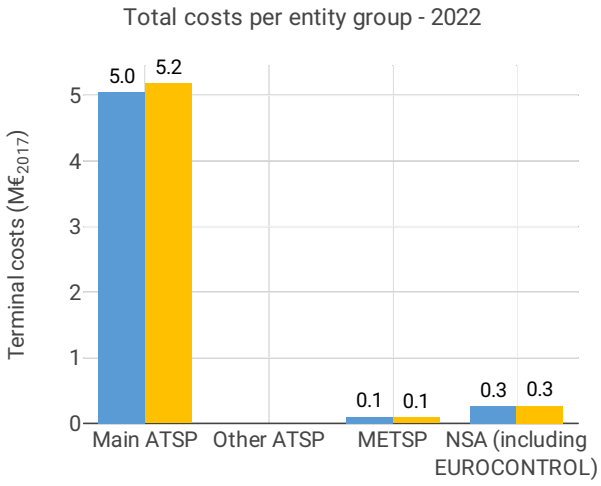


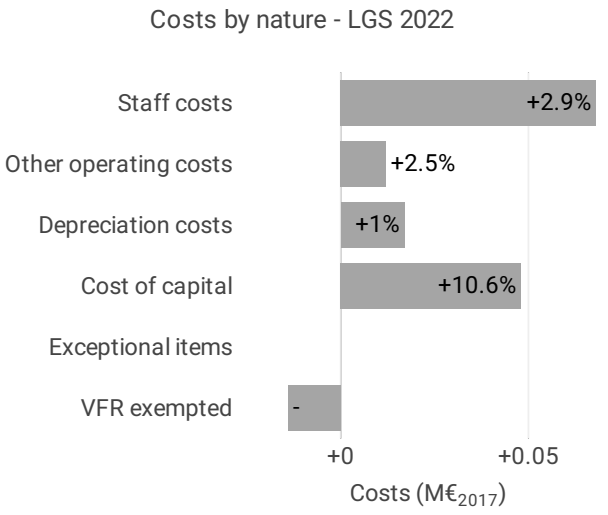




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	12	6	NA	NA
Determined costs	12	6	7	7
Difference costs	0	0	NA	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	10.0%	3.9%	3.1%
Determined inflation index	NA	119.7	124.3	128.1
Actual inflation rate	NA	17.2%	NA	NA
Actual inflation index	NA	127.5	NA	NA
Difference inflation index (p.p.)	NA	+7.8	NA	NA





Focus on unit cost

AUC vs. DUC

In 2022, the terminal AUC was +17.4% (or +25.37 €2017) higher than the planned DUC. This results from the combination of significantly lower than planned TNSUs (-12.6%) and higher than planned terminal costs in real terms (+2.6%, or +0.1 M€2017). It should be noted that actual inflation index in 2022 was +7.8 p.p. higher than planned.

Terminal service units

The difference between actual and planned TNSUs (-12.6%) falls outside the ±10% threshold foreseen in the traffic risk sharing mechanism. The resulting loss of terminal revenues is therefore shared between the ANSP and the airspace users, with the ANSP (LGS) bearing a loss of -0.2 M€2017.

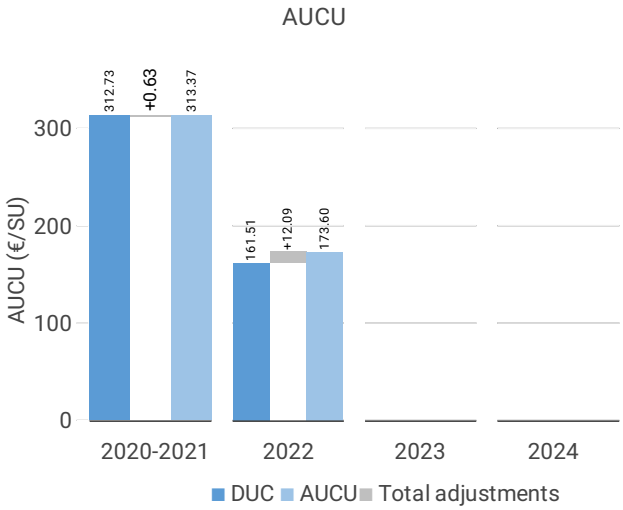
Terminal costs by entity

Actual real terminal costs are +2.6% (+0.1 M€2017) higher than planned. This is the result of higher costs for the main ANSP, LGS (+2.6%, or +0.1 M€2017) and the NSA (+5.9%, or +0.015 M€2017) and lower costs for the MET service provider (-6.8%, or -0.006 M€2017).

Terminal costs for the main ANSP at charging zone level

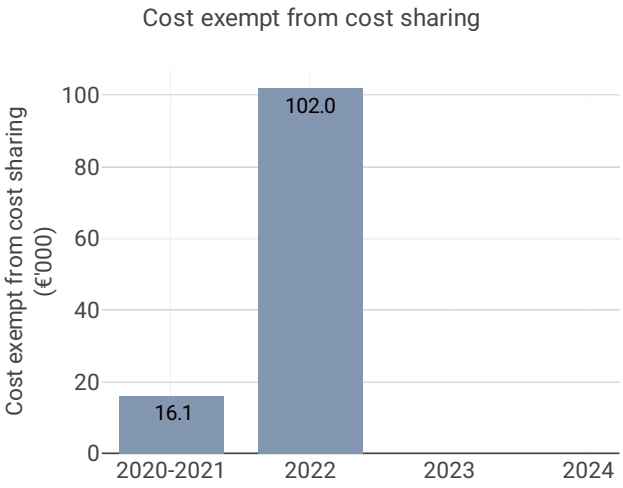
Higher than planned terminal costs in real terms for LGS in 2022 (+2.6%, or +0.1 M€2017) result from:
- Higher staff costs (+2.9%) due to LGS providing air traffic control for military airports, and in 2022 more staff were allocated to Terminal activities for that purpose;
- Higher other operating costs (+2.5%) also due to the transfer of costs between the En Route and Terminal parts in accordance with the ABC costing method;
- Slightly higher depreciation (+1.0%) due to commissioning of several large CAPEX projects that were launched prior to the COVID crisis;
- Significantly higher cost of capital (+10.6%). As for the en-route part, this can be explained by the fact that a number of investments were commissioned slightly earlier than planned, resulting in higher costs.

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



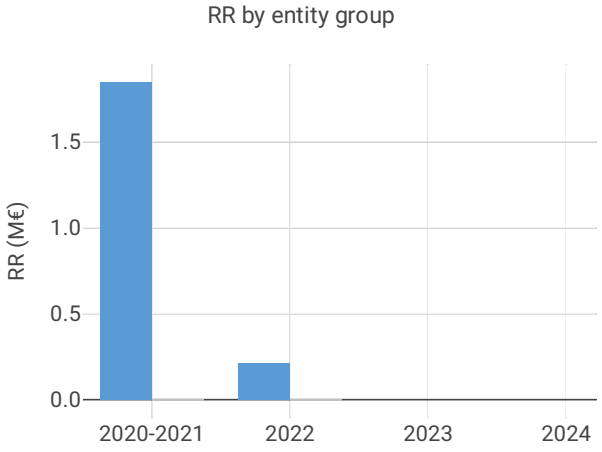
AUCU components (€/SU) – 2022

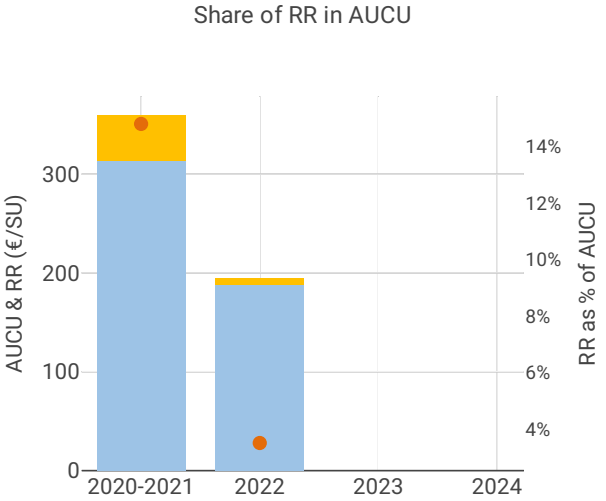
Components of the AUCU in 2022	€/SU
DUC	**161.51**
Inflation adjustment	7.10
Cost exempt from cost-sharing	3.15
Traffic risk sharing adjustment	13.38
Traffic adj. (costs not TRS)	2.72
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-14.26
Application of lower unit rate	0.00
Total adjustments	12.09
AUCU	**173.60**
AUCU vs. DUC	**+7.5%**

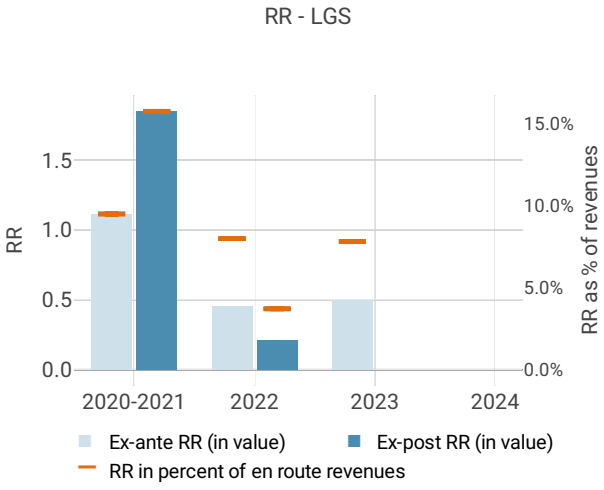


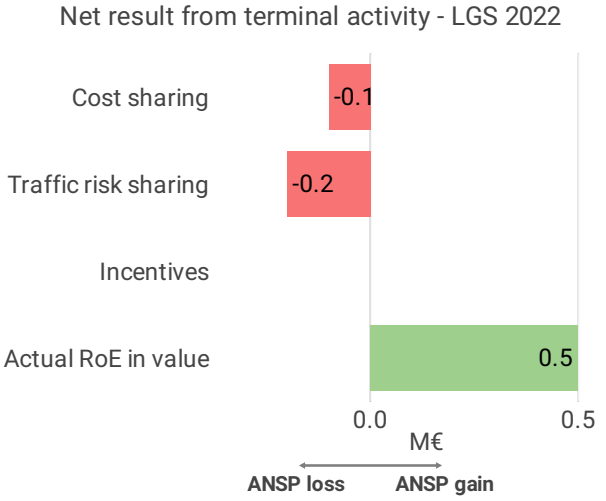
Cost exempt from cost sharing by item - 2022	€'000	€/SU
New and existing investments	71.3	2.21
Competent authorities and qualified entities costs	15.0	0.46
Eurocontrol costs	0.0	0.00
Pension costs	15.7	0.48
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**102.0**	**3.15**

5.3.3 Regulatory result (RR)









Focus on regulatory result

LGS net gain on activity in the Latvia terminal charging zone in the year 2022

LGS reported a net loss of -0.3 M€, as a combination of a loss of -0.03 M€ arising from the cost sharing mechanism, with a loss of -0.2 M€ arising from the traffic risk sharing mechanism.

LGS overall regulatory results (RR) for the terminal activity

Ex-post, the overall RR taking into account the net loss from the terminal activity mentioned above (-0.3 M€) and the actual RoE (+0.5 M€) amounts to +0.2 M€ (4.2% of the terminal revenues). The resulting ex-post rate of return on equity is 2.4%, which is lower than the 5.0% planned in the PP.