PRB | Performance review body of the single european sky

Performance Review Body Monitoring Report

Bulgaria - 2022

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1 OVERVIEW

1.1 Contextual information

National performance plan adopted following Commission Decision (EU) 2022/778 of 13 April 2022

List of ACCs 1
Sofia ACC

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

Exchange rate (1 EUR=)
2017: 1.95543 BGN
2022: 1.95525 BGN

Share of Union-wide:
- **traffic (TSUs) 2022** 3.6%
- **en route costs 2022** 1.7%

Share en route / terminal costs 2022 100% / 0%

En route charging zone(s)
Bulgaria

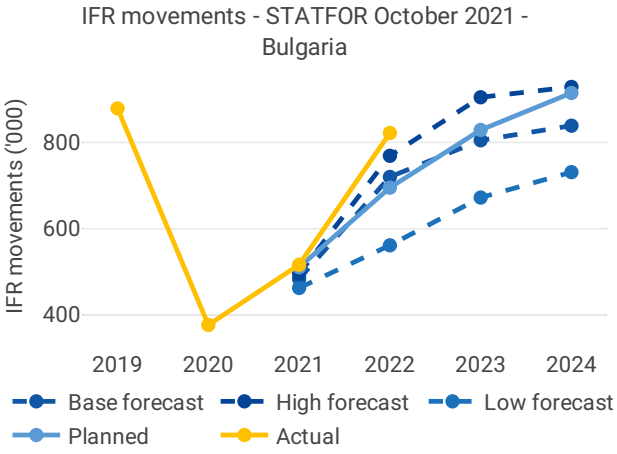
Terminal charging zone(s)
–

Main ANSP
- BULATSA

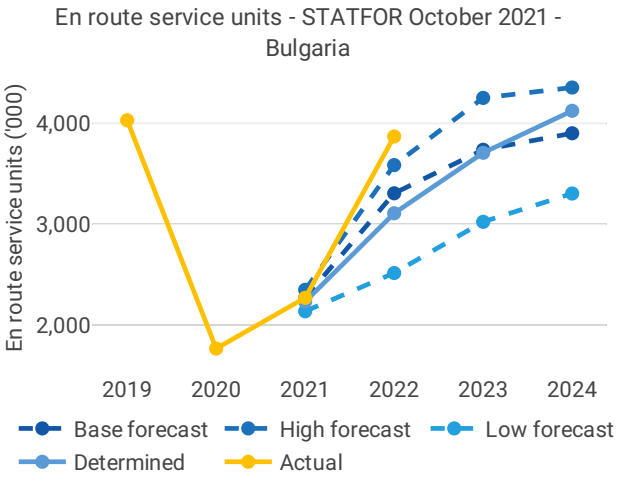
Other ANSPs
–

MET Providers
–

1.2 Traffic (En route traffic zone)

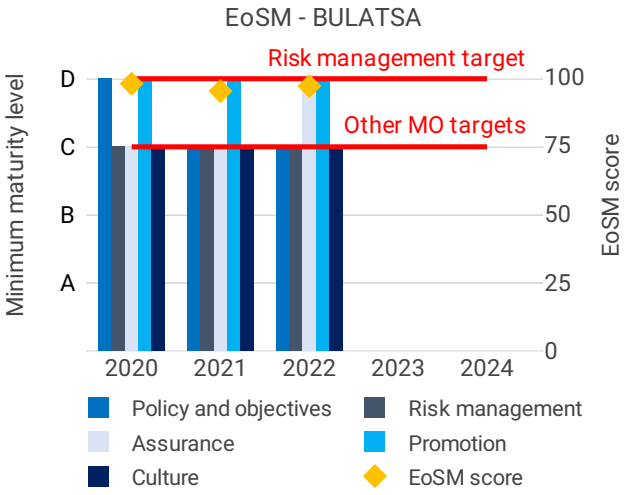


- Bulgaria recorded 822K actual IFR movements in 2022, +59% compared to 2021 (516K).
- Actual 2022 IFR movements were +18% above the plan (695K).
- Actual 2022 IFR movements represent 93% of the actual 2019 level (879K).



- Bulgaria recorded 3,871K actual en route service units in 2022, +71% compared to 2021 (2,270K).
- Actual 2022 service units were +24% above the plan (3,109K).
- Actual 2022 service units represent 96% of the actual 2019 level (4,032K).

1.3 Safety (Main ANSP)



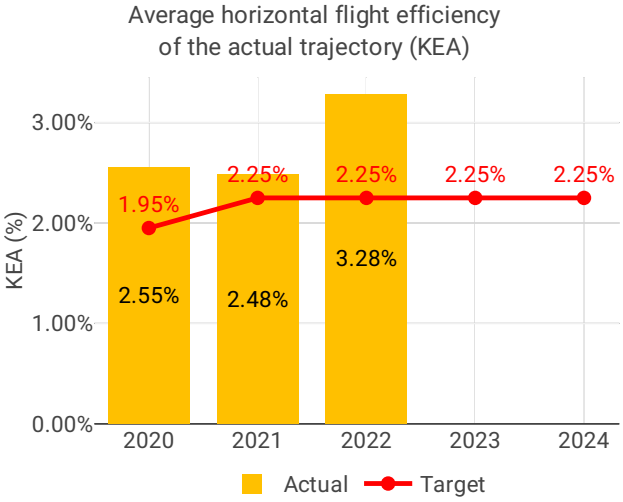
• BULATSA did not achieve the RP3 target for safety risk management, but it exceeded the RP3 targets for safety assurance and safety promotion. BULATSA exceeded its planned maturity levels from the performance plan.

• Bulgaria adopted the specific safety measures to achieve the acceptable level of safety performance according to its National Safety Plan, that is a part of the National Safety Programme. The plan's objectives included the integration of key safety initiatives to introduce continuous safety improvements.

• Bulgaria did not provide monitoring data for separation minima infringements (SMIs).

• BULATSA could improve its safety management by implementing automated safety data recording systems.

1.4 Environment (Member State)



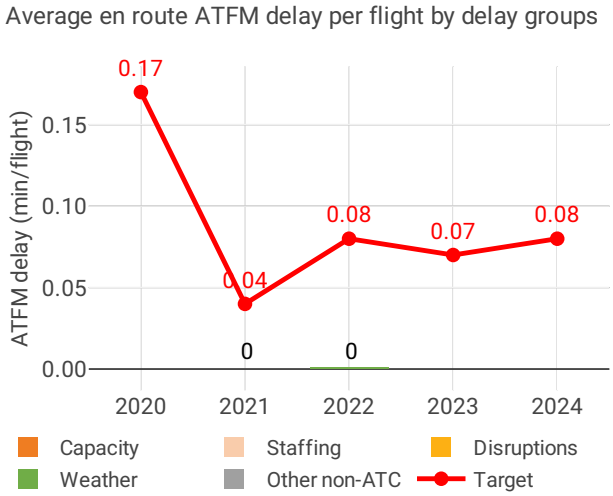
• Bulgaria achieved a KEA performance of 3.28% compared to its target of 2.25% and did not contribute positively towards achieving the Union-wide target. It should be noted that KEA performance worsened in comparison to 2021.

• Both KEP and SCR deteriorated in comparison to 2021.

• The NSA states the reasons for not meeting the environmental targets are related to the geopolitical situation and airspace restrictions due to the Crimean crisis and Russia's war of aggression against Ukraine, shifts in traffic flows, and airspace user preferences.

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

1.5 Capacity (Member State)



• Bulgaria registered zero minutes of average en route ATFM delay per flight during 2022, thus achieving the local target value of 0.08.

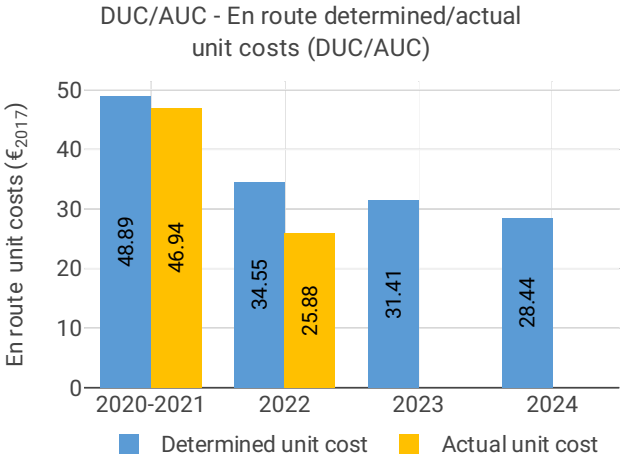
• The average number of IFR movements was still 7% below 2019 levels in Bulgaria in 2022.

• The number of ATCOs in OPS is planned to increase by 7% by the end of RP3, with the actual value being realised above the 2022 plan in Sofia ACC.

• The yearly total of sector opening hours in Sofia ACC was 34,837 in 2022, showing a 45.9% increase compared to 2021. Sector opening hours are 3.7% below 2019 levels.

• Sofia ACC registered 22.94 IFR movements per one sector opening hour in 2022, being 2.9% below 2019 levels.

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



• The en route 2022 actual unit cost of Bulgaria was 25.86 €2017, 25% lower than the determined unit cost (34.55 €2017). Bulgaria does not have a terminal charging zone.

• The en route 2022 actual service units (3,871K) were 24% higher than the determined service units (3,109K).

• The en route 2022 actual total costs were 7.3 M€2017 (-6.8%) lower than determined. The decrease was attributable to lower staff costs (-5.6 M€2017, or -8.5%) and other operating costs (-3.0 M€2017, or -17%). Although total actual costs in nominal terms were slightly higher (+1.3%) than planned, the decreases in real terms were mainly resulting from higher-than-expected inflation.

• BULATSA spent 18.9 M€2017 in 2022 related to costs of investments, 2.6% higher than determined (18.4 M€2017). This was due to an increase in the depreciation cost, even though the net book value of fixed assets decreased.

• The en route actual unit cost incurred by users in 2022 was 33.11€.

2 SAFETY - BULGARIA

2.1 PRB monitoring

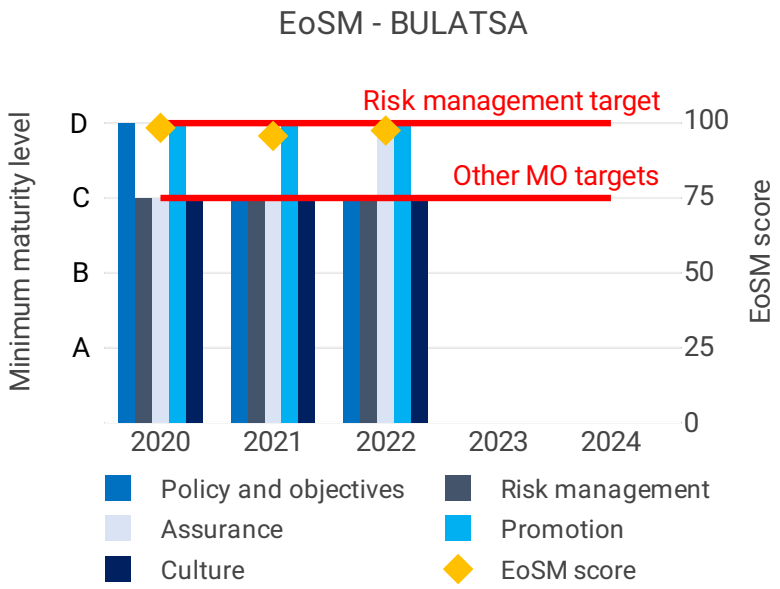
• BULATSA did not achieve the RP3 target for safety risk management, but it exceeded the RP3 targets for safety assurance and safety promotion. BULATSA exceeded its planned maturity levels from the performance plan.

• Bulgaria adopted the specific safety measures to achieve the acceptable level of safety performance according to its National Safety Plan, that is a part of the National Safety Programme. The plan's objectives included the integration of key safety initiatives to introduce continuous safety improvements.

• Bulgaria did not provide monitoring data for separation minima infringements (SMIs).

• BULATSA could improve its safety management by implementing automated safety data recording systems.

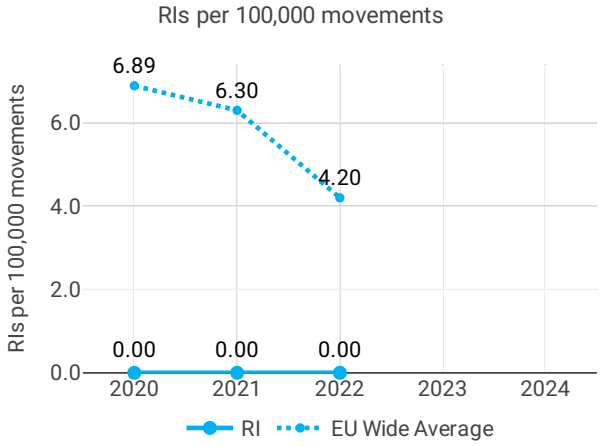
2.2 Effectiveness of Safety Management (EoSM) (KPI#1)

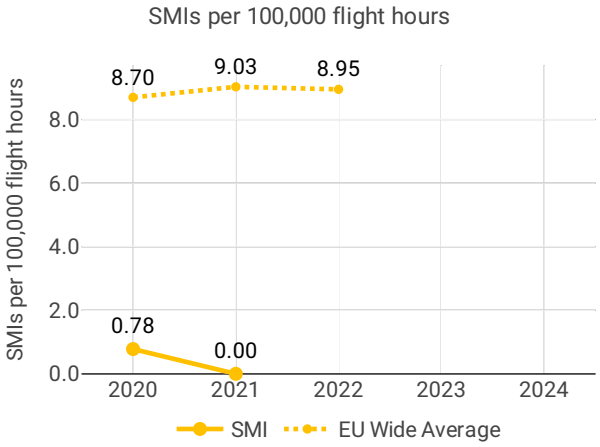


Focus on EoSM

Four out of five EoSM components of the ANSP meet or exceed already the RP3 EoSM target levels. Only one question in "Safety Risk Management" component is below the RP3 EoSM target level.

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





3 ENVIRONMENT - BULGARIA

3.1 PRB monitoring

• Bulgaria achieved a KEA performance of 3.28% compared to its target of 2.25% and did not contribute positively towards achieving the Union-wide target. It should be noted that KEA performance worsened in comparison to 2021.

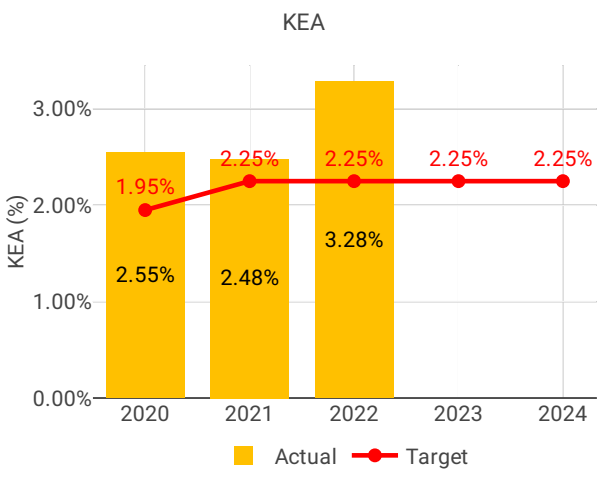
• Both KEP and SCR deteriorated in comparison to 2021.

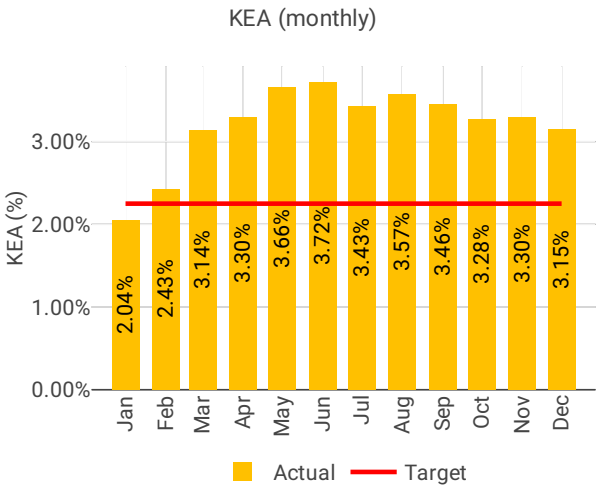
• The NSA states the reasons for not meeting the environmental targets are related to the geopolitical situation and airspace restrictions due to the Crimean crisis and Russia's war of aggression against Ukraine, shifts in traffic flows, and airspace user preferences.

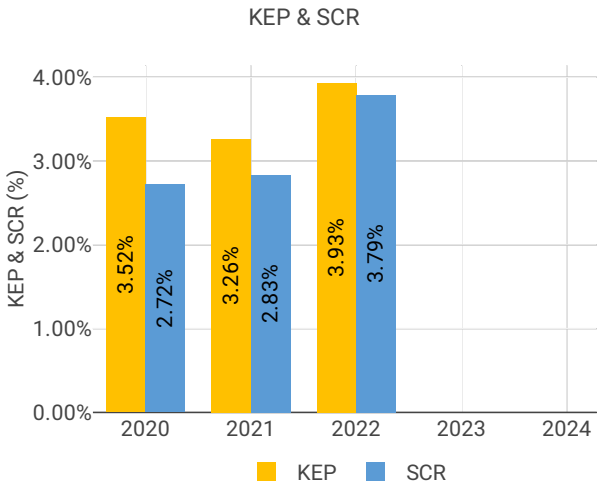
• Bulgaria has no airports that are regulated under the RP3 performance and charging scheme.

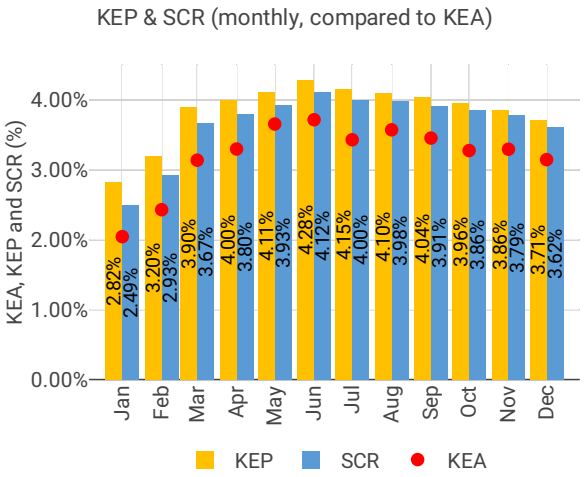
3.2 En route performance

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

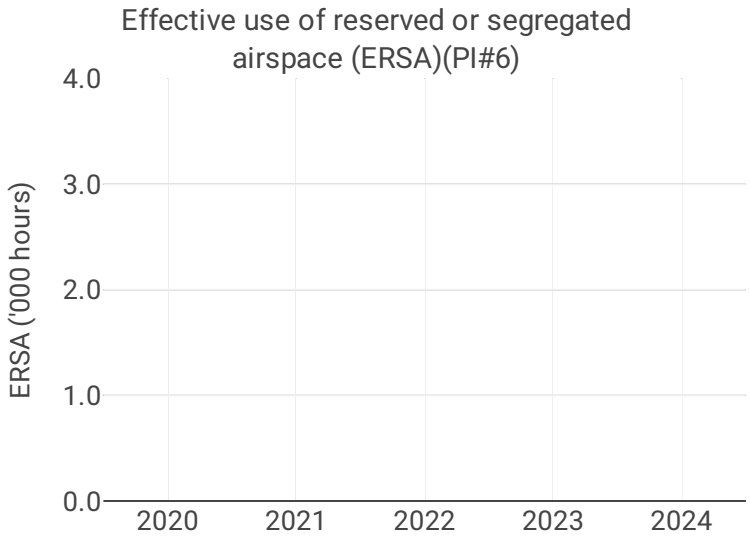


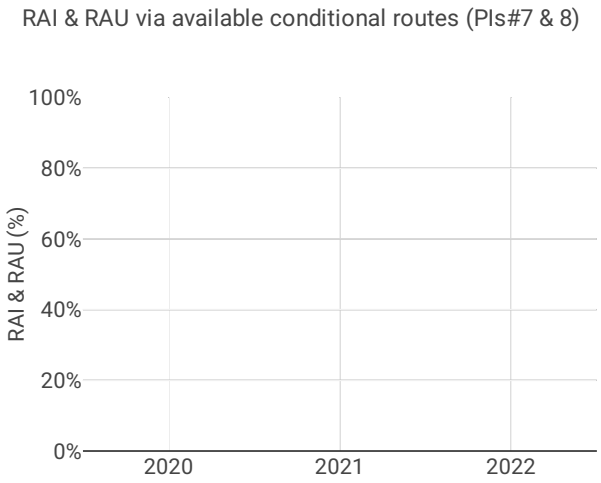


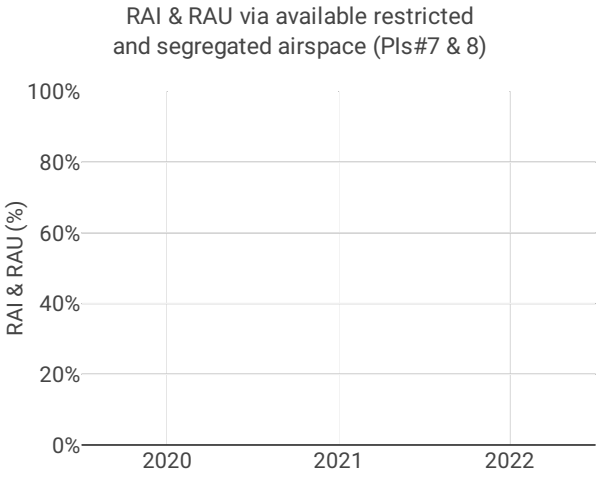




3.3 Civil-Military dimension







Focus on Civil-Military dimension

Update on Military dimension of the plan

The number of military aircraft increased since the outbreak of the war between Russia and Ukraine

Military - related measures implemented or planned to improve capacity

Initiatives implemented or planned to improve PI#6

Initiatives implemented or planned to improve PI#7

Initiatives implemented or planned to improve PI#8

4 CAPACITY - BULGARIA

4.1 PRB monitoring

• Bulgaria registered zero minutes of average en route ATFM delay per flight during 2022, thus achieving the local target value of 0.08.

• The average number of IFR movements was still 7% below 2019 levels in Bulgaria in 2022.

• The number of ATCOs in OPS is planned to increase by 7% by the end of RP3, with the actual value being realised above the 2022 plan in Sofia ACC.

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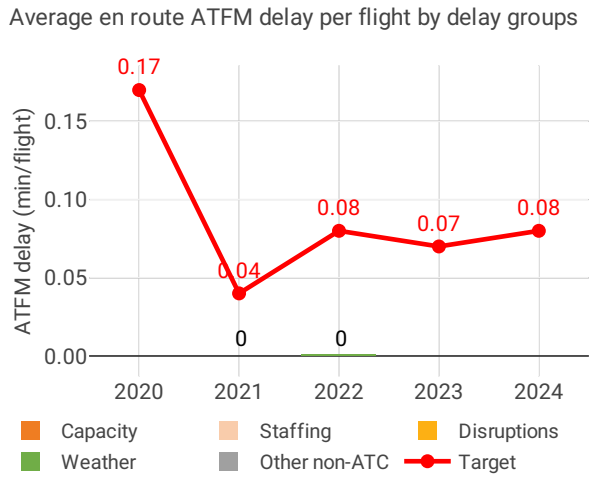
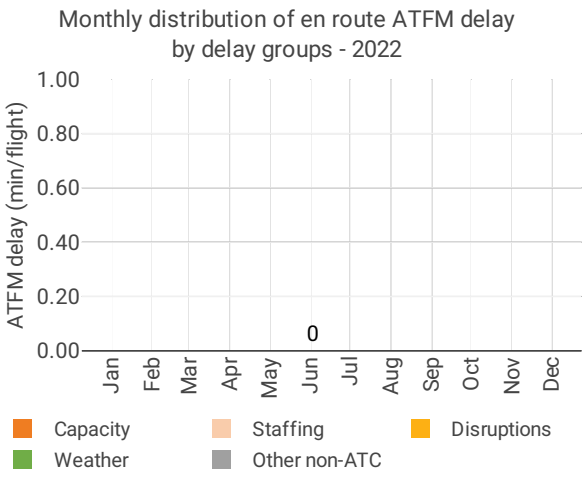
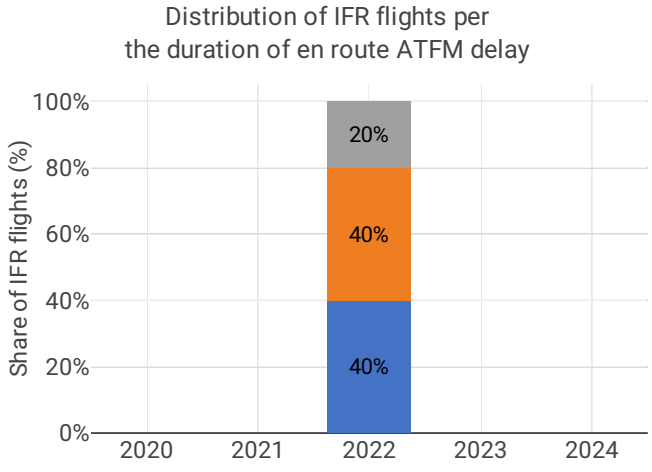
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)







Focus on en route ATFM delay

Summary of capacity performance

Bulgaria experienced an increase in traffic from 516k flights in 2021 to 822k flights in 2022, with zero ATFM delay. However, traffic levels were still substantially below the 879k flights in 2019. Although traffic levels were still below 2019 on an annual basis, over the second half of 2022 the number of flights were quite close to 2019, and in some cases exceeded the 2019 summer peaks.

NSA's assessment of capacity performance

During 2022 the number of serviced aircraft gradually increased, approaching 2019 levels. As a follow-up to the events in Ukraine, reciprocal bans have been imposed on the use of EU airspace by Russian aircraft and on the use of Russian Federation airspace by European aircraft. These actions led to a significant extension of the flight time for some destinations (mainly from/to the Far East and the aggregate flow from/to Other ICAO regions in Asia) and to the shift of non-traditional traffic to the Bulgarian airspace. BULATSA carried out the necessary preparations in a timely manner and successfully dealt with the increased air traffic over Bulgaria by developing sector configurations to handle the traffic and providing the necessary number of air traffic controllers. The number of serviced aircraft was 832,923, which is a increase of 58% compared to the previous year but was still below (~ 6.5%) the pre-pandemic 2019. The reported delay figure for Bulgaria in 2022 is 0.00.

Monitoring process for capacity performance

Monitoring of capacity performance is effected through regular monitoring of the minutes of delay generated, based on the information provided by NM. Monitoring is done on a monthly basis.

Capacity planning

Capacity planning is done on a network level as part of the capacity planning processes established by NM. Additionally, BULATSA has established internal capacity planning which is based on the traffic forecast produced by STATFOR, but also based on the internally produced traffic forecasts, which take into account local specifics. The capacity planning process includes:

• HR availability and rostering, both in long term (new ATCO hiring and training) , but also in the medium (seasonal) and short term (monthly). HR requirements are assessed and measures are taken to re-prioritize available resources during the busy periods.
• Medium and long term planning of capacity availability based on technological improvements, introduction of SESAR innovations, system upgrades
• Airspace changes, sectorization and development of interfaces with adjacent FIRs.

The issues and plans are regularly reviewed and reassess in relation to current operational environment and forecasts. A Capacity Management Board is established internally that convenes once a month in order to discuss the latest information and trends. The Capacity Board includes a broad range of experts (technical, operational, financial and legal) in order to ensure that multidisciplinary approach to capacity is undertaken.

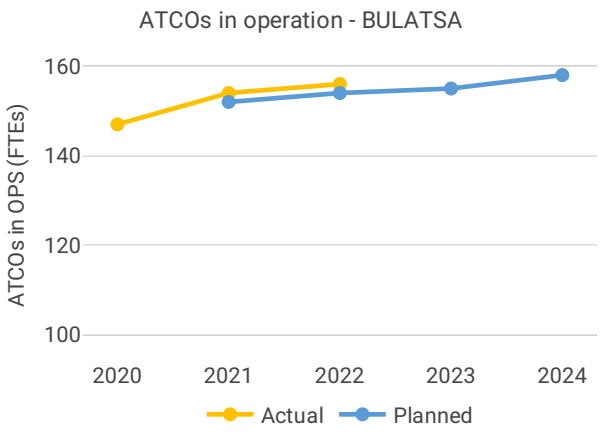
War in Ukraine

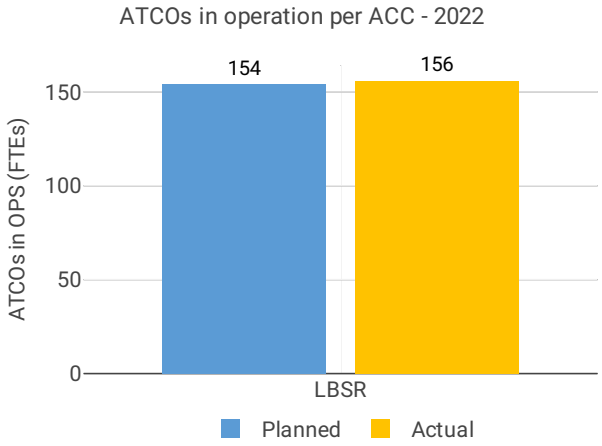
As a response to the situation, BULATSA introduced the utilization of new airspace configurations (now the lateral split of Sofia east sectors is actively used). A new organization of the interfaces with Turkey were agreed and will be implemented for Summer 2023. Cross training between sector cluster was initiated and successfully completed to allow for more flexibility in the human resources re-allocation. Meetings were carried out with major airspace users (Turkish Airlines) to review flight planning practices and agree on some traffic flow initiatives. Administrative staff with operational competence was reallocated for the peak traffic periods. At the same time, BULATSA has continued the work on key technological projects (rostering system, complexity management system, ATM system) in order to ensure that capacity will be improved in the medium and long term.

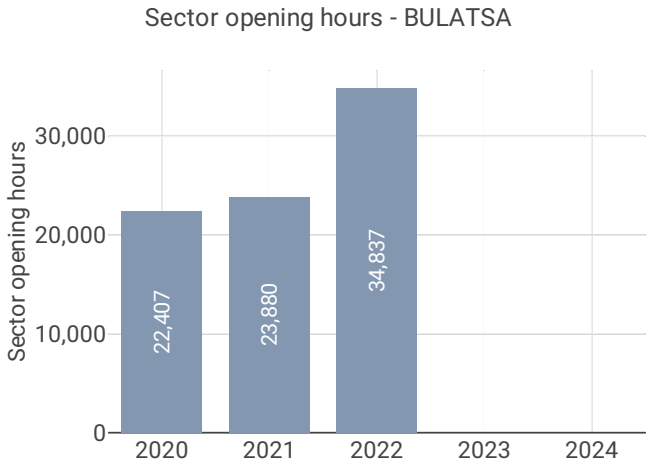
Application of Corrective Measures for Capacity (if applicable)

No data available

4.2.2 Other indicators







Focus on ATCOs in operations

N/A

5 COST-EFFIENCY - BULGARIA

5.1 PRB monitoring

• The en route 2022 actual unit cost of Bulgaria was 25.86 €2017, 25% lower than the determined unit cost (34.55 €2017). Bulgaria does not have a terminal charging zone.

• The en route 2022 actual service units (3,871K) were 24% higher than the determined service units (3,109K).

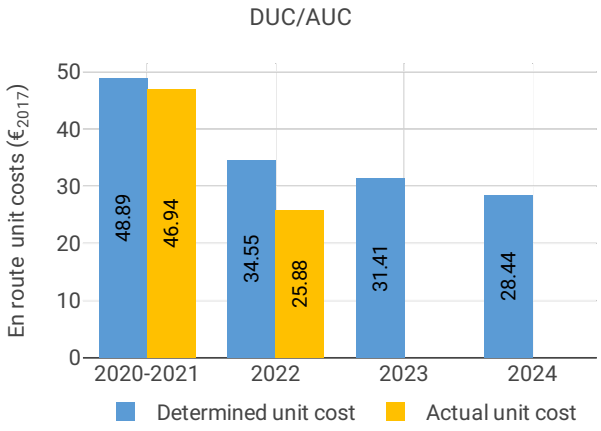
• The en route 2022 actual total costs were 7.3 M€2017 (-6.8%) lower than determined. The decrease was attributable to lower staff costs (-5.6 M€2017, or -8.5%) and other operating costs (-3.0 M€2017, or -17%). Although total actual costs in nominal terms were slightly higher (+1.3%) than planned, the decreases in real terms were mainly resulting from higher-than-expected inflation.

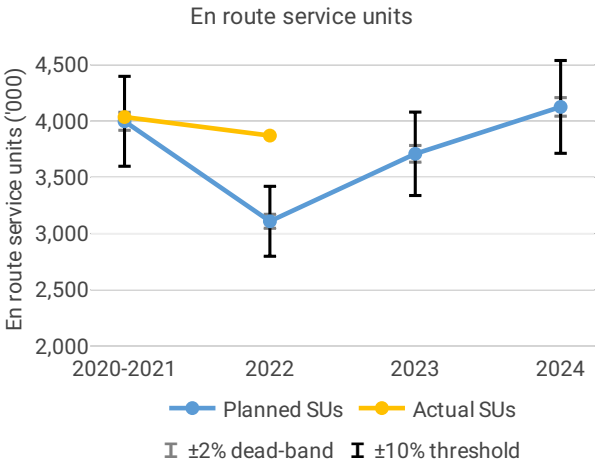
• BULATSA spent 18.9 M€2017 in 2022 related to costs of investments, 2.6% higher than determined (18.4 M€2017). This was due to an increase in the depreciation cost, even though the net book value of fixed assets decreased.

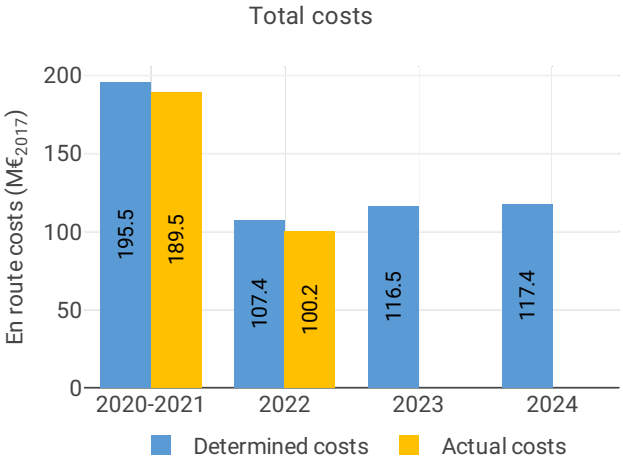
• The en route actual unit cost incurred by users in 2022 was 33.11€.

5.2 En route charging zone

5.2.1 Unit cost (KPI#1)

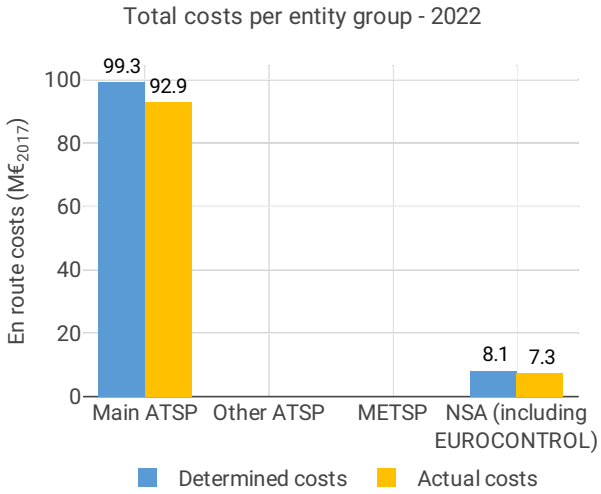


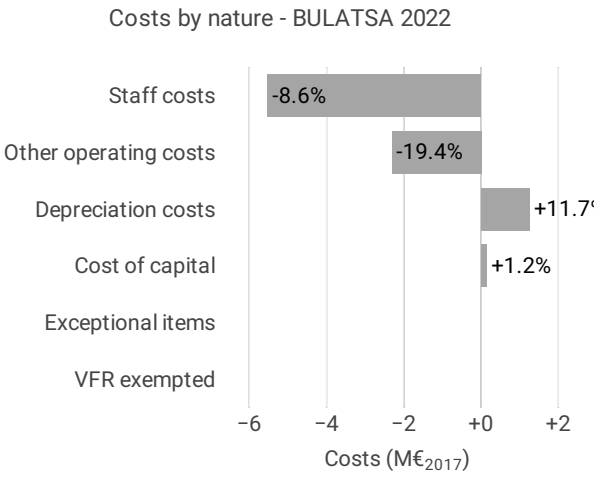




Actual and determined data

Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	200	116	NA	NA
Determined costs	205	115	126	129
Difference costs	-5	2	NA	NA
Inflation assumptions	**2020-2021**	**2022**	**2023**	**2024**
Determined inflation rate	NA	2.0%	2.0%	2.0%
Determined inflation index	NA	109.6	111.8	114
Actual inflation rate	NA	13.0%	NA	NA
Actual inflation index	NA	123.6	NA	NA
Difference inflation index (p.p.)	NA	+14.1	NA	NA





Focus on unit cost

AUC vs. DUC

In 2022, the en route AUC was -25.1% (or -16.99 BGN2017, -8.69 €2017) lower than the planned DUC. This results from the combination of significantly higher than planned TSUs (+24.5%) and significantly lower than planned en route costs in real terms (-6.8%, or -14.3 MBGN2017, -7.3 M€2017). It should be noted that actual inflation index in 2022 was +14.1 p.p. higher than planned.

En route service units

The difference between actual and planned TSUs (+24.5%) 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, with the ANSP (BULATSA) retaining an amount of +3.6 M€2017.

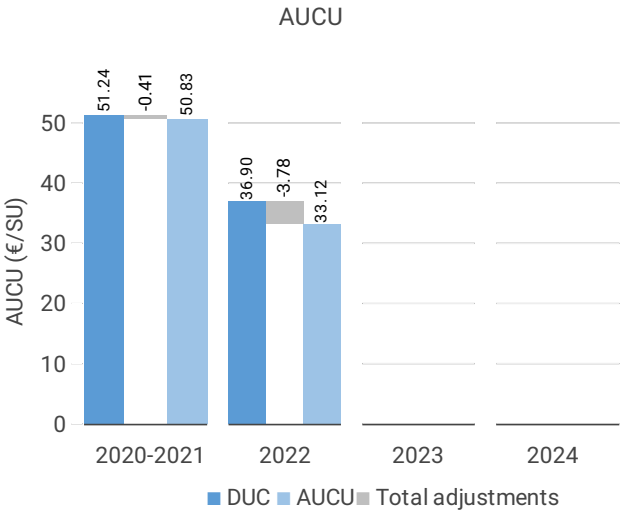
En route costs by entity

Actual real en route costs are -6.8% (-7.3 M€2017) lower than planned. This is the result higher than planned inflation with a significant impact on costs for the main ANSP, BULATSA (-6.5%, or -6.4 M€2017) and the NSA/EUROCONTROL (-10.8%, or -0.9 M€2017).

En route costs for the main ANSP at charging zone level

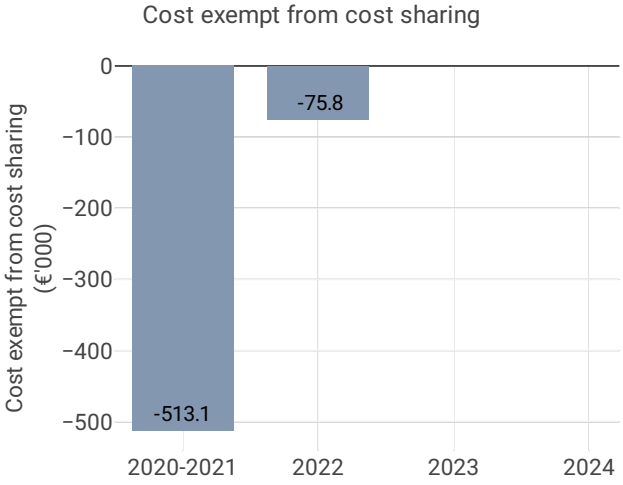
Significantly lower than planned en route costs in real terms for BULATSA in 2022 (-6.5%, or -6.4 M€2017) result mainly from a higher than planned inflation:
- Significantly lower than planned staff costs (-8.6%) in real terms but higher in nominal terms (+3.1%), reported to be due to *"BULATSA normalising levels of payment in line with traffic levels increase and in response to high inflation in Bulgaria over 2022 (>15% on a monthly roll-over basis)*";
- Significantly lower than planned other operating costs (-19.4%), reported to be mainly due to "*lower than expected impairment of receivables, lower mission and training costs, etc*";
- Significantly higher than planned depreciation costs (+11.7%), reported to be due to "*BULATSA continued fulfilment of all critically important investments and commissioned assets*";
- Higher cost of capital (+1.2%).

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



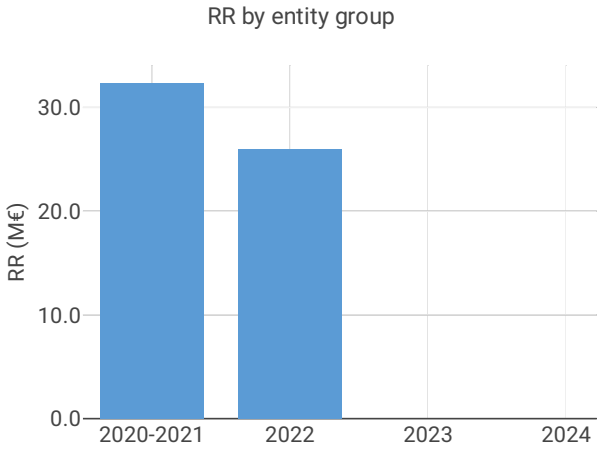
AUCU components (€/SU) – 2022

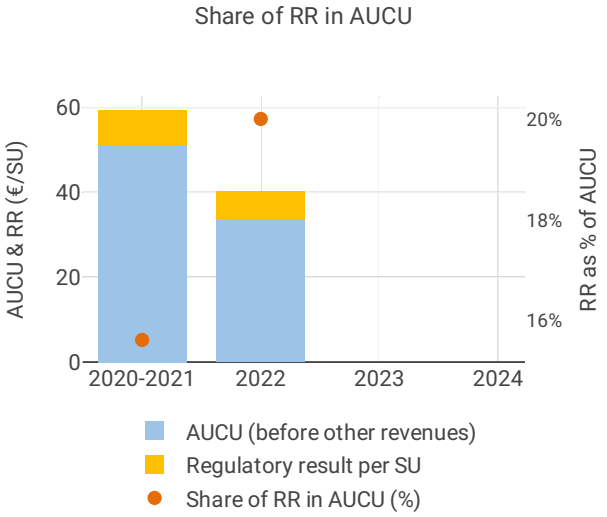
Components of the AUCU in 2022	€/SU
DUC	**36.90**
Inflation adjustment	2.77
Cost exempt from cost-sharing	-0.02
Traffic risk sharing adjustment	-5.26
Traffic adj. (costs not TRS)	-0.85
Finantial incentives	0.00
Modulation of charges	0.00
Cross-financing	0.00
Other revenues	-0.42
Application of lower unit rate	0.00
Total adjustments	-3.78
AUCU	**33.12**
AUCU vs. DUC	**-10.2%**

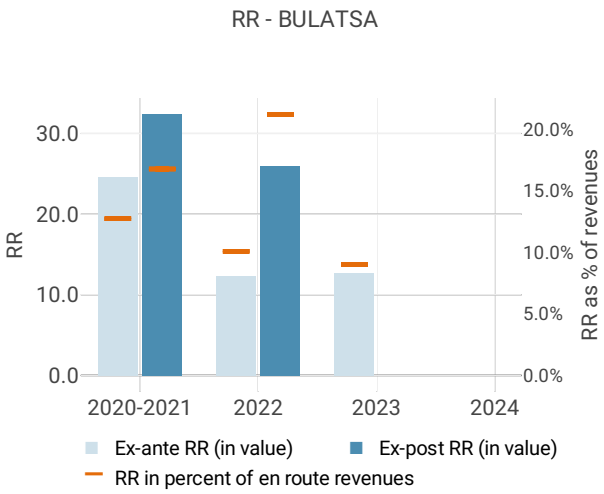


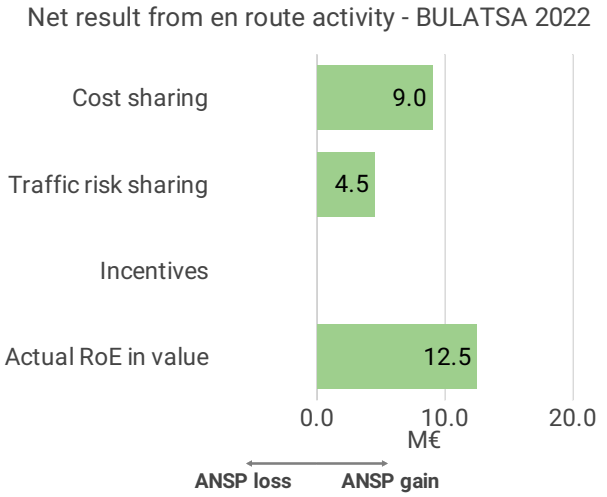
Cost exempt from cost sharing by item - 2022	€'000	€/SU
New and existing investments	471.0	0.12
Competent authorities and qualified entities costs	-459.6	-0.12
Eurocontrol costs	-354.8	-0.09
Pension costs	267.6	0.07
Interest on loans	0.0	0.00
Changes in law	0.0	0.00
Total cost exempt from cost risk sharing	**-75.8**	**-0.02**

5.2.3 Regulatory result (RR)









Focus on regulatory result

BULATSA net gain on activity in the Bulgaria en route charging zone in the year 2022

BULATSA reported a net gain of +26.4 MBGN, as a combination of a gain of +17.7 MBGN arising from the cost sharing mechanism, with a gain of +8.7 MBGN arising from the traffic risk sharing mechanism.

BULATSA 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 (+26.4 MBGN) and the actual RoE (+24.4 MBGN) amounts to +50.8 MBGN (21.2% of the en route revenues). The resulting ex-post rate of return on equity is 14.6%, which is higher than the 7.0% planned in the PP.