



Performance Review Body Monitoring Report

Bulgaria - 2020

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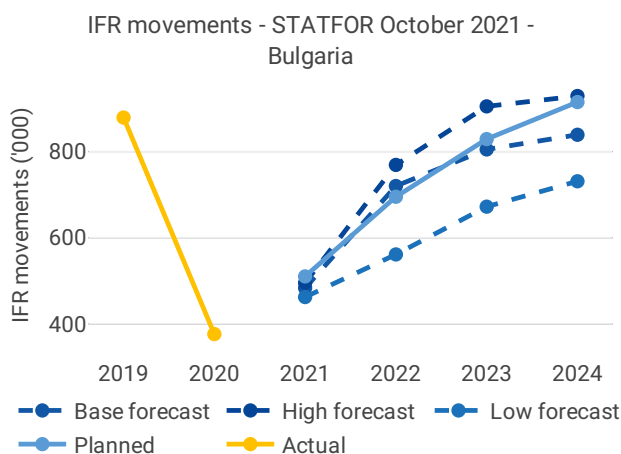
1 OVERVIEW

1.1 Contextual information

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

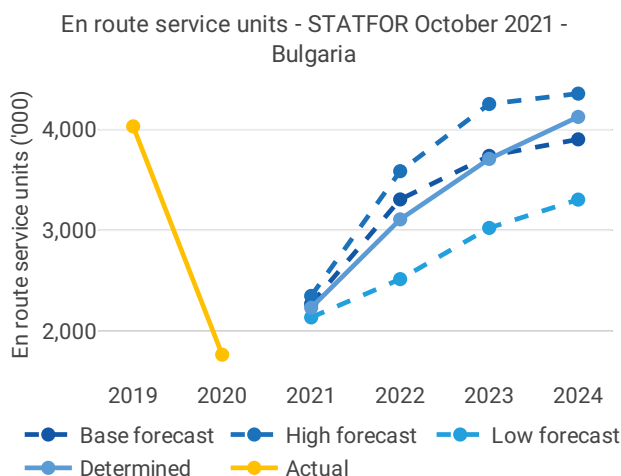
List of ACCs	1	Exchange rate (1 EUR=)		Main ANSP	
Sofia ACC		2017: 1.95543 BGN		• BULATSA	
		2020: 1.95531 BGN			
No of airports in the scope of the performance plan:		Share of Union-wide:		Other ANSPs	
• ≥80'K	0	• traffic (TSUs) 2020	3.4%	–	
• <80'K	0	• en route costs 2020	1.6%	MET Providers	
		Share en route / terminal costs 2020	100% / 0%	–	
		En route charging zone(s)			
		Bulgaria			
		Terminal charging zone(s)			
		–			

1.2 Traffic (En route traffic zone)



- Bulgaria recorded 376K actual IFR movements in 2020, -57% compared to 2019 (879K).

- The reduction in IFR movements for Bulgaria is in line with the average reduction at Union-wide level (-57%).



- Bulgaria recorded 1,766K actual en route service units in 2020, -56% compared to 2019 (4,032K).

- Bulgaria service units reduced less than the average reduction at Union-wide level (-57%).

1.3 Safety (Main ANSP)



- BULATSA achieved the EoSMS targets for RP3 on all management objectives except safety risk management. The target was exceeded for safety promotion and safety policy and objectives.

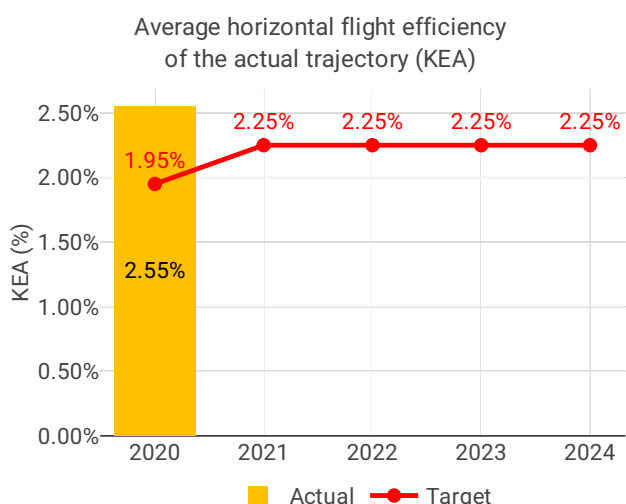
- Bulgaria developed specific safety measures to achieve the acceptable level of safety performance in the National Safety Plan, which will be implemented between 2020 and 2024. Specific actions were undertaken to improve the EoSMS level in safety risk management for BULATSA.

- The occurrence performance was good with a lower rate of separation minima infringement in 2020 than in 2019 and no occurrences of runway

incursions reported in 2020.

- BULATSA monitors safety performance using specific automated safety recording tools for occurrences and it is one of only a handful of ANSPs to do so.

1.4 Environment (Member State)



- Bulgaria achieved a KEA performance of 2.55% compared to its reference value of 1.95% and therefore did not contribute positively towards achieving the Union-wide target.

- The significant deterioration in performance during 2019 was caused by new data reported to the NM by Turkey, which caused the KEA to vary without significant underlying change in operational performance.

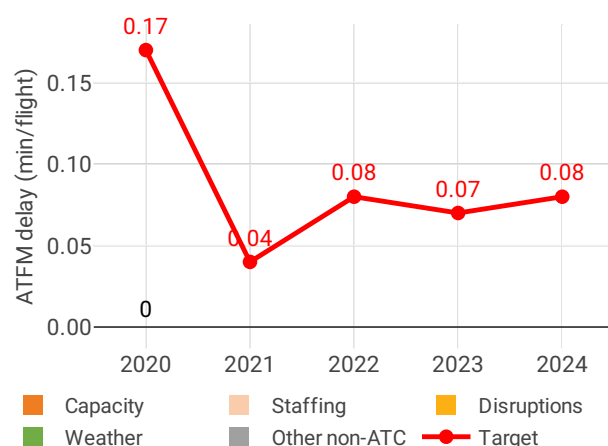
- The NSA identified the Crimea crisis as well as airspace users' preference for longer routes that helps avoiding delays or adverse wind patterns as reasons for its underperformance.

- Bulgaria will not implement any remedial measures and seems to absolve any responsibility to improve KEA now that it offers free route airspace and plans to implement all initiatives stipulated in the ERNIP and NOP.

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

1.5 Capacity (Member State)

Average en route ATFM delay per flight by delay groups



- BULATSA registered zero minutes of average en route ATFM delay per flight during 2020, thus meeting the local breakdown value of 0.17.

- Delays must be considered in the context of the traffic evolution: IFR movements in 2020 were 57% below the 2019 levels in Bulgaria.

- The NSA reported some early issues in adapting the rostering scheme due to the pandemic but managed to resolve these without generating delays.

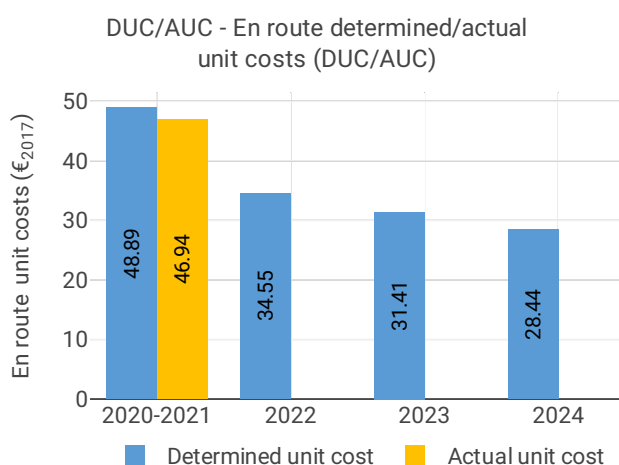
- ATCOs were also relocated to work on running projects, thus resulting in a reduction of over 5%

of ATCO FTEs compared to 2019 (2020 planned values were not reported).

- Brussels ACC registered 10.01 IFR movements per one sector opening hour in 2020, being 54.1% below 2019 levels.

- Sofia ACC registered 16.15 IFR movements per one sector opening hour in 2020, being 31.6% below 2019 levels.

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



- The 2020 actual service units (1,766K) were 56% lower than the actual service units in 2019 (4,021K).

- Bulgaria reduced total costs in 2020 by 15 M€2017 (-14%) compared to 2019 actual costs. The reduction is mainly due to a decrease of 13 M€2017 (-18%) in staff costs, attributable to a reduction of 30% in salaries.

- Cost of capital in 2020 increased by 0.3 M€2017 (+3%) due to an increase of the asset base.

- BULATSA spent 18 M€2017 in 2020 related to cost of investments, 9% less than planned in the

2019 draft performance plan (19 M€2017). The decrease is induced by a lower asset base than planned in the 2019 draft performance plan.

2 SAFETY - BULGARIA

2.1 PRB monitoring

- BULATSA achieved the EoSM targets for RP3 on all management objectives except safety risk management. The target was exceeded for safety promotion and safety policy and objectives.

- Bulgaria developed specific safety measures to achieve the acceptable level of safety performance in the National Safety Plan, which will be implemented between 2020 and 2024. Specific actions were undertaken to improve the EoSM level in safety risk management for BULATSA.

- The occurrence performance was good with a lower rate of separation minima infringement in 2020 than in 2019 and no occurrences of runway incursions reported in 2020.

- BULATSA monitors safety performance using specific automated safety recording tools for occurrences and it is one of only a handful of ANSPs to do so.

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



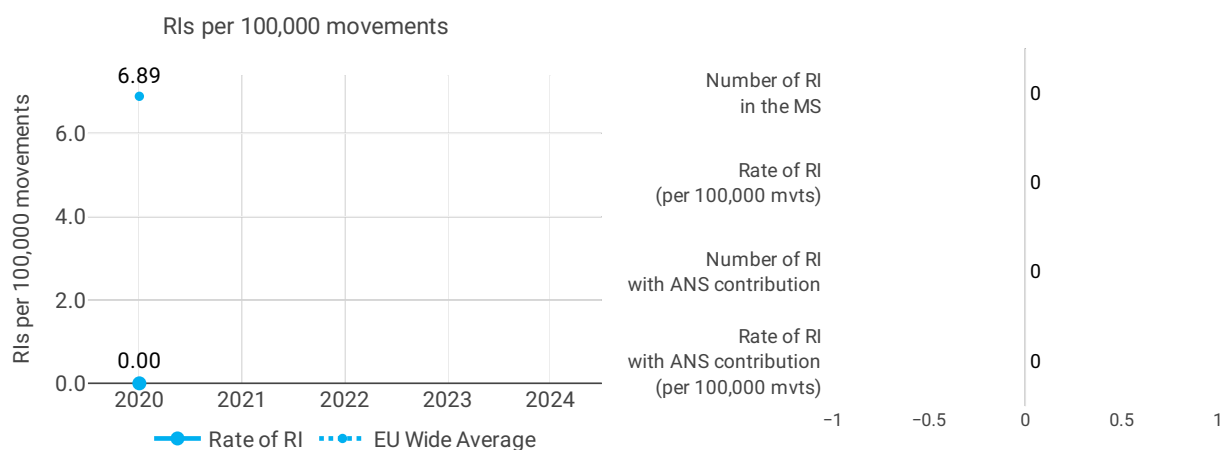
Focus on EoSM

Four out of five EoSM components of the ANSP meet, or exceed, already the 2024 target level. Only the component “Safety Risk Management” is below 2024 target level. All in all, one question out of 28 is below the target level.

Detailed information on Safety performance monitoring for the year 2020 are included in Performance Review Body Monitoring Report 2020, Annex III – Safety report

2.3 Safety occurrences

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



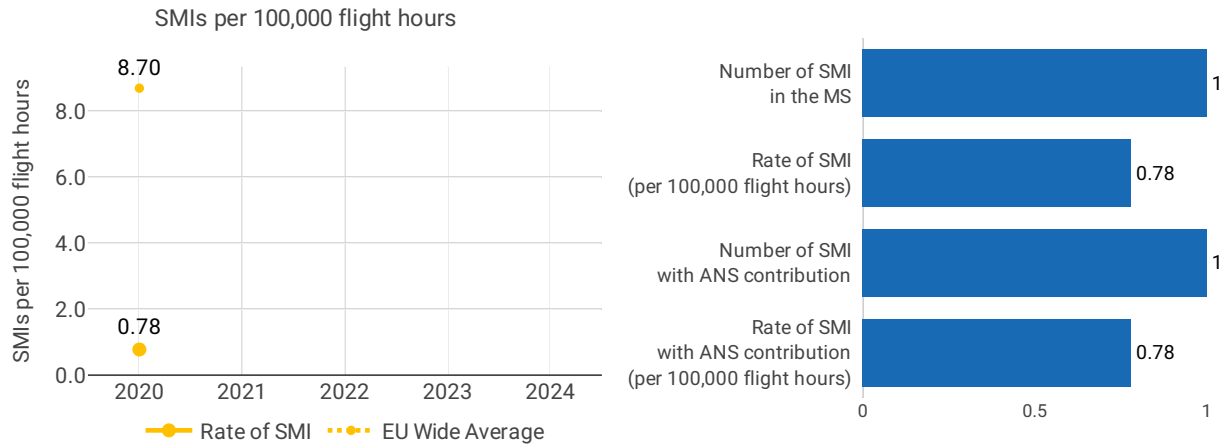
Rate of RIs per 100,000 airport movements - Bulgaria

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

Focus on runway incursions

Detailed information on Safety performance monitoring for the year 2020 are included in Performance Review Body Monitoring Report 2020, Annex III – Safety report

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



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

#	ANSP	Flight hours					Number of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	BULATSA	127,863	NA	NA	NA	NA	1	NA	NA	NA	NA

#	ANSP	Rate of SMI per 100,000 flight hours					% variation in rate of SMIs				
		2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
1	BULATSA	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NA

Focus on separation minima

Detailed information on Safety performance monitoring for the year 2020 are included in Performance Review Body Monitoring Report 2020, Annex III – Safety report

2.3.3 Quality of occurrences reporting

Detailed information on Safety performance monitoring for the year 2020 are included in Performance Review Body Monitoring Report 2020, Annex III – Safety report

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

2020	
For RIs	For SMIs
X	X

Detailed information on Safety performance monitoring for the year 2020 are included in Performance Review Body Monitoring Report 2020, Annex III – Safety report

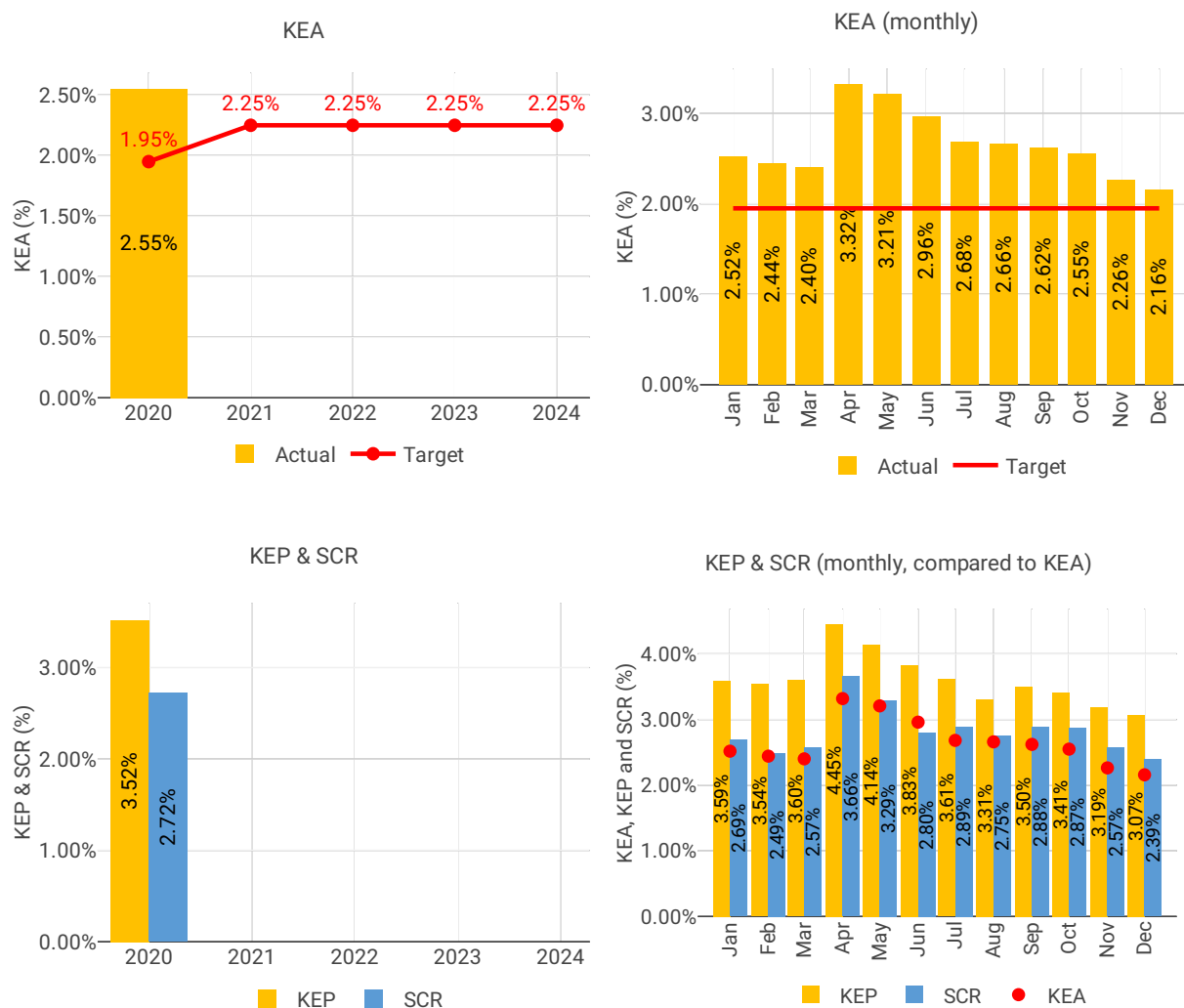
3 ENVIRONMENT - BULGARIA

3.1 PRB monitoring

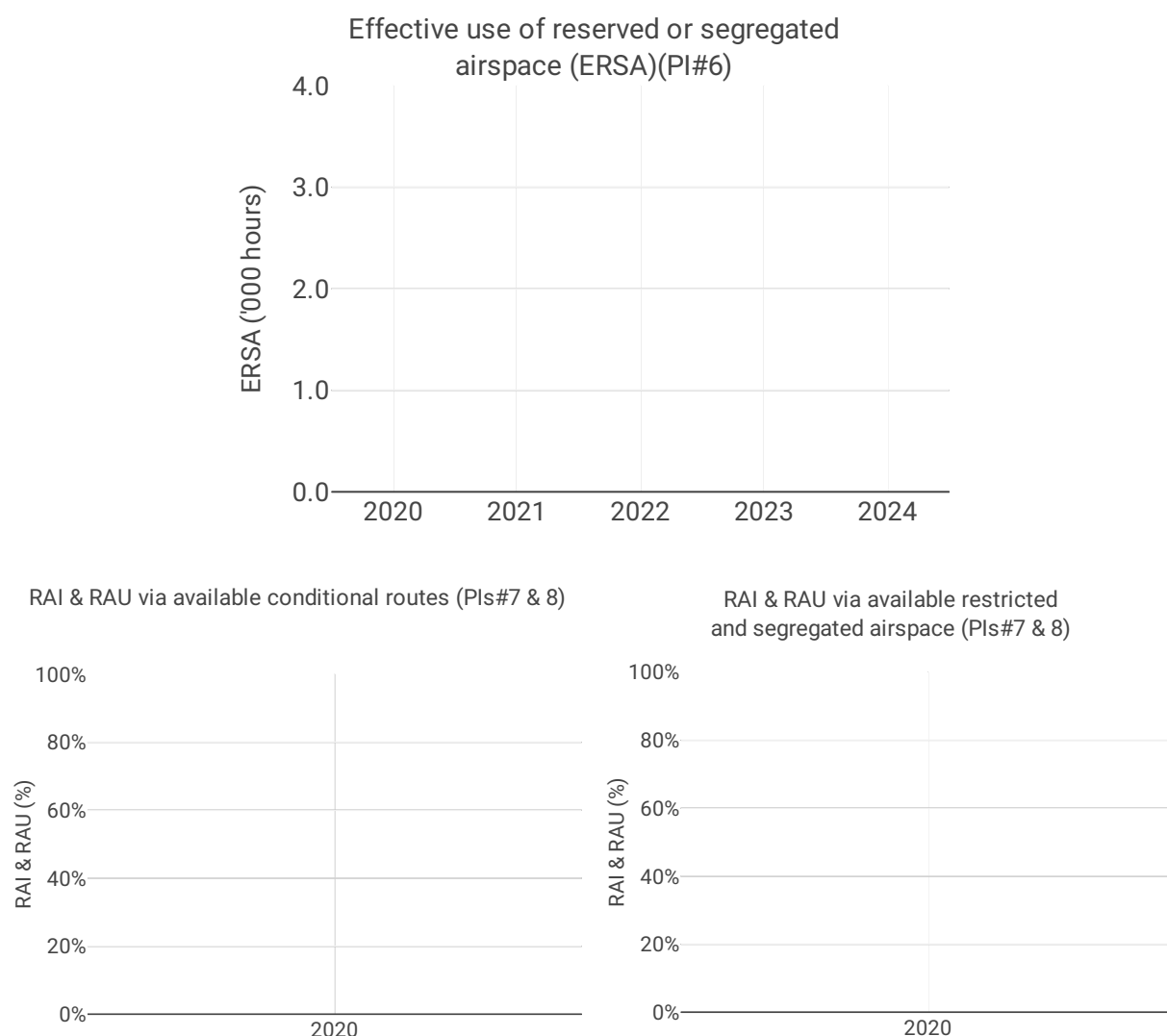
- Bulgaria achieved a KEA performance of 2.55% compared to its reference value of 1.95% and therefore did not contribute positively towards achieving the Union-wide target.
- The significant deterioration in performance during 2019 was caused by new data reported to the NM by Turkey, which caused the KEA to vary without significant underlying change in operational performance.
- The NSA identified the Crimea crisis as well as airspace users' preference for longer routes that helps avoiding delays or adverse wind patterns as reasons for its underperformance.
- Bulgaria will not implement any remedial measures and seems to absolve any responsibility to improve KEA now that it offers free route airspace and plans to implement all initiatives stipulated in the ERNIP and NOP.
- 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

An impact analysis with suggestions for improvements has been provided to National Airspace Policy Body (NAPB).

Military - related measures implemented or planned to improve environment and capacity

TRA airspace reorganisation in the vicinity of Plovdiv and Gorna Oryahovitsa airports as a result of decisions taken by NAPB. On the basis of recommendations within the impact analysis some improvements have been carried out.

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 - BULGARIA

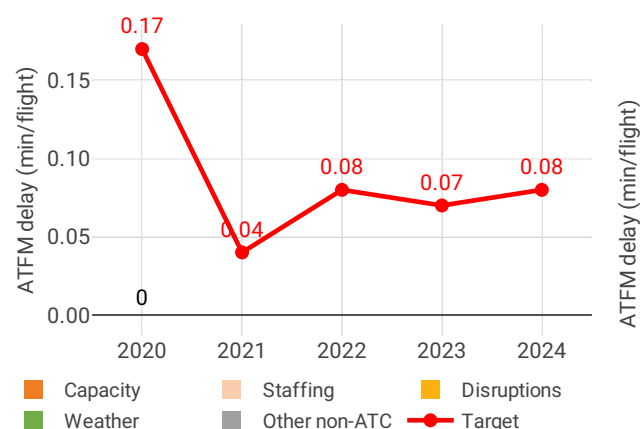
4.1 PRB monitoring

- BULATSA registered zero minutes of average en route ATFM delay per flight during 2020, thus meeting the local breakdown value of 0.17.
- Delays must be considered in the context of the traffic evolution: IFR movements in 2020 were 57% below the 2019 levels in Bulgaria.
- The NSA reported some early issues in adapting the rostering scheme due to the pandemic but managed to resolve these without generating delays.
- ATCOs were also relocated to work on running projects, thus resulting in a reduction of over 5% of ATCO FTEs compared to 2019 (2020 planned values were not reported).
- Brussels ACC registered 10.01 IFR movements per one sector opening hour in 2020, being 54.1% below 2019 levels.
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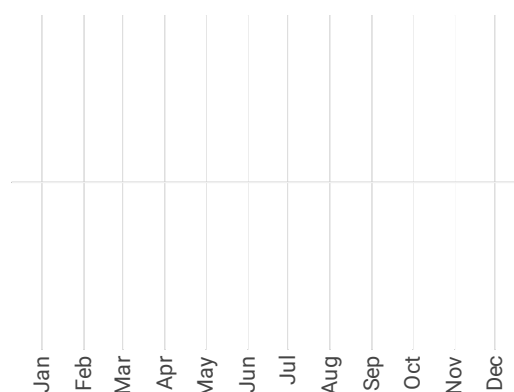
4.2 En route performance

4.2.1 En route ATFM delay (KPI#1)

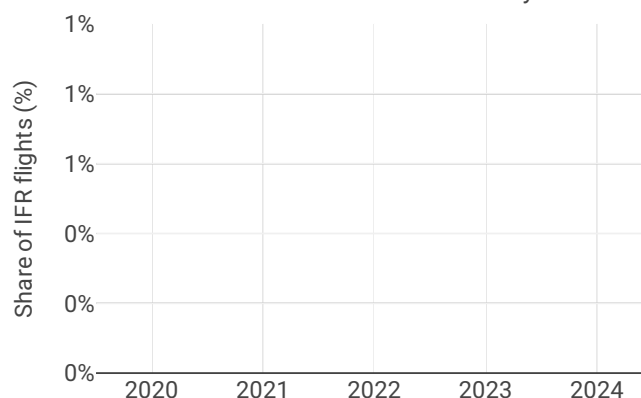
Average en route ATFM delay per flight by delay groups



Monthly distribution of en route ATFM delay by delay groups - 2020



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



Focus on en route ATFM delay

Summary of capacity performance

The Sofia FIR experienced a traffic reduction of 57% from 2019 levels, to 376k flights. The traffic level was accommodated with negligible en route ATFM delays to airspace users.

NSA's assessment of capacity performance

There is a sharp decrease of traffic level compared to 2019, however, it should duly be noted that a need for allotment of operational staff in 4-working flows is extremely demanding. The working flows have been put in place to restrict the spread of COVID 19 infection and to ensure the 24/7 service continuity. Besides, the allocation of 4-working flows came up unsatisfactory response to the match between demand and capacity in terms of available ATCOs, and therefore the number of working flows has been reduced to 3. As a main priority to preserve the health of people Bulatsa was forced to switch to inflexible rostering, the freedom of ATCO's movement in different shifts configurations has been restrained.

Monitoring process for capacity performance

[The NSA reported monitoring actions associated with the COVID 19 pandemic rather than monitoring actions regarding capacity performance.]

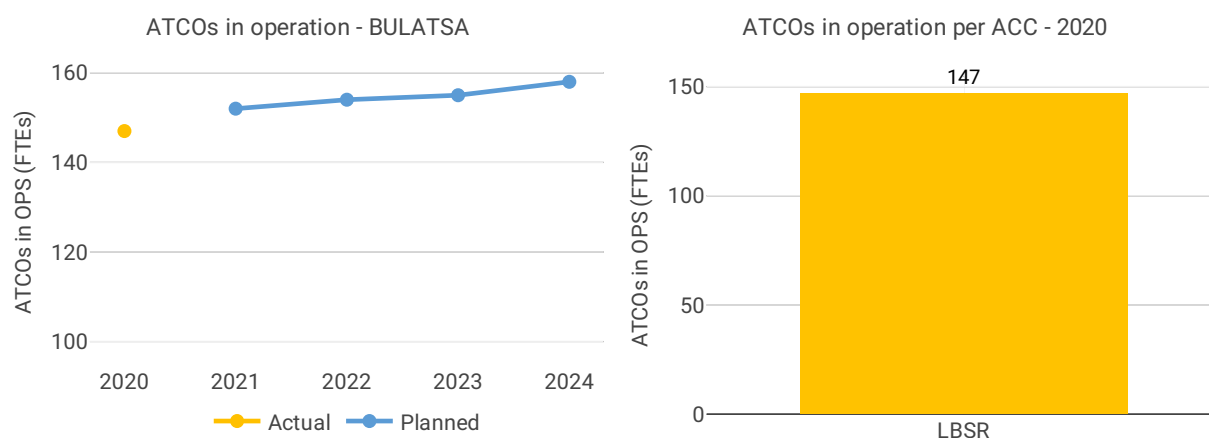
Capacity planning

Capacity planning is on weekly basis with regard to the traffic forecast delivered by NM. The forecast is of inaccurate nature leading to over- or underestimating the number of ATCOs needed for each particular day. Relaxation in [volume of] traffic [enabled] suspension of some RAD restrictions with no significant effect on capacity.

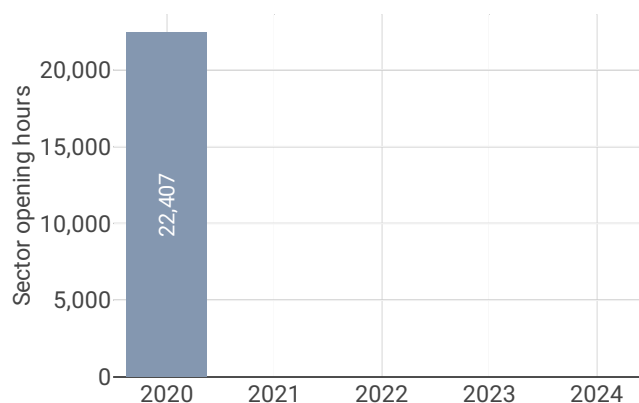
Application of Corrective Measures for Capacity (if applicable)

No data available.

4.2.2 Other indicators



Sector opening hours - BULATSA



Focus on ATCOs in operations

Factors influencing no of ATCOs include: partial reallocation of ATCOs to other duties (projects) and difficulty of predicting future needs.

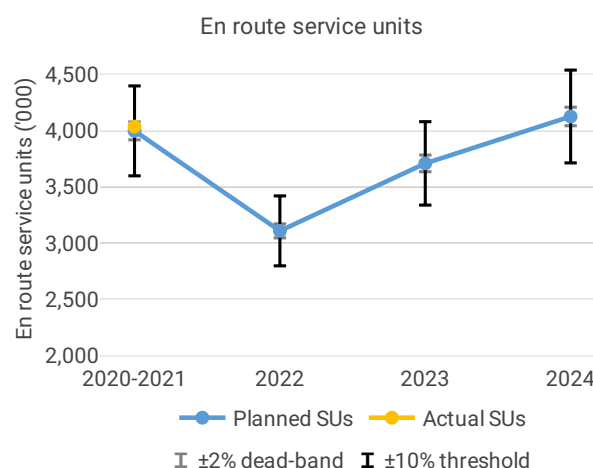
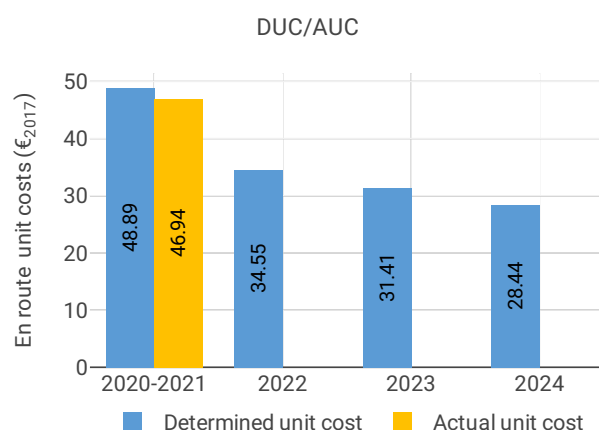
5 COST-EFFICIENCY - BULGARIA

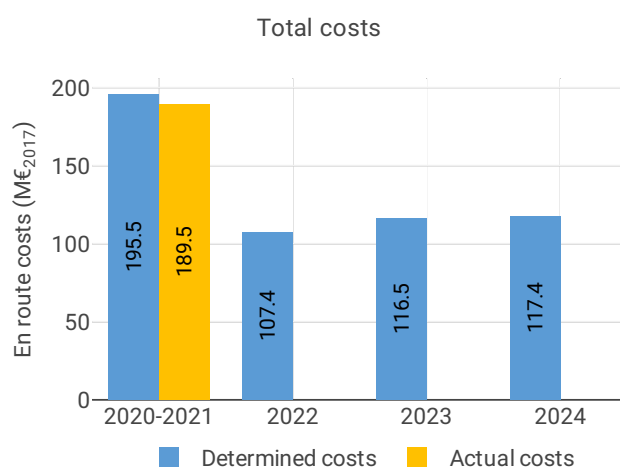
5.1 PRB monitoring

- The 2020 actual service units (1,766K) were 56% lower than the actual service units in 2019 (4,021K).
- Bulgaria reduced total costs in 2020 by 15 M€2017 (-14%) compared to 2019 actual costs. The reduction is mainly due to a decrease of 13 M€2017 (-18%) in staff costs, attributable to a reduction of 30% in salaries.
- Cost of capital in 2020 increased by 0.3 M€2017 (+3%) due to an increase of the asset base.
- BULATSA spent 18 M€2017 in 2020 related to cost of investments, 9% less than planned in the 2019 draft performance plan (19 M€2017). The decrease is induced by a lower asset base than planned in the 2019 draft performance plan.

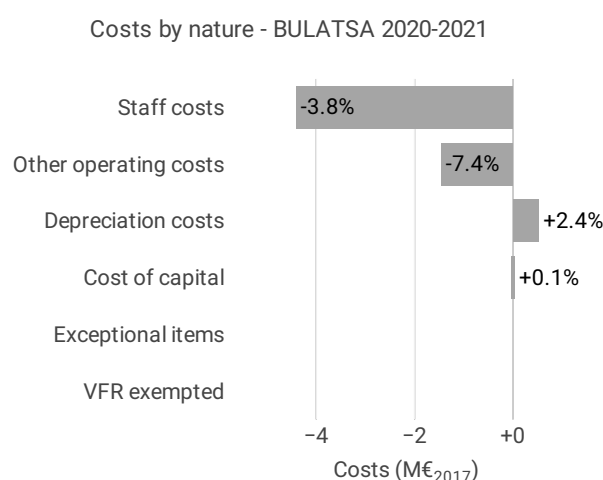
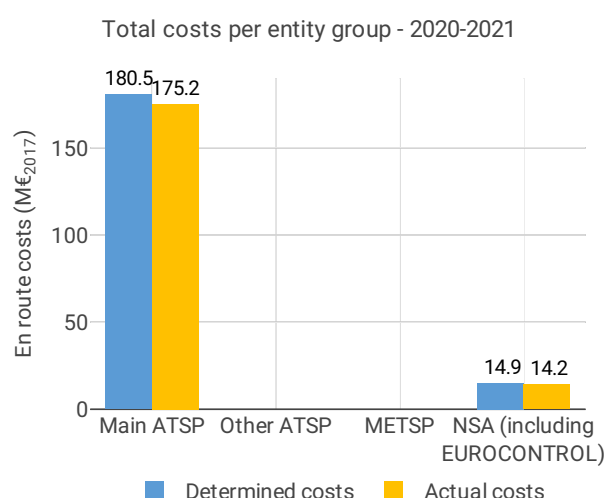
5.2 En route charging zone

5.2.1 Unit cost (KPI#1)





Actual and determined data				
Total costs - nominal (M€)	2020-2021	2022	2023	2024
Actual costs	200	NA	NA	NA
Determined costs	205	115	126	129
Difference costs	-5	NA	NA	NA
Inflation assumptions				
Determined inflation rate	NA	2.0%	2.0%	2.0%
Determined inflation index	NA	109.6	111.8	114
Actual inflation rate	NA	NA	NA	NA
Actual inflation index	NA	NA	NA	NA
Difference inflation index (p.p.)	NA	NA	NA	NA



Focus on unit cost

AUC vs. DUC

In the combined year 2020-2021, the AUC was lower than the planned DUC (-4.0% or -3.81 BGN2017 or -1.95 €2017). This results from the combination of slightly higher than planned TSUs (+0.9%) and lower than planned en route costs in real terms (-3.1%, or -11.8 MBGN2017).

En route service units

The difference between actual and planned TSUs (+0.9%) falls within of the $\pm 2\%$ dead band. Hence, the resulting gain of 3.3 MBGN is entirely retained by the ANSP.

En route costs by entity

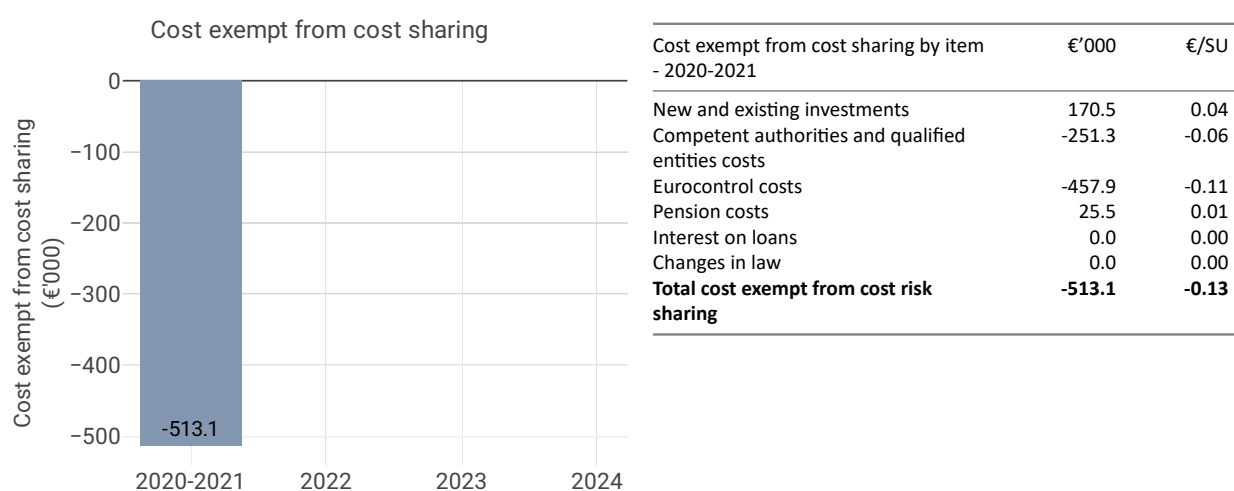
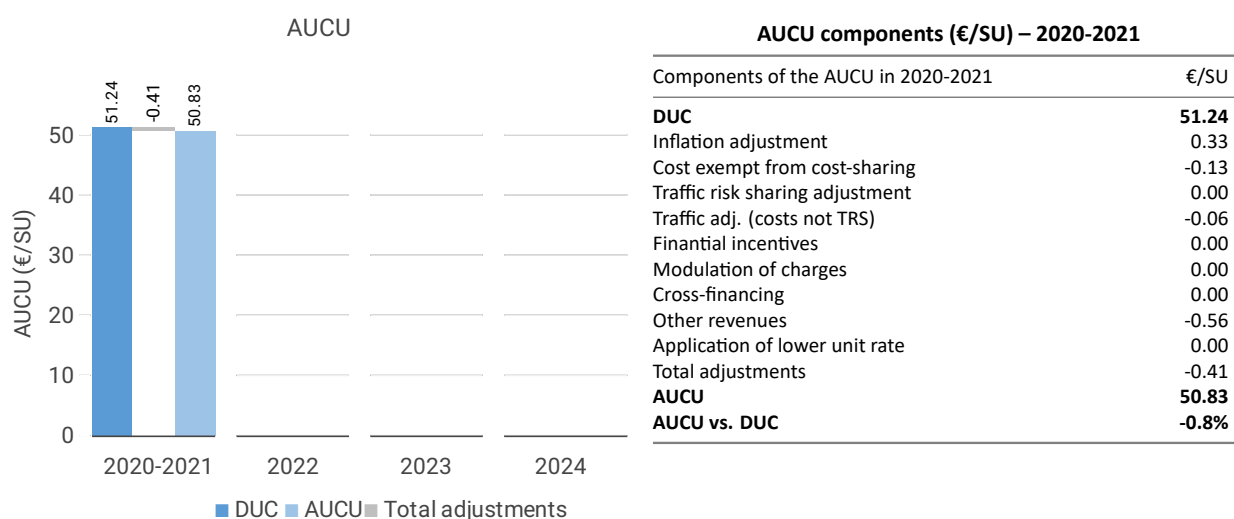
Actual real en route costs for 2020-2021 are -3.1% (-11.8 MBGN2017, or -6.0 M€2017) lower than planned. This reflects the results across all the entities in the charging zone: main ANSP - BULATSA (-2.9%, or -5.3 M€2017) and the NSA/EUROCONTROL (-4.7%, or -0.7 M€2017).

En route costs for the main ANSP at charging zone level

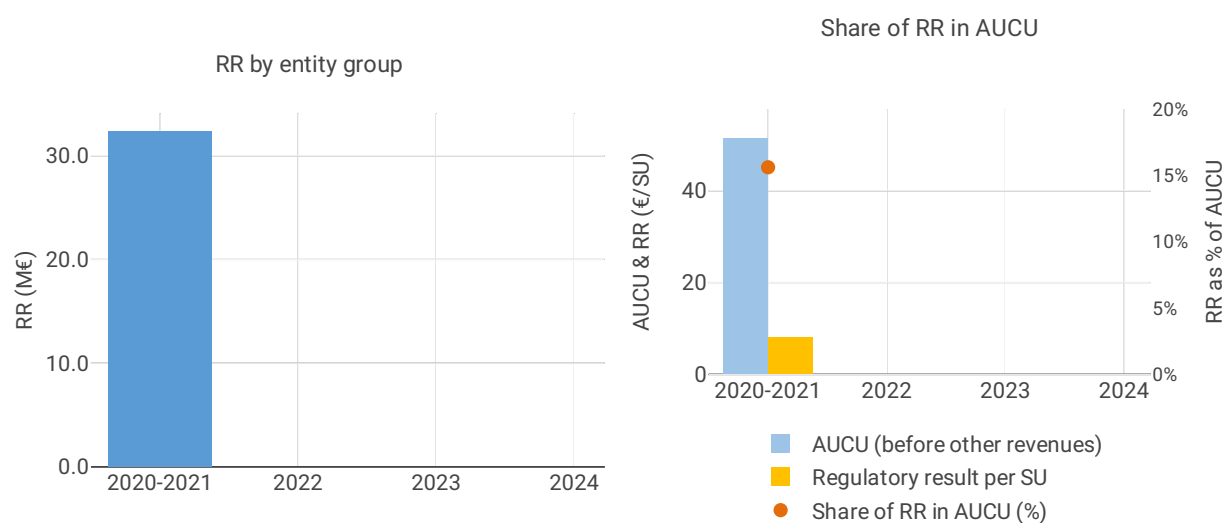
The lower than planned en route costs in real terms for BULATSA in 2020-2021 reflects a combination of:

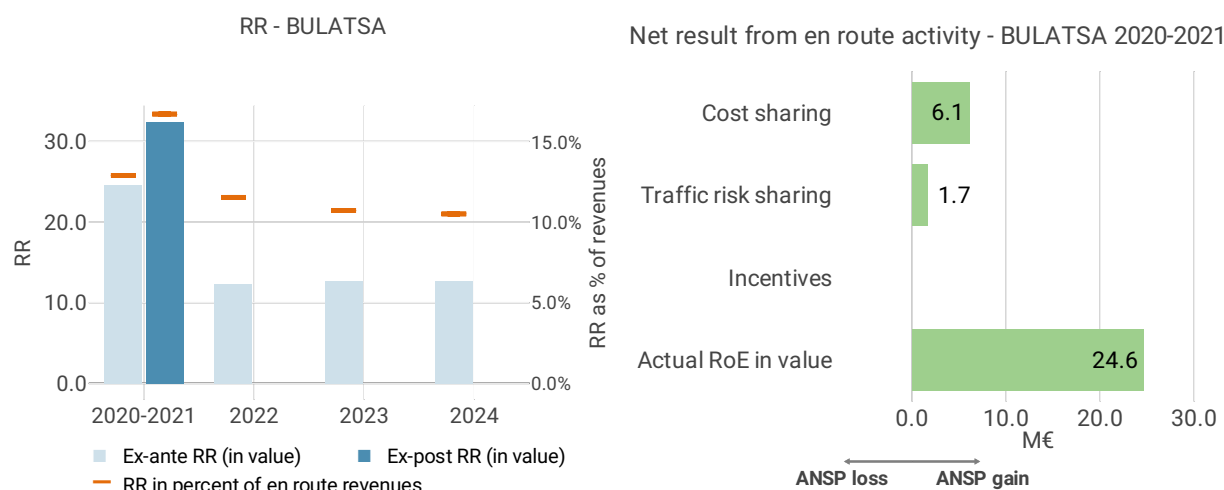
- lower staff costs (-3.8%), resulting from a reduction of salaries;
- lower other operating costs (-7.4%), reflecting delays and postponement of investment projects, specialised consulting services, trainings and travel;
- higher depreciation costs (+2.4%), reflecting the implementation of the investment plan; and,
- slightly higher cost of capital (+0.1%), resulting from slightly higher than planned asset base.

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



5.2.3 Regulatory result (RR)





Focus on regulatory result

BULATSA net gain on en route activity in the Bulgarian charging zone in the combined year 2020-2021

BULATSA's net gain amounts to +15.2 MBGN (+7.8 M€), as a combination of a gain of +11.9 MBGN (+6.1 M€) arising from the cost sharing mechanism and a gain of +3.3 MBGN (+1.7 M€) 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 (+15.2 MBGN or +7.8 M€) and the actual RoE (+48.1 MBGN or 24.6 M€) amounts to +63.3 MBGN or +32.4 M€ (16.8% of the en route revenues). The resulting ex-post rate of return on equity is 9.2%, which is higher than the 7.0% planned in the PP.