

Performance Plan

Czech Republic

Third Reference Period (2020-2024)

Status: Final adopted performance plan (Art. 16(a and b) of IR 2019/317)

Date of issue: 03.02.2022

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Signatories

Performance plan details	
State name	Czech Republic
Status of the Performance Plan	Final adopted performance plan (Art. 16(a and b) of IR 2019/317)
Date of issue	03.02.2022
Date of adoption of Draft Performance Plan	03.02.2022
Date of adoption of Final Performance Plan	30.05.2022

We hereby confirm that the present performance plan is consistent with the scope of Regulation (EU) No 2019/317 pursuant to Article 1 of Regulation (EU) No 2019/317 and Article 7 of Regulation (EC) No 549/2004.

Name, title and signature of representative	
Vítězslav Hezký, Aeronautical Operations Division Director, Civil Aviation Authority of the Czech Republic	

Additional comments	
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Document change record		
Version	Date	Reason for change
v01.00	28.06.2021	Draft for stakeholder consultations
v02.00	30.09.2021	Updated draft performance plan after stakeholder consultations
v03.00	16.11.2021	Updated draft performance plan (Art. 13(2) of IR 2019/317)
v03.10	28.01.2022	Updated draft performance plan (Art. 13(2) of IR 2019/317)
v03.20	03.02.2022	Updated draft performance plan (Art. 13(2) of IR 2019/317)
v03.20	30.05.2022	Final adopted performance plan (Art. 16(a and b) of IR 2019/317)

SECTION 1: INTRODUCTION

1.1 The situation

- 1.1.1 - List of ANSPs and geographical coverage of services
- 1.1.2 - Other entities in the scope of the Performance and Charging Regulation as per Article 1(2) last para.
- 1.1.3 - Charging zones (see also 1.4-List of Airports)
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1.7 - Establishment and application of a simplified charging scheme

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- ANNEX C. CONSULTATION
- ANNEX D. LOCAL TRAFFIC FORECASTS
- ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME

1 - INTRODUCTION

1.1 - The situation

NSA(s) responsible for drawing up the Performance Plan	Civil Aviation Authority of the Czech Republic, K letišti 1149/23, 160 08 Praha 6, Czech Republic
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1.1.1 - List of ANSPs and geographical coverage and services

Number of ANSPs	2	
ANSP name	Services	Geographical scope
ANS CR	ASM, ATFM, ATC, FIS, Alerting Service, AIS, SAR, CNS, APD	The Air Navigation Services of the CR (ANS CR) is responsible for the provision of en-route services to civil air traffic within FIR Praha and terminal services at the airports LKPR, LKMT, LKTB and LKKV.
CHMI	MET	The area of the Czech Hydrometeorological Institute (CHMI) responsibility includes FIR Praha and airports LKPR, LKMT, LKTB and LKKV.

Cross-border arrangements for the provision of ANS services

Number CB arrangements where ANSPs provide services in an other State	3
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ANSPs providing services in the FIR of another State	
ANSP Name	Description and scope of the cross-border arrangement
Deutsche Flugsicherung GmbH	Within Munich FIR and Rhein UIR provision of ATC service is delegated to ANS CR east of the Praha - Munich/Rhein Line, as described in the Letters of Agreement and AIP CR, ENR 2.
Austro Control Ges. m.b.H.	Within Wien FIR provision of ATC service is performed by ANS CR north of the LANUX line, as described in the Letter of Agreement and AIP CR, ENR 2.
PANSA of Poland	Within Warszawa FIR provision of ATC service is delegated to ANS CR within areas "W of OKX" and "S of Klodsko", as described in the Letter of Agreement and AIP CR, ENR 2.

Number CB arrangements where ANSPs from another State provide services in the State	3
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ANSPs established in another Member State providing services in one or more of the State's FIRs	
ANSP Name	Description and scope of the cross-border arrangement
Deutsche Flugsicherung GmbH	Within FIR Praha provision of ATC service is delegated to Deutsche Flugsicherung GmbH west of the Praha - Munich/Rhein Line, as described in the Letters of Agreement and AIP CR, ENR 2.
Austro Control Ges. m.b.H.	Within FIR Praha, provision of ATC service is delegated to Austro Control within BUDEX area and south of the LANUX Line, as described in the Letter of Agreement and AIP CR, ENR 2.
PANSA	Within FIR Praha area South of DESEN, provision of ATC service is delegated to PANSA of Poland, as described in the Letter of Agreement and AIP CR, ENR 2.

1.1.2 - Other entities in the scope of the Performance and Charging Regulation as per Article 1(2) last para.

Number of other entities	2
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Entity name	Domain of activity	Rationale for inclusion in the Performance Plan
Civil Aviation Authority of the Czech Republic	National Supervisory Authority	Determined costs of this entity are included in the cost base chargeable to AUs. NSA is responsible for Performance plan development, target setting, oversight of ANSPs, other functions as required by applicable legislation.
EUROCONTROL	NM, CRCO	Determined costs of this entity are included in the cost base chargeable to AUs.

1.1.3 - Charging zones (see also 1.4-List of Airports)

En-route	Number of en-route charging zones	1
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En-route charging zone 1	Czech Republic
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Terminal	Number of terminal charging zones	1
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Terminal charging zone 1	Czech Republic - TCZ
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1.1.4 - Other general information relevant to the plan

In 2019, the Czech Republic submitted its draft RP3 Performance Plan that would enable coping with then forecasted traffic growth and meeting the capacity targets imposed during the RP3 period at that time. The submitted draft performance plan included measures focusing on more strategic and fundamental changes to make services fit for the future and continued traffic growth, in order to avoid further deterioration of the capacity gap and deal with the continuing increase of the traffic complexity experienced in RP2.

The revised draft RP3 Performance Plan builds on the key elements of the plan submitted in 2019. At the same time, it fully reflects the situation triggered by the COVID-19 pandemic while still enabling to deal with the key challenges that the Czech Republic has faced in the recent years. The Czech Republic has been hit by the COVID-19 pandemic in terms of reduction of air traffic demand significantly more than other states in the SES area. It has responded to this situation by unprecedented cost cutting measures ranked one of the highest in the SES area according to PRB's unvalidated data. As the problems that the Czech Republic faced in RP2 still require more strategic and fundamental changes to make services fit for the future it is important to continue in the key projects, which have already significantly progressed, and make sure that the adequate quality of services can be maintained also once the traffic recovers. The revised draft RP3 Performance Plan takes this into account and applies the available resources in the most optimum way. It proposes the cost base that is consistent with the EU-wide targets while it ensures that the Czech Republic will be able to meet its targets in other KPAs not only in RP3 but also in RP4 and beyond.

In the previous version of the Performance Plan (September 2019) the Czech Republic has voluntarily included regional airports with less than 80 000 IFR movements. In line with the legislation, the Czech Republic is submitting its revised Performance Plan with the exclusion of the three regional airports (LKMT, LKKV and LKTB) from the terminal charging zone starting from 2020. During the consultation, stakeholders accepted and welcomed the proposed change.

Relevant local circumstances with high significance for performance target setting and updated view on the impact of the COVID-19 crisis on the operational and financial situation of ANSPs covered in the performance plan

As in many other countries, the COVID-19 virus affected the situation in the Czech Republic heavily. Its impact on the civil aviation sector in 2020 and 2021 has been severe and it continues to have a strong negative effect on both operational and financial situation of ANS CR. In 2020, the Czech Republic experienced exceptional year-to-year en-route traffic drop of 60.8% of IFR movements (vs. 55.1% Europe (ECAC) and 58.9% Comparator Group C average) and 61.2% in terms of SUs (vs. 57.6% Europe (CRCO) and 58.4% Comparator Group C average).

In order to stabilise the company financial situation and to mitigate away negative impact from airspace users to the maximum achievable level, ANS CR has introduced significant cost cutting measures representing overall reduction of 17% just in 2020 in comparison to 2019 actual cost level. Cost cutting measures represent noteworthy reductions through the whole scale of cost base. Additional savings were implemented in 2021 together with introduction of new organisational structure of ANS CR applicable as of 01/01/2021, which will positively contribute to the reduction of costs (mainly staff costs) during rest of the RP3 and beyond.

The situation also required a revision of ANS CR's investment plan and ongoing projects. Prioritization of the projects has been revisited, several projects have been delayed or completely pushed to RP4 (e.g. replacement of secondary radars). In order to cope with the conclusions drawn during 2019 performance plan approval process, existing financial proceeds have been utilized to the full extent to fund selected prioritized investments. The underlying decision was to keep the projects that are crucial either from the regulatory point of view (e.g. CP1 related investments) or are necessary to cope with future capacity requirements. The general approach to cost cutting measures was to achieve maximum savings while keeping the ability to handle traffic volumes of the year 2019 level without causing excessive ATFM delays in the future. There were therefore minimum changes made to the major investments proposed in the draft RP3 Performance Plan from 2019, including installing the new ATM system (TopSky) and implementing the 'ATS optimisation' project. Most of the related investment activities have significantly progressed and it would be counterproductive to stop them, as they are key for being able to cope with the future demand once the situation improves. ANS CR temporarily stopped-recruitment of additional ATCOs and amended the training plans to reflect the new reality.

Worsening of financial situation led to the increased need for external financing sources for the investment projects. ANS CR signed loan contracts with commercial banks and the state (Ministry of Transport of the Czech Republic) to secure external finances. This increases the company's gearing and thus reduce the Weighted Average Cost of Capital which will result in lower costs.

The savings in 2020 alone, together with savings made by other entities included in the cost base, represent 18% reduction of the cost base compared to the actual 2019 costs, which is among the largest reduction of the costs in the SES area according to the unvalidated data from PRB.

Additional comments

The Czech Republic keeps its promise to airspace users given in 2019 through which it accepted the IATA's argument that modifying the investment plan in RP2 means they funded partially other investments than originally agreed and underinvestment could possibly mean double-charging. On the other hand, ANS CR had to invest significantly higher resources into overtimes in order to cope with much higher traffic growth with immediate effect. Airspace users have benefited from this decision about reallocation of resources significantly through avoiding delays they would incur if this decision was not taken. ANS CR has therefore decided to give users back the difference between the originally planned determined costs for the delayed investments and 80% of the overtime costs (assuming that 20% of overtimes would still occur, based on historical experience). This resulted in reducing the cost base by 84 million CZK in RP3.

1.2 - Traffic Forecasts

1.2.1 - En route

En route Charging zone 1

Czech Republic

En route traffic forecast

Local forecast

Local Forecast	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	817	877	867	340	377	575	684	782	-2,0%
IFR movements (yearly variation in %)		7,4%	-1,1%	-60,8%	11,0%	52,4%	19,0%	14,4%	
En route service units (thousands)	2 824	3 041	2 936	1 138	1 280	1 841	2 196	2 514	-3,1%
En route service units (yearly variation in %)		7,7%	-3,5%	-61,2%	12,5%	43,8%	19,3%	14,5%	

Specific local factors justifying not using the STATFOR base forecasts
(provide justification below or refer to Annex D for more detailed explanation)

The forecast from 2022 onwards is fully in line with the STATFOR May 2021 prediction. Figures for year 2021 were updated according to the actuals.

NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives and ANSPs concerned on the rationale for not using the STATFOR base forecasts.

1.2.2 - Terminal

Terminal Charging zone 1

Czech Republic - TCZ

Terminal traffic forecast

Local forecast

Local Forecast	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	81,6	84,9	83,2	27,5	30,8	53,4	65,0	75,7	-1,9%
IFR movements (yearly variation in %)		4,0%	-2,0%	-67,0%	12,2%	73,3%	21,8%	16,4%	
Terminal service units (thousands)	90,4	97,5	99,0	28,2	32,0	60,4	77,2	91,3	-1,6%
Terminal service units (yearly variation in %)		7,9%	1,5%	-71,5%	13,2%	89,1%	27,7%	18,3%	

Specific local factors justifying not using the STATFOR base forecasts
(provide justification below or refer to Annex D for more detailed explanation)

The figures for year 2021 were updated according to the actuals. Local forecast from 2022 onwards is based on the STATFOR Scenario 2 from May 2021 but Terminal Service Units for the regional airports have been subtracted and the IFR movements have been recalculated proportionally. The actual data for 2020 and 2021 are updated for the LKPR only.

NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives and ANSPs concerned on the rationale for not using the STATFOR base forecasts.

1.3 - Stakeholder consultation

1.3.1 - Overall outcome of the consultation of stakeholders on the performance plan

Description of main points raised by stakeholders and explanation of how they were taken into account in developing the performance plan
<ol style="list-style-type: none"> 1. Provide details of the local traffic forecast calculation for TCZ. 2. Provide more details on measures taken or planned to be taken to ensure that the KEA target is met while increasing of traffic levels and consider introduction of a voluntary incentive mechanism for the Environment KPA. 3. Provide additional information about development of staff costs of the MET provider. 4. Provide a schedule for the phased return of staff benefits in ANS CR. 5. Provide quantification of benefits expected from the major investments. 6. Send the presentation to AUs after the consultation. 7. Provide details about the development fund published in the annual report of ANS CR. 8. Consider additional funding options / State support in order to lower the DUC for en-route charging zone.

1.3.2 - Specific consultation requirements of ANSPs and airspace users on the performance plan

Topic of consultation	Applicable	Results of consultation
Where applicable, decision to diverge from the STATFOR base forecast	Yes	Provide details of the local traffic forecast calculation for TCZ
Charging policy	Yes	No disagreements
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	No disagreements
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	No disagreements
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	No disagreements
Establishment or modification of charging zones	Yes	No disagreements, IATA supported establishing one charging zone within the scope of the performance plan which includes only Praha Ruzyně airport (LKPR), 3 regional airports have been excluded in accordance with Article 21 of the EC Implementation Regulation 2019/317 from the terminal charging zone from the beginning of RP3.
Establishment of determined costs included in the cost base for charges	Yes	IATA requested to: - provide additional information about development of staff costs of the MET provider - provide a schedule for the phased return of staff benefits in ANS CR
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	
Where applicable, decision to apply the simplified charging scheme	No	
New and existing investments, and in particular new major investments, including their expected benefits	Yes	IATA requested to provide quantification of benefits expected from the major investments

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	ANS CR (ANS provider), CHMI
Dates of main meetings / correspondence	20.07.2021
Main issues discussed	Timeframe of preparation and list of partial inputs of ANS provider to the revised Czech Republic Performance Plan for RP3. Latest traffic development and forecast. Validation of the main inputs and its compliance with the EU wide targets and applicable legislation. Details about determined costs.
Actions agreed upon	No further actions have been agreed on.
Points of disagreement and reasons	There were no points of disagreement.
Final outcome of the consultation	Minutes of the meeting, signed by all participants.
Additional comments	

There are no additional comments.

#2 - Airspace Users	
Stakeholder group composition	IATA, Lufthansa group
Dates of main meetings / correspondence	20.07.2021
Main issues discussed	See Annex C for full details
Actions agreed upon	See Annex C for full details
Points of disagreement and reasons	See Annex C for full details
Final outcome of the consultation	See Annex C for full details

Additional comments

#3 - Professional staff representative bodies	
Stakeholder group composition	CZATCA, PV OSD, CZATSEA (all staff representing Unions of ANS CR)
Dates of main meetings / correspondence	20.07.2021
Main issues discussed	See Annex C for full details
Actions agreed upon	See Annex C for full details
Points of disagreement and reasons	See Annex C for full details
Final outcome of the consultation	See Annex C for full details

Additional comments

#4 - Airport operators	
Stakeholder group composition	Vodochody Airport, Brno Airport
Dates of main meetings / correspondence	20.07.2021
Main issues discussed	See Annex C for full details
Actions agreed upon	See Annex C for full details
Points of disagreement and reasons	See Annex C for full details
Final outcome of the consultation	See Annex C for full details

Additional comments

#5 - Airport coordinator	
Stakeholder group composition	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

Additional comments

#6 - Other (specify)	
Stakeholder group composition	PRB, MII CZ, EUROCONTROL, observers from different NSAs and ANSPs
Dates of main meetings / correspondence	20.07.2021
Main issues discussed	See Annex C for full details
Actions agreed upon	See Annex C for full details
Points of disagreement and reasons	See Annex C for full details
Final outcome of the consultation	See Annex C for full details

Additional comments

1.4 - List of airports subject to the performance and charging Regulation

1.4.1 - Airports as per Article 1(3) (IFR movements \geq 80 000)

ICAO code	Airport name	Charging Zone	IFR air transport movements			
			2016	2017	2018	Average
LKPR	Prague/Ruzyne	Czech Republic - TCZ	132 026	144 013	151 050	142 363

1.4.2 Other airports added on a voluntary basis as per Article 1(4)

Number of airports	0		
ICAO code	Airport name	Charging Zone	Additional information

Additional comments
<p>The Czech Republic has one airport, Prague Ruzyne, with more than 80.000 IFR movements per year where the Performance and Charging Regulation (Implementing Regulation 2019/317) applies to terminal ANS by default.</p> <p>In the Draft performance plan for RP3 submitted to the EC on 20/09/2019, the Czech Republic applied the provisions of the Regulation also to terminal ANS at three regional airports (Brno Turany, Ostrava and Karlovy Vary) within the country with fewer than 80.000 IFR movements per year. On basis of the Implementation Regulation 2019/317 Article 21 on Establishment of charging zones, the Czech Republic decided to exclude these airports from the common Terminal charging zone 1 - Czech Republic - TCZ from 01/01/2020 and not add any other airport on voluntary basis as per Article 1(14). The Prague Ruzyne airport is therefore the only Czech airport allocated within the Terminal charging zone 1 - Czech Republic - TCZ.</p>

1.5 - Services under market conditions

Number of services under market conditions	0
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1.6 - Process followed to develop and adopt a FAB Performance Plan

Description of the process
Not applicable

1.7 - Establishment and application of a simplified charging scheme

Is the State intending to establish and apply a simplified charging scheme for any charging zone/ANSP?	No
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SECTION 2: INVESTMENTS

2.1 - Investments - ANS CR

- 2.1.1 - Summary of investments
- 2.1.2 - Detail of new major investments
- 2.1.3 - Other new and existing investments

2.2 - Investments - CHMI

- 2.2.1 - Summary of investments
- 2.2.2 - Detail of new major investments
- 2.2.3 - Other new and existing investments

Annexes of relevance to this section

ANNEX E. INVESTMENTS

NOTE: The requirements as per Annex II, 2.2.(c) are addressed in item 4.1.2

2.1 - Investments - ANS CR

2.1.1 - Summary of investments

Number of new major investments	3
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#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value, in thousands €)	Value of the assets allocated to ANS in the scope of the PP (in thousands €)	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	DPS – Data processing and presentation	37 111 538	35 381 538	1 965 545	1 135 000	82 982 000	177 635 000	223 626 000	4;7	86%	14%	2020 - 2025
2	DPS – New system	22 692 307	22 692 307	0	889 000	113 643 000	211 441 000	263 941 000	7;8	85%	15%	2021 - 2024
3	Construction works at IATCC ATS room	5 192 307	5 192 307	190 775	436 528	1 075 000	11 286 000	18 267 000	15	79%	21%	2020 - 2024
Sub-total of new major investments above (1)		64 996 152	63 266 152	2 156 320	2 460 528	197 700 000	400 362 000	505 834 000				
Sub-total other new investments (2)		60 799 128	57 179 123	192 769 544	144 196 259	111 303 062	110 515 043	130 050 423				
Sub-total existing investments (3)				495 164 236	548 198 213	526 701 938	484 200 957	294 450 577				
Total new and existing investments (1) + (2) + (3)		125 795 280	120 445 275	690 090 100	694 855 000	835 705 000	995 078 000	930 335 000				

* The total % enroute+terminal should be equal to 100%.

2.1.2 - Detail of new major investments

NOTE: Section 1.3 (Stakeholder Consultation) should include details on the consultation with airspace users' representatives on new major investments.

Name of new major investment 1	DPS – Data processing and presentation	Total value of the asset	37 111 538 €
Description of the asset	<p>Enhancements of legacy FDPS (E2000), implementation of new functionalities required by users, functionalities defined in the legally binding documents (EU regulations)</p> <p>Customization and transition of existing FDPS to the role of backup and support for new ATM system planned to be operational 2022, including supplementary processing than is not part of the new ATM system</p> <p>Supporting system capabilities for DCB/TCM functions provided by ATC/FMP Prague</p> <p>Further implementation and development on CDM functions as crucial part of LKPR CDM</p> <p>Development of Air-Ground data link functions in line with SJU activities</p> <p>New Releases and upgrade of workstations for IDP – support and backup radar system with FDP functionality – for ACC Praha, APP, TWR Praha, FIC Praha.</p> <p>New Releases for WALDO – ATS info system – for ACC Praha, ARO Praha, AMC, FMP, for all APP, TWR Praha positions.</p> <p>New functionality for CARD system, B2B ASM, B2B NMOC system.</p> <p>Bypass radar system with independent tracker, servers and workstations for ACC and APP Praha.</p> <p>New Backup radar system for Neopteryx project (TopSky) – servers, workstations, switches.</p>		

The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Regulation (EU) No 716/2014 (PCP), Regulation (EU) 2021/116 (CP1)					
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability
			CP1 S-AF 3.1.1, 3.1.2	CP1 S-AF 4.1.1, 4.1.2, 4.1.3, 4.1.4	CP1 S-AF 5.1.2, 5.1.5, 5.1.6	CP1 - AF6	
Benefits for airspace users and results of the consultation of airspace users' representatives	Increased capacity and safety. Improved situational awareness, interoperability for consistency. FullFRA - potentially saving miles flown, reduce fuel consumption and emissions. Reduced ATCO load, increase of throughput.						
Joint investment / partnership	No						
Investment in ATM systems	Yes						
If investment in ATM system, type?	Overhaul of existing system						
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	S-AF 3.1 - ASM and Advanced FUA; S-AF 3.2 - Free Route; S-AF 4.1 - Enhanced STAM, S-AF 4.2 - Family 4.2.3 - Interface ATM Systems to NM Systems; S-AF 4.4 Automated Support for Traffic Complexity Assessment; S-AF 5.6 - SWIM Flights Information Exchange; AF6 - Initial Trajectory Information Sharing					

Name of new major investment 2	DPS – New system					Total value of the asset	22 692 307 €
Description of the asset	<p>Within the RP3, ANS CR expects a cut-over to a new FDP system. All the payments related to SAT and System Readiness are to be made in that period. Subsequently, the implementation of new functionalities into TopSky - HMI, FDP evolutions, TCT, AMAN, ATN Base 2 integration, modifications triggered by operational requirements are going to be achieved then.</p> <p>DPS NS - This subdomain covers a main contract for the new system delivery and implementation signed with Thales company.</p> <p>DPS NS - Release 2020-2024 - The main system works in ATM environment, which needs to reflect all the changes introduced with the new generation of the system. This subdomain covers the changes in the cooperating systems.</p> <p>Note: It needs to be emphasised that this investment only includes upgrades of the TopSky system for which most of the capex was done already in RP2. Since the system is still not in operations, users have not paid for this investment. Also in the RP2 Performance Plan, the system should have been only put in operations throughout 2019, so the users were expected to pay for it only a small amount during 2019. Airspace Users therefore do not pay twice for the same investment.</p> <p>Note: the difference in the asset value presented here in comparison with the Major investment in the table above is due to inclusion of all subprojects, in particular the contract on purchasing the new DPS - system TopSky.</p>						
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Regulation (EU) No 716/2014 (PCP); Regulation (EU) 2021/116 (CP1) : AF1, AF3, AF4, AF5, AF6. PCP allocates aprox. 30% of CAPEX.					
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability
	CP1 - AF1		CP1 - AF3	CP1 - AF4	CP1 - AF5	CP1 - AF6	

Benefits for airspace users and results of the consultation of airspace users' representatives	Increased capacity and safety. Improved situational awareness, interoperability for consistency. FRA - potentially saving miles flown, reduce fuel consumption and emissions. Reduced ATCO workload, increase of throughput, additional working positions. Reduced ATCO workload could have direct impact to CEF area.	
Joint investment / partnership	No	
Investment in ATM systems	Yes	
If investment in ATM system, type?	Replacement investment	
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	PCP/CP1 reference: AF1, AF3, AF4, AF5, AF6. Master Plan Level 3 reference: New functionalities required by Master Plan Level 3: AOM21.2; ATC12.1; ATC17. TopSky system will ensure functionalities required by already implemented objectives in current system such as: AOM 21.2; AOP05; ATC02.8; ATC15.1; FCM06; ITY-AGDL; ITY-FMTP.

Name of new major investment 3	Construction works at IATCC ATS room		Total value of the asset	5 192 307 €
Description of the asset	The investment is linked to the main system implementation (and the transition from the current system). It is necessary to adapt the existing ATS control room for the new system. The adaptation contains new data and energy cables, renewal of the air condition and adjusting the room to a new layout of the ATC consoles. Additional note: Investment 'Construction works at IATCC ATS room' is a prerequisite for successful implementation of the 'ATS optimisation' project.			
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No			
Level of impact of the investment	Network	Please refer to Annex E.		
	Local	Please refer to Annex E.		
	Non-performance			
Quantitative impact per KPA	Safety	Please refer to Annex E.		
	Environment	Please refer to Annex E.		
	Capacity	Please refer to Annex E.		
	Cost Efficiency	Please refer to Annex E.		
Results of the consultation of airspace users' representatives				
Joint investment / partnership	No			
Investment in ATM systems	No			
If investment in ATM system, type?	Click to select	Not applicable.		
If investment in ATM system, Reference to European ATM Master Plan / PCP	Click to select	Not applicable.		

2.1.3 - Other new and existing investments

2.1.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

Details about other new and existing investments can be found in Annex E. Investments.

2.1.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	0
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2.2 - Investments - CHMI

2.2.1 - Summary of investments

Number of new major investments	0
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2.2.3 - Other new and existing investments

2.2.3.1 - Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period

There are no new major investments planned for RP3. The other new investments include:

- Replacement of AWOS (Airport Weather Observing System) at airport LKPR, planned date of entry into operation till 30/11/2020. Planned total value 21 mil. CZK, only the part related to the LKPR is considered within this Performance Plan.
- Replacement of sensors at airport LKPR planned date of entry into operation till 30/11/2020. Planned total value 5.5 mil. CZK, only the part related to the LKPR is considered within this Performance Plan.
- Supercomputer AURORA purchased in 2021.

2.2.3.2 - Details of the main other new investments in fixed assets planned over the reference period

Number of new other investments	3
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#	Name of investment	Total value of the asset (capex or contractual leasing value, in thousands CZK)	Value of the assets allocated to ANS in the scope of the PP	Determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency)					Description
				2020	2021	2022	2023	2024	
1	CHMI TCC equipment	44 700	31 373	5 230	5 127	4 945	4 762	4 579	
2	Replacement of AWOS + sensors	28 524	7 166	0	0	1 686	1 624	1 561	
3	SuperComp AURORA	72 600	9 170	0	1 769	1 703	1 638	1 572	

SECTION 3: PERFORMANCE TARGETS AND MEASURES FOR THEIR ACHIEVEMENT

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #x

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #x

3.4.3 - Pension assumptions

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

3.4.5 - Restructuring costs

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

3.5 - Additional KPIs / Targets

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

3.6.2 - Interdependencies and trade-offs between capacity and environment

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

3.6.4 - Other interdependencies and trade-offs

Annexes of relevance to this section

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX J. OPTIONAL KPIs AND TARGETS

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

SECTION 3.1: SAFETY KPA

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

- a) Safety national performance targets
- b) Detailed justifications in case of inconsistency between local and Union-wide safety targets
- c) Main measures put in place to achieve the safety performance targets

Annexes of relevance to this section

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

3 - PERFORMANCE TARGETS AT LOCAL LEVEL

3.1 - Safety targets

3.1.1 - Safety KPI #1: Level of Effectiveness of Safety Management achieved by ANSPs

a) Safety performance targets

Number of Air Traffic Service Providers		1					
		2020A	2020	2021	2022	2023	2024
		Actual	Target	Target	Target	Target	Target
ANS CR	Safety policy and objectives	C	C	C	C	C	C
	Safety risk management	D	C	D	D	D	D
	Safety assurance	D	C	C	C	C	C
	Safety promotion	D	C	C	C	C	C
	Safety culture	D	C	C	C	C	C
	Additional comments	The targets for years 2021-2024 have been set in accordance with the COMMISSION IMPLEMENTING DECISION (EU) 2019/903 of 29 May 2019. In 2020, all components of the EoSM reached the required level, in most cases the target levels were already exceeded.					

b) Detailed justifications in case of inconsistency between local and Union-wide safety targets

There is no inconsistency between local and Union-wide safety targets.

The Czech Republic has either met or exceeded the safety targets during RP2. In the Safety KPI #1: Level of Effectiveness of Safety Management, the Czech Republic achieved the Level C, exceeding the target of B at the national level, while ANS CR achieved Level D for both the Safety Culture MO, as well as all other MOs. In 2020, all safety KPIs reached the required level of Effectiveness of Safety Management and except for the Safety policy and objectives the target levels were already exceeded. It is therefore expected that the Czech Republic will be able to meet the European targets in the safety domain without difficulties. However, the processes will continue to develop to enable meeting and exceeding the expectations.

* Refer to Annex O, if necessary.

c) Main measures put in place to achieve the safety performance targets

ANS CR has already achieved a very good level of mandatory and voluntary reports and have detailed information coming from the monitoring system. Every alert is investigated and in case of a real incident, the investigation department of ANS CR reports it as a mandatory report or manages it with the involved ATCO according to Just Culture rules. Mandatory and voluntary reports are stored in an internal occurrence database which is a part of an extensive database including all maintenance procedures and management of information disseminated within the whole company. There is also a direct link to maintenance database in a case of ATM-specific or technical occurrences. NSA maintains and updates its own internal ATM/ANS occurrence database (this internal database was also presented to EASA inspectors). The data obtained by the occurrence reporting system are categorized and consequently discussed and analysed within the platform established between NSA and ANS CR – Safety Board. Subsequently the NSA verifies the outcome from the Safety Board with ECCAIRS database and also by reports received by the AAIB inspectors. Both mandatory and voluntary ANS CR reports are stored in the same database but with controlled access (confidentiality of voluntary reports).

In September 2018 ANS CR launched the new intranet web page (Safety portal) to support events reporting, feedbacks, just culture and promote safety awareness in general.

The Safety Management System (SMS) is in place and ANS CR Business plan for 2020 – 2024 states within Safety KPA (among others) seven mid-term goals for the further development and improvement of SMS. Following goals specifically address Safety Risk Management area:

- Development and support of the safety management system;
- Development and support of the fatigue risk management system (FRMS) in ANS CR;
- Further integration of the human factor domain in the safety management system and particular in the Safety Risk Management.

The compliance management is supported by advanced tools and the Annual safety management review process takes place within the Integrated Management System (IMS) as implemented in ANS CR. The continuous SMS improvement is driven by taking part in CANSO/EUROCONTROL SoE in SMS annual self-assessment and follow up activities at international level, e.g. CANSO.

Development and support of the fatigue risk management system (FRMS) is ongoing within ANS CR. In 2020, the project continued with Validation of Voice Analysis Using EEG and other scientifically proven methods for identifying and monitoring the ATCOs Fatigue Level. The measurements were performed on ATCOs during simulator sessions. For this project, ANS CR was selected as the Runner-Up in the Environment, Research and Innovation category in the 2020 ATM awards, organised by Air Traffic Management Magazine and Unmanned Airspace. The output is currently being evaluated.

In 2020, the process of assessing the safety implication of the functional system changes was further developed, both by modifying individual procedures caused in particular by legislation (PNK (EU) 2017/373) and by modifying software for managing changes to the functional system (TIS / KIWI). Also, a proposal was prepared for further involvement of the human factor in the process of assessing the safety of functional system changes. This methodology was used on a pilot basis in the evaluation of the safety of functional system changes (e.g. A-SMGCS upgrade and FRACZECH implementation). The service providers produce follow-up reports to provide details of actions they intend to take in order to prevent similar occurrences in the future, as soon as these actions have been identified. These reports are produced in forms and manner agreed with the competent authority.

SECTION 3.2: ENVIRONMENT KPA

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

- a) Environment national performance targets
- b) Detailed justifications in case of inconsistency between national targets and national reference values
- c) Main measures put in place to achieve the environment performance targets

Annexes of relevance to this section

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

3.2 - Environment targets

3.2.1 - Environment KPI #1: Horizontal en route flight efficiency (KEA)

a) National environment performance targets

	2020A	2020	2021	2022	2023	2024
National reference values	2,18%	n/a	2,05%	2,05%	2,05%	2,05%
		2020	2021	2022	2023	2024
		Target	Target	Target	Target	Target
National targets		2,26%	2,05%	2,05%	2,05%	2,05%

b) Detailed justifications in case of inconsistency between national targets and national reference values

There is no inconsistency between national targets and national reference values as the Czech Republic decided to adopt the local reference values as its national environment performance targets for the horizontal en route flight efficiency (KEA). The target for year 2020 was met.

ANS CR successfully implemented 24/7 Free Route Operations in the FRACZECH area (FL095 – FL660) on 25 February 2021 and is progressively relaxing RAD restrictions. It needs to be therefore noted that ANS CR will have limited possibilities for additional significant improvement of the horizontal en route flight efficiency in the future and this will mostly depend on other factors outside of the ANSP's control such as:

- Airspace users' decision making: this is one of the main factors affecting traffic growth and the situation is very volatile at the moment which makes planning challenging. It needs to be emphasized that the decision making and the actual trajectories flown also depends on the capacity situation and resulting delays in other FIRs, which are not under the ANS CR's control.
- Weather: the experience from RP2 has shown that there has been a strong correlation between the observed weather phenomena (especially CBs during summer period) and the actual trajectories flown, thus deviating significantly from the originally filed flight planned routes.
- NM measures: bringing re-routings and avoidance of congested area in EU/EUROCONTROL airspace impacting both capacity and environment indicators.
- Geopolitical situation (such as Ukraine (Donetsk/Simferopol/Crimea), Belarus or Iraq/Syria): bringing unpredictable changes in traffic flows, impacting both capacity and environment indicators.

The KEP indicator, although not RP2 or RP3 monitored, shows a continues improvement in the Czech Republic from 3.94% in 2014 to 3.62% in 2018 and to 3.47% in 2020. ANS CR will continue to invest into improving its services and making sure the airspace users can plan their preferred routes without any significant limitations.

The latest plan assumes that the Czech Republic will become a part of the South Eastern Europe Free Route Airspace (SEE FRA) by 2023 (improvement proposal 102.017 and related Airspace Restructuring Project proposals ARP003F and ARP004F) followed by the expansion towards BALTIC FRA in 2024 (improvement proposal 102.018 and related Airspace Restructuring Project proposal ARP005F). SEE FRA will thus include Slovakia, Hungary, Romania, Bulgaria, as well as the Baltic FAB states of Poland and Lithuania and later will be expanded with Moldova. The area will be subsequently merged with SECSI FRA (expanded with Albania and North Macedonia), DE-SE FRA, Hellas FRA (covering Greece) and FRA Ukraine. In order to enable this vision and the full benefits of FRA mentioned above, ANS CR will need to achieve the full compliance with the FRA requirements which can be only provided by the new ATM system.

Implementation of these projects is coordinated directly with the Network Manager through the FAB CE Airspace Task Force in which ANS CR actively participates.

The Czech Republic will thus contribute to achievement of European targets in this KPA.

* Refer to Annex P, if necessary.

c) Main measures put in place to achieve the environment performance targets

Main measures put in place to achieve the environment performance targets are:

- Further development of FRA within the FIR Prague, implemented in February 2021. The introduction of the FRA into the existing airspace architecture will be for a transitional period with restrictions that can be unblocked after the introduction of the new sectorisation. The latest plan assumes that the Czech Republic will become a part of the South Eastern Europe Free Route Airspace (SEE FRA) by 2023 (improvement proposal 102.017 and related Airspace Restructuring Project proposals ARP003F and ARP004F) followed by the expansion towards BALTIC FRA in 2024 (improvement proposal 102.018 and related Airspace Restructuring Project proposal ARP005F). SEE FRA will thus include Slovakia, Hungary, Romania, Bulgaria, as well as the Baltic FAB states of Poland and Lithuania and later will be expanded with Moldova. The area will be subsequently merged with SECSI FRA (expanded with Albania and North Macedonia), DE-SE FRA, Hellas FRA (covering Greece) and FRA Ukraine.
- New sectorisation, which is based on requests from airlines to open new routes / flows. Considering the design of current sectorisation, it is not possible to implement some of the user requirements, because it would have undesirable effect of “clipping” at some sectors and further reducing the capacity.
- Possible changes might stem from the application of recommendations from European Airspace Architecture Study, especially, from the Airspace Structural Bottlenecks project led by NM (Central-South East Europe airspace - Project 3). The improvements proposed by NM are expected to follow a stepped implementation process over RP3 or slightly beyond converging towards the target concept and reflecting current situation in capacity in Europe. ANS CR is a part of FAB CE which has established the FAB CE Airspace Task Force working alongside NM on proposing the most optimum airspace structure for the FAB CE region, contributing to the NM's Central-South East Europe Airspace project. The results of these activities are however not yet known.
- Active coordination with MIL in the ASM area. Dynamic Airspace Management is realized at ASM Level 2 and/or ASM Level 3. Areas published in AIP CR / MIL AIP or other pre-arranged areas can be used under FUA rules as AUP manageable with UUP function updates. FUA evaluation is performed monthly by individual TRA / TSA administrators and reported to the CAA. Deficiencies are addressed both within the ASM Consultation Group (ASMCG) meetings and individually with individual administrators, if needed.
- The Czech Republic's ATS Optimisation project which is expected to significantly increase the available capacity over the Czech airspace, thus allowing more effective route planning, impacting the KEA indicator.
- Main steps taken in order to improve the KEP were preparation of FRA implementation (as of February 2021), gradual implementation of the ATM optimisation project (centralization of regional APPs - LKTB and LKKV in 2020, LKMT in 2021).

** Refer to Annex P, if necessary.*

SECTION 3.3: CAPACITY KPA

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

- a) Capacity national performance targets
- b) Detailed justifications in case of inconsistency between national targets and national reference values
- c) Main measures put in place to achieve the target for en-route ATFM delay per flight
- d) ATCO planning

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

- a) Capacity national performance targets
- b) Contribution to the improvement of the European ATM network performance
- c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

Annexes of relevance to this section

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
National reference values	0,00	n/a	0,06	0,11	0,11	0,11
		2020	2021	2022	2023	2024
		Target	Target	Target	Target	Target
National targets		0,20	0,06	0,11	0,11	0,11

b) Detailed justifications in case of inconsistency between national targets and national reference values

There is no inconsistency between National reference values and National targets.

* Refer to Annex Q, if necessary.

c) Main measures put in place to achieve the target for en-route ATFM delay per flight

In the Key Performance Area of Capacity, the Czech Republic should have no problems with meeting the local targets consistent with the NM's reference values. The performance plan includes the key projects to continue capacity increases to make sure that when traffic recovers back to 2019 levels (currently expected towards the end of RP3/at the beginning of RP4), ANS CR will be able to handle the traffic without significant ATFM delays even if the traffic complexity continues to increase similarly as throughout RP2. The key pre-requisites include on-time implementation of the new TopSky ATM system, completion of the key 'ATS optimisation' project activities, including ensuring sufficient number of ATCOs are trained to provide the necessary capacity.

The main measure put in place to achieve the target for en-route ATFM delay per flight for RP3 and beyond is the 'ATS optimisation' project. The main goal of the project is related to closing the increasing gap between the current workforce and numbers of controllers required to cope with the increase in traffic accompanied by the significant increase of traffic complexity in recent years. The 'ATS optimisation' project will significantly speed-up the training process to mitigate the ATCO shortage and will enable closing this gap by reallocation of the surplus ATCOs from regional airports and increase of their productivity by extending their responsibilities to the lower en-route airspace, while limiting the responsibilities of the current ACC ATCOs to the upper airspace. In summary, the project has the following goals:

- An increase in FIR Prague's capacity and flexibility to meet the NM and users' requirements by complete re-sectorisation and adding more possibilities for modular sector configurations;
- An increase of the training efficiency and available number of ATCOs, resulting in lower number of overtime hours, more efficient rostering and man-power planning;
- Maintaining or an increase of the safety level of ATM services;
- Coordination of deploying all ATM development projects, including single ATM system support (TopSky).

Together with introduction of a new ATM system that is planned to be in operations from Q1 2022, the 'ATS optimisation' project is a part of a wider list of other ATM development activities initiated in order to deal with the future challenges and aiming to increase capacity so that the traffic levels experienced before the COVID-19 crisis can be managed without additional costs (excessive overtimes and high ATFM delays). The planned measures include:

- ASM tool (equiv. to LARA);
- Improved ATS route network; implemented in 2019;
- Improved flow and capacity management techniques, including STAM; implemented in 2019-2020;
- Adaptation of sector opening times depending on available staff; 2019-2024;
- Centralisation of regional APPs with 'ATS optimisation' project; 2019-2024;
- Additional controllers; 2019-2024;
- Reconstruction of the OPS room and implementation of the new ATM system (TopSky); 2021-2022;
- Full FRA; implemented in Q1 2021;
- New sectorisation; 2023/2024.

For more details on these capacity measures and their impact, refer to Annex E. Investments. Planned capacity enhancement measures are listed in detail in the European Network Operations Plan 2019-2024, as well as in the Czech Republic's LSSIP (Chapter 2).

New sectorisation will build on implementation of the cross-border FRA, as it requires an analysis of the changes in traffic flows before implementation of any changes. The cross-border FRA is expected to be completed in 2024.

The Czech Republic is fully determined to close the capacity gap experienced before the COVID-19 crisis and contribute to meeting the delay targets at the European level for RP3 and beyond. ANS CR is committed to keeping the current flexibility of rostering procedures which enables to deal with current volatility of traffic and additional requirements until the main measure, the 'ATS optimisation' project, is fully implemented.

It needs to be emphasised that despite the slight traffic decrease in 2019, Prague ACC continued to experience a capacity gap and the ATFM delay in that year. One of the reasons was that the airspace complexity in the Czech sectors and number of vertical movements in Praha ACC further increased

despite the traffic drop observed since April 2019. Prague ACC continued to generate 'ATC Capacity and Staffing'-related delays and confirmed that the delay incurred also in the periods outside of the Summer season when there was no delay observed in the previous years. In addition, Prague ACC continued to experience unpredictability of weather and faced significant weather-related delay, which has also impact on capacity.

The situation in 2019 therefore confirmed that the past decisions of how to continue with resources allocation were correct. It is a clear evidence that all resources available for capacity and safe operations have been fully utilised and measures for the capacity increase are necessary. Without major investments into systems, procedures and operational staff, ANS CR cannot guarantee the service provision at requested level when the traffic reach the 2019 level again. 'ATS optimisation' project is a key element to this. If the project is not implemented, the capacity gap already experienced in 2018 and 2019 will increase substantially, and it can be expected that delays would increase significantly. Continuing in implementation of this project is therefore a must for ANS CR and there is no other option that would enable the Czech Republic to cope with future traffic growth and meet the capacity targets for the RP3 period and beyond when the traffic is expected to reach and grow over the levels experienced before the COVID-19 crisis.

* Refer to Annex Q, if necessary.

d) ATCO planning

Prague (LKAA ACC)	Actual			Planning			
	2018	2019	2020	2021	2022	2023	2024
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)		21,9	23,9	13	12	0	10
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)		2	4	3	4	1	3
Number of ATCOs in OPS planned to be operational at year-end (FTEs)	96	115,9	135,8	145,8	153,8	152,8	159,8

Additional comments

Several activities of the 'ATS optimisation' project were slowed down because of the pandemic but the project mostly continued in line with the schedule presented in the Draft performance plan for RP3 submitted in 2019. The key delayed activity was training of new ATCOs for Sector L that was temporarily suspended as part of the measures introduced by ANS CR due to the COVID-19 situation. The training has however resumed in May 2021 in order to secure necessary capacity for the traffic volumes reaching the values of 2019 at the end of RP3 and beyond.

In the table above, there are presented FTEs for all personnel holding the appropriate licence. There are 11 employees possessing the ATCO licence but performing mainly other duties in 2019 (increasing the above presented FTEs by 3.3). For the year 2020 the situation is similar, the ANS CR had 13 employees holding licence but being assigned to other duties, with 4.3 FTEs dedicated to ATS provisioning.

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
	Actual	Target	Target	Target	Target	Target
National targets	0,07	0,37	0,4	0,4	0,4	0,4
Additional comments	<p>The National targets for terminal and airport ANS ATFM arrival delay per flight follow the set targets from the last years of RP2.</p> <p>On basis of the Implementation Regulation 2019/317 Article 21 on Establishment of charging zones, the Czech Republic decided to exclude the regional airports (Brno, Ostrava and Karlovy Vary) from the common Terminal charging zone 1 - Czech Republic - TCZ from 01/01/2020. The Prague Ruzyně airport is therefore the only czech airport allocated within the Terminal charging zone 1 - Czech Republic - TCZ and the only contributor to national capacity performance targets. The targets therefore only include Prague/Ruzyně airport.</p>					

Airport level	LKPR-Prague/Ruzyně	0,09	0,40	0,40	0,40	0,40	0,40
Airport contribution to national targets	LKPR - Prague Ruzyně is the only contributor to national targets.						

b) Contribution to the improvement of the European ATM network performance

Prague airport has fully implemented the A-CDM, which is highly contributing to the airport operations efficiency and to the European ATM network performance. In addition, airport operations are integrated with Network strategic planning and day to day operations with the Departure Planning Information message (DPI) fully operational.

* Refer to Annex Q, if necessary.

c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

Prague airport is actively contributing to the regular strategic information reporting process and the Network Manager will continue the efforts to establish a process of events information exchange between the airport and the Network Manager in the pre-tactical and tactical phase. The contact for tactical diversion capabilities information exchange is already established. The Network Manager recommends establishing an APOC process and the related AOP to address and improve the Airport Capacity and Performance (ACAP) area.

AST approach separation tool is planned to provide spacing support tools in OPS.

A new A-SMGCS system upgrade was performed and its operational use was launched on 9 February 2021 at Prague Airport.

With respect to actual runway configuration at Prague airport, a significant increase of the airport capacity is expected after construction of a parallel runway. The construction is however planned beyond RP3. More information is provided in LSSIP.

* Refer to Annex Q, if necessary.

SECTION 3.4: COST-EFFICIENCY KPA

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #x

- a) RP3 revised cost-efficiency performance targets (IR 2020/1627)
- b) Information on the baseline values for the determined costs and the determined unit costs
- c) Detailed justifications for the adjustments to the baseline values
- d) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate
- e) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS
- f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #x

- a) RP3 revised cost-efficiency performance targets (IR 2020/1627)
- b) Information on the baseline values for the determined costs and the determined unit costs
- c) Detailed justifications for the adjustments to the baseline values
- d) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS
- e) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of

3.4.3 - Pension assumptions

3.4.3.1 Total pension costs

3.4.3.2 Assumptions for the "State" pension scheme

3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme

3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

3.4.5 - Restructuring costs

3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3

3.4.5.2 Restructuring costs planned for RP3

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

- a) Overall description of the measures necessary to achieve the en-route capacity targets for RP3, which induce additional costs
- b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3
- c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 by nature by ANSP
- d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

Annexes of relevance to this section

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

NOTE: The following requirements as per Annex II, 3.3 are addressed in the Annexes A and B:

Point 3.3 (d) on cost-allocation;

Point 3.3 (e) on the return on equity and cost of capital;

Point 3.3 (f) on assumptions for pension costs and interest on debt for other entities, inflation forecast and adjustments beyond IFRS;

Point 3.3 (g) on adjustments to the unit rates carried over from previous reference periods;

Point 3.3 (h) on costs exempt from cost-sharing;

Point 3.3 (k) reporting tables and additional informations.

3.4 - Cost efficiency targets

3.4.1 - Cost efficiency KPI #1: Determined unit cost (DUC) for en route ANS

En Route Charging Zone #1 - Czech Republic

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

En route charging zone Czech Republic	Baseline 2014	Baseline 2019	RP3 revised cost-efficiency targets (determined 2020-2024)				2024 D vs. 2014 B	2024 D vs. 2019 B
	2014 B	2019 B	2020/2021 D	2022 D	2023 D	2024 D		
Total en route costs in nominal terms (in national currency)	2 834 024 443	3 305 843 079	5 341 278 171	3 093 207 552	3 313 232 021	3 375 276 257	19,1%	2,1%
Total en route costs in real terms (in national currency at 2017 prices)	2 896 988 238	3 204 517 254	5 056 399 161	2 866 536 564	3 033 769 012	3 047 424 812	5,2%	-4,9%
Total en route costs in real terms (in EUR2017) 1	110 103 500	121 791 508	192 174 493	108 946 148	115 302 017	115 821 022	5,2%	-4,9%
YoY variation			57,8%	-43,3%	5,8%	0,5%		
Total en route Service Units (TSU)	2 366 841	2 903 594	2 418 592	1 840 802	2 195 628	2 514 308	6,2%	-13,4%
YoY variation			-16,7%	-23,9%	19,3%	14,5%		
Real en route unit costs (in national currency at 2017 prices)	1 223,99	1 103,64	2 090,64	1 557,22	1 381,73	1 212,03	-1,0%	9,8%
Real en route unit costs (in EUR2017) 1	46,52	41,95	79,46	59,18	52,51	46,06	-1,0%	9,8%
YoY variation			89,4%	-25,5%	-11,3%	-12,3%		

National currency	CZK
1 Average exchange rate 2017 (1 EUR=)	26,31

b) Information on the baseline values for the determined costs and the determined unit costs

En route charging zone Czech Republic	Baseline 2014	Baseline 2019	Actuals 2014	Actuals 2019	2014 Baseline adjustments	2019 Baseline adjustments
	2014 B	2019 B	2014 A	2019 A		
Total en route costs in nominal terms (in national currency)	2 834 024 443	3 305 843 079	2 834 024 443	3 305 843 079	0	0
Total en route costs in real terms (in national currency at 2017 prices)	2 896 988 238	3 204 517 254	2 896 988 238	3 204 517 254	0	0
Total en route costs in real terms (in EUR2017) 1	110 103 500	121 791 508	110 103 500	121 791 508	0	0
Total en route Service Units (TSU)	2 366 841	2 903 594	2 393 408	2 936 186	-26 567	-32 592

c) Detailed justifications for the adjustments to the baseline values

c.1) Adjustments to the 2014 baseline value for the determined costs

Number of adjustments	0
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c.2) Adjustments to the 2014 service units

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-1,11%	CRCO correction factor May 2019 (on 12 months)	-26 567

Other adjustment to the 2014 service units	No
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Total adjustments to the 2014 service units	-26 567
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c.3) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	0
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c.4) Adjustments to the 2019 service units

	Coefficient M2/M3	Source	Service units
Impact of transition to actual route flown	-1,11%	CRCO correction factor May 2019 (on 12 months)	-32 592

Other adjustment to the 2019 service units	No
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Total adjustments to the 2019 service units	-32 592
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d) Description and justification of the consistency between local and Union-wide cost-efficiency targets

The Czech Republic will exceed the Determined Cost targets implied by the EU-wide targets and even though the latest STATFOR scenarios for the Czech Republic are significantly worse than for the SES area, its Determined Unit Costs in real terms will be also consistent with the EU-wide DUC targets.

The Czech Republic is in a position to present Performance Plan that is on average more favourable to the Airspace users than the PRB recommendation. In case of DC development the saving against the 2019 baseline are higher and the DC during the RP3 will be on average 87% of the 2019 baseline (in comparison with the EU-wide target of 96 %). In case of the DUC, the Czech Republic will be 41% above the baseline (in comparison with the EU-wide target of 45% above the baseline).

** Refer to Annex R, if necessary.*

e) Where a deviation from the Union-wide performance targets is observed, please indicate if the NSA considers those deviations to be necessary and proportionate under:

Additional costs of measures necessary to achieve the capacity targets for RP3	No
Restructuring costs planned for RP3	No

f) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS

In order to stabilise the company financial situation and to mitigate away negative impact from airspace users to the maximum achievable level, ANS CR has introduced significant cost cutting measures representing overall reduction of over 17% just in 2020 in comparison to 2019 actual cost level. Cost cutting measures represent noteworthy reductions through the whole scale of cost base.

Additional savings were implemented in 2021 together with introduction of new organisational structure of ANS CR applicable as of 01/01/2021 with changes, which will positively contribute to the reduction of costs (mainly staff costs) during rest of the RP3 and beyond.

The situation also required a revision of ANS CR's investment plan and ongoing projects. Prioritization of the projects has been revisited, several projects have been delayed or completely pushed to RP4 (e.g. replacement of secondary radars). In order to cope with the conclusions drawn during 2019 performance plan approval process, over the years accumulated financial proceeds have been utilized to the full extend to fund selected prioritized ongoing investments. The underlying decision was to keep the projects that are crucial either from the regulatory point of view (e.g. CP1 related investments) or are necessary to cope with future capacity requirements. The general approach to cost cutting measures was to achieve maximum savings while keeping the ability to handle traffic volumes of the year 2019 level without causing excessive ATFM delays in the future. There were therefore minimum changes made to the major investments proposed in the draft RP3 Performance Plan from 2019, including installing the new ATM system (TopSky) and implementing the 'ATS optimisation' project. Most of the related investment activities have significantly progressed and it would be counterproductive to stop them, as they are key for being able to cope with the future demand once the situation improves. ANS CR however stopped temporarily recruitment of additional ATCOs and amended the training plans to reflect the new reality.

Worsening of financial situation however also led to the increased need for external sources of financing the investment projects. ANS CR signed loan contracts both with commercial banks and the state (Ministry of Transport of the Czech Republic) to secure external finances. On the other hand, this will increase the company's gearing and thus reduce the Weighted Average Cost of Capital which will result in lower cost of capital for airspace users.

The savings in 2020 alone, together with savings made by other entities included in the cost base, represent 18% reduction of the cost base compared to the actual 2019 costs, which is among the largest reduction of the costs in the SES area according to the unvalidated data from PRB.

The main drivers for the RP3 costs evolution include:

- New collective agreements (applicable for years 2021 – 2023) and managerial decisions resulting in new organisational structure bringing the reduction of managerial and other positions, reduction of FTE through both reduction of heads and by lowering working fund, postponing of pension contributions and reduction of variable parts of employees' salaries. It needs to be however noted that in order to preserve key personal resources and to cope with labour market conditions, ANS CR expects a gradual recovery of personal costs towards the end of RP3. In addition, even by introducing significant restrictions and applying staff cutting schemes, the ATCOs training has remain the top priority.
- Revaluation of all external contracts, reduction of car fleet, travel costs, reduction and postponement of building and ATM maintenance. To secure operability of essential systems and assets, gradual recovery of postponed compulsory and necessary maintenance is however planned to be executed toward the end of RP3.
- Deferred CAPEX on surveillance infrastructure (MSSR), rescheduling of majority of investments and cancelation of some "other investments".
- Permanent reduction of staff (73 FTEs - starting from 2021 onwards)

** Refer to Annex R, if necessary.*

g) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification

The cost bases presented in Annexes to this Performance Plan are fully in line with these particular requirements of the EU 2019/317 and EU 550/2004.

In accordance with Article 22 (5) of Regulation (EU) 2019/317 for the determination of criteria for the allocation of determined costs to en-route and terminal service, the NSA approved a procedure for service providers ANS CR to allocate the determined costs to en-route and terminal service and their parameters by CAA's Decision, reference number 010494-21-701 of 24 September 2021. Detailed information are described in the Annexes A.2 En-route Additional information and B.2 TNC additional information as the parts of this revised performance plan.

** Refer to Annex U, if necessary.*

3.4.2 - Cost efficiency KPI #2: Determined unit cost (DUC) for terminal ANS

Terminal Charging Zone #1 - Czech Republic - TCZ

a) RP3 revised cost-efficiency performance targets (IR 2020/1627)

Terminal charging zone Czech Republic - TCZ	Baseline 2019	Efficiency targets (determined 2020-2024)				2024 D vs. 2019 B
	2019 B	2020/2021 D	2022 D	2023 D	2024 D	
Total terminal costs in nominal terms (in national currency)	569 925 000	849 902 960	452 412 380	535 350 786	543 432 271	-4,6%
Total terminal costs in real terms (in national currency at 2017 prices)	550 233 481	794 583 331	416 392 320	485 619 488	485 843 805	-11,7%
Total terminal costs in real terms (in EUR2017) 1	20 912 281	30 199 089	15 825 488	18 456 549	18 465 074	-11,7%
YoY variation		44,4%	-47,6%	16,6%	0,0%	
Total terminal Service Units (TNSU)	93 167	60 210	60 440	77 210	91 320	-2,0%
YoY variation		-35,4%	0,4%	27,7%	18,3%	
Real terminal unit costs (in national currency at 2017 prices)	5 905,88	13 196,93	6 889,35	6 289,59	5 320,23	-9,9%
Real terminal unit costs (in EUR2017) 1	224,46	501,57	261,84	239,04	202,20	-9,9%
YoY variation		123,5%	-47,8%	-8,7%	-15,4%	

National currency	CZK
1 Average exchange rate 2017 (1 EUR=)	26,31

b) Information on the baseline values for the determined costs and the determined unit costs

Terminal charging zone Czech Republic - TCZ	Baseline 2019	Actuals 2019	2019 Baseline adjustments
	2019 B	2019 A	
Total terminal costs in nominal terms (in national currency)	569 925 000	709 501 000	-139 576 000
Total terminal costs in real terms (in national currency at 2017 prices)	550 233 481	683 605 036	-133 371 555
Total terminal costs in real terms (in EUR2017) 1	20 912 281	25 981 226	-5 068 945
Total terminal Service Units (TNSU)	93 167	99 036	-5 869

c) Detailed justifications for the adjustments to the baseline values

c.1) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	1
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Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
Change of the terminal scope of the PP	Terminal charging zone	ANSP	Staff	-139 576 000	-133 371 555	-5 068 945
Description and justification of the adjustment						
This adjustment reflects the decision to exclude the three regional airports from the scope of the performance plan and single terminal charging zone as of start of the RP3. The adjusted baseline of 2019 therefore reflects only the values for LKPR. Please note that the selected entity type and cost nature does not reflect the real situation as this spreadsheet does not allow to select correct entity and type (i.e. the whole charging zone and all cost categories). Both in table a) and b) column D (baseline 2019) the figures have been changed accordingly. The original figures are presented in the column E (table b).						

Total adjustments to the 2019 baseline value for the determined costs	Costs nominal NC	Costs real NC	Costs EUR2017
	-139 576 000	-133 371 555	-5 068 945

c.2) Adjustments to the 2019 service units

Adjustment to the 2014 service units	Yes	Service units	
			-5 869
Description and justification of the adjustment			
This adjustment applies to 2019 service units with the same justification as above.			

d) Description and justification of the contribution of the local targets to the performance of the European ATM network

The Czech Republic plans to decrease its determined unit costs by 9,9% during RP3 due to the significant savings achieved mainly on the ANSP side. The Czech Republic also confirms its intention not to increase the current unit rate of 6,800 CZK.
In 2024, reduction of the TNC at Prague Airport to 5,950 CZK is planned, representing a reduction by 12% by 2024.

Not applicable.

* Refer to Annex R, if necessary.

e) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS

The main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS are similar to the measures described in section 3.4.1.

In addition, the Czech Republic agreed on a state additional financial support of ANS provided at regional airports in order to reduce a burden on the airspace users. The Czech Republic is removing regional airports with less than 80,000 IFR movements from scope of the RP3 Performance Plan as of 1 January 2020. It is believed that airspace users will benefit from this change through lower terminal navigation charges. It is also in line with the requests made by both the European Commission and airspace users to the states calling for higher support to be provided to the civil aviation. During the consultation, stakeholders accepted and welcomed the proposed change.

The Czech Republic also confirms its intention not to increase the current unit rate of 6,800 CZK. ANS CR will only apply the Cost of Capital in the terminal cost base if the actual costs are lower than the target unit rate. This will be applicable until 2023 when the benefit of removal of the regional airports from the terminal charging zone will result in a reduction of the TNC at Prague Airport to 5,950 CZK, which represents a reduction by approximately 12% by 2024, compared to the situation with regional airports in the charging zone.

** Refer to Annex R, if necessary.*

f) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of corrections applied to the cost base as a result of this verification

The cost bases presented in Annexes to this Performance Plan are fully in line with these particular requirements of the EU 2019/317 and EU 550/2004.

In accordance with Article 22 (5) of Regulation (EU) 2019/317 for the determination of criteria for the allocation of determined costs to en-route and terminal service, the NSA approved a procedure for service providers ANS CR to allocate the determined costs to en-route and terminal service and their parameters by CAA's Decision, reference number 010494-21-701 of 24 September 2021. Detailed information are described in the Annexes A.2 En-route Additional information and B.2 TNC additional information as the parts of this revised performance plan.

** Refer to Annex U, if necessary.*

3.4.3 - Pension assumptions

ANS CR

3.4.3.1 Total pension costs (in nominal terms in '000 national currency)

Pension costs	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pension costs	233 800	211 827	445 627	225 719	261 519	268 319
En-route activity	203 200	186 772	389 972	199 021	230 587	236 582
Terminal activity	30 600	25 055	55 655	26 698	30 932	31 737
Other activities			-			

The pension costs are a part of the mandatory pension scheme applicable to all employers in the Czech Republic, with no exceptions. The legal regulations set the percentage rate (24,8%) out of the total pensionable payroll and maximum calculation base for the calculation of "state" pension costs.

3.4.3.2 Assumptions for the "State" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many? No

<Staff category name>	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	1 087 450	968 573	2 056 023	1 096 788	1 387 369	1 429 510
Employer % contribution rate to this scheme	25	25		25	25	25
Total pension costs in respect of this scheme	233 800	211 827	445 627	225 719	261 519	268 319
Number of employees the employer contributes for in this scheme	1 018	950		951	964	971

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3

The mandatory pension scheme applicable to all employers in the Czech Republic is of 'defined contribution' nature, with no exceptions. The legal regulations of premiums for social security are contained in the Act No. 589/1992 Col., on Premiums for Social Security and Contribution to the State Policy of Employment, as amended. Maximum calculation base for payment of social security premium and contribution is defined as 48 multiple of the mean monthly wage.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

Assumptions for calculation of pension cost within Reference Period 3: The amount of social security premium is determined by a percentage rate from the total pensionable payroll. The rate is planned at 24,8 % for the entire RP 3. Social premiums include payments for: Premiums on sickness insurance (2.3 %), Premiums on pension insurance (21.5 %), Contribution to the state policy of employment (1.2 %). There is a maximum calculation base for payment of social security premium, we planned 2 % increase year on year.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users

Not applicable.

3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme (in nominal terms in '000 national currency)

Are there different contribution rates for different staff categories? If yes, how many? No

<Staff category name>	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies			-			
Employer % contribution rate to this scheme	x	x		x	3	3
Total pension costs in respect of this scheme			-			
Number of employees the employer contributes for in this scheme						

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3

The legal regulations of supplementary pension savings are contained in the Act No. 427/2011 Col., on Supplementary pension savings, as amended. Pension funds are managed by third parties. ANS CR contributes to the pension savings of employees on the basis of signed collective agreements. Since 2023 occupational "defined contributions" will amount to 3% of the monthly gross wage.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs

An employee may receive an employer's contribution if he concludes a supplementary pension savings contract with a pension company and fulfils the conditions set in employer's directive.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users

Not applicable.

3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme (in nominal terms in '000 national currency)

Does the ANSP assume liability for meeting future obligations for the occupational "Defined benefits" scheme?	No
Is the occupational "Defined benefits" pension scheme funded?	No

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies			-			
Total pension costs in respect of this scheme			-			
- in respect of regular pension costs			-			
- in respect of non-recurring deficit repair			-			
- reported as staff costs (in reporting tables)			-			
- not reported as staff costs (in reporting tables): please use comment box			-			
Actuarial assumptions						
% discount rate						
% projected increase in benefits						
% annual increase in salaries						
% expected return on plan assets						
Net funding surplus / deficit			-			
Number of employees the employer contributes for in this scheme						

Description on the relevant national pension regulations and pension accounting regulations on which the assumptions are based, as well as information whether changes of those regulations are to be expected during RP3
 Not applicable.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs
 Not applicable.

Where, in the Reporting Tables, some occupational "defined benefits" costs (e.g. interest expense related to pensions) are reported in other cost item(s) than staff costs, the cost item(s) should be indicated here below along with corresponding explanations.
 Not applicable.

Describe the actions taken ex-ante to manage the cost-risk (cost increase) associated with this item, as well as the actions taken to limit the impact of the unforeseen change on the costs to be passed on to airspace users
 Not applicable.

3.4.4 - Interest rate assumptions for loans financing the provision of air navigation services

ANS CR

Select number of loans 3

Interest rate assumptions for loans financing the provision of air navigation services (Amounts in nominal terms in '000 national currency)

Loan #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Long-term investment loan (EUR) from KB, a.s. with interest rate of 0.52% p.a. Instalments starts in 2023, repayment period 4 years.					
Remaining balance	870 247	908 077		917 263	926 448	775 102
Interest rate %	0,52%	0,52%		0,52%	0,52%	0,52%
Interest amount	4 525	4 722	9 247	4 770	4 818	4 031

Loan #2	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Long-term investment loan (CZK) from ČSOB, a.s. with interest rate of 0.90% p.a. Instalments starts in 2023, repayment period 4 years.					
Remaining balance	49 101	335 000		339 500	344 000	294 106
Interest rate %	0,90%	0,90%		0,90%	0,90%	0,90%
Interest amount	442	3 015	3 457	3 056	3 096	2 647

Loan #3	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Long-term investment loan (EUR) from ČSOB, a.s. with interest rate of 0.42% p.a. Instalments starts in 2023, repayment period 4 years.					
Remaining balance	0	325 438		327 538	329 637	281 168
Interest rate %	0,00%	0,42%		0,42%	0,42%	0,42%
Interest amount	0	1 367	1 367	1 376	1 384	1 181

Other loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Repayable financial assistance from the Czech Republic (MoT) with annual instalments as of 2027.					
Remaining balance	500 000	500 000		500 000	500 000	500 000
Average weighted interest rate %	0,00%	0,00%		0,00%	0,00%	0,00%
Interest amount	0	-	-	-	-	-

Total loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total remaining balance	1 419 348	2 068 515		2 084 301	2 100 085	1 850 376
Average weighted interest rate %	0,35%	0,44%		0,44%	0,44%	0,42%
Interest amount	4 967	9 104	14 071	9 201	9 298	7 858

3.4.5 - Restructuring costs

3.4.5.1 Restructuring costs from previous reference periods to be recovered in RP3

Restructuring costs from previous reference periods approved by the European Commission?	No
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3.4.5.2 Restructuring costs planned for RP3

Restructuring costs foreseen for RP3?	No
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Additional comments
There are no additional comments.

3.4.6 - Additional determined costs related to measures necessary to achieve the en route capacity targets

Additional costs of measures necessary to achieve the capacity targets for RP3?	No
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SECTION 3.5: ADDITIONAL KPIS / TARGETS

3.5 Additional KPIS / Targets

Annexes of relevance to this section

ANNEX J. OPTIONAL KPIS AND TARGETS

SECTION 3.6: DESCRIPTION OF KPAS INTERDEPENDENCIES AND TRADE-OFFS INCLUDING THE ASSUMPTIONS USED TO ASSESS THOSE TRADE-OFFS

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

- 3.6.1 - Interdependencies and trade-offs between safety and other KPAs
- 3.6.2 - Interdependencies and trade-offs between capacity and environment
- 3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity
- 3.6.4 - Other interdependencies and trade-offs

3.6 - Description of KPAs interdependencies and trade-offs including the assumptions used to assess those trade-offs

3.6.1 - Interdependencies and trade-offs between safety and other KPAs

a) Do the measures to reach the targets in the different KPAs require changes in the ANSP functional system that have safety implications? If yes, which mitigation measures are put in place?

The planned changes to allow reaching the targets in the different KPAs, particularly in the area of capacity towards the end of RP3 and beyond, do require changes of the functional system. However, these changes have no negative safety implications and even though the main project, the 'ATS optimisation' project, is not being implemented for safety reasons, the operational concept was developed with having safety as the highest priority. The 'ATS optimisation' will not have a negative impact on safety. On the contrary, the project will bring an optimum airspace design with reduced complexity, as well as reduced ATCO shortage and thus also less overtimes and workload per controller when the traffic is back at 2019 levels.

In addition, the Czech Republic has developed robust procedures for assessing the impact of any change on safety and will consistently apply these processes, as well as maintain and further develop them in accordance with the latest requirements and best practices.

b) What are the main assumptions used to assess the interdependencies between safety and other KPAs?

Safety KPA is the key element and has the highest priority. The Czech Republic is fully aware that safety shall not be by any circumstance compromised. The Czech Republic fulfils all KPIs without jeopardising safety and fosters towards the balanced approach between all KPAs. The Czech Republic supports consideration of local circumstances as stated by EC.

c) What metrics, other than those indicators described in the Regulation, are you monitoring during RP3 to ensure targets in the KPAs of capacity, environment, and cost-efficiency are not degrading safety?

In addition to the regular monitoring of KPIs and PIs within all performance areas, that is part of annual reports to the European Commission, relevant CAA inspectors also carefully monitor the situation regarding reported occurrences relevant to all ATM/ANS areas in compliance with Reg. (EU) No. 376/2014. Should there be any sign of potential safety deterioration or adverse trend in number of incidents regarding CAP or ENV areas (i.e.. flight plan vs route flown, overload of ACC sectors, etc.) it is immediately discussed with reporting entities and consequently solved within national and international meetings (FAB CE – NSA CC, Safety Board platform with all ANSPs, EASA and AAIB discussions, etc.) and remedial measures are adopted as soon as possible. Also supervision activities within areas of ATFM, ASM and others are regularly conducted by qualified CAA inspectors.

CAA analyses findings raised at all services providers under its supervision and the associated corrective actions status twice a year (while the main ANSP - the ANS CR reports to NSA on quarterly basis) with aim to indicate possible areas where any interdependencies may occur and the planned performance could be deteriorated. Outcomes from such as analysis is recorded.

d) Do targets allow trade-offs in operational decision making to managing resource shortfalls in order to preserve safety performance? Do targets restrict the release of staff for safety activities, such as training?

The trade-offs in operational decisions are sometimes necessary, but the Czech Republic is aware that safety should never be compromised. The training for operational staff regarding areas relevant to safety KPA is never part of organisational restrictions.

e) Has the State reviewed the ANSP financial and personnel resources that are needed to support safe ATC service provision through safety promotion, safety improvement, safety assurance and safety risk management after changes introduced to achieve targets in other KPAs? Please, explain.

The CAA inspectors regularly supervise and review the ANSP financial and personnel resources in accordance with relevant regulatory requirements (Reg. (EU) 2017/373). After the COVID-19 outbreak in 2020, the ANS CR has regularly provided information about the financial health, cash flow and impact on the personnel resources including cost saving measures had been implied to the CAA CZ. This was also the subject on the regular audit performed in Autumn 2020.

The Czech Republic is also regularly supervised by EASA inspectors within their standardisation inspections (last inspection in Autumn 2020). In regard to meet the requirements Art. 4(8) and ATM/ANS.AR.B.001 a) 2) of the EU Reg. 2017/373 and Art. 5(5) and ATCO.AR.A.005(a) of the EU Reg. 2015/340 the CAA CR conducts the NSA HR assessment every two year as a common FAB CE NSAs HR Assessment. The last assessment was conducted in 2020.

3.6.2 - Interdependencies and trade-offs between capacity and environment

The shifts of traffic flows in Eastern Europe, caused by the Ukrainian/Syrian crisis or recent situation in Belarus clearly reveal that actual trajectories flown do not always follow the required optimized great circle routings, as foreseen for the KPI. There is a strong, unswayable effect, where actually flown trajectories distort the required KEA indicator. Following the capacity shortfalls in Western Europe (e.g. Karlsruhe), traffic flows were also shifted to avoid these congested areas to minimize delays, creating new bottlenecks as a consequence and impacting the KEA indicator.

In addition, the developments strongly depend on the NM measures. Possible changes might stem also from the application of recommendations from European Airspace Architecture Study, especially, from the Airspace Structural Bottlenecks project led by NM (Central-South East Europe airspace - Project 3). The improvements proposed by NM are expected to follow a stepped implementation process over RP3 or slightly beyond converging towards the target concept and reflecting current situation in capacity in Europe. ANS CR is a part of FAB CE which has established the FAB CE Airspace Task Force working alongside NM on proposing the most optimum airspace structure for the FAB CE region, contributing to the NM's Central-South East Europe Airspace project.

3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

Before the COVID-19 crisis, the Czech Republic experienced a high traffic growth rates combined with a significant increase of complexity (also because of unplanned participation in the NM's 4ACC and eNM initiatives). In 2019, two contradictory trends could be observed:

- 1) The airspace complexity in the Czech sectors and number of vertical movements in Praha ACC further increased;
- 2) The Czech Republic lost a significant deal of horizontal traffic (overflights). The observed drop in the number of SUs was -3.5%, while experiencing a rise in the complexity and a drop in terms of IFR movements only -1.1%.

This trend is expected to continue once the traffic recovers to pre-COVID-19 levels. The STATFOR Sc.2 forecast from May 2021 foresees that the number of IFR movements in 2024 will be -2.0% compared to 2019, while SUs are expected to be at -3.1% compared to 2019. All of these factors can have significant impact on the cost efficiency.

It needs to be emphasised that taking into account both the development before and after COVID-19 the situation is extremely challenging in terms of resource planning. NM confirmed in its 2019 NOP that the capacity gap was expected to continue until 2024 and the Czech Republic continued investing significant effort and resources into closing this capacity gap and implementing measures such as the 'ATS optimisation' project to solve the issues. In June 2021, after the total collapse in 2020, the traffic still reaches only around 40% of 2019 traffic; however, the STAFOR forecast expects the traffic to reach 2019 values again in 2025 with 90% of 2019 traffic in 2024. Therefore, the capacity must be secured in order to mitigate cumulation of delays as experienced in 2018 and 2019. The ANS CR therefore continues investing in the 'ATS optimisation' project in line with the schedule presented in the Draft performance plan for RP3 submitted in 2019, with only a few activities delayed including ATCO training for Sector L that was temporarily suspended as part the measures introduced by ANS CR due to the COVID-19 situation. The training has however resumed in May 2021 in order to secure necessary capacity for the traffic volumes reaching the values of 2019 in the end of RP3 and beyond.

ATCO shortage was one of the main factors affecting ability to offer a required capacity to cope with the demand and experienced capacity gap in the Czech Republic bringing restrictions and delays to airspace users. However, on ANSP side, significant overtimes were required during the peak season to enable use of the maximum sector configuration, which had a strong impact on staff costs. Over 150 hours per every ACC controller was required in 2018. It is envisaged that significantly less overtime hours will be required after the implementation of the 'ATS optimisation' project once the traffic recovers, which is one of the main goal of the project. The project will reduce the complexity of the training and speed-up the training process while using the surplus capacity of the former regional APP controllers responsible now for lower en-route airspace.

3.6.4 - Other interdependencies and trade-offs

There is a strong correlation between the observed weather phenomena (especially CBs during summer period) and the actual trajectories flown, thus deviating significantly from the originally filed flight planned routes and impacting the KEA indicator. In the Czech Republic, around 30% of the delay caused in 2018 and 2019 was attributable to weather. Although the ATFM delay is expected to be negligible until the traffic recovers, the weather phenomena can still have a significant impact on the local performance during some days.

The most significant trade-off in the recent past, especially in 2018, turned to be the local vs. network-wide capacity, which was brought by the NM's 4ACC and eNM initiatives. It needs to be emphasised that joining these initiatives brought significant network-wide benefits; however, it also had a clear impact on the ATM provision in the airspace over the Czech Republic, bringing further deterioration of local capacity constraints, additional increase in the traffic complexity and increased level of local delays. This was confirmed by the Network Manager several times at different occasions. Given the traffic is not expected to fully recover before 2025 (STATFOR Scenario 2 from May 2021), more extensive NM measures that might impact on the local performance is only expected towards the end of RP3.

Another important local trade-off is between the new ATM system (TopSky) and available capacity. The stand-alone implementation of Neopteryx (TopSky) is not expected to bring a substantial increase of capacity; however, it is a necessary prerequisite for it. Even though it will increase the theoretical maximum number of sectors, opening the maximum configuration is affected by the ATCO availability and is also limited by the airspace design. In addition, a short-term decrease of available capacity can be expected during the implementation of a new system, which is typical for any ACCs implementing new systems. However, the Neopteryx (TopSky) is fundamental enabler for other activities, including 'ATS optimisation' and re-sectorisation of the airspace which are expected to significantly increase the Czech airspace's capacity in order to meet the demand once the traffic recovers. In addition, given the traffic is not expected to fully recover before 2025 (STATFOR Scenario 2 from May 2021), implementation of the new system is not expected to have any negative impact.

SECTION 4: CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

4.1 - Cross-border initiatives and synergies

4.1.1 - Planned or implemented cross-border initiatives at the level of ANSPs

4.1.2 - Investment synergies achieved at FAB level or through other cross-border initiatives

4.2 - Deployment of SESAR Common Projects

4.3 - Change management

Annexes of relevance to this section

ANNEX N. CROSS-BORDER INITIATIVES

4.1 - Cross-border initiatives and synergies

4.1.1 - Planned or implemented cross-border initiatives at the level of ANSPs

Number of cross-border initiatives	1
Initiative #1	
Name	FAB CE
Description	Functional Airspace Block Central Europe
Expected performance benefits	Capacity, flight efficiency, cost-efficiency

Additional comments
<p>The Czech Republic is a member of FAB CE. FAB CE fully adheres to the requirements for a functional airspace block defined in the Article 2(25) of the Regulation (EC) No 549/2004. The provision of air navigation services and related functions in FAB CE is performance-driven and as a priority, the FAB invests a significant effort into coordination of airspace planning and network development activities, in accordance with the requirements under the Article 9a(1) and (2)(b) of the Regulation (EC) No 550/2004. FAB CE focuses on enhanced cooperation among air navigation service providers and activities that bring added value as required by the Article 9a of the Regulation (EC) No 550/2004 and the Article 2(25) of the Regulation (EC) No 549/2004. The activities are driven by the FAB CE Strategy which latest update for years 2020-2030 was published in February 2020 (available at https://www.fab-ce.eu/news-media/publications-and-documents).</p> <p>One of the most important activities focusing on network benefits to users is related to the recommendations from European Airspace Architecture Study, especially, from the Airspace Structural Bottlenecks project led by NM (Central-South East Europe airspace - Project 3). The improvements proposed by NM are expected to follow a stepped implementation process over RP3 or slightly beyond converging towards the target concept and reflecting current situation in capacity in Europe. FAB CE has established the FAB CE Airspace Task Force working alongside NM on proposing the most optimum airspace structure for the FAB CE region, contributing to the NM's Central-South East Europe Airspace project. This includes a coordination of the implementation of the cross-border FRA areas with NM. The latest plan assumes that the Czech Republic will become a part of the South Eastern Europe Free Route Airspace (SEE FRA) by 2023 (improvement proposal 102.017 and related Airspace Restructuring Project proposals ARP003F and ARP004F) followed by the expansion towards BALTIC FRA in 2024 (improvement proposal 102.018 and related Airspace Restructuring Project proposal ARP005F). SEE FRA will thus include Slovakia, Hungary, Romania, Bulgaria, as well as the Baltic FAB states of Poland and Lithuania and later will be expanded with Moldova. The area will be subsequently merged with SECSI FRA (expanded with Albania and North Macedonia), DE-SE FRA, Hellas FRA (covering Greece) and FRA Ukraine. In order to enable this vision and the full benefits of FRA mentioned above, ANS CR will need to achieve the full compliance with the FRA requirements which can be only provided by the new ATM system.</p>

4.1.2 - Investment synergies achieved at FAB level or through other cross-border initiatives

Details of synergies in terms of common infrastructure and common procurement
<p>The Czech Republic is a member of FAB CE and there are a number of activities at the FAB CE level that positively impact on synergies in the region. The activities are driven by the FAB CE Strategy endorsed in February 2020. Transition to a real airspace alliance is based on meeting high-priority FAB CE Strategic Objective (FSOs), which are, amongst others, a new, jointly-developed and implemented FAB CE airspace structure (in cooperation with NM under the umbrella of FAB CE Airspace Task Force), compliant with ANSP requirements and the EAAS vision; joint planning of FAB CE communications/navigation/surveillance (CNS) infrastructure; new framework agreements enabling more extensive use of cross-border services in FAB CE and others.</p> <p>FAB CE coordinate their planning with respect to implementation of PCP and Deployment Programme. Other recent and ongoing projects include the following activities:</p> <p>FAB CE ANSPs recently coordinated their activities in ADS-B deployment, datalink and SSR frequency monitoring, which were organised as dedicated projects.</p> <p>FAB CE ANSPs have made a significant progress in terms of developing processes for planning and operations of the surveillance and navigation infrastructure. The Surveillance infrastructure optimisation project has been successfully completed in 2018 and the Navigation infrastructure optimization project finished in June 2020. The processes for surveillance and navigation infrastructure planning, maintenance planning, maintenance of SUR and NAV database and sharing the specifications were developed and are now fully implemented. These processes are leading to a proactive consultation and a FAB CE-wide information exchange regarding SUR and NAV systems to improve cost-effectiveness within the region, reducing duplication and unnecessary complexity. As part of the projects, SUR and NAVAID infrastructure and coverage of neighbouring countries were analysed, leading to identification of a space for improvement, including operational inter-dependencies and requirements. The process for CNS infrastructure planning is in place and the FAB CE ANSPs coordinate their plans annually.</p> <p>Building on the successful completion of the Surveillance optimisation project and NAVAID optimisation projects in 2018 and 2020, a Common CNS planning project was initiated in 2020 focusing on identification of opportunities for smart procurement of CNS infrastructure and developing a joint CNS investment plan to be used as an input into updating/optimizing of the national CNS investment plans. The project established and deployed a continuous process for common CNS infrastructure planning, building on the processes developed under SUR and NAVOPT projects. FABCE Aviation Services, a joint FAB CE venture, has been a leader of these activities to ensure the planning is common, coordinated and takes a FAB CE-wide</p>

perspective, there are no double investments in the cross-border areas, the FAB CE ANSPs share common system resources where and when possible and optimise CNS infrastructure across the region.

4.2 - Deployment of SESAR Common Projects

4.2.1 - Common Project One (CP1)

CP1 ATM Functionality (CP1-AF) / Sub functionality (CP1-s-AF)	Recent and expected progress
CP1-AF1 - Extended AMAN and Integrated AMAN/DMAN in High-Density TMAs	
CP1-s-AF1.1 AMAN extended to en-route airspace	Deployed en-route support of Extended AMAN for EDDM and LOWW in ATM system for ACC Praha. Implementation of AMAN for LKPR is currently under evaluation and is not required by CP1.
CP1-s-AF1.2 AMAN/DMAN Integration	Not planned
CP1-AF2 - Airport Integration and Throughput	
CP1-s-AF2.1 DMAN synchronised with predeparture sequencing	Not planned
CP1-s-AF2.2.1 Initial airport operations plan (iAOP)	LKPR is A-CDM fully implemented airport since September 2015. iAOP is foreseen to be phase 1 of full AOP project and is planned for 2023+.
CP1-s-AF2.2.2 Airport operations plan (AOP)	Full AOP is initially planned for 2026-2027.
CP1-s-AF2.3 Airport safety nets	Airport Safety Nets deployed in frame of ASMGCS upgrade in February 2021.
CP1-AF3 - Flexible Airspace Management and Free Route Airspace	
CP1-s-AF3.1 Airspace management and advanced flexible use of airspace	Partly completed. ASM/ATM system supports free route and flexible sector configuration based on traffic demand. Enhanced cooperation of ASM system with NM about airspace status sharing is planned.
CP1-s-AF3.2 Free route airspace	Free route airspace in Czech Republic (FRACZECH) was implemented on 25th February 2021. Cross-border extension of FRA is planned. In August 2021 (after the consultations with NM) the ANS CR decided to merge FRACZECH with SEE FRA (2022/2023) and POLFRA (2024) in order to reach the target 2C scenario step by step.
CP1-AF4 - Network Collaborative Management	
CP1-s-AF4.1 Enhanced short-term ATFCM measures	STAM Phase 1 and 2 completed.
CP1-s-AF4.2 Collaborative NOP	Not planned yet
CP1-s-AF4.3 Automated support for traffic complexity assessment	Functionality deployed - TCM tool used at FMP/ACC Prague.
CP1-s-AF4.4 AOP/NOP integration	Planning in line with iAOP/AOP project, see above.
CP1-AF5 - SWIM	
CP1-s-AF5.1 Common infrastructure components	All the services in the AF5 sub-functionalities will join and use the common components. ANS CR will include the requirements for use of the components into the specification for development of the services. The implementation date is therefore bound to the implementation of the services in AF5.3,
CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	The SWIM yellow profile technical infrastructure will be the key requirement for the specification of the new services described in the AF5 sub-functionalities. Already implemented services will be upgraded to meet the SWIM specification.
CP1-s-AF5.3 Aeronautical information exchange	The start of the implementation of described services is planned in 3Q/2022. The plan is to implement the services one by one and the expected date is 1Q/2025 for all the services to be put into operation including the digital NOTAM. The services will be based on the solution already deployed during the Project 2015_243_AF5 "Aeronautical Information Distribution Service".
CP1-s-AF5.4 Meteorological information exchange	Project 2015_241_AF5 "Meteorological Information Exchange Service" is still ongoing (the project was extended until the end of 2021). The IWXXM international Exchange via AMHS is operational since 2020.

CP1-s-AF5.5 Cooperative network information exchange	In progress, expected implementation in 2022.
CP1-s-AF5.6 Flight information exchange (yellow profile)	Operational - reception of flight data from NMOC.
CP1-AF6 - Initial Trajectory Information Sharing	
CP1-s-AF6.1 Initial air-ground trajectory information sharing	Not planned yet
CP1-s-AF6.2 Network Manager trajectory information enhancement	Not planned yet
CP1-s-AF6.3 Initial trajectory information sharing ground distribution	Not planned yet

4.3 - Change management

Change management practices and transition plans for the entry into service of major airspace changes or for ATM system improvements, aimed at minimising any negative impact on the network performance

The ANS CR expects a number of significant changes within the third reference period. The FRA was already implemented in February 2021, new ATM system (TopSky) will be operational in 2022 and the 'ATS optimisation' restructuring project has already started and its implementation will continue towards the end of RP3 and beyond.

The implementation of TopSky is constantly monitored and project progress is discussed during regular meetings with the supplier. ANS CR regularly notifies the CAA CR about the progress of the project. The planned date for operations of the new system is expected in February 2022.

The 'ATS optimisation' project is ongoing and brought significant changes in the airspace structure and optimisation of the way how ATS is provided in the Czech airspace. A completely new TERMINAL airspace was created. This required a sufficient number of new and re-trained and relocated staff from current regional airport units. Therefore, the training of ATCOs is under constant focus. ANS CR has adapted the training courses to increase the success rate and meet the requirements for the new airspace architecture while satisfying all the safety criteria.

All the above actions are continuously monitored. Risks are identified and mitigated by ANS CR and all are under control at this moment.

As far as procedures for the change management are concerned, the CAA Directive ID: CAA/S-SP-009-2/2019 was implemented to provide services providers and CAA staff with detail application procedures concerning changes as specified in articles ATM/ANS.AR.C.025-040 and ATM/ANS.OR.A.040-045 and ATM/ANS.OR.C.005 ATS.OR.205-210 of Commission Implementing Regulation (EU) 2017/373. This directive also includes detail application procedures concerning changes at Air Traffic Controller Training organisations as specified in articles ATCO.OR.B.015 and ATCO.AR.E.001 c) and ATCO.AR.E.010 of Commission Regulation (EU) 2015/340. The Directive creates a clearly defined environment for implementing both technical and operational changes, including changes in the training of licensed personnel and ATSEP. Details are specified within all areas of management of changes, such as the approvals of ANSPs' procedures defining the management of changes, required information exchange between CA and services providers, agreed specific, valid and documented criteria for making decision to review a notified change to the functional system, a procedure dedicated to revision of a notified change to the functional system, securing that the measurement and monitoring are properly applied, etc. Both sides enhance its system for management and oversight of the changes, where CA has implemented the system CADOC (Competent Authority Database for Oversight of Changes) and the service provider ANS CR has implemented the DB tool KIWI for automatic information exchange with CADOC. Continuous work for further development of both tools with close cooperation is ongoing.

The Airspace Charter of the Czech Republic provides both airspace users and other stakeholders with a dedicated procedure for Airspace changes as well as with sufficient procedures to deal with ASM at all three levels (strategic / pre-tactical / tactical).

Several workshops both internationally and nationally were held to arrange smooth transition to RP3 regulation environment. Both CA and services providers have developed implementation plans, including arrangement of sufficient resources for a necessary staff training. The transition plans were accomplished in 2019. In addition, there is a plan for restructuring of the Czech airspace, where the extension of the airspace class G will be carried out at the expense of the airspace class E with estimated implementation period until the middle of 2023. As well, the airspace designer function will be implemented in accordance with the Reg. (EU) 2020/469.

In this context, the change management process to manage the organisational, operational and technological changes associated with the planned technological improvements at services providers is under CAA CR close oversight and there have not been indicated any problems, which may lead to block or delay entry into service of any major airspace changes or to block or delay ATM system improvements during the RP3, so far.

SECTION 5: TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

5.1 - Traffic risk sharing parameters

- 5.1.1 Traffic risk sharing - En route charging zones
- 5.1.2 Traffic risk sharing - Terminal charging zones

5.2 - Capacity incentive schemes

- 5.2.1 - Capacity incentive scheme - Enroute
 - 5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute
 - 5.2.1.2 Rationale and justification - Enroute
- 5.2.2 - Capacity incentive scheme - Terminal
 - 5.2.2.1 Parameters for the calculation of financial advantages or disadvantages - Terminal
 - 5.2.2.2 Rationale and justification - Terminal

5.3 - Optional incentives

Annexes of relevance to this section

- ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING
- ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES
- ANNEX K. OPTIONAL INCENTIVE SCHEMES

5.1 - Traffic risk sharing

5.1.1 Traffic risk sharing - En route charging zones

Czech Republic			Traffic risk-sharing parameters adapted?		no	
			Service units lower than plan	Service units higher than plan		
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

5.1.2 Traffic risk sharing - Terminal charging zones

Czech Republic - TCZ			Traffic risk-sharing parameters adapted?		no	
			Service units lower than plan	Service units higher than plan		
	Dead band	Risk sharing band	% loss to be recovered	Max. charged if SUs 10% < plan	% additional revenue returned	Min. returned if SUs 10% > plan
Standard parameters	±2,00%	±10,0%	70,0%	5,6%	70,0%	5,6%

5.2 - Capacity incentive schemes

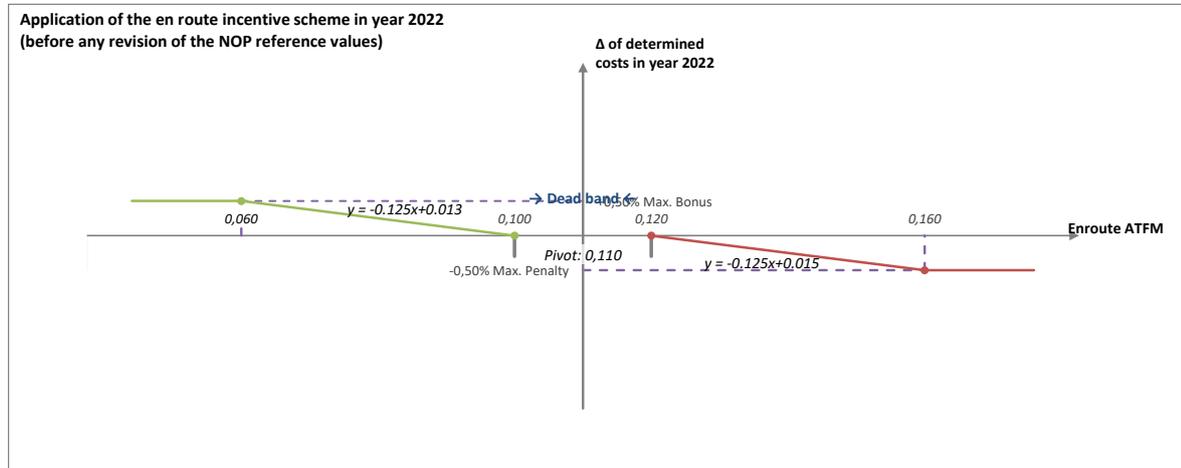
5.2.1 - Capacity incentive scheme - Enroute

5.2.1.1 Parameters for the calculation of financial advantages or disadvantages - Enroute

Enroute	Expressed in	Value
Dead band Δ	fraction of min	$\pm 0,010$ min
Max bonus ($\leq 2\%$)	% of DC	0,50%
Max penalty (\geq Max bonus)	% of DC	0,50%
The pivot values for RP3 are	fixed	

ANS CR

	2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)			0,11	0,11	0,11
Alert threshold (Δ Ref. value in fraction of min)			$\pm 0,050$	$\pm 0,050$	$\pm 0,050$
Performance Plan targets (mins of ATFM delay per flight)			0,11	0,11	0,11
Pivot values for RP3 (mins of ATFM delay per flight)			0,11	0,11	0,11
Financial advantages / disadvantages	Dead band range		[0.1-0.12]	[0.1-0.12]	[0.1-0.12]
	Bonus sliding range		[0.06-0.1]	[0.06-0.1]	[0.06-0.1]
	Penalty sliding range		[0.12-0.16]	[0.12-0.16]	[0.12-0.16]



5.2.1.2 Rationale and justification - Enroute

If the pivot values are different that the values in the NOP, explain rationale for the difference and method of calculation**

Not applicable.

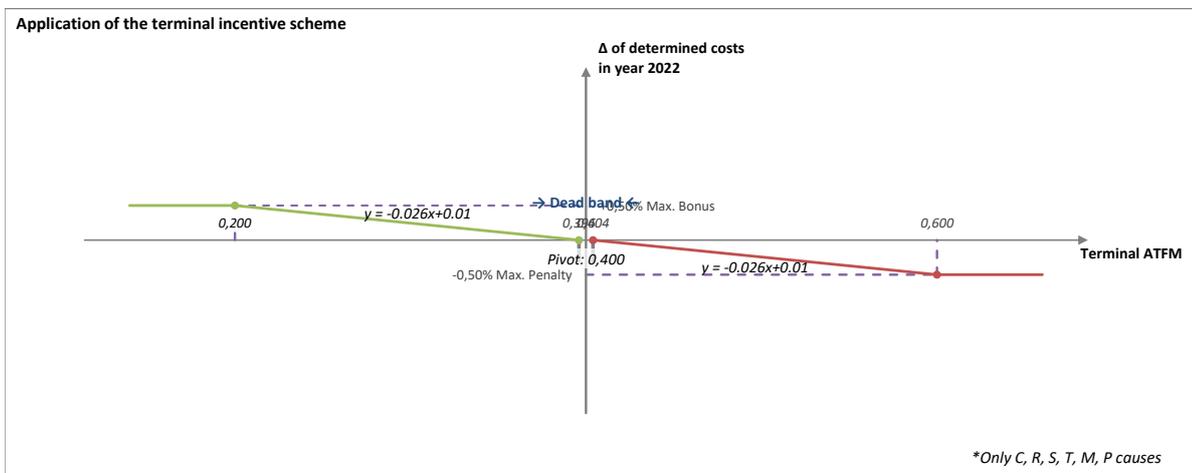
** Refer to Annex I, if necessary.

5.2.2 - Capacity incentive scheme - Terminal

5.2.2.1 Parameters for the calculation of financial advantages or disadvantages - Terminal

Terminal	Expressed in	Value
Dead band Δ	%	$\pm 1,0\%$
Bonus/penalty range (% of pivot value)	%	$\pm 50\%$
Max bonus	% of DC	0,50%
Max penalty	% of DC	0,50%
The pivot values for RP3 are	fixed	

	2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)			0,4	0,4	0,4
Bonus/penalty range Δ (in fraction of min)			$\pm 0,200$	$\pm 0,200$	$\pm 0,200$
Pivot values for RP3 (mins of ATFM delay per flight)			0,40	0,40	0,40
Financial advantages / disadvantages	Dead band range		[0.396-0.404]	[0.396-0.404]	[0.396-0.404]
	Bonus sliding range		[0.2-0.396]	[0.2-0.396]	[0.2-0.396]
	Penalty sliding range		[0.404-0.6]	[0.404-0.6]	[0.404-0.6]



5.2.2.2 Rationale and justification - Terminal

Explain how the bonus and penalties are going to be apportioned between the different terminal charging zones and ANSPs providing services in each of them**

Not applicable.

** Refer to Annex I, if necessary.

SECTION 6: IMPLEMENTATION OF THE PERFORMANCE PLAN

6.1 Monitoring of the implementation plan

6.2 Non-compliance with targets during the reference period

6 - IMPLEMENTATION OF THE PERFORMANCE PLAN

6.1 Monitoring of the implementation plan

Description of the processes put in place by the NSA to monitor the implementation of the Performance Plan including the yearly monitoring of all KPIs and PIs defined in Annex I of the Regulation and a description of the data sources

The NSA of the Czech Republic (NSA CZ) is the authority responsible for monitoring the performance targets at national and European level within the scope of the Performance plan. There shall be established processes for continuous oversight of all areas within the scope of the Performance plan of the Czech Republic for RP3. These processes contain procedures for data collection, data assessment and data validation. The monitoring at national level includes ANSP' business and annual plans, uncontrollable costs, reaching of alert thresholds (in accordance with Article 18, Reg. (EU) 2019/317) and other obligatory requirements determined within Annex VI, Reg. (EU) 2019/317 and other relevant legislation (especially Reg. (EU) 2017/373).

The monitoring of progress in achieving performance targets set in Reg. (EU) 2019/317 shall be performed by dedicated NSA CZ inspectors. The monitoring itself is carried out on a quarterly basis and relevant mechanisms/procedures are established, some of which are partly based on the monitoring procedures of RP2. The cooperation with neighbouring NSAs is already established and will be used accordingly if needed.

6.2 Non-compliance with targets during the reference period

Description of the processes put in place and measures to be applied by the NSA to address the situation where targets are not reached during the reference period

In case that a target is not met at national level, the NSA CZ shall identify potential issues, apply corrective measures designed to rectify the situation and subsequently inform the European Commission in accordance with Art. 37, Reg. (EU) 2019/317. Based on all the inputs from NSAs (SAF KPA), ANSPs (CEF KPA) with cooperation with Network Manager (CAP and ENV KPA), NSA CZ inspectors will prepare an Annual monitoring report for the Czech Republic and after approval will submit it to the European Commission via PRB until 1st June of every year of RP3 at the latest.

7 - ANNEXES

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)

ANNEX A.x - En route Charging Zone #x

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX B.x - Terminal Charging Zone #x

ANNEX C. CONSULTATION

ANNEX D. LOCAL TRAFFIC FORECASTS

ANNEX E. INVESTMENTS

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES

ANNEX J. OPTIONAL KPIs AND TARGETS

ANNEX K. OPTIONAL INCENTIVE SCHEMES

ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME

ANNEX M. COST ALLOCATION

ANNEX N. CROSS-BORDER INITIATIVES

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

ANNEX S. INTERDEPENDENCIES

ANNEX T. OTHER MATERIAL

ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE

ANNEX Z. CORRECTIVE MEASURES*

** Only as per Article 15(6) of the Regulation*

PRINT