Performance Plan

Czech Republic

Third Reference Period (2020-2024)

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CIVIL AVIATION AUTHORITY CZECH REPUBLIC

Draft RP3 Performance Plan for the Czech Republic

EXECUTIVE SUMMARY

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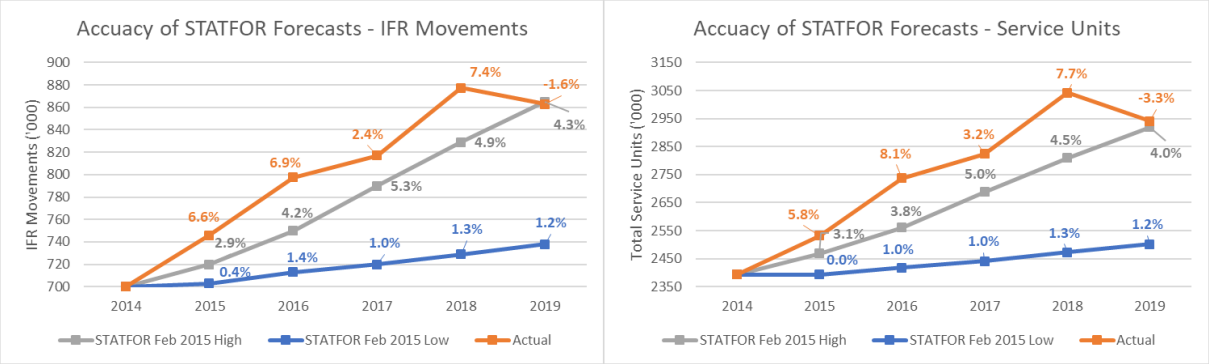
Draft RP3 Performance Plan of the Czech Republic
Executive Summary

Development in RP2 and response needed to deal with the new situation

The Czech Republic airspace has faced a strong increase of air traffic accompanied by an increase of operational complexity during the whole Reference Period (RP) 2 and the traffic figures foreseen in the latest STATFOR forecast available at the time of finalising RP2 Performance Plan were significantly exceeded already in the first year of RP2, with even higher traffic growth experienced in 2016-2018. Even though the Czech Republic has observed a traffic drop in 2019 since May, the revised estimate for 2019 still suggests that the traffic has grown at higher rate than the STATFOR high-traffic growth scenario available when RP2 performance plan was finalised.



Another trend that was observed is related to the development of traffic complexity which was already above average and continued to increase ranking the Czech Republic amongst the top 7-8 countries with the most complex airspace. The traffic complexity continues to increase, despite a traffic drop experienced since the end of April 2019 (see Annex for details).

Despite this development, the Czech Republic was able to mitigate any negative impact on airspace users and until summer 2018, the ATFM delays were negligible. The Czech Republic continued to meet or exceed all its performance targets. In order to deal with the high traffic increases experienced in RP2, however, ANS CR had to make a number of strategic decisions about reallocation of the planned resources in order to best fulfil the tasks given to it by the RP2 Performance Plan, in terms of safety, capacity, costs efficiency and environment. As a short-term response to the high traffic growth, the company decided to allocate the resources in a way which uses the unique competitive advantage related to its flexibility and which brings immediate effect. Efficient and flexible collective and individual staff agreements enabled the use of:

- maximum overtime hours; and
- flexible rostering system enabling the most effective use of available working time of operational personnel.

As a longer-term response to the situation, it was decided in 2016 to re-structure and optimise both the airspace architecture and the way of providing the services, and initiate the ‘ATS optimisation’ project. Preparation of the bulk of investments planned for RP2 continued, including the replacement project for the main Data Processing System (DPS), but the company had to re-consider its investment plan and adapt it according to this decision. This determined the resource allocation during the entire RP2. Using the available workforce at maximum possible level brought about high increase of overtime hours over their usual level (due to unexpected events on the side of individuals) on one hand side and lower investment and consequently lower depreciation costs on the other side. This decision resulted in sufficient capacity required to cope with the traffic levels by the Summer of 2018 with only negligible ATFM delays. The hourly capacity reached 187 flights in 2017, i.e. increased by +15.4% compared to the 2014 baseline which is almost a threefold increase compared to +5.6% increase of the hourly capacity assumed in the Performance Plan between 2014 and 2017 and it would be not possible without the strategic decision about reallocation of the resources.

The developments in 2018 confirmed that the strategic decisions made were correct. The annual growth of air traffic reached +7.4% and the traffic exceeded STATFOR forecast by +8.3%. Although, the traffic levels did not reach the +/-10% alert threshold, the capacity gap of surrounding FIRs followed by NM's '4ACCs' initiative brought an unforeseen shift in traffic flows and an additional increase in complexity within the FIR Prague. The complexity rose from 8.29 in 2017 (already above average) to 8.87 in 2018, lifting the value even higher above the EUROCONTROL average of 6.74.

Complexity within the FIR Prague	2014	2015	2016	2017*	2018*
ANS CR	7.92	8.37	8.73	8.29	8.87
YoY (%)	N/A	5.7%	4.3%	-5.0%	7.0%
European average	6.54	6.73	6.92	6.45	6.74
YoY (%)	N/A	2.9%	2.8%	-6.8%	4.5%
ANS CR / European average	**21.1%**	**24.4%**	**26.2%**	**28.5%**	**31.6%**
YoY (%)	**N/A**	**15.5%**	**7.3%**	**9.1%**	**10.8%**

* The methodology has changed in 2017 which caused a drop in the complexity while the overall complexity has not changed significantly in reality, see https://ansperformance.eu/data/ for details

Despite the ANS CR's efforts to implement measures for further increase of the capacity in 2018, this complexity development resulted in an actual drop of the hourly capacity, as calculated by the NM, from 187 in 2017 to 182 flights in 2018, while the peak 1-hour demand for summer 2018 was 195 flights (+12% more than forecasted for 2018 in the RP2 PP in terms of hourly traffic). This resulted in a significant increase of delays experienced in 2018. It is a clear evidence that all resources available for capacity and safe operations have been fully utilised. The insufficient capacity/delay situation was caused mainly by the traffic structure and complexity and Network Manager confirmed in the latest European Network Operations Plan 2019-2024 that the capacity gap may be expected in Prague ACC if traffic continues to fly on currents routes during the planning period. Although shifting to the shortest routes could cause a drop of traffic by -16%, NM confirmed at the Czech RP3 stakeholder consultations on 22 July 2019 that impact of shortest routes profile on traffic over the Czech Republic is historically around 12-20% and NM does not expect any significant change in the near future.

It is worth to emphasise that a large proportion of the delays in 2018 were caused by the ANS CR's participation in the NM's 4ACC initiative and helped to reduce the delay at the network level. This is also confirmed by an official letter from EUROCONTROL DG from 14 February 2019 stating that *"In overall terms, EUROCONTROL was very satisfied with the operational performance of ANS CR and your assistance to the network in 2018 and we thank you for that. Every effort to make Summer 2019 more efficient will be appreciated."* NM has recently officially confirmed that 92,000 minutes of delay in 2018 incurred due to 4ACC and should be reallocated during the post-ops adjustment process.

Development in 2019 and positive case of 'ATS optimisation' project under new circumstances

In the short-term, ANS CR had to deal with the unforeseen traffic developments through maximum overtime hours and flexible rostering system enabling the most effective use of available working time of operational personnel. The main issue was however related to the fact that the training system and the low success rate in the recent past were very limiting and ANS CR only managed to train sufficient number of licensed ATCOs to replace the retiring ATCOs and the ATCO pool was kept at constant levels (see Table 18 in Annex R). The main response in the longer-term was therefore an initiation of the 'ATS optimisation' project with the main goal 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. 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. The full project's concept, as well as significant benefits to airspace users, are fully described in Annex R.

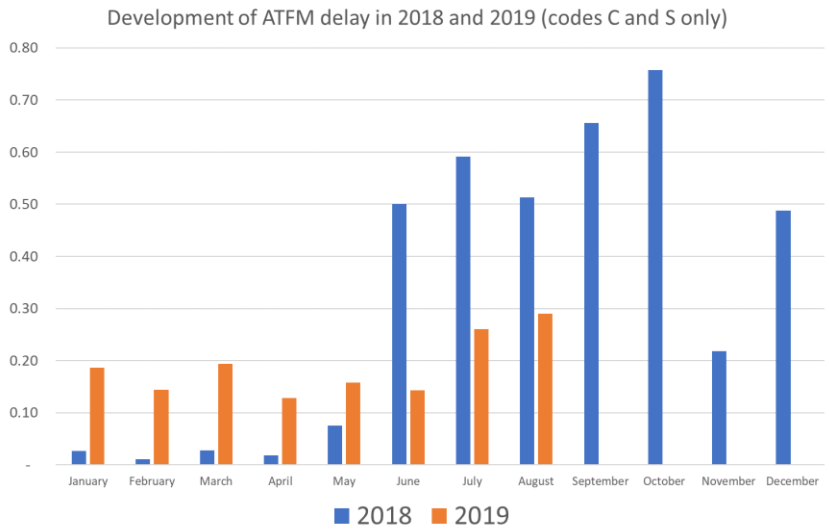
Originally, the business case for the 'ATS optimisation' project was however developed during a period of strong traffic increases experienced in January-April 2019 which were accompanied by ATFM delay not observed during the same period in the previous years. With application of the eNM measures at the end of April 2019, the situation has dramatically changed. The traffic has been decreasing since the end of April by around -3%, with service units dropping at almost double rates compared to the IFR movements. NM confirmed at the consultation that only around a half of this decrease can be attributed

to the eNM measures with the other half being due to other factors such as different route choices and current capacity constrains in Hungary. It is, at the moment, not clear which of the factors are only of a temporary nature and which ones represent structural changes in traffic that will continue into the near future. IATA has therefore challenged the assumptions used in the CBA, as well as the need for the 'ATS optimisation' project as such. IATA also invited the Czech Republic to update the CBA to make sure that the project makes economic sense even under the changed circumstances.

The business case was therefore updated taking into account the latest developments. The pessimistic scenario was re-developed using the latest estimate of the traffic in 2019 and assuming the low growth traffic increase rates from the February 2019 STATFOR medium-term forecast for years 2020-2024. This scenario was developed to show that the case is still positive even under such pessimistic assumptions. A number of other changes have been implemented in the CBA model which made the analysis even more conservative than in the previous versions of the business case.

The results show that despite high costs of the 'ATS optimisation' project, **the benefits for airspace users are significantly higher than the costs even for the pessimistic scenario taking into account developments in 2019 and there is a sufficient buffer to make sure that the case for the project is positive** (see Annex R for full details).

It needs to be emphasised that despite the observed traffic decreases starting in April 2019, Prague ACC continues to experience a capacity gap and the ATFM delay despite lower traffic. One of the reasons is that the airspace complexity in the Czech sectors and number of vertical movements in Praha ACC have further increased despite the traffic drop observed since April 2019. In addition, Prague ACC continues to experience unpredictability of weather and faces significant weather-related delay, which has also impact on capacity. The following figures shows that Prague ACC continues to generate 'ATC Capacity and Staffing'-related delays also in 2019 and confirms that the delay has been incurred also in the periods outside of the Summer season when there was no delay observed in the previous years.



The situation in 2019 therefore confirms that the decision of how to continue with resources allocation was correct and a more fundamental change is needed that is offered by the 'ATS optimisation' project.

Impact of the RP2 developments on investments

Although the investment plan in RP2 had to be modified and reallocation of resources was necessary, due to reasons described above, it enabled additional capacity required to cope with the traffic levels. Assessment included in Annex E shows that while implementation of the investment plan and allocation of resources changed compared to the RP2 Performance Plan, airspace users have benefited from this decision significantly. Over one million of delay minutes have been saved compared to the scenario in which the original plan was followed.

The main difference compared to the Performance Plan in terms of fulfilling the investment plan was related to the shift of the DPS replacement project. The original tender had to be cancelled, as none of the two bidders fulfilled all mandatory requirements, which caused a significant delay to the procurement. After the decision about initiation of the 'ATS optimisation' project, the requirements had

to be also revised to enable centralisation of the regional ATS units. The project's schedule was adjusted to make it realistic and the phases of the project were merged. Since the plan was to complete the first phase of the new DPS system and put it into operations only in 2019, airspace users have not paid for this investment as it was only planned to be included in the cost base through depreciation and cost of capital at the end of RP2. On the other hand, the delay in the project required additional investments required for to current DPS and other supporting ATM systems in order to comply with the latest regulatory requirements and increase their capacity until the effects of the 'ATS optimisation' and new DPS become available. This extended the lifetime of these systems and allow them to form a supporting/contingency system within the new DPS in course of RP3 and beyond.

Other required changes are described in Annex E.

Key features of the Draft Performance Plan for RP3

For all the reasons described above, the draft RP3 performance plan for the Czech Republic has been developed as a 'capacity-driven' response needed for dealing with the current situation and offers robust measures that will bring significant value to airspace users (as demonstrated in Annex E and Annex R). The plan includes investments into systems, procedures and operational staff that will result in closing the capacity gap that continues to be observed in ACC Prague despite the traffic drop since April 2019.

The 'ATS optimisation' project is in the heart of all measures for the necessary capacity increase delivering to airspace users:

- Airspace structure supporting the local traffic patterns and network requirements;
- Structure of operational personnel, which enables quick and effective ATCO training and licensing;
- Usage of existing personnel from regional airports.

The draft RP3 performance plan assumes that the traffic developments in 2019 are only temporary and it is expected that the traffic should resume to the levels previously forecasted by STATFOR Base scenario from February 2019. The records of NM as presented during the consultations (see details in Annex D) show that if the capacity gap in the neighbouring countries (notably in Karlsruhe ACC) is solved, there would be significantly more traffic using the Czech airspace and the demand would increase compared to today's situation. This is fully in line with our traffic forecasts and with evidence of past years. NM also confirmed that although the Czech Republic has historically experienced around 12-20% of traffic that would not be expected in the region if flights followed the shortest routes, NM does not expect any significant change in the near future. The assumptions for the traffic developments are therefore reasonable and IATA has also conditionally supported the assumptions that deviate from the STATFOR Feb 2019 base-case forecast for the years 2019 and 2020 and to return to using the base-case forecast as of 2021.

The draft RP3 performance plan offers:

- Sufficient capacity of the Czech airspace for coping with the expected demand;
- Price which supports fulfilment of wide-European targets while bringing sufficient resources for meeting the capacity targets;
- The highest levels of safety;
- Full implementation of Free Route Airspace contributing to fulfilling the environmental goals.

After the stakeholder consultations on 22 July 2019, the Czech Republic also decided to make several compromises which better reflect airspace users' expectations. The revised draft RP3 performance plan hereby submitted to the European Commission includes the following changes compared to the consulted version:

- The Czech Republic has revised its cost of capital rate and reduced the value for ANS CR from 6.5% to 5.57% (see details in Section 3 of Annex C.2 and Annex A.2). This decision reduced the cost base by around 200 million CZK throughout RP3. (see details in Annex A.2)
- The Czech Republic accepted the IATA's argument that modifying the investment plan in RP2 means that airspace users funded through the determined costs other investments than originally agreed and underinvestment could possibly mean double-charging. On the other hand, for the reasons explained above, ANS CR had to invest significantly higher resources into

overtimes in order to cope with much higher traffic growth with immediate effect and airspace users have benefited from this decision about reallocation of resources significantly through avoiding delays they would incur if this decision was not taken, as shown above. 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 around 84 million CZK evenly distributed throughout RP3. (see details in Annex E)

- The Czech Republic has also made other minor corrections in response to IATA's valid comments (e.g. correcting the lifetime for the radar investment). These corrections have slightly reduced the cost base further.

All these compromises have resulted in a combined reduction of the cost base compared to the draft performance plan submitted for stakeholder consultations that result in an average reduction of real-term DUC of -2.0 % over RP3, in line with the European-wide target of -1.9%.

En route charging zone	Baseline 2014	Baseline 2019	RP3 Performance Plan (determined 2020-2024)					CAGR	CAGR
Czech Republic	2014B	2019 B	2020 D	2021 D	2022 D	2023 D	2024 D	2014A-2024D	2019B-2024D
Total en route costs in nominal terms (in national currency)			3,882,664,881	4,118,963,438	4,315,849,366	4,279,664,286	4,260,694,987		
Total en route costs in real terms (in national currency at 2017 price	**2,896,988,238**	**3,495,035,910**	**3,724,161,694**	**3,889,960,363**	**4,025,107,229**	**3,928,173,958**	**3,862,022,981**		
YoY variation			6.6%	4.5%	3.5%	-2.4%	-1.7%		
Total en route Service Units (TSU)	2,367,133	2,892,889	3,119,052	3,345,215	3,418,410	3,481,725	3,543,040	4.1%	4.1%
YoY variation			7.8%	7.3%	2.2%	1.9%	1.8%		
Real en route unit costs (in national currency at 2017 prices)	**1,223.84**	**1,208.15**	**1,194.00**	**1,162.84**	**1,177.48**	**1,128.23**	**1,090.03**	**-1.2%**	**-2.0%**
YoY variation			-1.2%	-2.6%	1.3%	-4.2%	-3.4%		
Real en route unit costs (in EUR2017) [1]	**46.51**	**45.92**	**45.38**	**44.20**	**44.75**	**42.88**	**41.43**	**-1.151%**	**-2.037%**
YoY variation			-1.2%	-2.6%	1.3%	-4.2%	-3.4%		

Should the STATFOR forecast be revised in a way that the DUC would be not anymore in line with the EU-wide target of -1.9%, the Czech Republic believes that this would be a fully justifiable deviation from the planned Determined Costs for RP3 in accordance with Annex IV paragraph 1.4 point (d) of the Implementing Regulation (EU) 2019/317), as the project is required in order to:

> (i) allow the achievement of the performance targets in the key performance area of capacity set at national level provided that the deviation from the Union-wide determined unit cost trend is exclusively due to additional determined costs related to measures necessary to achieve the performance targets in the key performance area of capacity.

The Czech Republic would like to emphasise again that without major investments into systems, procedures and operational staff, ANS CR cannot guarantee service provision at requested level. The 'ATS optimisation' project is a key element to this. If the project is not implemented, the capacity gap already experienced in 2018 (which continues to be observed in 2019 despite traffic decrease) will increase substantially, and it can be expected that delays would increase significantly, as confirmed by the updated business case for the 'ATS optimisation' project. 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 the forecasted traffic growth and meet the capacity targets imposed during the RP3 period. All quick fixes were already implemented in RP2 and the proposed optimisation focuses on more strategic and fundamental changes to make services fit for the future and continued traffic growth.

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Signatories

Performance plan details	
State name	Czech Republic
Status of the Performance Plan	Draft performance plan (Article 12)
Date of issue	30.09.2019
Date of adoption of Draft Performance Plan	30.09.2019
Date of adoption of Final Performance Plan	

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	There are no additional comments

Document change record		
Version	Date	Reason for change
v1.0	01.07.2019	Draft for stakeholder consultations
v2.0	30.09.2019	Update after stakeholder consultations

SECTION 1: INTRODUCTION

1.1 The situation

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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

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

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. GmbH.
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

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

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

En-route charging zone 1	Czech Republic

Terminal	Number of terminal charging zones	1

Terminal charging zone 1	Czech Republic - TCZ

1.1.4 - Other general information relevant to the plan

There are no additional comments.

Additional comments
There are no additional comments.

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	2019	2020	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	817	877	866	919	973	994	1,013	1,032	3.6%
IFR movements (yearly variation in %)		7.4%	-1.2%	6.1%	5.8%	2.2%	1.9%	1.9%	
En route service units (thousands)	2,824	3,041	2,925	3,119	3,345	3,418	3,482	3,543	3.9%
En route service units (yearly variation in %)		7.7%	-3.8%	6.6%	7.3%	2.2%	1.9%	1.8%	

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

Developments in RP2

The Czech Republic experienced a high traffic growth rates in the recent years. The traffic in terms of IFR movements rose at +6.5% in 2015 and at +6.9% in 2016, and even though the traffic increase somewhat slowed down in 2017 (+2.4%), it again increased to +7.4% in 2018. This was combined with a significant increase of complexity (also because of unplanned participation in the NM's 4ACC initiative) which rose from 8.29 in 2017 (already above average) to 8.87 in 2018, lifting the value even higher above the EUROCONTROL average of 6.74 (see the development of the complexity factor and breakdown of traffic flows in Annex D). The year of 2019 started off with very high traffic increases compared to 2018 which suggested that 2019 will be another year of experiencing very high traffic growth, NM´s prediction for the traffic growth in 2019 was up to 5.9 %, without the eNM/S19 measures. The situation has however suddenly changed in May 2019 when the Czech Republic's traffic levels were hit heavily by the eNM measures which was accompanied by change in the route choices by airspace users. The traffic dropped by -3% in May, -2.8% in June, -3% in July and -3.2% in August 2019 in terms of IFR movements compared to the same periods in 2018, with service units dropping at almost double rates compared to the IFR movements. NM confirmed at the consultation that only around a half of this decrease can be attributed to the eNM measures with the other half being due to other factors such as different route choices and current capacity constrains in Hungary. It is at the moment not clear which of the factors are only of a temporary nature and which ones represent structural changes in traffic that will continue into the near future.

Two contradictory trends could be observed since the end of April 2019:
1) The airspace complexity in the Czech sectors and number of vertical movements in Praha ACC have further increased significantly despite the downturn of traffic.
2) The Czech Republic lost a great deal of horizontal traffic (overflights). The observed drop in the number of SUs is around twice as big than the drop in terms of IFR movements, while experiencing a rise in the complexity.

It needs to be emphasised that even though there is a traffic drop observed since the end of April 2019, the traffic has been still considerably higher in May-July compared to the situation in 2017, notably in terms of IFR movements. More details can be found in Annex D.

Following further communication with NM, it was confirmed that a significant shift of traffic was noted also through the Balkan area showing a choice from the airspace users. It was also confirmed that, as of May 2019, a general slow down of the traffic growth was recorded and the entire axis Bulgaria-Romania-Hungary-Slovakia-Czech Republic is recording similar traffic decreases. This is resulting from the choice of different routes (also because of the limited capacity of FIR Budapest) and from a general decrease of traffic to/from Middle East. However, there are factors that are expected to have only temporary effect: The Middle East is expected to gradually restore during Summer of 2019 and the Boeing Max issue is also a factor that is expected to be sorted out, now likely in 2020. In addition, the situation has freed up capacity in the Czech airspace and ANS CR is in continuous discussions with the NM to find the best solution for the network and use this available capacity.

The traffic developments have been consulted at the Czech RP3 Performance Plan stakeholder consultations on 22 July 2019 (see details in Annex D).

Baseline values

Taking into account all abovementioned factors and based on the developments in 2019 considering also consultations with the NM, the Czech Republic has decided to make its own internal estimate of the 2019 IFR movements and SUs taking into account the traffic drop observed since the end of April 2019.

The estimated number of IFR movements is 866 thousand and implies a traffic drop of -1.2% compared to 2018. This has been calculated based on the latest PRU data published at 'ansperformance.eu' portal which includes the actual data until August 2019 (incl.). See details in Annex D.

The baseline value for 2019 SUs has been estimated by the ANS CR's experts using the internal statistics and is based on the actual route flown (M3). The estimated value equals to 2,893 thousand SUs which implies 2,925 thousand SUs using the current methodology (M2). This is consistent with the data published at EUROCONTROL's SU dashboard. The updated baseline 2019 value implies a drop of -3.8% compared to 2018 and is considered the best available estimate of the traffic.

This estimate is seen as significantly more accurate than the latest STATFOR Medium-term Forecast from February 2019, as well as the Intermediate forecast from May 2019, which do not fully take into account the recent developments.

For more details see Annex D.

Traffic forecast for 2020-2024

Taking into account all abovementioned factors and consultations with NM, it is expected that the developments observed since April 2019 are only short-term. The Czech Republic believes that the traffic should resume to the levels previously forecasted by STATFOR. It was therefore decided to apply the STATFOR Base forecast FEB 2019 (Flight Plan 2017-19, Actual Route 2020-2024) from 2021 onwards. The number of SUs in 2020 is then calculated as an average between years 2019 and 2021 using the actual route flown method.

The local traffic forecast implies an average annual traffic growth of +4.1% over RP3. It needs to be re-emphasised that the average annual traffic growth in RP2 until 2018 (incl.) was +6.2% which +3.7% higher that the latest STATFOR Base MTF15 available when finalising the RP2 Performance Plan. And even if the traffic drop in 2019 is considered, the actual average annual traffic growth is expected to be +4.1% over the whole of RP2. The Czech Republic therefore considers the selected traffic forecast for its draft RP3 Performance Plan as reasonable and justifiable.

IATA in its response to the Czech Republic's draft RP3 performance plan submitted for stakeholder consultations (see Annex C) conditionally supported the proposal to deviate from the STATFOR base-case forecast for the years 2019 and 2020 and to return to using the base-case forecast as of 2021. IATA also invited the Czech Republic to review the traffic situation for summer 2019 before the submission of the final performance plan by end of September to ensure that the latest available data is taken into consideration. This has been done and the updated traffic forecast is described above.

For more details see Annex D.

Impact of uncertainties on ANS CR

It needs to be emphasised that this situation is extremely challenging in terms of resource planning. NM confirmed in its latest NOP that the capacity gap will continue until 2024 and the Czech Republic is investing significant effort and resources into closing this capacity gap, in close coordination with the NM, and is implementing measures such as the 'ATS Optimisation' project to solve the situation. This was also confirmed by NM at the RP3 stakeholder consultations on 22 July 2019 where NM welcomed planned capacity measures described in the draft PP for RP3 and noticed that impact of the 'ATS optimisation' project is not reflected in the latest NOP and should be further discussed with NM. NM expects that the new measures will allow achievement of sufficient capacity, at minimum for current routes profile till 2024 as NM does not expect any significant change in routing choices.

While ANS CR was ready to assist DFS and accepted without objections the measures imposed by NM in order to help the network (which was a number of times acknowledged and appreciated by the NM), the resulting effect is a significant drop of traffic and, at the same time, much higher vertical complexity as well as less route charges billed on behalf of the Czech Republic due to a significant drop of SUs from the re-routed long-haul traffic. While ANS CR strives to be as flexible as possible, this has a significant impact on the cashflow situation and financial position of ANS CR and makes planning very challenging and reduces availability of funds required to implement measures required to cope with the traffic in the long-term.

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	2019	2020	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	81.6	84.9	86.3	90.0	92.6	95.4	98.0	100.8	3.1%
IFR movements (yearly variation in %)		4.0%	1.7%	4.3%	2.9%	3.0%	2.7%	2.9%	
Terminal service units (thousands)	91.2	97.5	101.0	105.4	108.6	112.0	115.4	120.3	3.6%
Terminal service units (yearly variation in %)		6.9%	3.5%	4.4%	3.0%	3.1%	3.1%	4.2%	

Developments in RP2

Similarly as for en-route, the Czech Republic experienced high traffic growth rates at the regulated airports during RP2 and even though the traffic in terms of IFR movements dropped by -2.8% until the end of August 2019 compared with the same period in 2018 (according to PRU data at 'ansperformance.eu' portal), the service units continued to increase also in 2019.
Although the traffic has been reducing compared to 2018 in terms of IFR movements, the traffic in terms of SUs continues to increase. The traffic has been still considerably higher in May-August compared to the situation in 2017 both in terms of IFR movements as well as SUs.

For more details see Annex D.

Baseline 2019 values

Taking into account the developments in RP2 and notably in 2019, the Czech Republic has decided to make its own internal estimate of the 2019 IFR movements and SUs. This estimate is seen as significantly more accurate than the latest STATFOR Medium-term Forecast from February 2019, which does not fully take into account the recent developments.
The estimated number of IFR movements is 82.7 thousand and implies a traffic drop of -2.8% compared to 2018. This has been calculated based on the latest PRU data published at 'ansperformance.eu' portal which includes the actual data until August 2019 (incl.). The data for September till December have been estimated using the average % reduction of IFR flights observed in January-August 2019.
The baseline value for 2019 SUs has been estimated by the ANS CR's experts using the internal statistics. The estimated value equals to 101 thousand SUs and implies an increase of +3.5% compared to 2018 and is considered the best available estimate of the terminal traffic.

For more details see Annex D.

Traffic forecast for 2020-2024

Considering all abovementioned factors, the Czech Republic used a local forecast done by ANS CR's operational experts. These take into account the trends and developments in the recent years and in 2019 in terms of the traffic growth and its composition and take into account the development plans of the airports included in the terminal charging zone. The local traffic forecast implies an average annual traffic growth of +3.6% over RP3 which is marginally higher than +3.5% suggested by the February 2019 Medium-term STATFOR forecast. It needs to be re-emphasised that the average annual traffic growth in RP2 until 2018 (incl.) was +7.6% and even if the situation in 2019 is considered, the actual average annual traffic growth is expected to be +6.7% over the whole of RP2. The Czech Republic therefore considers the selected traffic forecast for its draft RP3 Performance Plan as reasonable and justifiable.

For more details see Annex D.

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
For full details please refer to Annex C

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	See Annex C.2 for detailed list of concerns and the Czech Republic's response IATA requested to review the local traffic numbers vs. STATFOR Base (for years 2021-2024) and provide additional justification for local traffic forecast. Section 1.2 and Annex D were updated as a result of the consultation with more details and additional justification provided.
Charging policy	Yes	See Annex C.2 for detailed list of concerns and the Czech Republic's response
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	See Annex C.2 for detailed list of concerns and the Czech Republic's response
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	See Annex C.2 for detailed list of concerns and the Czech Republic's response
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	See Annex C.2 for detailed list of concerns and the Czech Republic's response
Establishment or modification of charging zones	No	
Establishment of determined costs included in the cost base for charges	Yes	See Annex C.2 for detailed list of concerns and the Czech Republic's response IATA requested to: - revise the business case for 'ATS Optimisation' project taking into account the latest traffic developments - review and correct pension costs and applicable number of employees - provide planned number of ANSP staff per agreed categories - provide additional explanation of planned increase in staff costs in 2021 - provide underlying assumption for estimation of exempted VFR flights - provide clarification of higher NSA' depreciation costs in the first three years of RP3 As a result of the consultation, the business case for 'ATS Optimisation' project was updated taking into account the latest developments. The pessimistic scenario was re-developed using the latest estimate of the traffic in 2019 and assuming the low growth traffic increase rates from the February 2019 STATFOR medium-term forecast for years 2020-2024. This scenario was developed to show that the case is still positive even under such pessimistic assumptions. A number of other changes have been implemented in the CBA model which made the analysis even more conservative then in the previous versions of the business case. The business case is now included as a part of Annex R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS. Additional information has been included in Annex R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS
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	See Annex C.2 for detailed list of concerns and the Czech Republic's response IATA requested to: - provide additional transparency about investments development in RP2 and plan for RP3 - provide information about quantitative benefits and expected ramp-up for each investment planned for RP3 plus the new DPS system - provide quantitative benefits for other measures listed in Section 3.3.1.c. of draft PP for RP3 As a result of the consultation, Annex E has been completely redrafted with additional information provided.

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	ANS CR (ANS provider), CHMI (MET provider)
Dates of main meetings / correspondence	29 May 2019
Main issues discussed	Parcial inputs of these providers to the Czech Republic Performance Plan for RP3, validation of the proposed costs eligibility. Validation of the other inputs and its compliance with the EU wide targets and applicable legislations.
Actions agreed upon	No further actions have been agreed on.
Points of disagreement and reasons	Agreement has been reached in all discussed topics.
Final outcome of the consultation	Minutes of the meeting were signed by all participants.

Additional comments
There are no additional comments.

#2 - Airspace Users	
Stakeholder group composition	IATA, Lufthansa, LOT, EC, PRB, NM, PRB Support, proffessional staff representative bodies
Dates of main meetings / correspondence	22 July 2019
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
There were two additional consultations in March 2019 in Madrid and on 20 May 2019 in Brussels concerning the 'ATS optimisation' project. More details about the 'ATS optimisation' can be found in ANNEX R.

#3 - Professional staff representative bodies	
Stakeholder group composition	IATA, Lufthansa, LOT, EC, PRB, NM, PRB Support, proffessional staff representative bodies
Dates of main meetings / correspondence	22 July 2019
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	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

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	
Dates of main meetings / correspondence	
Main issues discussed	
Actions agreed upon	
Points of disagreement and reasons	
Final outcome of the consultation	

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 ≥ 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	3		
ICAO code	Airport name	Charging Zone	Additional information
LKTB	Brno Turany	Czech Republic - TCZ	Part of the Terminal charging zone 1 - Czech Republic - TCZ
LKMT	Ostrava	Czech Republic - TCZ	Part of the Terminal charging zone 1 - Czech Republic - TCZ
LKKV	Karlovy Vary	Czech Republic - TCZ	Part of the Terminal charging zone 1 - Czech Republic - TCZ

Additional comments
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. In addition, the Czech Republic decided to apply the provisions of the Regulation 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, as they are part of the common Terminal charging zone 1 - Czech Republic - TCZ. *Additional note: It should be noted that the voluntary inclusion of an airport in the scope of the Performance and Charging Regulation also entails that those airports are included as part of performance monitoring during the reference period, unless otherwise stated in Section 2 of Annex I. However, only ANSP' data can be used in case of the three regional airports as there are no other performance data available at this moment.*

1.5 - Services under market conditions

Number of services under market conditions	0

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

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	4

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value - in '000 €)	Value of the assets allocated to ANS in the scope of the PP (in '000 €)	**Determined costs** of investment (i.e. depreciation, cost of capital and cost of leasing) (in national currency - '000 CZK)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	MSSR	6,395	4,827	0	0	0	0	11,921	7	100%	0%	2024 - 2025
2	DPS – Data processing and presentation	38,527	38,527	65,185	159,588	258,243	405,598	478,157	4;7	86%	14%	2020 - 2025
3	DPS – New system – Development	15,504	15,504	0	0	17,122	34,566	50,993	7;8	85%	15%	2021 - 2024
4	Construction works at IATCC ATS room	7,950	7,950	0	3,230	8,878	12,098	18,156	15	79%	21%	2020 - 2024
Sub-total of **new major investments** above (1)		68,376	66,808	65,185	162,818	284,243	452,262	559,227				
Sub-total **other new investments** (2)		95,523	95,523	431,192	479,461	677,925	474,418	409,939				
Sub-total **existing investments** (3)				529,693	355,458	144,492	118,830	100,538				
Total new and existing investments (1) + (2) + (3)		163,899	162,331	1,026,070	997,737	1,106,660	1,045,510	1,069,704				

** 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	***MSSR***		Total value of the asset	***6,395,300 €***
Description of the asset	**- MSSR in location "PISEK"** replacement and additional new TAR in year 2023. Mode S secondary radar (MSSR) at PISEK hill with range of 160 NM is a second key element of the Czech surveillance infrastructure. Radar was installed in year 2004 in POEMS version (Pre-Operational European Mode S). The main processor and a part of software was upgraded to version CIRIUS in year 2014. Radar and RADOME replacement is scheduled for year 2023 when antenna, gearbox, TX/RX and all accessories will be 19 years old. MSSR antenna will be collocated with a new primary radar (80NM range). TAR/MSSR should be the master radar for TMA Prague. **- MSSR in location "BUKOP"** replacement in year 2024. Mode S secondary radar (MSSR) at BUKOP hill with range of 200 NM is a key element of the Czech surveillance infrastructure. The antenna and gearbox of the old radar was installed in year 1996 while the upgraded electronics components (TX/RX and processing) are from year 2011. Radar and RADOME replacement is scheduled for year 2024.			
The investment is mandated by a SES Regulation (i.e. PCP/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes	Regulation (EU) 2018/1139 Regulation (EU) 1207/2011		
Benefits for airspace users and results of the consultation of airspace users' representatives	Constant and sustainable high level of reliability and quality of surveillance information.			
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)			

Name of new major investment 2	***DPS – Data processing and presentation***		Total value of the asset	***38,527,100 €***
Description of the asset	**DPS – Data processing and presentation** investment is managed as a domain within ANS CR. Each domain contains individual sub-domains, and each sub-domain contains individual investment actions that form a functional system. The value of the investment includes the following elements: - Enhancements of legacy FDPS, implementation of new functionalities required by users, functionalities defined in the legally binding documents (EU regulations). - 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. - Supporting system capabilities for DCB/TCM functions provided by ATC/FMP Prague. - Further implementation and development on CDM functions as crucial part of LKPR CDM. - Development of Air-Ground data link functions in line with SJU activities. - New Releases and upgrade of workstations for IDP – support and backup radar system with FDP functionality – for ACC Praha, APP, TWR Praha, FIC Praha. - New Releases for IDP TR7 – main RDP system for APP and TWR regional airports. - New Releases for WALDO – ATS info system – for ACC Praha, ARO Praha, AMC, FMP, for all APP, TWR positions. - New functionality for CARD system, B2B ASM, B2B NMOC system. - Bypass radar system with independent tracker, servers and workstations for ACC and APP Praha. - New Backup radar system for Neopteryx sytem – servers, workstations, switches.			
The investment is mandated by a SES Regulation (i.e. PCP/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)		
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 2.1 - Family 2.1.3 - Basic A-CDM; 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 3	***DPS – New system – Development***		Total value of the asset	***15,503,900 €***
Description of the asset	**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 sub-domain covers the changes in the cooperating systems. 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.			
The investment is mandated by a SES Regulation (i.e. PCP/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): AF1, AF3, AF4, AF5, AF6. PCP allocates aprox. 30% of CAPEX.		
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 reference: AF1, AF3, AF4, AF5, AF. 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 4	***Construction works at IATCC ATS room***		Total value of the asset	***7,949,600 €***
Description of the asset	**Construction works at IATCC ATS room** - The investment is linked to the main system imlementation (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 succesful implementation of the 'ATS optimisation' project. More details can be found in Annex R.			
The investment is mandated by a SES Regulation (i.e. PCP/Interoperability)?	No			
Level of impact of the investment	Network	Please refer to Annex R.		
	Local	Please refer to Annex R.		
	Non-performance			
Quantitative impact per KPA	Safety	Please refer to Annex R.		
	Environment	Please refer to Annex R.		
	Capacity	Please refer to Annex R.		
	Cost Efficiency	Please refer to Annex R.		
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

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. Details about investments related to the 'ATS Optimisation' project are fully described in Annex R.

2.2 - Investments - CHMI

2.2.1 - Summary of investments

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value - in '000 €)	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 - '000 CZK)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sub-total of **new major investments** above (1)		0	0	0	0	0	0	0				
1	Replacement of AWOS at LKPR, LKKV, LKTB and LKMT	1,330	1,090	5,530	5,530	5,530	5,530	5,530	7	79%	21%	2020
2	Replacement of sensors at LKPR, LKKV, LKTB a LKMT	369	302	0	0	1,533	1,533	1,533		79%	21%	2022
Sub-total **other new investments** (2)		1,699	1,392	5,530	5,530	7,063	7,063	7,063				
Sub-total **existing investments** (3)				0	0	0	0	0				
Total new and existing investments (1) + (2) + (3)		1,699	1,392	5,530	5,530	7,063	7,063	7,063				

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

2.2.2 - Detail of new major investments

There are no new major investments planned for RP3.

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

2.2.3 - Other new and existing investments

Description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period	Other new investments: • Replacement of AWOS (Airport Weather Observing System) at airports LKPR, LKKV, LKTB and LKMT, planned date of entry into operation till 30/11/2020. Planned total value 29 mil. CZK without VAT (35 mil. CZK incl.21% VAT) • Replacement of sensors at airports LKPR, LKKV, LKTB a LKMT, planned date of entry into operation till 30/11/2020. Planned total value 8.0 mil. CZK without VAT (9.7 mil. CZK incl.21% VAT)

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

3.5 - 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 R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

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

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

		2020	2021	2022	2023	2024
ANS CR	Safety policy and objectives					C
	Safety risk management					D
	Safety assurance					C
	Safety promotion					C
	Safety culture					C
	Additional comments	The targets for 2024 have been set in accordance with the COMMISSION IMPLEMENTING DECISION (EU) 2019/903 of 29 May 2019. Due to the fact that EASA's acceptance means of compliance (AMC) and guidance material for local targets (GM) are still only available as drafts, the targets for years 2020-2023 will be set once the final material is available.				

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. Local safety performance targets respect the COMMISSION IMPLEMENTING DECISION (EU) 2019/903 of 29 May 2019.

c) Main measures put in place to achieve the safety performance 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. The safety processes meet the high standards and it is expected that the Czech Republic will be able to meet the European targets in the safety domain without difficulties. The processes will continue to develop to enable meeting and exceeding the expectations.

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 (confidentionality 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. 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.

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

3.2 - Environment targets

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

a) National environment performance targets

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National reference values	2.26%	2.21%	2.16%	2.16%	2.16%
National targets	2.26%	2.21%	2.16%	2.16%	2.16%

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

The Czech Republic decided to adopt the local reference values as its environment targets for the horizontal en route flight efficiency (KEA), there is therefore no inconsistency between national targets and national reference values.

It needs to be however noted that with the plan to achieve the 24/7 cross-border FRA within the RP3, ANS CR will have limited scope for additional significant improvement of the horizontal en route flight efficiency.This will mostly depend on other factors outside of the ANSP's control such as:
• Airspace users' decision making and route choices: 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 unpredictable changes in traffic flows, impacting both capacity and environment indicators.

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

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

Main measures put in place to achieve the environment performance targets are:
• Implementation of FRA within the FIR Prague which is planned for Q1 2021. The introduction of the FRA into the current airspace architecture will be for a transitional period with restrictions that can be unblocked after the introduction of the new sectorisation. The decision on joining other cross-border FRA airspace blocks, such as SEEN FRA or SESCI FRA, has been not made yet.
• 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 alongisde 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 known.
• Active coordination with MIL in the ASM area.
• 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. More details about the 'ATS Optimisation' project can be found in Annex R.

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

3.3 - Capacity targets

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

a) National capacity performance targets

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National reference values	0.20	0.20	0.14	0.12	0.12

National targets	0.20	0.20	0.14	0.12	0.12
Additional comments	The Czech Republic decided to modulate the pivot values for calculation of the capacity incentive scheme. In order to account for significant and unforeseen changes in traffic, the pivot value for year n is the reference value from the November release of year n-1 of the NOP. The Czech Republic also decided to limit the incentive to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. The main reason is increasing impact of weather disruptions which are out of control of the ANS CR. Details can be found in Section 5.2.1.				

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.

However, it needs to be noted that due to reasons that are fully described in Section 1.2 'Traffic forecasts', there is currently a capacity gap in the Prague ACC. This capacity gap is a result of very high traffic growth in RP2 combined with complexity increase and is also recognised in the latest European Network Operation Plan 2019-2024 published in June 2019, where Prague ACC is presented as one of 19 ACCs expected to generate delays at higher levels than the network capacity requirements. For the full details regarding traffic and capacity development in RP2, please refer to Annex D. 'LOCAL TRAFFIC FORECASTS'.

As a short-term response to the traffic developments experienced in RP2, ANS CR had to allocate the resources in a way which uses the unique competitive advantage and brings immediate effect. Efficient and flexible collective and individual staff agreements enabled to use:
• maximum overtime hours and
• flexible rostering system enabling the most effective use of available working time of operational personnel.

As a longer-term response to the situation, it was decided in 2016 to re-structure and optimise both the airspace architecture and the way of providing the services, and initiated the 'ATS optimisation' project. Together with the introduction of a new ATM system, the project is part of a wider list of ATM development activities and measures needed to deal with the future challenges and bring the level of en-route delays back to its economical optimum in line with the National reference values for RP3. The 'ATS optimisation' project is fully described (together with assessment of its benefits to users) in Annex R.

The latest European Network Operations Plan 2019-2024 (ENOP) foresees that the structural lack of capacity might be anticipated for Prague ACC until 2024, especially based on the current routes scenario. The forecasted delay is between 0.81-0.86 min/flight in 2019-2020 (compared to the reference values of 0.10 min/flight in 2019 and 0.20 min/flight in 2020) and around 0.94-1.28 min/flight in 2021-2024 (compared to the reference values of 0.20-0.12 min/flight). At the Czech RP3 stakeholder consultations on 22 July 2019 Network Manager welcomed planned capacity measures described in the draft PP for RP3 and noticed that impact of the 'ATS optimisation' project is not reflected in the latest ENOP and should be further discussed with NM. NM expects that the new measures will allow achievement of sufficient capacity, at minimum for current routes profile till 2024 as NM does not expect any significant change in routing choices. This is consistent with the assumptions used in the draft performance plan. It offers sufficient capacity of the Czech airspace for coping with the expected demand and proposes adopting the national reference values as targets provided that 'ATS optimisation' project is implemented.

In any case, it needs to be emphasized that meeting the expected performance and the National reference values for en-route ATFM delay per flight also depends on factors which are not under direct control of local ANSP. These are mainly:

• Continuous traffic growth: in terms of volume but also in terms of complexity. It needs to be re-emphasised that the average annual traffic growth in terms of IFR movements in RP2 until 2018 (incl.) was +5.8% and even if the traffic drop in 2019 is considered, the actual average annual traffic growth is expected to be +4.3% over the whole of RP2 which +1.5% higher that the latest STATFOR Base MTF15 available when finalising the RP2 Performance Plan. In combination with the significant increase of traffic complexity, this resulted in the current capacity gap and similar developments in RP3 could also impact on the actual performance.

• Airspace users' decision-making: due to the fact that airspace users tend to plan the most efficient routes from a cost point of view, there is still a significant difference between the shortest routes available and the routes actually flown by the airspace users. In 2018, for the Czech airspace, the difference between the actual demand and the demand on the shortest available routes was of approximately 16%, as indicated in the latest edition of the ENOP. At the Czech RP3 stakeholder consultations on 22 July 2019, NM confirmed that impact of shortest routes profile on traffic over the Czech Republic has been historically around 12-20% and NM does not expect any significant change in the near future.

• NM measures: it needs to be emphasised that joining the 4ACC initiative 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. At the moment, it is still not clear which NM's measures will be put in operations in RP3.

• Weather: it is expected that recent trend of increasingly frequent disruptive weather will continue to further impact the performance and consequently the capacity in a noteworthy way; disruptions in surrounding FIRs need to be considered due to unpredictable re-routing of traffic through the Czech airspace.

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

The main measure put in place to achieve the target for en-route ATFM delay per flight 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. 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 needed to deal with the future challenges. The planned measures include:

• ASM tool (equiv. to LARA); 2019;
• Improved ATS route network; 2019;
• Improved flow and capacity management techniques, including STAM; 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; 2019-2020 and 2023-2024;
• Reconstruction of the OPS room and implementation of the new ATM system (TopSky); 2021-2022;
• Full FRA implementation; 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).

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

It needs to be emphasised that despite the observed traffic decreases starting in April 2019, Prague ACC continues to experience a capacity gap and the ATFM delay despite lower traffic. One of the reasons is that the airspace complexity in the Czech sectors and number of vertical movements in Praha ACC have further increased despite the traffic drop observed since April 2019. Prague ACC continues to generate 'ATC Capacity and Staffing'-related delays also in 2019 and confirms that the delay has been incurred also in the periods outside of the Summer season when there was no delay observed in the previous years. In addition, Prague ACC continues to experience unpredictability of weather and faces significant weather-related delay, which has also impact on capacity.

The situation in 2019 therefore confirms 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. 'ATS optimisation' project is a key element to this. If the project is not implemented, the capacity gap already experienced in 2018 (which continues to be observed in 2019 despite traffic decrease) will increase substantially, and it can be expected that delays would increase significantly, as confirmed by the updated business case. 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 the forecasted traffic growth and meet the capacity targets imposed during the RP3 period.

The business case for the project was updated taking into account the latest developments and the results show that despite high costs of the 'ATS optimisation' project, the benefits for airspace users are significantly higher than the costs even for the pessimistic scenario taking into account developments in 2019 and there is a sufficient buffer to make sure that the case for the project is positive.

Full details about the 'ATS optimisation' project can be found in ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS.

The Czech Republic has also done an assessment of the combined impact of all measures on the capacity KPA using the methodology for delay estimation described in Section 4.5.1 of Annex R.1 JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS: Business case for 'ATS Optimisation Project'. This assessment shows that implementation of the RP3 investment plan together with the additional ATCOs enabled by implementation of the 'ATS optimisation' project, if compared to a scenario with keeping the capacity at the current levels, will enable saving of 3.5 million of delay minutes representing a benefit of around €300m (undiscounted), using the value of €78 per minute, the same value as recently used by SJU in the Airspace Architecture Study done for the European Commission.

For full details see Annex E. Investments.

d) ATCO planning

	Actual	Planning					
Prague (LKAA ACC)	2018	2019	2020	2021	2022	2023	2024
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)		18	21	12	14	21	15
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)		4	2	3	4	2	3
Number of ATCOs in OPS planned to be operational **at year-end (FTEs)**	93	107	126	135	145	164	176

Additional comments
More details about the planned ATCO development and additional measures can be found in Annex R.

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

a) National capacity performance targets

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National targets	0.37	0.37	0.37	0.37	0.37
Additional comments	The National targets for terminal and airport ANS ATFM arrival delay per flight follow the set targets from the last years of RP2. The Czech Republic decided to modulate the pivot values for calculation of the capacity incentive scheme and limit the incentive to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. The main reason is increasing impact of weather disruptions which are out of control of the ANS CR. Details can be found in Section 5.2.2.				

Airport level	***LKPR-Prague/Ruzyne***	0.40	0.40	0.40	0.40	0.40
	Airport contribution to national targets	LKPR - Prague Ruzyne is the only expected contributor to national targets.				
	LKTB-Brno Turany	0.10	0.10	0.10	0.10	0.10
	Airport contribution to national targets	LKTB - Brno Turany is not expected to produce terminal and airport ANS ATFM arrival delay / contribute to national targets. The target was however set to take into account also potential delay caused by weather and other causes beyond ANS CR's control.				
	LKMT-Ostrava	0.10	0.10	0.10	0.10	0.10
	Airport contribution to national targets	LKMT - Ostrava is not expected to produce terminal and airport ANS ATFM arrival delay / contribute to national targets. The target was however set to take into account also potential delay caused by weather and other causes beyond ANS CR's control.				
	LKKV-Karlovy Vary	0.10	0.10	0.10	0.10	0.10
	Airport contribution to national targets	LKKV - Karlovy Vary is not expected to produce terminal and airport ANS ATFM arrival delay / contribute to national targets. The target was however set to take into account also potential delay caused by weather and other causes beyond ANS CR's control.				

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.

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 in 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 to establish an APOC process and the related AOP to address and improve the Airport Capacity and Performance (ACAP) area.

With respect to actual runway configuration at Prague airport, a significant increase of the airport capacity is expected after the third reference period when the construction of a parallel runway at Prague airport is expected to be finished, more information is provided in LSSIP. A number of maintenance and construction works with impact on RWY operations are planned for 2020/2021. These are reflected in the level of National targets for these years.

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

Additionally, the splitting the ATCO pool into those having either TWR or APP licence (previously, all terminal ATCOs were cross licensed for both APP and TWR services) is expected to increase the training efficiency of the TWR controllers.

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) Baseline value for the determined costs and the determined unit costs (in real terms and in national currency)

b) Cost-efficiency performance targets

c) Description and justification of the methodology used to estimate the baseline values

d) Justification for the level of the baseline value for the determined costs in comparison with the latest available actual costs

e) Description and justification of the consistency between local and Union-wide cost-efficiency targets

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

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

Terminal Charging Zone #x

a) Baseline value for the determined costs and the determined unit costs (in real terms and in national currency)

b) Cost-efficiency performance targets

c) Description and justification of the methodology used to estimate the baseline values

d) Justification for the level of the baseline value for the determined costs in comparison with the latest available actual costs

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

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

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

Annexes of relevance to this section

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

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

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 beyong 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) Baseline value for the determined costs and the determined unit costs (in real terms and in national currency)

2019 baseline value for the determined costs (in real terms and in national currency)	3,495,035,910
2019 latest available service units forecast (actual route flown, see point 1.2 of Annex VIII)	**2,908,999**
2019 baseline value for the determined unit costs (in real terms and in national currency)	**1,201.46**

b) Cost-efficiency performance targets

En route charging zone / **Czech Republic**	**Baseline 2014** / **2014B**	**Baseline 2019** / **2019 B**	**RP3 Performance Plan (determined 2020-2024)** / **2020 D**	**2021 D**	**2022 D**	**2023 D**	**2024 D**	**CAGR** / **2014A-2024D**	**CAGR** / **2019B-2024D**
Total en route costs in nominal terms (in national currency)			3,882,664,881	4,118,963,438	4,315,849,366	4,279,664,286	4,260,694,987		
Total en route costs in real terms (in national currency at 2017 prices)	**2,896,988,238**	**3,495,035,910**	**3,724,161,694**	**3,889,960,363**	**4,025,107,229**	**3,928,173,958**	**3,862,022,981**		
YoY variation			6.6%	4.5%	3.5%	-2.4%	-1.7%		
Total en route Service Units (TSU)	2,367,133	2,892,889	3,119,052	3,345,215	3,418,410	3,481,725	3,543,040	4.12%	4.14%
YoY variation			7.8%	7.3%	2.2%	1.9%	1.8%		
Real en route unit costs (in national currency at 2017 prices)	**1,223.84**	**1,208.15**	**1,194.00**	**1,162.84**	**1,177.48**	**1,128.23**	**1,090.03**	**-1.15%**	**-2.04%**
YoY variation			-1.2%	-2.6%	1.3%	-4.2%	-3.4%		
Real en route unit costs (in EUR2017) 1	**46.51**	**45.92**	**45.38**	**44.20**	**44.75**	**42.88**	**41.43**	**-1.15%**	**-2.04%**
YoY variation			-1.2%	-2.6%	1.3%	-4.2%	-3.4%		

National currency	**CZK**
1 Average exchange rate 2017 (1 EUR=)	**26.3115**

c) Description and justification of the methodology used to estimate the baseline values

The baseline value in 2019 represents the budget for the year 2019 approved by the ANS CR's Supervisory Board, which includes state representatives of the Ministry of Transport and Ministry of Defence & Armed Forces; and it is the best available estimate of the actual costs.

d) Justification for the level of the baseline value for the determined costs in comparison with the latest available actual costs

There is no difference between the 2019 baseline and the latest available actual costs.

e) Description and justification of the consistency between local and Union-wide cost-efficiency targets

For additional information on the planned development of costs in RP3 please refer to Annex A.2 as well as Annex C.2.

For all the reasons described in detail in Annex D, the draft RP3 performance plan for the Czech Republic has been developed as a 'capacity-driven' response needed for dealing with the current situation and offers robust measures that will bring significant value to airspace users (as demonstrated in Annex E and Annex R). The plan includes investments into systems, procedures and operational staff that will result in closing the capacity gap that continues to be observed in ACC Prague despite the traffic drop since April 2019. The 'ATS optimisation' project is in the heart of all measures for the necessary capacity increase delivering to airspace users:

- Airspace structure supporting the local traffic patterns and network requirements;
- Structure of operational personnel, which enables quick and effective ATCO training and licensing;
- Usage of existing personnel from regional airports.

The draft RP3 performance plan assumes that the traffic developments in 2019 are only temporary and it is expected that the traffic should resume to the levels previously forecasted by STATFOR Base scenario from February 2019. The updated business case for the 'ATS optimisation' project however clearly shows that the case would be positive even under the pessimistic scenario applying the low traffic growth rates to the latest estimate of 2019 traffic.

The draft RP3 performance plan offers:

- Sufficient capacity of the Czech airspace for coping with the expected demand;
- Price which supports fulfilment of wide-European targets while bringing sufficient resources for meeting the capacity targets;
- The highest levels of safety;
- Full implementation of Free Route Airspace contributing to fulfilling the environmental goals.

After the stakeholder consultations on 22 July 2019, the Czech Republic also decided to make several compromises which better reflect airspace users' expectations. The revised draft RP3 performance plan hereby submitted to the European Commission includes the following changes compared to the consulted version:

- The Czech Republic has revised its cost of capital rate and reduced the value for ANS CR from 6.5% to 5.57% (see details in Section 3 of Annex C.2 and Annex A.2). This decision reduced the cost base by around 200 million CZK throughout RP3. (see details in Annex A.2)

• The Czech Republic accepted the IATA's argument that modifying the investment plan in RP2 means that airspace users funded through the determined costs other investments than originally agreed and underinvestment could possibly mean double-charging. On the other hand, for the reasons explained above, ANS CR had to invest significantly higher resources into overtimes in order to cope with much higher traffic growth with immediate effect and airspace users have benefited from this decision about reallocation of resources significantly through avoiding delays they would incur if this decision was not taken, as shown above. 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 around 84 million CZK evenly distributed throughout RP3. (see details in Annex E)
• The Czech Republic has also made other minor corrections in response to IATA's valid comments (e.g. correcting the lifetime for the radar investment). These corrections have slightly reduced the cost base further.
• The Czech Republic has updated the Eurocontrol costs based on the new figures made available after the stakeholder consultation.

All these compromises have resulted in a combined reduction of the cost base compared to the draft performance plan submitted for stakeholder consultations that result in an average reduction of real-term DUC of -2.0 % over RP3, in line with the European-wide target of -1.9%. Should the STATFOR forecast be revised in a way that the DUC would be not anymore in line with the EU-wide target of -1.9%, the Czech Republic believes that this would be a fully justifiable deviation from the planned Determined Costs for RP3 in accordance with Annex IV paragraph 1.4 point (d) of the Implementing Regulation (EU) 2019/317), as the project is required in order to:
(i) allow the achievement of the performance targets in the key performance area of capacity set at national level provided that the deviation from the Union-wide determined unit cost trend is exclusively due to additional determined costs related to measures necessary to achieve the performance targets in the key performance area of capacity.

The Czech Republic would like to emphasise again that without major investments into systems, procedures and operational staff, ANS CR cannot guarantee the service provision at requested level. 'ATS optimisation' project is a key element to this. If the project is not implemented, the capacity gap already experienced in 2018 (which continues to be observed in 2019 despite traffic decrease) will increase substantially, and it can be expected that delays would increase significantly, as confirmed by the updated business case. 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 the forecasted traffic growth and meet the capacity targets imposed during the RP3 period. All quick fixes were already implemented in RP2 and the proposed optimisation focuses on more strategic and fundamental changes to make services fit for the future and continued traffic growth.

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

The ANS CR keeps a strict cost-containment measure in place since the RP1 (and even before). The approach for RP3 is performance driven and remains based on:
• Flexible salary scheme for operational personnel that allows covering short-time changes in traffic levels;
• Flexible budgeting that allows diverting of necessary resources to an increase of the capacity while reducing other costs;
• Recruitment of operational staff in order to reduce an overtime work;
• Active participation in common FAB CE projects with positive CBAs;
• Gradual implementation of English-working environment in order to attract foreign staff (again to reduce overtimes).

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

Terminal Charging Zone #1 - Czech Republic - TCZ

a) Baseline value for the determined costs and the determined unit costs (in real terms and in national currency)

2019 baseline value for the determined costs (in real terms and in national currency)	677,618,238
2019 latest available terminal service units forecast	101,000
2019 baseline value for the determined unit costs (in real terms and in national currency)	**6,709.09**

b) Cost-efficiency performance targets

Terminal charging zone	**Baseline 2019**	**RP3 Performance Plan (determined 2020-2024)**					**CAGR**
Czech Republic - TCZ	**2019 B**	**2020 D**	**2021 D**	**2022 D**	**2023 D**	**2024 D**	**2019B-2024D**
Total terminal costs in nominal terms (in national currency)		763,051,000	816,977,600	828,752,000	868,582,000	877,077,900	
Total terminal costs in real terms (in national currency at 2017 prices)	**677,618,238**	**728,723,996**	**768,902,695**	**767,784,222**	**794,287,902**	**789,620,769**	**3.1%**
YoY variation		7.5%	5.5%	-0.1%	3.5%	-0.6%	
Total terminal Service Units (TNSU)	101,000	105,444	108,607	111,974	115,445	120,294	3.6%
YoY variation		4.4%	3.0%	3.1%	3.1%	4.2%	
Real terminal unit costs (in national currency at 2017 prices)	**6,709.09**	**6,911.00**	**7,079.68**	**6,856.81**	**6,880.23**	**6,564.09**	**-0.4%**
YoY variation		3.0%	2.4%	-3.1%	0.3%	-4.6%	
Real terminal unit costs (in EUR2017) 1	**254.99**	**262.66**	**269.07**	**260.60**	**261.49**	**249.48**	**-0.4%**
YoY variation		3.0%	2.4%	-3.1%	0.3%	-4.6%	

National currency	**CZK**
1 Average exchange rate 2017 (1 EUR=)	**26.3115**

c) Description and justification of the methodology used to estimate the baseline values

The baseline value in 2019 represents the budget for the year 2019 approved by the ANS CR's Supervisory Board, which includes state representatives of the Ministry of Transport and Ministry of Defence & Armed Forces; and it is the best available estimate of the actual costs.

d) Justification for the level of the baseline value for the determined costs in comparison with the latest available actual costs

There is no difference between the 2019 baseline and the latest available actual costs.

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

Not applicable.

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

For additional information on the planned development of costs in RP3 please refer to Annex B.2 as well as Annex C.2.

The ANS CR keeps a strict cost-containment measure in place since the RP1 (and even before). The approach for RP3 is performance driven and remains based on:

- Flexible salary scheme for operational personnel that allows covering short-time changes in traffic levels;
- Flexible budgeting that allows diverting of necessary resources to an increase of the capacity while reducing other costs;
- Recruitment of operational staff in order to reduce an overtime work;
- Active participation in common FAB CE projects with positive CBAs;
- Gradual implementation of English-working environment in order to attract foreign staff (again to reduce overtimes).

Note that after the stakeholder consultations on 22 July 2019, the Czech Republic also decided to make several compromises which better reflect airspace users' expectations. The revised draft RP3 performance plan hereby submitted to the European Commission includes a revised its cost of capital rate reduced down from 6.5% to 5.57% (see details in Section 3 of Annex C.2 and Annex B.2).
The Czech Republic's intention is to not 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.

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	2022D	2023D	2024D
Total pension costs	409,387	452,407	479,386	504,747	533,303
En-route activity	309,522	342,441	362,998	382,299	404,052
Terminal activity	92,455	102,287	108,428	114,193	120,691
Other activities	7,410	7,679	7,960	8,255	8,560

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	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	2,097,736	2,334,471	2,402,624	2,381,146	2,451,319
Employer % contribution rate to this scheme	25	25	25	25	25
Total pension costs in respect of this scheme	**351,115**	**386,862**	**411,897**	**438,087**	**464,716**
Number of employees the employer contributes for in this scheme	1,079	1,105	1,113	1,132	1,145

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 annual wage.

For additional explanations see answer to question 6 in Annex C.2.

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 25 % 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 6 % increase year on year. However the current developments in the national economy result in increasing higher than the planned 6 %. This will affect the increasing of social security contributions and total personnel costs.

For additional explanations see answer to question 6 in Annex C.2.

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	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	1,942,400	2,184,833	2,249,633	2,222,000	2,286,233
Employer % contribution rate to this scheme	3	3	3	3	3
Total pension costs in respect of this scheme	**58,272**	**65,545**	**67,489**	**66,660**	**68,587**
Number of employees the employer contributes for in this scheme	790	802	814	826	838

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. ANS CR provides a defined contribution occupational scheme to all employees. ANS CR contributes to employees' additional pension insurance based on signed collective agreements. These pension funds are managed by third parties, with the amount of contributions defined by the provisions in the collective agreement.

For additional explanations see answer to question 6 in Annex C.2.

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 fulfills the conditions set in employer's directive. The employer's contribution amounts to 3 % of the employee's monthly gross wage per month. For additional explanations see answer to question 6 in Annex C.2.

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	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies					
Employer % contribution rate to this scheme					
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
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	Select

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

Other loans	2020D	2021D	2022D	2023D	2024D
Description	Not applicable as no loan is currently planned for RP3. This decision might be revisited once there is a need for more resources to fund the closure of the capacity gap and meet the regulatory requirements stemming from SESAR and other European initiatives, such as the European Airspace Architecture Study.				
Remaining balance					
Average weighted interest rate %	-	-	-	-	-
Interest amount					

Total loans	2020D	2021D	2022D	2023D	2024D
Total remaining balance	0	0	0	0	0
Average weighted interest rate %	-	-	-	-	-
Interest amount	0	0	0	0	0

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	
Czech Republic					

3.4.5.2 Restructuring costs planned for RP3

Restructuring costs foreseen for RP3?	No
If yes, number of charging zones concerned	1

Additional comments
The Czech Republic is in the process of implementing an 'ATS optimisation' project. This project was originally considered as a restructuring project as it fully meets the criteria defined under both bullet (i) and (ii) for a justifiable deviation from the planned Determined Costs for RP3 in accordance with Annex IV paragraph 1.4 point (d) of the Implementing Regulation (EU) 2019/317), as the project is required in order to: (i) allow the achievement of the performance targets in the key performance area of capacity set at national level provided that the deviation from the Union-wide determined unit cost trend is exclusively due to additional determined costs related to measures necessary to achieve the performance targets in the key performance area of capacity; (ii) implement restructuring measures that lead to restructuring costs referred to in Article 2(18), provided that the deviation is exclusively due to those restructuring costs and that a demonstration is provided in the performance plan that the restructuring measures concerned will deliver a net financial benefit to airspace users at the latest in the subsequent reference period. The Czech Republic requested an application of the restructuring mechanism also for the costs incurred in 2018-2019 related to this project. The consultations with IATA and initial response of the European Commission suggested that the users and EC do not agree with application of the restructuring mechanism to RP2 costs as "restructuring costs incurred before the approval of an application by the Commission cannot be recouped through charges". Although the Czech Republic does not agree with this interpretation of the regulatory requirements stemming from Regulation (EU) No 391/2013, the Czech Republic decided to withdraw its application for the costs incurred in 2018-2019. As far as RP3 is concerned, ANS CR originally included all costs related to the 'ATS optimisation' projects under 'restructuring costs planned for RP3' in the draft performance plan for purposes of the stakeholder consultations. After the consultations, it was decided that the project will be justified using bullet (i) Section 1.4 of Annex IV of the Commission Implementing Regulation (EU) 2019/317. All elements of the project and their costs are interlinked and cannot be separated from each other; and are necessary to meet the performance targets in capacity and thus represent a justifiable deviation of the criteria referred to in points (a) to (c) of Section 1.4 of Annex IV of the Commission Implementing Regulation (EU) 2019/317. Full details about the project can be found in ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS.

SECTION 3.5: ADDITIONAL KPIS / TARGETS

3.5 Additional KPIs / 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 reach the targets in the different KPAs, particularly in the area of capacity, do require changes of the functional system. But these should 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.

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.

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, and the Czech Republic is fully aware that safety shall not be by any circumstance compromised. The Czech Republic will be focused on fulfilling performance targets within all KPAs, but taking into consideration local situation and conditions it might be necessary to reduce one of the parameters against the other. But overall we foster towards the balanced approach between all KPAs.

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 deterioriation or adverse trend in number of incidents regarding CAP or ENV areas (ie. 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 were 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 we are 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) No. 1035/2011) and nowadays prepare for the requirements of a new Reg. (EU) 2017/373. The Czech Republic is also regularly supervised by EASA inspectors within their standardisation inspections. CAA CZ conducts the NSA HR assessment in accordance with EU reg. 1034/2011 every two year as a common FAB CE NSAs HR Assessment. The last assessment was conducted in 2018.

3.6.2 - Interdependencies and trade-offs between capacity and environment

The recent shifts of traffic flows in Eastern Europe, mainly caused by the Ukrainian/Syrian crisis 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. In addition, following the capacity shortfalls in Western Europe (Karlsruhe, a.o), traffic flows were 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 eNM 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 alongisde 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 known.

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

The Czech Republic experienced a high traffic growth rates in the recent years combined with a significant increase of complexity (also because of unplanned participation in the NM's 4ACC initiative). The year of 2019 started off with very high traffic increases compared to 2018 which suggested that 2019 will be another year of experiencing very high traffic growth, NM´s prediction for the traffic growth in 2019 was up to 5.9 %, without the eNM/S19 measures. The situation has however suddenly changed in May 2019 when the Czech Republic's traffic levels were hit heavily by the eNM measures which was accompanied by change in the route choices by airspace users. Two contradictory trends could be observed in Summer 2019:
1) The airspace complexity in the Czech sectors and number of vertical movements in Praha ACC have further increased significantly. 2) The Czech Republic lost a great deal of horizontal traffic (overflights). The observed drop in the number of SUs is around twice bigger than the drop in terms of IFR movements, while experiencing a rise in the complexity. All of these factors have also impact on the cost efficiency.

It needs to be emphasised that this situation is extremely challenging in terms of resource planning. NM confirmed in its latest NOP that the capacity gap will continue until 2024 and the Czech Republic is investing significant effort and resources into closing this capacity gap, in close coordination with the NM, and is implementing measures such as the 'ATS optimisation' project to solve the situation. On the other hand, while ANS CR was ready to assist DFS and accepted without objections the measures imposed by NM in order to help the network (which was a number of times acknowledged and appreciated by the NM), the resulting effect is a significant drop of traffic and, at the same time, much higher vertical complexity as well as less route charges billed on behalf of the Czech Republic due to a significant drop of SUs from the rerouted long-haul traffic. While ANS CR strives to be as flexible as possible, this has a significant impact on the cashflow situation and financial position of ANS CR and makes planning of resources very challenging and reduces availability of funds required to implement measures required to cope with the traffic in the long-term.

ATCO shortage is one of the main factors affecting ability to offer a required capacity to cope with the demand and current capacity gap in the Czech Republic. Significant overtimes are currently required during the peak season to enable use of the maximum sector configuration, which has a strong impact on staff costs. Over 150 hours per every ACC controller was required in 2018. Overtime has a significant impact on staff costs and it is expected that significantly less overtime hours will be required after the implementation of the 'ATS optimisation' project, which one of the main goal is to reduce the complexity of the training and speed-up the training process while using the surplus capacity of the regional APP controllers.

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. Weather caused 26% of all delays in 2018 summer traffic.

The most significant trade-off in 2018 turned to be the local vs. network-wide capacity, which was brought by the NM's 4ACC iniciative. It needs to be emphasised that joining the 4ACC initiative 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.

An 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 shortage 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.

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

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
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 is currently under a review and the new version is expected in the autumn of 2019. 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 alongisde 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 known.

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
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 which is currently under a review and the new version is expected in the autumn of 2019. FAB CE coordinate their planning with respect to implementation of PCP and Deployment Programme. Other recent and ongoing projects include the following activities: A pilot project for common procurement of FAB CE CNS covering an upgrade of the cross-border telecommunications network (X-bone) hardware has been successfully completed in 2018. The procurement was managed by FAB CE ANSPs' joint venture FABCE Aviation Services, Ltd., which is used as a FAB CE outsourcing platform for ATM/CNS infrastructure. Six air navigation service providers (ANSPs) purchased CISCO routers based on a common specification and tender to benefit from lower procurement costs and economies of scale. Following the successful conclusion of this project, the FAB CE CEO Committee has agreed to apply these same procedures for future smart procurement initiatives. A common approach to procurement of spare parts for technical systems is currently under development. FAB CE ANSPs have also made a significant progress in terms of developing processes for planning and operations of the surveillance infrastructure. The 'Surveillance infrastructure optimisation' project has been successfully completed in 2018. The processes for surveillance infrastructure planning, surveillance maintenance planning, maintenance of SUR database and sharing the specifications were developed and are now in the process of implementation. The project also proposed a number of overall SUR service quality improvements and developed a feasibility study for the regional tracker. Due to the negative CBA, the regional tracker project will be not further pursued. The NAVAID optimisation project which will improve interoperability and data-sharing through the optimisation of navigational aid (NAVAID) infrastructure, reducing duplication and unnecessary complexity has been started in 2018. This project will meet the accuracy, integrity and continuity requirements for proposed operations in FAB CE airspace by aligning NAVAID operating and purchasing policies among the seven FABEC ANSPs, reducing purchasing, implementation, operational and maintenance costs. The project group will first develop a process for coordinated NAVAID infrastructure and preventive maintenance planning and information-sharing where operational dependencies are evident. The second part of the project is focusing on an analysis of NAVAID infrastructure and coverage - including those of neighbouring countries. The team will identify potential areas for improvement, including operational interdependencies and requirements. The third part is focusing on solving operational issues – namely, assessing vulnerabilities within the global navigation satellite system (GNSS) network. This will require addressing signal monitoring and interference issues while assessing how free route airspace will influence the requirements for ground-based NAVAIDs in this new era of area navigation operations. FAB CE agreed a commpon approach to a number of technical services and recently initiated a number of new activities, including: - SSR monitoring; - Coordinated ADS-B deployment; - Datalink monitoring; - VoIP coordinated testing and implementation.

4.2 - Deployment of SESAR Common Projects

PCP ATM Functionality (AF) / Sub functionality (s-AF)	Recent and expected progress
AF1 - Extended AMAN and PBN in high density TMA	
s-AF1.1 AMAN extended to en-route airspace	Deployed, pre-operational phase. Projects **2015_196_AF1** and **2015_234_AF1** (extended AMAN EDDM and LOWW) are finished.
s-AF1.2 Enhanced TMA using RNP-based operations	Not planned.
AF2 - Airport Integration and Throughput	
s-AF2.1 DMAN synchronised with predeparture sequencing	Not planned.
s-AF2.2 DMAN integrating surface management constraints	Not planned.
s-AF2.3 Time-based separation for final approach	Not planned.
s-AF2.4 Automated assistance to controller for surface movement planning and routing	Not planned.
s-AF2.5 Airport safety nets	Not planned.
AF3 - Flexible Airspace Management and Free Route	
s-AF3.1 Airspace management and advanced flexible use of airspace	Projects **2015_239_AF3** "Flexible ASM and Free Route" is still ongoing. The software was delivered and tested. Operational documentation, safety assessment, certification by Civil Aviation Authority and staff training are currently being prepared. The project should be completed by the end of 2020.
s-AF3.2 Free route	Implementation of FRA in Czech Airspace is still ongoing and will be completed by the end of 2021 (before the implementation of the new operational ATM system).
AF4 - Network Collaborative Management	
s-AF4.1 Enhanced short-term ATFCM measures	STAM Phase 1 is completed. STAM Phase 2 is still ongoing and will be completed at the end of 2019.
s-AF4.2 Collaborative NOP	Not planned yet
s-AF4.3 Calculated take-offtTime to target times for ATFCM purposes	Not planned yet
s-AF4.4 Automated support for traffic complexity assessment	Deployed - TCM tool used at FMP/ACC Prague. Project **2015_240_AF4** "Traffic Complexity Tools" is finished.
AF5 - Initial SWIM	
s-AF5.1 Common infrastructure components	Project **2015_174_AF5_B** "NewPENS Stakeholder contributions …" is still ongoing. The project is lead and co-ordinated by EuroControl. The project should be completed by the end of 2020.
s-AF5.2 SWIM technical infrastructure and profiles	Project **2016_065_AF5** "SWIM implementation into ATS INFO/ARO systems" is still ongoing. Technical specifications and tender documentation are being prepared. The procurement is scheduled for the last quater of 2019 and the first quarter of 2020. The project should be completed by the end of 2020.
s-AF5.3 Aeronautical information exchange	Project **2015_145_AF5_B** "AIM Deployment Toolkit" is still ongoing. The project is lead and co-ordinated by EuroControl. The project should be completed by the end of 2020. Project **2015_243_AF5** "Aeronautical Information Distribution Service" is still ongoing. The tender will be announced by the end of June 2019. The project should be completed by the end of 2020. Project **2016_064_AF5** "AIM System Integration Layer" is still ongoing. Technical specifications and tender documentation are being prepared. The procurement is scheduled for the first half of 2020. The project should be completed by the end of 2020.

s-AF5.4 Meteorological information exchange	Project **2015_241_AF5** "Meteorological Information Exchange Service" is still ongoing. The software is tested by CHMI and ANS CR and procurment is planned to the end of 2019. The project should be completed by the end of 2020.
s-AF5.5 Cooperative network information exchange	In progress - sectorization update to NMOC.
s-AF5.5.6 Flight information exchange	Operational - reception of FlighData from NMOC.
AF6 - Initial Trajectory Information Sharing	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 is planning a number of significant changes within the third reference period. The FRA is planned for 2021, new ATM system (TopSky) will be operational in 2022 and the 'ATS optimisation' restructuring project has already started and will be implemented by the end of 2024. The implementation of TopSky is constantly monitored and project progress is discussed during regular meetings with the supplier. The planned date for operations of the new system is planned for Q1 2022. The 'ATS optimisation' project will bring significant changes in the airspace structure and optimisation of the way how ATS is provided in the Czech airspace. A completely new TERMINAL airspace will be created. This requires a sufficient number of new and re-trained and relocated staff from current regional airport units. The training of ATCOs is therefore under constant focus. ANS CR is adapting 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, a new CAA Directive ID: CAA/S-SP-009-0/2019 was already issued in May 2019 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, including 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. Also rules for these changes to functional systems which are notified according to regulation valid in RP2 and implemented in RP3 were set up. 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 shall be accomplished before the end of 2019. 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 CZ close oversight and there have not been indicated any problems, which may leads 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

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

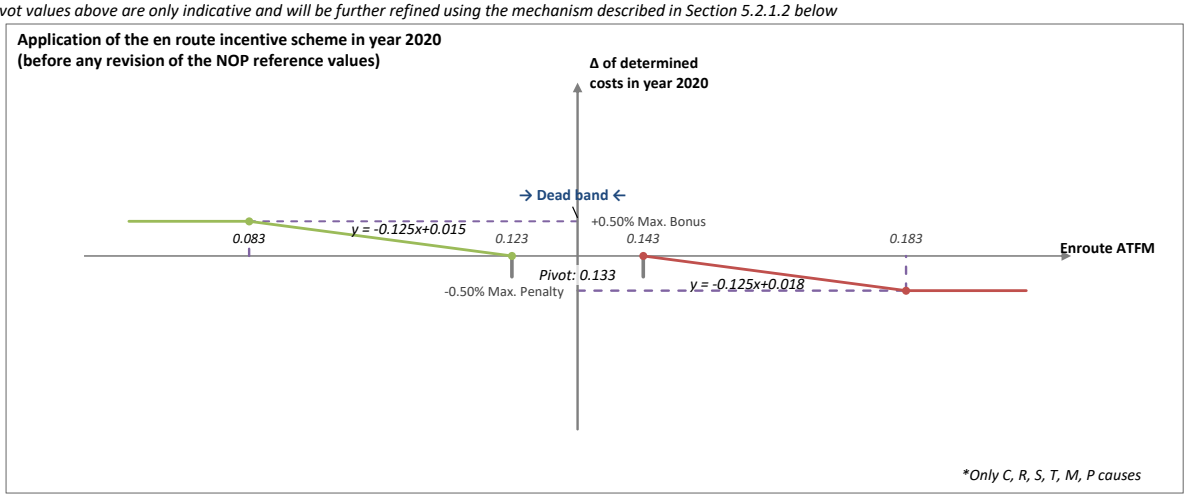
Enroute	Expressed in	Value
Dead band Δ	fraction of min	±0.010 min
Max bonus (≤2%)	*% of DC*	0.50%
Max penalty (≥ Max bonus)	*% of DC*	0.50%
The pivot values for RP3 are	modulated	

ANS CR

		2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)		0.2	0.2	0.14	0.12	0.12
Alert threshold (Δ Ref. value in fraction of min)		±0.050	±0.050	±0.050	±0.050	±0.050
Performance Plan targets (mins of ATFM delay per flight)		0.20	0.20	0.14	0.12	0.12
Pivot values for RP3 (mins of ATFM delay per flight)*		0.13	0.13	0.09	0.08	0.08
Financial advantages / disadvantages	Dead band range	[0.123-0.143]	[0.123-0.143]	[0.083-0.103]	[0.07-0.09]	[0.07-0.09]
	Bonus range	[0.083-0.123]	[0.083-0.123]	[0.043-0.083]	[0.03-0.07]	[0.03-0.07]
	Penalty range	[0.143-0.183]	[0.143-0.183]	[0.103-0.143]	[0.09-0.13]	[0.09-0.13]

** When modulation applies, these figures are only indicative as they will be updated annually on the basis of the November n-1 NOP and the methodology described in 5.2.1.2.a2 below. The pivot values for year n have to be notified to the EC by 1 January n.*

** The pivot values above are only indicative and will be further refined using the mechanism described in Section 5.2.1.2 below*



5.2.1.2 Rationale and justification - Enroute

Indicate which of the principles below will be applied for the modulation of the pivot values for the whole RP3:	
a) In order to enable significant and unforeseen changes in traffic to be taken into account:	
a.1) The pivot value for year n is the reference value from the November release of year n-1 of the NOP.	Yes
a.2) The pivot value for year n is informed by the November release of the year n-1 of the NOP and calculated according to the following principles and formulas:	No
Not applicable. The pivot value for year n is the reference value from the November release of year n-1 of the NOP.	
b) The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. If yes, provide below a justification for this decision and an explanation of how the pivot values are calculated.	Yes

A number of states in the Central-Eastern European region continued to face weather phenomena in the recent year (especially CB thunderstorms during the summer period) which resulted in high delays due to weather reasons (around 45% of the delay in FAB CE was caused by weather in 2018). In the Czech Republic, over 26% of the delay caused in 2018 was attributable to weather. NM acknowledged in the Network Operations Report 2018 that there was a higher impact of disturbances within the network (e.g. adverse weather) due to saturation of sector capacities compared to former years. Trajectory prediction decreased due to: added traffic flows, deviations due to weather, intruding aircraft from adjacent ATC units due to weather/CBs. It can be expected that with climate changes the weather will become even more unpredictable. In 2019, weather continued to contribute significantly to the overall en-route ATFM delay representing 40.8% of the total delay in Jan-July 2019.

The Czech Republic therefore proposes a scheme in which it would not be penalised for effects beyond ANS CR's control. The Czech Republic will only apply the C, R, S, T, M, P codes in the incentive scheme. The pivot values above are only indicative using the share of the C, R, S, T, M, P causes in 2016-2018 which according to data on ANS performance dashboard (https://ansperformance.eu/data/) was 66.5%. The pivot value will be always recalculated during application of the capacity incentive scheme using the actual share of the C, R, S, T, M, P causes experienced in year n using the formula: (pivot value for year n is the reference value from the November release of year n-1 of the NOP) * (actual share of the CRSTMP causes in year n).

5.2.2 - Capacity incentive scheme - Terminal

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

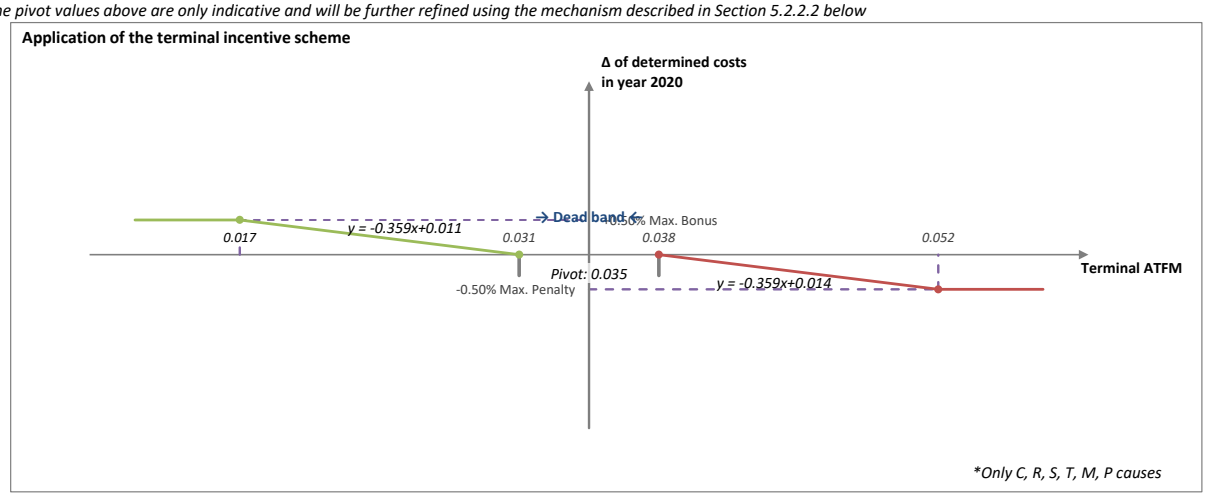
Terminal	Expressed in	Value
Dead band Δ	%	±10.0%
Bonus/penalty range (% of pivot value)	*%*	±50%
Max bonus	*% of DC*	0.50%
Max penalty	*% of DC*	0.50%
The pivot values for RP3 are	modulated	

		2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)		0.37	0.37	0.37	0.37	0.37
Bonus/penalty range Δ (in fraction of min)		±0.017	±0.017	±0.017	±0.017	±0.017
Pivot values for RP3 (mins of ATFM delay per flight)*		0.03	0.03	0.03	0.03	0.03
Financial advantages / disadvantages	Dead band range	[0.031-0.038]	[0.031-0.038]	[0.031-0.038]	[0.031-0.038]	[0.031-0.038]
	Bonus range	[0.017-0.031]	[0.017-0.031]	[0.017-0.031]	[0.017-0.031]	[0.017-0.031]
	Penalty range	[0.038-0.052]	[0.038-0.052]	[0.038-0.052]	[0.038-0.052]	[0.038-0.052]

** The pivot values will be further refined using the mechanism described in Section 5.2.2.2 below*

** The pivot values above are only indicative and will be further refined using the mechanism described in Section 5.2.2.2 below*

Application of the terminal incentive scheme



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. The Czech Republic has only one terminal charging zone - Czech Republic - TCZ.

Indicate which of the principles below will be applied for the modulation of the pivot values for the whole RP3:	
a) The pivot value for year n is modulated in order to enable significant and unforeseen changes in traffic to be taken into account and is based on the principles explained below:	No
Not applicable. The pivot value for year n is not modulated.	
b) The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual. If yes, provide below a justification for this decision and an explanation of how the pivot values are calculated.	Yes
A number of states in the Central-Eastern European region continued to face weather phenomena in the recent year (especially CB thunderstorms during the summer period) which resulted in high delays due to weather reasons (around 45% of the delay in FAB CE was caused by weather in 2018). In the Czech Republic, over 80% of the airport ATFM arrival delay caused in 2016-2018 was attributable to weather. NM acknowledged in the Network Operations Report 2018 that there was a higher impact of disturbances within the network (e.g. adverse weather) due to saturation of sector capacities compared to former years. Trajectory prediction decreased due to: added traffic flows, deviations due to weather, intruding aircraft from adjacent ATC units due to weather/CBs. It can be expected that with climate changes the weather will become even more unpredictable. In 2019, weather continued to contribute significantly to the overall airport ATFM delay representing 73.1% of the total delay in Jan-July 2019. The Czech Republic therefore proposes a scheme in which it would not be penalised for effects beyond ANS CR's control. The Czech Republic will only apply the C, R, S, T, M, P codes in the incentive scheme. The pivot values above are only indicative using the share of the C, R, S, T, M, P causes in 2018 which according to data on ANS performance dashboard (https://ansperformance.eu/data/) was 11.2%. The pivot value will be always recalculated during application of the capacity incentive scheme using the actual share of the C, R, S, T, M, P causes experienced in year n using the formula: (Performance Plan target in year n) * (actual share of the CRSTMP causes in year n). According to data on ANS performance dashboard (https://ansperformance.eu/data/), this proportion was only 9.4% in the period of 2016-2018.	

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 will be performed on quarterly basis, the mechanisms and procedures shall be established, some of them are partially based on monitoring procedures from 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 any 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.1 - En route Charging Zone #1
ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)
ANNEX B.1 - Terminal Charging Zone #1
ANNEX C. CONSULTATION
ANNEX D. LOCAL TRAFFIC FORECASTS
ANNEX E. INVESTMENTS
ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS