Performance Plan

Croatia

Third Reference Period (2020-2024)

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

Date of issue: 26.04.2022

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Signatories

Performance plan details	
State name	Croatia
Status of the Performance Plan	Final adopted performance plan (Art. 16(a and b) of IR 2019/317)
Date of issue	30.09.2021
Date of adoption of Draft Performance Plan	30.09.2021 17.11.2021 - draft v3.0 based on EC verification of completeness RP3 PP findings 20.12.2021 - draft v4.0 based on the 2021 traffic update following the consultation with PRB
Date of adoption of Final Performance Plan	26.04.2022 - following Commission Decision C(2022)2284 dated on 13.04.2022

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

Name, title and signature of representative	
Ministry of the Sea, Transport and Infrastructure	Dinko Staničić Director of the Civil Aviation Sector

Additional comments	

Document change record		
Version	Date	Reason for change
v1.0	30.07.2021	Draft for the stakeholder consultation
v2.0	30.09.2021	Performance plan draft for the submission to European Commission (Article 12 of EU 2019/317)
v3.0	17.11.2021	Performance plan draft for the submission to European Commission (Article 13 of EU 2019/317)
v4.0	20.12.2021	Update of 2021 traffic forecast following the consultation with PRB

SECTION 1: INTRODUCTION

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1 - INTRODUCTION

1.1 - The situation

NSA(s) responsible for drawing up the Performance Plan	Croatian Civil Aviation Authority

1.1.1 - List of ANSPs and geographical coverage and services

Number of ANSPs	1

ANSP name	Services	Geographical scope
Croatia Control	ATS, CNS, AIS, MET (ATFM and ASM)	FIR Zagreb

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
BHANSA	Within Sarajevo FIR, provision of ATC service of en-route traffic is delegated to Zagreb ATCC (according to AIP Croatia and LoA between Zagreb ATCC and Sarajevo ATCC and en-route charts ENR 6.1-1 and ENR 6.2-1)
Slovenia Control	Within Ljubljana FIR, provision of ATC service of en-route traffic is delegated to Zagreb ATCC (according to AIP Croatia and LoA between Ljubljana ATCC and Zagreb ATCC and en-route charts ENR 6.1-1 and ENR 6.2-1).
SMATSA	Within Beograd FIR, provision of ATC service of en-route traffic is delegated to Zagreb ACC (according to LoA between Beograd ATCC and Zagreb ATCC).

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
Slovenia Control	Within Zagreb FIR, provision of ATC service of en-route traffic is delegated to Ljubljana ATCC in the northern part of the FIR (according to AIP Croatia and LoA between Ljubljana ATCC and Zagreb ATCC and en-route charts ENR 6.1-1 and ENR 6.2-1)
ENAV	Within Zagreb FIR, provision of ATC service of en-route traffic is delegated to Padova ACC and Brindisi ACC in the western and southern part of the FIR (according to AIP Croatia and LoAs between Zagreb ATCC and Padova/Brindisi ACC and en-route charts ENR 6.1-1 and ENR 6.2-1)
SMATSA	Within Zagreb FIR, provision of ATC service of en-route traffic is delegated to Beograd ATCC in the southern part of the FIR (according to LoA between Beograd ATCC and Zagreb ATCC).

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	3

Entity name	Domain of activity	Rationale for inclusion in the Performance Plan
CCAA	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.
SAR	SAR activites	Search and rescue services provided to civil aviation and to be ready for service when required.
EUROCONTROL	NM, CRCO	Determined cost of EUROCONTROL is included in the NSA cost base as it is chargeable to Airspace users.

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	Croatia	
Terminal	Number of terminal charging zones	0

1.1.4 - Other general information relevant to the plan

Croatia does not have an airport 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, Croatia decided to not apply the provisions of the Regulation to terminal ANS at any airport within the country with fewer than 80,000 IFR movements per year. Letter regarding Information on non-application of the Regulation (EU) 2019/317 regarding terminal ANS has been sent to DG Move on 7 May 2019.

Relevant local circumstances with high significance for performance target setting and updated view on the impact of the COVID-19 crisis on the operational and financial situation of ANSPs covered in the performance plan
As a result of stronger than anticipated traffic growth, Croatia Control experienced a lack of capacity in 2019 related to a lack of sufficient levels of ATC staff, resulting in significant ATFM delay per flight. During 2020 the recorded IFR traffic was 58% lower when compared to 2019. Due to a substantial traffic drop and uncertain recovery, Croatia Control focused on preserving liquidity through halting training and recruitment, introducing salary decrease and slimming down of the investment plan. Additionally, in 2020 Croatia saw the retirement of a significant number of staff, resulting from the increased risks and uncertainty. With traffic recovery on a horizon Croatia Control expects to re-start the investment cycle and staff recruitment with a goal to reach and deliver required capacity targets within and beyond RP3. Due to seriously deprived liquidity in 2021 Croatia Control expects to withdraw a liquidity loan, and loan to support RP3 investment cycle during 2022-2024.

Additional comments
There are no additional comments.

1.2 - Traffic Forecasts

1.2.1 - En route

En route Charging zone 1	**Croatia**
En route traffic forecast	STATFOR Base forecast MAY 2021 (Flight Plan 2017-19, Actual Route 2020-2024)

STATFOR Base forecast MAY 2021 (Flight Plan 2017-19, Actual Route 2020-2024)	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	587	647	714	301	459	501	605	696	-0,5%
IFR movements (yearly variation in %)		10,2%	10,4%	-57,8%	52,4%	9,2%	20,8%	15,0%	
En route service units (thousands)	1.799	1.994	2.193	929	1.510	1.582	1.946	2.251	0,5%
En route service units (yearly variation in %)		10,8%	10,0%	-57,6%	62,5%	4,7%	23,0%	15,7%	

Local Forecast	2017A	2018A	2019A	2020A	2021	2022	2023	2024	CAGR 2019-2024
IFR movements (thousands)	587	647	714	301					-100,0%
IFR movements (yearly variation in %)		10,2%	10,4%	-57,8%					
En route service units (thousands)	1.799	1.994	2.193	929					-100,0%
En route service units (yearly variation in %)		10,8%	10,0%	-57,6%					

Specific local factors justifying not using the STATFOR base forecasts (provide justification below or refer to Annex D for more detailed explanation)
No deviation from the STATFOR base May 2021 forecasts, except for 2021 traffic which has been updated to reflect the latest estimate for 2021 actual, expected to be 1% lower than STATFOR base Oct 2021 forecast for 2021. Latest estimate for 2021 traffic was developed based on the actual traffic recorded till mid of Dec 2021 plus expected traffic for the rest of Dec 2021. Given that STATFOR Oct 2021 Base Forecast for Croatia assumes higher number of TSUs (already) in 2022 compared to 2019 (+3,3%), therefore Oct STATFOR submission was not considered realistic. This was a result of combination of drastic increase in IFR MOV and of unrealistic increase of weight factors resulting in significantly increased TSU per flight ratio (i.e. from 3.1 what has been recorded as a prior years actual to which was assumed by STATFOR as an ever highest ratio of 3.6 for 2024.; +16%). This goes above the traffic recovery assumptions at the EU level, and is not expected at this level for any other Member state. Furthermore, such an TSU-to-IFR MOV ratio assumption is not backed by the ex post nor by the ex ante comparison to the neighboring countries, but was a mere effect of STATFOR assumption that “the average distances and weights will go back to their trends prior to the COVID outbreak (i.e. early 2020)”. This resulted in un-precedently high ratio of weight factor per flights, since the traffic patterns recorded during the "early 2020" can not be considered RP3 long term normalized and representative for all the period. Deviation from the STATFOR May 2021 forecast was undertaken only over the 2021 traffic forecast subsequent to bilateral PRB consultations with aim of mitigating an expected 2021 traffic risk sharing effects.

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

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
Based on the outcome of consultation and written comments by IATA (please refer to Annex to the RP3 Performance Plan), Croatia has take them into account and reviewed its initial RP3 Performance Plan calculations and assumptions. Croatia provided additional explanations in written according to Action point agreed (please refer to Consultation meeting minutes). CoC was revised downwards as suggested by stakeholders. Stakeholders invited Croatia to review its assumptions regarding support staff costs, which Croatia did. Incentive scheme - based on airspace user views asymmetry is introduced, penalty is increased, bonus is decreased.

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	No	
Charging policy	Yes	
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	Based on the airspace users request maximum penalty is increased and maximum bonus decreased.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	No	
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	Based on the airspace users request, asymmetric incentive scheme is applied.
Establishment or modification of charging zones	No	
Establishment of determined costs included in the cost base for charges	Yes	
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	No concerns raised by airline users.

1.3.3 - Consultation of stakeholder groups on the performance plan

#1 - ANSPs	
Stakeholder group composition	Croatia Control
Dates of main meetings / correspondence	From February to September
Main issues discussed	PP preparation and assumptions, investments, traffic, KPI specifics and additional requirements for explanation
Actions agreed upon	Actions are agreed through proposed KPI values taking into account also local circumstances
Points of disagreement and reasons	NSA pointed the need for better linkages between KPI's with adequate business and operative explanation
Final outcome of the consultation	The final outcome is proposed draft of RP3 PP

Additional comments
No additional comments.

#2 - Airspace Users	
Stakeholder group composition	IATA, Lufthansa, Croatia airlines, Turkish Airlines
Dates of main meetings / correspondence	23rd August 2021
Main issues discussed	RP2 achievement, RP3 PP targets, traffic, main assumptions, investments, staff development, additional requirements for explanation

Actions agreed upon	Staff cost - IATA understands that there was a capacity shortage issue before the pandemic and therefore understand there is some “catch up” to do in the number of ATCOs. Also AU raised concern regarding CCL plan to increase support staff number. Although the number of planned support staff in the RP3 plan was mostly influenced by a general lack of the support staff already present in 2019PP draft (i.e. support staff levels were kept highly conservative and competitive during RP2 despite a significant traffic development), further by an substantial increase of RP3 investments and projects planned for implementation until the end of RP3. Nevertheless, following the users consultation meeting, Croatia has revised downwards support staff plan. Final proposal implies further continuation of the support staff deficit from 2019, but such a revised down was finally accepted following the “exceptional measures” RP3 planning environment and will have to be duly addressed at the very beginning of RP4. Investment - IATA asked NSA to assess if all possibilities were used to lower the cost as much as possible through extension of the depreciation periods and by reducing the dedicated offices. Croatia appreciated the presented level of IATA’s understanding over the revised RP3 CAPEX plan, which after being closely presented with additional information provided during the national consultation and later, resulted in no open questions left over the scale and scope of the revised CAPEX plan. Croatia additionally explains local depreciation policy as well as engagement of office spaces. WACC - IATA considered that given the “exceptional measures” environment, there was still a room to reduce CoC by reducing WACC and asset base. Croatia additionally explained rational and concerns regarding a certain CoC elements as suggested by IATA, but nevertheless revised downwards the WACC following the stakeholders comments.
Points of disagreement and reasons	Incentive scheme - IATA stresses out that they do not favor the implementation on bonuses in incentive schemes, also IATA notes proposal to include traffic deviations as part of the incentive scheme formula but did not comment on it before they understand if such schemes are in line with EU regulations. Croatia reminded IATA that the current incentive scheme proposal was already presented to airspace users at Croatia’s 2019 stakeholder consultation meeting. The scheme was then accepted by IATA and considered innovative. Croatia finds the proposed incentive scheme principles fully in line with the existing regulation. OPEX - IATA welcomes the OPEX cost control recorded in 2020 and 2021 and plan for 2022 and encouraged NSA to scrutinize a OPEX development in the years 2023 and 2024. CCAA has additionally scrutinized the proposed development in the planned engagement of other operational resources and finds it adequate reinforcing that 2020 /2021 employment of other operating resources was not considered long term sustainable as a gradual business recovery was duly expected. Asset beta - AU finds asset beta of 0.5 is generous and opted for asset beta close to 0.3. Croatia find the proposed 0.5 of asset beta to be fully eligible and adequate, given that it stands at the lower band recommended by the Competition & Markets Authority’s report in response to the NERL/CAA appeal, lower than the indicative asset beta calculated for Croatia as presented in the PRB Study on the cost of capital (Sep 2021), within the SDG asset beta recommendation and at the RP2 level despite the significantly adverse ANSP systematic risk profile. Asset base - IATA considered that 2020 and 2021 under-recovery should not take a part in CoC relevant asset base. Following the relevant regulatory framework and principles, following the previous historical treatment of such an element in RP2 asset base calculation (in time of accruing over-recoveries) and given the nature of such an asset, Croatia retained such and asset as a part of regulated asset base.
Final outcome of the consultation	Following the national user consultation meeting, Croatia made further commitment in the final version of the revised draft RP3 PP submitted on 1 Oct 2021, to find additional solutions to converge towards the users’ needs and suggestions to the maximum extent possible, irrespective of the fact that the draft revised RP3 PP from August 2021 has already been in line with the EU-wide performance targets set for RP3.

Additional comments

Based on the outcome of consultation and written comments by IATA, Croatia has made following changes in Performance Plan compared to initial draft of RP3 PP presented during national consultations:

- Cost efficiency:
  - Support staff costs has been revised downwards for the new staff employment plan (postponement from end of RP3 to beginning of RP4)
  - Cost of Capital assumptions were revised in terms of RFR which resulted in lower WACC and CoC
- Incentive scheme - asymmetry is introduced, penalty is increased

Cumulatively, the final draft RP3 PP has a determined cost lower by 20M HRK than initially presented during local consultations.

For more detailed explanations please see Annex C, Minutes from Croatia Performance Plan stakeholder consultation meeting and Action points.

#3 - Professional staff representative bodies	
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

#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

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

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

Additional comments
Croatia has no airports 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, Croatia decided to not apply the provisions of the Regulation to terminal ANS at any airport within the country with fewer than 80,000 IFR movements per year. Letter regarding Information on non-application of the Regulation (EU) 2019/317 regarding terminal ANS was sent to DG Move on 7 May 2019.

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 - Croatia Control

2.1.1 - Summary of investments

2.1.2 - Detail of new major investments

2.1.3 - 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 - Croatia Control

2.1.1 - Summary of investments

Number of new major investments	2

#	Name of new major investment (i.e. above 5 M€)	Total value of the asset (capex or contractual leasing value)	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 '000 national currency)					Lifecycle (Amortisation period in years)	Allocation (%)*		Planned date of entry into operation
				2020	2021	2022	2023	2024		Enroute	Terminal	
1	COOPANS - sustainment and transition to digital ATM platform	239.647	163.324	3.263	4.774	6.605	11.350	17.083	7	100%	0%	2020-2026
2	Zadar training, extended APP and TWR centre	170.790	26.336	0	0	41	341	974	20 for buildings/ 7 for equipment	100%	0%	2026
Sub-total of **new major investments** above (1)		410.437	189.660	3.263	4.774	6.647	11.691	18.058				
Sub-total **other new investments** (2)		596.088	337.917	3.374	8.647	15.137	31.799	46.802				
Sub-total **existing investments** (3)				114.453	80.998	59.201	46.429	38.375				
Total new and existing investments (1) + (2) + (3)		1.006.525	527.577	121.090	94.419	80.985	89.919	103.234				

** Given the scope of the RP3 PP, therefore only en route part of the projected CAPEX investments and determined costs of investment (i.e. depreciation, cost of capital and cost of leasing) are presented within "E"-"J". Terminal part of determined costs resulting from the planed CAPEX are not disclosed here.*

Total lifecycle CAPEX value as per specific investment is disclosed within the revised PP template under the section 2.1 Investments, column "Total value of investment". ENR part of the planned RP3 CAPEX plan, together with the associated RP3 determined ENR costs stemming from such a fixed asset plan (i.e. depreciation and CoC), have been disclosed within "Determined costs" collumns. Total presentation of the RP3 CAPEX plan, comprising both, ENR and Terminal component, has been disclosed in the Annex E to the revised RP3 PP.

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	***COOPANS - sustainment and transition to digital ATM platform***	Total value of the asset	***239.647 HRK***

Description of the asset	The COOPANS alliance has been a successful collaboration of ANSPs for the definition of common operational requirements towards harmonized ATM system software builds. This project is part of the joint investment of the COOPANS partners towards: a) The existing (legacy) ATM system, primarily for compliance with regulatory requirements (e.g. SWIM), ensuring continuity of service, and enhancing service provision through introduction of updated tools. b) Development of the next generation digital ATM platform, horizontally integrated with an open IT architecture meeting the needs of all ATSPs with a single HMI interface, enabling use cases towards the vision of the Airspace Architecture Study and EU ATM Masterplan. The foreseen programme will ensure the following requirements are met in this RP: 1. Regulatory requirements • ATM system support for SWIM • Improvements of cyber security (new operational system, elements of cyber protection, interface in accordance with SIEM - Security Information and Event Management) • Network Manager requirements 2. Ensuring the continuity of service • At end-of-life of hardware platform - to provide for safer, more optimal design that will enable scalability • Replacement of obsolete sub-systems (technical control and management system, big data analysis etc.) • Increase of system capacities upon the air traffic recovery 3. Safety • Improving safety by implementing the tools identified by safety analyses or studies (for example NM's recommendations such as Blind Spot etc.) 4. Improvement of service provision • Implementation of various operational tools aimed at increase in productivity (for example, TCT – Tactical Controller Tool, TBS – Time Based Separation etc.) depending on speed of traffic recovery COOPANS members have also identified the key requirements of future users - ATSPs (Air Traffic Services Providers), such as automation aimed at the reduction of workload per flight, lower costs for end users (for example airline operators), scalability of capacity on demand, flexibility which contributes to availability and, of course, safety and security. Therefore the COOPANS members have, pursuant to SJU SRIA (Strategic Research and Innovation Agenda 2020), defined the key goals of the modernization program which will contribute to the fulfilment of the aforementioned requirements: • Open architecture (SRIA Roadmap 3.5) • Automation (SRIA Roadmap 3.1 and 3.2 i 3.8) • Interoperability (SRIA Roadmap 3.1 and 3.3 and 3.9) This RP3 programme will put in place development to ensure a timely delivery of the new functions during RP4, in time for anticipated capacity and cost-efficiency requirements. Several new use cases are enabled (operationally and technically), including system resilience (contingency), shared infrastructure and data centers (increased cost efficiency), ATM automation (improved ATCO productivity), etc. The Cloud-based infrastructure is aligned with the concept of virtualization and ADSPs, with consequent benefits in scalability, agility and cost. Deployment of all software upgrades and new platforms during RP4 are not part of this programme, which is anticipated to run until 2026.

The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)? Ref. to the Regulation and, if funded through Union assistance programmes, ref. to the relevant grant agreement.)	Yes							
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
			3		5			
Benefits for airspace users and results of the consultation of airspace users' representatives	The programme enables a continuity of service through continued support for the existing ATM system, whilst developing a clear transition towards the digital ATM platform necessary to meet longer term requirements. As well as continuity, improvements are foreseen in • safety (through improved conflict detection e.g. TCT) • capacity (through increased controller productivity through use of improved MTCD and TBS) • flight efficiency, through improved FRA using MTCD The exact deployment of improvements can be flexible, giving confidence that CCL is able to adjust to meet emerging needs towards the end of RP3 (2024). Revised RP3 CAPEX plan presented during the national consultation resulted in no open questions left over the scale and scope of the revised CAPEX plan, according to which one can assume that airspace users find Croatia revised RP3 CAPEX plan as “fit for purpose”.							
Joint investment / partnership	Yes	COOPANS is an international partnership between the air navigation service providers of Austria (Austro Control), Croatia (Croatia Control), Denmark (Naviair), Ireland (Irish Aviation Authority), Portugal (NAV Portugal) and Sweden (LFV). Thales is a chosen supplier (industry partner) for COOPANS. COOPANS partners operate a world class, safe and cost-effective ATM system. COOPANS has adopted a common managerial approach, whereby the six ANSPs act as one organization together with Thales (supplier) with a focus on common success.						
Investment in ATM systems	Yes							
If investment in ATM system, type?	Replacement investment	Modernization of the existing TopSky system						
If investment in ATM system, Reference to European ATM Master Plan / PCP	PCP	Directive (EU) 2016/1148 Act on Cybersecurity of Key Service Providers and Digital Service Providers Common Project One (CP1) - Commission Implementing Regulation (EU) 2021/116: • AF3 Flexible Airspace Management and Free Route Airspace • AF5 System Wide Information Management ATM Master Plan • Virtualization of service provision • Fully dynamic and optimized airspace • Trajectory-based operations • 4.3 Delivering the Digital European Sky (Phase D)						

Name of new major investment 2	***Zadar training, extended APP and TWR centre***	Total value of the asset	***170.790 HRK***

Description of the asset	As proposed in the initial draft RP3 plan, the programme delivers a centre at Zadar which seeks to meet multiple challenges in as cost-effective manner as possible. It contains operational working positions, training facilities (including simulators) and a Remote Tower capability. The existing facilities in Zadar are at their end-of-life for the provision of ATC services due to their obsolescence. The planned investment is a modification of the initially planned investment, in line with the new circumstances in part caused by COVID-19 pandemic and the traffic drop. Operations at the new centre have been postponed from 2024 to 2026, and there has been recognition of the emerging need and potential benefits of virtualization across all Air Traffic Services. Additionally, in 2020, CCL was certified as an Approved Training Organization for the training of ACC, APP, and TWR ATCO personnel. CCL has optimized its training process and assumed control over ATCO training, thus meeting its own needs for ATCO personnel – this was an identified issue in 2018-2019 and the lack of trained personnel resulted in delays for the users. As a result of intense training of new ATCOs, refresher training, simulations of new concepts and validation of new technologies (all of this with the purpose of delivering the required air traffic control capacities), the existing simulator capacities are highly insufficient. There is no possibility of extending the capacities of the Training Organization using existing facilities in CCL. Given the traffic drop due to the pandemic, the previously foreseen ACC positions are not now thought to be the most cost-effective solution for the users. It is planned to compensate for the insufficient capacity in 2019 not only by training of new ACC ATCOs, but also by reorganization of lower airspace, potentially changing vertical limits, which would increase the ACC capacity by disburdening this airspace. In order to implement the aforementioned activities optimally and to enable the provision of advanced APP (gradual transition to centralized APP service for coastal airports), a new facility is necessary since it is not possible to provide the mentioned service from any of the existing CCL's APP facilities.

	In line with the COOPANS roadmap outlined in the previous project, Zadar could be connected to the Digital ATM platform, and be enabled as a contingency centre for Zagreb (and possibly other cross-border areas). Finally, the COVID-19 pandemic and related decrease in terminal traffic resulted in additional financial burden for CCL, prompting CCL to find a balanced solution. To that end, CCL has decided to gradually implement Remote TWR technology, where the efficient provision of TWR services by implementation of new virtual technologies in line with harmonized EU development strategies would result in the service optimization. Additionally, because of the state and serviceability of the existing TWR infrastructure, Zadar is the ideal candidate for the first phase of implementation of RTWR technology, especially having in mind that there is no space for the installation of RTWR and simulators in any of the existing CCL's facilities. The introduction of new RTWR technology in Zadar will therefore serve as a basis for possible RTWR technology extension to other airports, with the possibility of introducing the options of Multiple Remote TWR centre. The Zadar centre therefore aims to deliver: • A solution to existing severe obsolescence at Zadar • Required training / simulator facilities, necessary for planned ATCO training to meet the capacity challenges that were seen in 2019, and for CCL to train its own ATCOs efficiently and flexibly • Improved APP/ACC airspace design, bringing increased capacity in ACC (by moving traffic to APP), and enabling a more efficient centralized approach in future • A centralized Approach Control Service (APS), bringing increased productivity, effectiveness, and flexibility. • A potential contingency centre for Zagreb ACC, delivering continuity of service • An initial Remote TWR service, with the potential to develop a Remote TWR centre and bring significant efficiency for terminal services in Croatia.							
The investment is mandated by a SES Regulation (i.e. PCP/CP1/Interoperability)?	No							
Specify links to the PCP/CP1/Interoperability Regulations (add the sub-AF number(s) under each relevant box)	AF1	AF2	AF3	AF4	AF5	AF6	Interoperability	
Level of impact of the investment	Network	Enables CCL to meet its capacity needs across RP3 (and onwards), by • providing the required training facilities (including simulator) • enabling a TMA re-design to unburden ACC of some traffic In time, will also provide enhanced continuity of service, improved flexibility and resilience – also bringing possibility of greater optimization of operational organization in future (in line with Airspace Architecture concepts and ATM Masterplan).						
	Local	Zadar ATS are maintained through replacement of obsolescent equipment and facilities. Centralised APP and potential Remote TWR centre bring productivity and cost-effectiveness improvements.						
	Non-performance							
	Safety	Enhanced service continuity, and a safer TWR service through use of modern remote and digital TWR technology.						
	Environment							

Quantitative impact per KPA	Capacity	Zadar's use for training enables CCL to deliver the necessary plan in recruitment and training to provide capacity beyond RP3. The provision of centralized APS service in combination with flexible airspace reconfiguration (depending on the traffic level) will result in ACC capacity optimization. There is an option to introduce multiple licensing for APP ATCO's which will enable CCL to adjust number of ATCOs according to the traffic; e.g. to collapse APP sectors during low traffic, or extend vertical APP sector dimensions in peak ACC hours, thus taking over control of lower ACC sectors. TMA capacity should increase as a result of the provision of centralized APS service. This investment will ensure additional ACC capacity through additional working positions opened in Zagreb ACC, whereas simulator positions in Zagreb would be transformed into the new operational working positions (as needed during periods of high traffic), as Zadar would become new additional training facility.
	Cost Efficiency	The centralization of APS service and implementation of TWR service will result in better cost-efficiency in the long term.
Results of the consultation of airspace users' representatives	Revised RP3 CAPEX plan presented during the national consultation resulted in no open questions left over the scale and scope of the revised CAPEX plan, according to which one can assume that airspace users find Croatia revised RP3 CAPEX plan as "fit for purpose".	
Joint investment / partnership	No	
Investment in ATM systems	Yes	
If investment in ATM system, type?	New system	
If investment in ATM system, Reference to European ATM Master Plan / PCP	Master Plan (non-PCP)	The introduction of Remote Tower technology is one of the basics of virtualization foreseen in ATM Master Plan, as well as one of preconditions for the realization of Digital European sky. It has a significant role in "SESAR Vision" section of ATM Master Plan, especially in sections 2.1.3. "Improved airport performance and access" and in 2.1.6 "Optimal use of air navigation services infrastructure and use of scarce resources", while in section "Operational View" its significance is stressed in 4.2.5 Virtualisation of service provision (by new COOPANS system and possible implementation of service continuity (contingency) sites for the provision of ACC service and for possible extension of airspace capacity).

2.1.3 - Other new and existing investments

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

CCL has successfully delivered its CAPEX plan for RP2, with total delivery in line with that planned at the start of RP2. In RP3, besides the new major investments detailed above, which represent 31% of the overall RP3 investments, CCL plans other investments which will ensure sustainment of operations, alignment to new regulatory mandates and to the European ATM modernisation vision, the ATM Master Plan. This revised investment plan also takes into consideration the new traffic forecast, which (in short term) reduces significantly past pressures to increase capacity, as well as the increased need to reduce costs to aid the Airspace Users, without compromising future ATM service provision. The revised RP3 plan proposes a reduction in investments of 363 Mkn, corresponding to a decrease of 36% in CAPEX, compared to the initial RP3 CAPEX plan.

Overall, in the revised RP3 CAPEX the primary drivers are regulatory compliance and sustainment and replacement, which account for 49% and 42% respectively, and 91% of total CAPEX. Indirectly, these projects will also contribute to an increase in safety, security and capacity. Furthermore, from the planned 655 MKn of revised RP3 CAPEX, 54% corresponds to projects that also contribute to the ATM Master Plan and Common Projects.

Croatia appreciates the presented level of IATA's understanding over the revised RP3 CAPEX plan, which after being closely presented with additional information provided during August national consultation, resulted in no open questions left over the revised CAPEX plan scale and scope.

Further details are provided in Annex E.

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

Number of new other investments	7

#	Name of investment	Total value of the asset (capex or contractual leasing value)	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 '000 national currency)					Description
				2020	2021	2022	2023	2024	
1	VOICE COM GG	28.798	16.185	3.374	267	842	1.882	1.997	Two new radio facilities developed, and a series of VHF/UHF radio station upgrades. Full implementation of 8.33 kHz channel spacing Radio equipage replacement. Investment revised in less 9.7Mkn. Main driver: Sustainment and replacement.
2	NAV-DME	26.675	8.612		6	165	645	1.275	Replacement of end-of-life NAV sensors (VOR/DME), provision of DME/DME fall back infrastructure for PBN. Investment revised in less 3.3Mkn. Main driver: Regulatory compliance.
3	SUR-WAM	29.100	29.100		0	303	1.375	4.033	Rollout of nationwide WAM providing continuity of service and extended coverage. Investment revised in more 3Mkn. Main driver: Regulatory compliance.
4	NET-MAGnet	29.008	26.658		2.546	3.015	4.036	4.246	Upgrade of Network Infrastructure for the purposes of G/G and A/G VoIP, radar over IP and emergency system. Investment revised in more 4Mkn. Main driver: Regulatory compliance.
5	Buildings reconstruction	22.102	8.677		280	381	584	750	Continuation of existing work programme on facilities, electrics, lighting, climate control and security. Main driver: Sustainment and replacement.

6	ICT modernization	23.299	12.309		53	328	1.099	1.996	Business ICT sustainment and upgrades, including videoconferencing, ERP and a new access control system. Investment revised in less 8.3Mkn. Main driver: Sustainment and replacement and capacity enabling.
7	Other	437.106	236.375		5.496	10.103	22.177	32.504	Remaining investments in line with business continuity and regulatory compliance, further details in Annex E.

SECTION 3: PERFORMANCE TARGETS AND MEASURES FOR THEIR ACHIEVEMENT

3.1 - Safety targets

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

3.2 - Environment targets

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

3.3 - Capacity targets

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

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

3.4 - Cost efficiency targets

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

En Route Charging Zone #x

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

Terminal Charging Zone #x

3.4.3 - Pension assumptions

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

3.4.5 - Restructuring costs

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

3.5 - Additional KPIs / Targets

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

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

3.6.2 - Interdependencies and trade-offs between capacity and environment

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

3.6.4 - Other interdependencies and trade-offs

Annexes of relevance to this section

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

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX J. OPTIONAL KPIs AND TARGETS

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

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

SECTION 3.1: SAFETY KPA

3.1 - Safety targets

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

a) Safety national performance targets

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

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

Annexes of relevance to this section

ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

3 - PERFORMANCE TARGETS AT LOCAL LEVEL

3.1 - Safety targets

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

a) Safety performance targets

	Number of Air Traffic Service Providers	1

		2020A	2020	2021	2022	2023	2024
		Actual	Target	Target	Target	Target	Target
Croatia Control	Safety policy and objectives	*B*	B	B	B	B	C
	Safety risk management	*C*	B	C	C	C	D
	Safety assurance	*C*	B	C	C	C	C
	Safety promotion	*C*	B	C	C	C	C
	Safety culture	*C*	B	C	C	C	C
	Additional comments	The targets in 2024 have been set in accordance with the COMMISSION IMPLEMENTING DECISION (EU) 2021/891 of 2 June 2021					

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.

** Refer to Annex O, if necessary.*

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

Croatia will adopt and meet the European targets for RP3.

Croatia Control operates a proactive safety management system that aims to identify safety risks early and to limit, mitigate, or avoid these risks. Three main leading safety performance indicators, which are closely monitored at Croatia Control, are the Effectiveness of the Safety Management System (SMS), the application of the severity classification of the Risk Analysis Tool (RAT) and the reporting of Just Culture. Lagging safety performance indicators such as the trend in separation infringements provide additional data which help to establish safety trends. The safety processes have met the high standards and will continue to develop to continue meeting and exceeding the expectations. Croatia Control's Safety Management System is constantly achieving target maturity levels in accordance to EoSM. Croatia Control Annual Report is published on the CCL website and contains Safety data and KPI's. Usage of Safety Tools (ETOKAI, ASMT, CMMS and other) makes possible to monitor day to day safety performance.

** Refer to Annex O, if necessary.*

SECTION 3.2: ENVIRONMENT KPA

3.2 - Environment targets

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

a) Environment national performance targets

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

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

Annexes of relevance to this section

ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

3.2 - Environment targets

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

a) National environment performance targets

	2020A	2020	2021	2022	2023	2024
National reference values	*1,47%*	n/a	1,46%	1,46%	1,46%	1,46%

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National targets	1,49%	1,46%	1,46%	1,46%	1,46%

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

The national targets set are consistent with the reference values. Targets represent the value estimated by the Network Manager.

** Refer to Annex P, if necessary.*

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

Croatia is a part of the cross-border South East Common Sky Initiative Free Route Airspace (SECSI FRA) which merged the two Free Route Airspaces SAXFRA (Slovenian Austrian Cross-border Free Route Airspace) and SEAFRA (South-East Axis Free Route Airspace - project of three ANSPs from Bosnia and Herzegovina, Croatia, Serbia and Montenegro). The successful implementation of SECSI FRA was acknowledged by NM as an important step towards achieving Free Route airspace across Europe.
On the 2nd of December 2021 it is expected that SECSI FRA will be extended as described in the latest version of ERNIP II document - SECSI FRA - FRALB H24 cross-border FRA and SECSI FRA - M-FRA H24 cross-border FRA.

With that in mind, it is important to emphasise that once this concept is implemented there is not much room left for further significant improvements in the area of environmental performance. The performance achieved is predominantly driven by external factors such as weather or the routeing decisions made by airspace users, rather than the efficiency of routeing enabled by Croatia.

The Croatia actual value of average horizontal en route flight efficiency (KEA) in 2018 was 1.50, and is below the FAB CE target of 1.85 an Union-wide target (2,53%-2,4%). Measures to improve this indicator are related to the introduction of the PBN concept over the selected TMA zones in Croatia in 2019 and 2020 and airspace reorganisation. As limited benefits are expected out of mentioned improvements it must be understood that target achievement could be jeopardized by weather events and airspace user decision on route choices.

** Refer to Annex P, if necessary.*

SECTION 3.3: CAPACITY KPA

3.3 - Capacity targets

3.3.1 - Capacity KPI #1: En route ATFM delay per flight
- a) Capacity national performance targets
- b) Detailed justifications in case of inconsistency between national targets and national reference values
- c) Main measures put in place to achieve the target for en-route ATFM delay per flight
- d) ATCO planning

3.3.2 - Capacity KPI #2: Terminal and airport ANS ATFM arrival delay per flight
- a) Capacity national performance targets
- b) Contribution to the improvement of the European ATM network performance
- c) Main measures put in place to achieve the target for terminal and airport ANS ATFM arrival delay per flight

Annexes of relevance to this section

ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

3.3 - Capacity targets

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

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
National reference values	*0,00*	n/a	0,09	0,16	0,17	0,17

	2020	2021	2022	2023	2024
	Target	Target	Target	Target	Target
National targets	0,43	0,09	0,16	0,17	0,17

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

The national targets set are consistent with the reference values. Targets represent the value estimated by the Network Manager.

** Refer to Annex Q, if necessary.*

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

There are three key improvements which give confidence that the capacity targets will be met across RP3: a new airspace resectorisation, ATCO recruitment and training changes, and operatioonal/rostering improvements.

New airspace sectorisation.
Airspace re-sectorisation will be used as a tool to meet increasing capacity needs in the Zagreb FIR. CCL implemented a fourth lateral sector at the beginning of 2020. The new 'Central' sector largely comprises the eastern side of the West Sector and a portion of the southwest of the North sector. The Central sector comprises four vertical splits, meaning ACC Zagreb is technically capable of opening 16 ACC sectors. The planning for this airspace change has been conducted in close cooperation with the Network Manager, whose detailed assessment showed that this solution enabled a 32.5% reduction in delay, when compared to a future expectation of delay under a "do nothing" scenario (subject to pre-pandemic traffic levels).
Alongside the implementation of the fourth sector, in 2020 CCL handed over control of a portion of the upper airspace (FL325 to FL660) that used to control over Bosnia and Herzegovina to BHANSA. The operational change, commonly referred to as BHANSA Phase 2, changed the lateral dimensions of AoR and sectors.
With a view on enabling long-term airspace capacity (beyond RP3), CCL is also planning reconfiguring airspace sectors based on forecasted traffic development for RP4. The existing ACC currently has sufficient space for controller working positions to enable coping with current traffic developments. Possible airspace changes and further capacity improvement is seen through the investment in Zadar. This investment will ensure additional ACC capacity through additional working positions opened in Zagreb ACC, whereas simulator positions in Zagreb would be transformed into the new operational working positions (as needed during periods of high traffic), as Zadar would become new additional training facility.
The additional benefit of the Zadar centre is that it enables a change in sectorisation both in terminal airspace and in the boundary of ACC/APP area of responsibility, thus allowing to move workload from the Zagreb centre to the Zadar centre, without relocating ACC staff. Hence the Zadar centre investment is a prerequisite for this further capacity improvement.

Operational improvements.
To better manage the expected traffic growth CCL performed a thorough review of the sector opening schemes and the rostering pattern. In the light of the findings from the review it is expected that new shifts will be introduced and in the summer operational ATCOs with supplementary managerial roles will be asked to increase their support of the operations by reducing work on other duty and increasing operational shifts. This could be seen as short term rostering adjustment rather than permanent solution taking into consideration that significant "not on duty" work (i.e. shift supervisors, ATM system development, training, safety conducts etc) could be conducted only by operational ATCOs'.

New enhanced ATFCM measures will also be introduced in line with NM guidelines and recommendations to mitigate ATFM delays to the real minimum, so allowing Airspace Users to perform all their daily operations with high punctuality. Capacity improvements are also going to be strongly supported by new COOPANS system functionalities (functionalities enabling ATCO workload reduction, i.e. Vertical SEP tool, MTCD improvements, improvements of Intra-sector coordination, Multi QDM, Tactical Controller Tool – TCT, Time Based Separation – TBS, etc.) and more agile system improvement process.

ATCO recruitment and training.
With the identified capacity gap in 2019 and new organisational set-up of CCL, implementing a new approved training organisation, CCL have put emphasis on higher capability requirement and training. The measures significantly reduce the risk of ATCO numbers not matching the capacity needs.
In light of the COVID-19 pandemic, the increased recruitment was temporarily paused, to respond to the drop in demand. However, traffic is expected to recover to the 2019 levels by the end of RP3 and given the staffing shortage seen in 2019 combined with increased retirements in 2020, recruitment will be the key to ensuring adequate capacity provision in 2024 and beyond. Further detail is presented on this below.

** Refer to Annex Q, if necessary.*

d) ATCO planning

	Actual			Planning			
Zagreb (LDZO ACC)	2018	2019	2020	2021	2022	2023	2024
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)				2	9	9	10
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)				2	1	1	4
Number of ATCOs in OPS planned to be operational **at year-end (FTEs)**	107	107	92	92	107	115	121

Additional comments
Towards the end of RP2 Croatia Control struggled with a ATCO shortage FTE compared to an optimum level, which has resulted in delays having been recorded. As such, the initial RP3 plan included an expectation of recruiting 54 ATCOs (in terms of FTE), 6 in 2023 and 12 in all other years of the Reference Period. The COVID-19 pandemic has significantly disrupted traffic demand, which in turn has eased the pressure on staffing. For 2020 recruitment of 12 new ATCOs was planned, but this training process was postponed due to decreased business activity related with traffic decrease. Additionally, when compared to the original RP3 plan we witnessed an accelerated retirement of ATCO's due to COVID pandemic, as part of the cost containment action plan. It has to be kept in mind that for an optimal service provision level in 2024, when traffic in Croatia is expected to reach the levels seen in 2019, Croatia Control will require more ATCOs than in 2019. This is reflected in the ATCO numbers assumptions, which assume recruitment to re-start in 2021 and slowly increase towards the end of the period. As such, by the end of 2024, the number of ATCO FTEs is expected to increase by 13%. It is also worth noting that with the new business structure adopted on October 1 2019, the Training Organization was established as a separate organizational unit. This allows to conduct training more efficiently and hence allows maximum use of the new sectorization in the years to come. Due to accelerated retirement and decrease of traffic during 2020 and 2021, introduced cost containment measures and increased ACC ATCO engagement on other duties resulted with decrease of ATCO FTE at the end of the year. In 2022 with traffic recovery ATCOs are planned to be as much as possible available in operations which is going to result with step increase of ATCO FTE, reaching the ATCO in OPS FTE capacity as recorded in 2019. Development of the ATCOs during RP3 was welcomed by the Airspace users which in its comments regarding Croatia Draft Performance plan stated: We understand that there was a capacity issue before the pandemic and therefore understand there is some “catch up” to do in the number of ATCOs to address this situation.

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

a) National capacity performance targets

	2020A	2020	2021	2022	2023	2024
	Actual	Target	Target	Target	Target	Target
National targets	*N/A*	N/A				
Additional comments	Not applicable as no airport in Croatia is included in the Performance Plan. Croatia does not have an airport 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, Croatia decided to not apply the provisions of the Regulation to terminal ANS at any airport within the country with fewer than 80,000 IFR movements per year. Letter regarding Information on non-application of the Regulation (EU) 2019/317 regarding terminal ANS has been sent to DG Move on 7 May 2019.					

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

** Refer to Annex Q, if necessary.*

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

** Refer to Annex Q, if necessary.*

SECTION 3.4: COST-EFFICIENCY KPA

3.4 - Cost efficiency targets

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

En Route Charging Zone #x

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

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

c) Detailed justifications for the adjustments to the baseline values

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

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

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

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

Terminal Charging Zone #x

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

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

c) Detailed justifications for the adjustments to the baseline values

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

e) Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the cost base for charges with the requirements of Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317, and where applicable identification of

3.4.3 - Pension assumptions

3.4.3.1 Total pension costs

3.4.3.2 Assumptions for the "State" pension scheme

3.4.3.3 Assumptions for the occupational "Defined contributions" pension scheme

3.4.3.4 Assumptions for the occupational "Defined benefits" pension scheme

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

3.4.5 - Restructuring costs

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

3.4.5.2 Restructuring costs planned for RP3

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

a) Overall description of the measures necessary to achieve the en-route capacity targets for RP3, which induce additional costs

b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3

c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 by nature by ANSP

d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

Annexes of relevance to this section

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

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

ANNEX H. RESTRUCTURING MEASURES AND COSTS

ANNEX M. COST ALLOCATION

ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

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

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

Point 3.3 (d) on cost-allocation;

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

Point 3.3 (f) on assumptions for pension costs and interest on debt for other entities, inflation forecast and adjustments 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 - Croatia

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

En route charging zone Croatia	Baseline 2014 2014 B	Baseline 2019 2019 B	RP3 revised cost-efficiency targets (determined 2020-2024) 2020/2021 D	 2022 D	 2023 D	 2024 D	2024 D vs. 2014 B	2024 D vs. 2019 B
Total en route costs in nominal terms (in national currency)	662.284.802	671.173.047	1.290.454.731	650.707.954	704.539.471	731.453.470	10,4%	9,0%
Total en route costs in real terms (in national currency at 2017 prices)	**664.298.356**	**659.342.815**	**1.264.260.510**	**629.789.408**	**672.089.322**	**686.518.906**	**3,3%**	**4,1%**
Total en route costs in real terms (in EUR2017) [1]	89.027.153	88.363.027	169.432.172	84.402.373	90.071.273	92.005.080	3,3%	4,1%
YoY variation			91,7%	-50,2%	6,7%	2,1%		
Total en route Service Units (TSU)	1.759.191	2.191.890	2.439.286	1.582.000	1.946.000	2.251.000	28,0%	2,7%
YoY variation			11,3%	-35,1%	23,0%	15,7%		
Real en route unit costs (in national currency at 2017 prices)	**377,62**	**300,81**	**518,29**	**398,10**	**345,37**	**304,98**	-19,2%	1,4%
Real en route unit costs (in EUR2017) [1]	**50,61**	**40,31**	**69,46**	**53,35**	**46,29**	**40,87**	-19,2%	1,4%
YoY variation			72,3%	-23,2%	-13,2%	-11,7%		

National currency	**HRK**
[1] Average exchange rate 2017 (1 EUR=)	**7,46**

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

En route charging zone Croatia	Baseline 2014 2014 B	Baseline 2019 2019 B	Actuals 2014 2014 A	Actuals 2019 2019 A	2014 Baseline adjustments	2019 Baseline adjustments
Total en route costs in nominal terms (in national currency)	662.284.802	671.173.047	662.284.802	671.173.047	0	0
Total en route costs in real terms (in national currency at 2017 prices)	664.298.356	659.342.815	664.298.356	659.342.815	0	0
Total en route costs in real terms (in EUR2017) [1]	89.027.153	88.363.027	89.027.153	88.363.027	0	0
Total en route Service Units (TSU)	1.759.191	2.191.890	1.760.424	2.193.426	-1.232	-1.535

c) Detailed justifications for the adjustments to the baseline values

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

Number of adjustments	0

c.2) Adjustments to the 2014 service units

	Coefficient M2/M3	Source	Service units
Impact of transition to actual route flown	-0,07%	CRCO correction factor May 2019 (on 12 months)	-1.232

Other adjustment to the 2014 service units	No

Total adjustments to the 2014 service units	-1.232

c.3) Adjustments to the 2019 baseline value for the determined costs

Number of adjustments	0

c.4) Adjustments to the 2019 service units

Impact of transition to actual route flown	Coefficient M2/M3	Source	Service units
	-0,07%	CRCO correction factor May 2019 (on 12 months)	-1.535

Other adjustment to the 2019 service units	No

Total adjustments to the 2019 service units	-1.535

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

In the combined period of 2020/2021 Croatia significantly outperformed the expectations set down by the Union-wide combined target for 2020/2021. Except for 2022, Croatia plans to meet or exceed Union-wide RP3 cost-efficiency targets. 2022 deviation is a mere consequent of an traffic update undertaken over the 2021 forecast (taking into account the latest actual for a first half of Dec 2021 and an expected traffic for the rest of the month), all subsequent to bilateral PRB consultations with aim of mitigating an expected 2021 traffic risk sharing effects. Even though deviating from the EU wide CEFF target for 2022, undertaken 2021 traffic update resulted in significant and favorable reduction in 2021 DUC level. Meeting or overachieving Union-wide cost-efficiency targets is happening in the environment of Croatia Control having the significant lack of capacity (number of ATCOs) during 2018 and 2019 which resulted in significant ATFM delay all due to significantly higher than planned RP2traffic. Support staff RP2 shortage was identified and communicated transparently to users' community also. Cost efficiency performance in the beginning of RP3 period is enabled through the re-prioritization, reduction and postponement of the investments (initially planned in 2019 RP3 Performance plan draft), short term salaries cuts and cost reductions across a number of non-staff operational costs during 2020/2021. Nonetheless, cost increases will be required in the staff category, to ensure that by the end of the RP3, when traffic levels are expected to recover at 2019, Croatia Control can resolve the understaffing observed specially in terms of ATCOs, as well as in support staff.

Such a challenging RP3 activates and associated operational resources have been planned and structured in a such a way that Croatia plans to meet the cost-efficiency targets despite the necessary additional recruitment (which is to provide for required capacity when traffic recovers), challenging CAPEX plan, identified new regulatory requirements.

Additionally, across the RP3 period the Croatian DUC is expected to be lower than EU wide average.

** Refer to Annex R, if necessary.*

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

Additional costs of measures necessary to achieve the capacity targets for RP3	Yes	Detailed in part 3.4.6 of the performance plan
Restructuring costs planned for RP3	No	

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

The key measures are as follows:

• Existing collective agreement ensures stable and controllable staff cost.

• Pension cost peak recorded at the start of the period (as a consequence of increased retirements caused by the COVID-19 pandemic) is not expected going forward. Additionally, the new accelerated retirement regulation allows for the necessary planning stability.

• Staffing recruitment revised to better align with the traffic recovery pattern expected nad capacity targets, while still ensuring sufficient staffing is in place by the end of the period, when traffic levels are expected to reach the 2019 levels.

• Cost control measures put in place during RP2 (i.e. public tendering, COOPANS know how and market power, effective staff costs management, etc.) proved their effectiveness in RP2 and is expected to support the efficient business activities further in RP3.

• Cost control measures proved resilient and flexible during the peek of COVID 19 crisis ultimately resulted in reduced 2020A total costs compared to 2019A, even though 2020A has been effected by significant non-recurring cost pressure (increased pension and depreciation charge compared to 2019A).

• The capital investment plan has been strongly revised down in light of the COVID-19 pandemic and the related changes in customer needs and ANSP liquidity.

** Refer to Annex R, if necessary.*

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

Compliant with requirements defined in EU Reg 2019/317.

** Refer to Annex U, if necessary.*

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

Terminal Charging Zone #1 - Croatia - TCZ Zone 1

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

Terminal charging zone Name of the CZ	Baseline 2019 2019 B	RP3 revised cost-efficiency targets (determined 2020-2024) 2020/2021 D	 2022 D	 2023 D	 2024 D	2024 D vs. 2019 B
Total terminal costs in nominal terms (in national currency)						
Total terminal costs in real terms (in national currency at 2017 prices)						
Total terminal costs in real terms (in EUR2017) [1]						
YoY variation						
Total terminal Service Units (TNSU)						
YoY variation						
Real terminal unit costs (in national currency at 2017 prices)						
Real terminal unit costs (in EUR2017) [1]						
YoY variation						

National currency	
[1] Average exchange rate 2017 (1 EUR=)	

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

Terminal charging zone Name of the CZ	Baseline 2019 2019 B	Actuals 2019 2019 A	2019 Baseline adjustments
Total terminal costs in nominal terms (in national currency)			
Total terminal costs in real terms (in national currency at 2017 prices)			
Total terminal costs in real terms (in EUR2017) [1]			
Total terminal Service Units (TNSU)			

c) Detailed justifications for the adjustments to the baseline values

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

Number of adjustments	1

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
<Title of adjustment>		Click to select	Click to select		-	-
Description and justification of the adjustment						
<Justification>						

Total adjustments to the 2019 baseline value for the determined costs	**Costs nominal NC**	**Costs real NC**	**Costs EUR2017**
	-	**-**	**-**

c.2) Adjustments to the 2019 service units

Adjustment to the 2014 service units	Click to select

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

** Refer to Annex R, if necessary.*

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

** Refer to Annex R, if necessary.*

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

** Refer to Annex U, if necessary.*

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

Terminal Charging Zone #2 - Croatia - TCZ Zone 2

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

Terminal charging zone Name of the CZ	Baseline 2019 2019 B	RP3 revised cost-efficiency targets (determined 2020-2024) 2020/2021 D	 2022 D	 2023 D	 2024 D	2024 D vs. 2019 B
Total terminal costs in nominal terms (in national currency)						
Total terminal costs in real terms (in national currency at 2017 prices)						
Total terminal costs in real terms (in EUR2017) [1]						
YoY variation						
Total terminal Service Units (TNSU)						
YoY variation						
Real terminal unit costs (in national currency at 2017 prices)						
Real terminal unit costs (in EUR2017) [1]						
YoY variation						

National currency	
[1] Average exchange rate 2017 (1 EUR=)	

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

Terminal charging zone Name of the CZ	Baseline 2019 2019 B	Actuals 2019 2019 A	2019 Baseline adjustments
Total terminal costs in nominal terms (in national currency)			
Total terminal costs in real terms (in national currency at 2017 prices)			
Total terminal costs in real terms (in EUR2017) [1]			
Total terminal Service Units (TNSU)			

c) Detailed justifications for the adjustments to the baseline values

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

Number of adjustments	1

Adjustment #1	Entity name	Entity type	Nature	Costs nominal NC	Costs real NC	Costs EUR2017
<Title of adjustment>		Click to select	Click to select		-	-
Description and justification of the adjustment						
<Justification>						

Total adjustments to the 2019 baseline value for the determined costs	**Costs nominal NC**	**Costs real NC**	**Costs EUR2017**
	-	**-**	**-**

c.2) Adjustments to the 2019 service units

Adjustment to the 2014 service units	Click to select

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

** Refer to Annex R, if necessary.*

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

** Refer to Annex R, if necessary.*

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

** Refer to Annex U, if necessary.*

3.4.3 - Pension assumptions

Croatia Control

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

Pension costs	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pension costs	53.315	29.680	82.995	25.851	36.297	27.244
En-route activity	53.315	29.680	82.995	25.851	36.297	27.244
Terminal activity	N/A	N/A	N/A	N/A	N/A	N/A
Other activities	N/A	N/A	N/A	N/A	N/A	N/A

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

ATCO staff	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	N/A	N/A	N/A	N/A	N/A	N/A
Max employer % contribution rate to this scheme	11,3%	11,3%		11,3%	11,3%	11,3%
Total pension costs in respect of this scheme	**16.008**	**12.629**	**28.637**	**12.969**	**13.579**	**14.191**
Number of employees the employer contributes for in this scheme	212	213		219	230	240

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 Croatian pension system is a mixed public-private system based on three pillars: mandatory pension insurance based on intergenerational solidarity, mandatory pension insurance based on individual capitalized savings and voluntary pension insurance based on individual capitalized savings. The first pillar is a public pension scheme, mandatory for all employees based on PAYG principle. The second pillar is the employees' fully-funded scheme that is privately managed by pension company, is institutionally separated from the PAYG and is regulated by separate legislation. Financing of the first and second pillars goes through contributions rate of 20%, levied on the gross earnings and paid by employees. The third pillar is voluntary private pension scheme privately managed, divided into personal and occupational scheme. Persons working in arduous (i.e. ATCOs) or hazardous occupations are granted special treatment and can retire earlier without reductions of pension benefit. In such cases the insurance periods are calculated in extended duration and the age prescribed for the entitlement to the old-age pension is decreased, depending on the degree of increment of the insurance periods. Pension contribution rate for such occupations is higher than the standard rate and is paid by the employer.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs
Table 3.4.3.2 comprises "State" pension costs stemming from the mandatory employer contributions into the accelerated retirement scheme for the en route activity relevant ATCOs. Given the yearly maximum contribution cap, maximum contribution rate is nominal 11,3% of the gross 1 salary (i.e. exclusive of mandatory accelerated retirement contributions and health security contributions "on" gross 1 salary), therefore no total pensionable payroll to which the scheme applies can be reliably estimated, but only the total pension costs in respect of the scheme.

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
Employer contribution rate to the scheme is exclusively defined by the Croatian Government and is therefore out of CCL's control. National legislation regarding arduous and hazardous occupations have recently been revised, therefore, no further alterations are expected during RP3. CCL holds reasonable control over the realisation of the RP3 staff plan and will aim at executing the staff plan according to development of relevant business environment (closing the ATCO gap from RP2, traffic development, CAPEX plan, etc.).

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

All staff	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total pensionable payroll to which this scheme applies	N/A	N/A	N/A	N/A	N/A	N/A
Employer % contribution rate to this scheme	N/A	N/A	N/A	N/A	N/A	N/A
Total pension costs in respect of this scheme	**37.307**	**17.050**	**54.358**	**12.881**	**22.718**	**13.053**
AVG number of employees the employer contributes for in defined contribution scheme	677	679		703	732	753
AVG number of employees eligible for one-of severances scheme	40	24		11	13	9

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
See comment under 3.4.3.2.

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs
Table 3.4.3.3 comprises "occupational" pension costs stemming from the employment rights defined in existing collective agreement and relates to one off severance rights (planed for the part of employees which are expected to end their working age in the company) and pension related ("MIO") defined contribution (applicable monthly to all employees). Since the resulting pension rights and values are governed by specific provisions in the collective agreement, therefore, no total pensionable payroll to which the scheme applies can be reliably estimated, but only the total pension costs in respect of the scheme.

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
Government holds exclusive control over the existing and future terms and conditions ruling the eligible retirement age. CCL holds reasonable control over the realisation of the RP3 staff plan and over the costs stemming from the collective agreement.

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
Number of employees the employer contributes for in this scheme	N/A

	2020D	2021D	2020/2021D	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						

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
N/A

Description of the assumptions underlying the calculations of pension costs comprised in the determined costs
N/A

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.
N/A

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
N/A

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

Croatia Control

Select number of loans	4

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

Loan #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	EIB Loan: Face value= EUR 20 mio Date of subscription to the loan: Sep 2002. Loan tenor / Repayment: 1H 2025 Interest rate: specific fixed rates associated to specific loan tranches; for RP3 = 4,5% Type of loan: bank loan Average balance: 1% of total debt balance Note: given that debt balance line, according to guidance material, represents end of period balance, therefore it results in unrealistic average weighted interest rate value (%).					
Remaining balance	4.711	3.664		2.617	1.571	524
Interest rate %	3,75%	4,50%		4,50%	4,50%	4,50%
Interest amount	195	188	383	141	94	47

Loan #2	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	EBRD Loan Face value= 47M EUR Date of subscription to the loan: Sep 2011. Loan tenor / Repayment: 1H 2023 Interest rate: 6mth EURIBOR+1% Gaurantor: Republic of Croatia Type of loan: bank loan Average balance: 15% of total debt balance Note: given that debt balance line, according to guidance material, represents end of period balance, therefore it results in unrealistic average weighted interest rate value (%).					
Remaining balance	105.660	63.396		21.132	-	-
Interest rate %	0,82%	0,50%		0,56%	0,54%	0,00%
Interest amount	1.027	425	1.452	237	57	-

Loan #3	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	New RP3 loan 1 - ZABA / Unicredit Group Purpose: Working capital financing Face value= 200 M HRK Planned date of subscription to the loan: 2H 2021 Loan tenor / Repayment: 5 years starting 2023 Interest rate: fixed rate assumed at 1.40% Type of loan: bank loan Average balance: 43% Note: given that debt balance line, according to guidance material, represents end of period balance, therefore it results in unrealistic average weighted interest rate value (%).					
Remaining balance	0	70.000		200.000	160.000	120.000
Interest rate %	0,00%	1,87%		1,45%	1,40%	1,40%
Interest amount	0	655	655	1.955	2.520	1.960

Loan #4	2020D	2021D	2020/2021D	2022D	2023D	2024D

Description	New RP3 loan 2 Purpose: CAPEX plan financing Face value= up to 400 M HRK Planned date of subscription to the loan: 2022 Loan tenor / Repayment: 7yrs following 2024 Interest rate: fixed rate assumed at 1.60% Type of loan: bank loan Average balance: 41% of total debt Note: given that debt balance line, according to guidance material, represents end of period balance, therefore it results in unrealistic average weighted interest rate value (%).					
Remaining balance	0	-		50.000	200.000	285.636
Interest rate %	0,00%	0,00%		3,40%	1,60%	1,60%
Interest amount	0	-	-	850	2.000	3.885

Other loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Description	Eurocontrol loan					
Remaining balance	1.878	377		-	-	-
Average weighted interest rate %	1,34%	1,80%		0,75%	0,00%	0,00%
Interest amount	13	20	33	-	-	-

Total loans	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total remaining balance	112.249	137.437		273.749	361.571	406.160
Average weighted interest rate %	1,10%	0,94%		1,16%	1,29%	1,45%
Interest amount	1.234	1.289	2.523	3.184	4.671	5.892

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

3.4.5.2 Restructuring costs planned for RP3

Restructuring costs foreseen for RP3?	No

Additional comments

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

Additional costs of measures necessary to achieve the capacity targets for RP3?	Select
If yes, number of **en route** charging zones concerned	1

Croatia Control

a) Overall description of the measures necessary to achieve the en-route capacity targets for RP3, which induce additional costs

Traffic growth in RP2 substantially exceeded the assumptions contained in the Performance Plan. Taking into account actual RP2 YoY growth rates, the cumulative IFR MOV was 25% above planned levels in 2019.

Strong growth in demand in 2017, 2018 and 2019, with a natural lag in RP2 ATCO recruitment response, and when additional ATCO capacity was provided mostly via optimization of the internal existing OPS capacity, resulted in an ENR delay of 0.76 min/flight in 2019.
In the situation, when traffic is expected to recover to 2019 level by 2024, in order to achieve the en-route capacity targets for RP3 Croatia Control needs to increase the ATCO FTE number to close capacity gap existed in 2019.

Such a challenging RP3 recruitment activates and associated costs have been planned and structured in a such a way that Croatia plans to meet the cost-efficiency targets.

b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3

Number of capacity measures, which induce additional costs	1

Measure #1	2020D	2021D	2020/2021D	2022D	2023D	2024D
Associated additional costs (nominal terms in '000 national currency)	0	2.505	2.505	11.413	20.887	32.457
Description and justification of the additional determined costs of the measure						
Additional costs included in measure #1 are related to new additionally needed ATCO trainees and new employed ATCOs						

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total additional costs of measures ('000 national currency)	-	2.505	2.505	11.413	20.887	32.457

c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP3 by nature by ANSP

Additional costs of measures necessary to achieve the capacity targets for RP3
(nominal terms in '000 national currency)

Click to select	2020D	2021D	2020/2021D	2022D	2023D	2024D
Staff		2.505	2.505	11.413	20.887	32.457
of which, pension costs		186	186	794	1.584	2.410
Other operating costs		-	-	-	-	-
Depreciation		-	-	-	-	-
Cost of capital		-	-	-	-	-
Exceptional items		-	-	-	-	-
Total additional costs of measures	-	-	-	-	-	-

	2020D	2021D	2020/2021D	2022D	2023D	2024D
Total additional costs of measures ('000 national currency)	-	2.505	2.505	11.413	20.887	32.457

Additional comments
Croatia Control is applying conservative calculation of additional cost of measures to achieve the capacity targets for RP3 in a way that only direct staff costs for additional ATCOs are taken into account.

d) Demonstration that the deviation from the Union-wide targets is exclusively due to the additional determined costs related to measures necessary to achieve the performance targets in capacity

Despite the fact that Croatia plans on meeting the revised RP3 Cost efficiency targets in full, hereby is presented a scenario of additional capacity measures (based upon the highly needed additional ATCO recruitment) in support of credible and genuine assessment of the revised RP3 PP for Croatia.

SECTION 3.5: ADDITIONAL KPIS / TARGETS

3.5 Additional KPIs / Targets

Annexes of relevance to this section

ANNEX J. OPTIONAL KPIs AND TARGETS

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

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

3.6 - 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 safety is of paramount importance for CCL. CCL has employed a reliable and robust change management process, accepted by CCAA, for the management of changes to the ATM functional system. The process includes the risk management taking into account mitigation measures and their implementation, monitoring and management.

None of the planned changes are foreseen to have a negative impact on safety.

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

Croatia Control has a track-record of maintaining a high level of air navigation services safety. Safety considerations take priority over commercial, operational, social and any other aspects of business. CCL's Safety Management System (SMS) is aimed at systematic and proactive achievement of an acceptable level of safety, thus making a valuable contribution towards the safety of European air traffic in general.

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 as required for the annual reporting to the European Commission, the CCL Safety Unit carefully monitors the reported ATM/ANS occurrences in compliance with Reg. (EU) No. 376/2014 and implements the required corrective measures as soon as possible. Additionally, CCL has developed comprehensive Change Management Process taking into account all associated risks. Safety related changes are assessed and, if required, the mitigation measures are introduced.

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?

Safety always takes priority over commercial, operational, social and any other aspects of business.

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.

CCAA inspectors and experts regularly supervise and review the ANSP financial and personnel resources in accordance with relevant regulatory requirements (Reg. (EU) 2017/373. The existing and planned ANSP financial and personnel resources required for supporting safe ATC service provision are regularly monitored by CCAA and they are considered to be sufficient based on this regular oversight. The regular oversight will be continued in the future.

3.6.2 - Interdependencies and trade-offs between capacity and environment

February 1st 2018. This has enabled a potential saving of 1,940NM in flight distance, 285 mins of flight time, reduction of fuel consumption of 8,000kg and reduction in CO2 emissions of 25,500kg each day, resulting in CCL being able to provide excellent environmental performance. Extension of SECSI FRA towards Albania and North Macedonia is planned to be implemented by 2 December 2021.

However, possible shortages of capacity both within the Croatian airspace an also in the neighboring airspace during summer season traffic peaks may have an impact on the routes choices which can result in aircraft operators flying alternate routings.

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

The ability of Croatia Control to deliver on the planned capacity requirements, particularly towards the end of RP3, is strongly dependent on the ability to recruit both ATCOs and also Support (primarily engineering) staff.

In the shorter term the ability to reach CEFF targets has been related to the postponement of ATCO training in the earlier years of the RP3 period, combined with the increase of retirements.

Towards the end of the RP3 period the ATCO staff pool will have to be increased to ensure the staffing gap seen at the end of RP2 is closed by 2024, when traffic levels are forecasted to reach the 2019 levels. This level of staffing will allow peak periods to be efficiently managed at the level of RP3 CAP targets and make use of the planned sectorisation arrangement (max 16 sectors). The position of CCL as an Approved Training Organization will enable the required efficiency through reduced duration of the training and better success rate and flexible training to meet the forecast capacity requirements in terms of ATCO numbers, and to be able to adjust efficiently given the uncertainties in the future forecasts.
Additionally, the COOPANS Alliance is in the process of planning for the next generation systems, which will ensure, among other, long term increase of capacity. In order to foster design and development of next generation system ATCO support will also be needed.

As shown in the investment plan, Croatia Control is planning on undertaking a series of capital investments, which has been re-planned in light of the impact of the COVID-19 pandemic. The focus has shifted from capacity enabling projects to regulatory compliance, sustainment and replacement, which account for 49% and 42% respectively, and 91% of total CAPEX.

3.6.4 - Other interdependencies and trade-offs

SECTION 4: CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

4.1 - Cross-border initiatives and synergies

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

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

4.2 - Deployment of SESAR Common Projects

4.3 - Change management

Annexes of relevance to this section

ANNEX N. CROSS-BORDER INITIATIVES

4.1 - Cross-border initiatives and synergies

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

Number of cross-border initiatives	1

Initiative #1	
Name	South East Europe Common Sky Initiative (SECSI FRA)
Description	SECSI FRA has been implemented by merging SEAFRA (South-East Axis Free Route Airspace - project of three ANSPs from Croatia, Bosnia and Herzegovina, Serbia and Montenegro) and SAXFRA (Slovenian Austrian Cross-border Free Route Airspace - project of ANSPs from Austria and Slovenia). Extension of SECSI FRA (merging with FRALB H24 cross-border FRA and M-FRA H24 cross-border FRA) is planned to Albania and North Macedonia in December 2021.
Expected performance benefits	SECSI FRA allows users to have access to more flight planning options. Full cross border FRA allows airliners to take a user preferred trajectory. By use of these options at flight planning level airliners reduce flight and cost efficiency, environment impact and consequently ATC workload which increases capacity. In a pre-pandemic traffic-level circumstances, this project creates a potential saving of 1,940NM in flight distance, 285 mins of flight time, reduction of fuel consumption of 8,000kg and reduction in CO2 emissions of 25,500kg each day. This initiative is a step forward to Single European Sky, and the planned extension of SECSI FRA will bring additional performance benefits.

Additional comments
New important initiative dealing with capacity issues and cross-border initiatives 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 beyond converging towards the target concept. NM proposed roadmap for FAB CE area airspace improvements to an established FAB CE Airspace Task Force (ATF) group. FAB CE ATF will work together with NM on proposing optimum airspace structure for the FAB CE region, contributing to the NM's Central-South East Europe Airspace project. Optimisation is planned trough extension and merging of FRA and parallel process of resolving structural bottlenecks and cross-border sectorisation.

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
The COOPANS alliance has been a successful collaboration of ANSPs for the definition of common operational requirements towards harmonized ATM system software builds. The investment synergy provided through the COOPANS Alliance will enable CCL to benefit from SWIM and cyber security requirements, ensure a continuity of service, and improve controller tools (Tactical Controller Tool). It also builds towards the implementation of a new open architecture Cloud-based infrastructure, enabling several new use cases including system resilience (contingency), shared infrastructure and data centers (increased cost efficiency), ATM automation (improved ATCO productivity), etc. The FAB CE platform enables identification and development of joint projects with the aim of developing the industrial partnership among the FAB CE members, increasing air traffic efficiency and reducing the costs. Due to the onset of COVID-19 and the resulting changes in the ANSPs' strategic focus areas and priorities, some activities in 2020 were either delayed, postponed to 2021+ or cancelled. In the present challenging circumstances, the following projects in technical domain with joint participation took place: • „SSR monitoring project" is a project aimed at 1030/1090MHz spectrum protection, i.e. prevention of exceeding the threshold levels of the aircraft transponders (Article 6 of the Commission Implementing Regulation (EU) no. 1207/2011). The starting point of the project is to define common functional requirements for the monitoring system, forms for periodical monitoring/reporting and development of coordination procedures in case of identifying the detection anomalies. Finally, this project may result in joint procurement of the monitoring system should the members decide they want to continue with such form of cooperation. • „ADS-B coordinated deployment" is a project supported by the European ADS-B implementation plan (SESAR DM). It is planned within FAB to jointly perform a part of ADS-B data testing and validation, as well as to use knowledge and experience in the procurement of ADS-B system and implementation and operational use of ADS-B technology. • The project „Datalink monitoring" represents the idea of development of a tool aimed at facilitation of monitoring the Data Link applications, currently having in mind CPDLC. It is planned for the mentioned tool to enable performance monitoring in "near real time" (data processing is

expected with a delay of some 10 minutes). The mentioned tool should also enable simpler monitoring of quality of ATN/VDLm2 services leased from the CSPs (Communication Service Providers – SITA & ARINC).

These projects have been closed at the end of 2020 due to fulfilling the objectives (e.g. common approach to datalink monitoring) or due to initiating parallel activities at European level (coordinated approach to ADS-B deployment, coordinated monitoring and protection of surveillance frequencies).

4.2 - Deployment of SESAR Common Projects

4.2.1 - Common Project One (CP1)

CP1 ATM Functionality (CP1-AF) / Sub functionality (CP1-s-AF)	Recent and expected progress
CP1-AF1 - Extended AMAN and Integrated AMAN/DMAN in High-Density TMAs	
CP1-s-AF1.1 AMAN extended to en-route airspace	n/a - Croatia is not in the geographical scope of this s-AF
CP1-s-AF1.2 AMAN/DMAN Integration	n/a - Croatia is not in the geographical scope of this s-AF
CP1-AF2 - Airport Integration and Throughput	
CP1-s-AF2.1 DMAN synchronised with predeparture sequencing	n/a - Croatia is not in the geographical scope of this s-AF
CP1-s-AF2.2.1 Initial airport operations plan (iAOP)	n/a - Croatia is not in the geographical scope of this s-AF
CP1-s-AF2.2.2 Airport operations plan (AOP)	n/a - Croatia is not in the geographical scope of this s-AF
CP1-s-AF2.3 Airport safety nets	n/a - Croatia is not in the geographical scope of this s-AF
CP1-AF3 - Flexible Airspace Management and Free Route Airspace	
CP1-s-AF3.1 Airspace management and advanced flexible use of airspace	LARA tool is already in use. ASM Tool to support AFUA is already implemented. ASM Management of real time airspace data is planned. Full rolling ASM/ATFCM process and ASM information sharing is already implemented. VoIP communication implementation will be fully covered after finishing three CEF IP-s: 2015_051_AF3, 2016_043_AF3 and 2016_075_AF3_B. Dynamic Sectorisation is implemented in ATM system, but not yet in operational use. Management of pre-defined Airspace Configuration is already implemented. Predefined airspace configurations based on pre-defined airspace structures and sectorisation planning are implemented at the network level and at the level of all Operational Stakeholders. Families 3.1.1 – ASM and A-FUA, and 3.1.2 – Management of Predefined Airspace Configurations are planned to be completed by the end of 2022.
CP1-s-AF3.2 Free route airspace	Upgrade of ATM systems tu support DCT and FRA is in progress. MTCD is already implemented. Dynamic Area proximity Warning (APW) - integration with ASM tools is not planned. TCT is not planned on NM level. MONA is already implemented. BASIC OLDI (ABI, ACT, REV, MAC, PAC) including the management of reference COP is already implemented. Transfer Dialogue (ROF, COF, TIM, HOP, MAS, SDM) is already implemented. Coordination Dialogue (RAP, RRV, CDN, ACP, RJC, SBY) is mostly implemented (systems integration, procedures and training of personnel are planned). FRA implemented (H 24/7) above FL 205, in full eligible AoR. Cros-bordes FRA already implemented. Family 3.2.1 – Initial FRA is already implemented. Family 3.2.2 – Enhanced Free Route Airspace Operations is partially implemented. It will be completed until end of 2025.
CP1-AF4 - Network Collaborative Management	
CP1-s-AF4.1 Enhanced short-term ATFCM measures	STAM Phase 1 is already implemented. STAM Phase 2 is planned, with NM platform to be used. Family 4.1.1 - Enhanced Short Term ATFCM Measures is planned to be completed by the end of 2022.

CP1-s-AF4.2 Collaborative NOP	Interactive Rolling NOP is planned. ATFM procedures and staff training will be done when NM platform (N-Connect) will be available. Interface ATM systems to NM systems is partially covered. Family 4.2.1 – Interactive rolling NOP is planned to be completed until end of 2023. Croatia is not in the geographical scope of the Family 4.2.2 – Initial AOP/NOP Information Sharing.
CP1-s-AF4.3 Automated support for traffic complexity assessment	Planned to be implemented within Network management ongoing initiatives (N-connect). Automatically deliver AFP message: mostly implemented (NM integration and procedures to be done) Process and display of APL and ACH messages: already implemented. Family 4.3.1 - Automated Support for Traffic Complexity Assessment and Flight Planning interfaces is planned to be completed by the end of 2022., but it depends also on Network Manager initiatives.
CP1-s-AF4.4 AOP/NOP integration	n/a - Croatia is not in the geographical scope of this s-AF
CP1-AF5 - SWIM	
CP1-s-AF5.1 Common infrastructure components	GAP will be covered by deployment of the European Aviation Common PKI (EACP) solution. Family 5.1.1 – Common SWIM PKI and cyber security is expected to be completed until end of 2024.
CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	This sub-funcionality will be handled within 2017_066_AF5 COOPANS_SWIM and CCL internal projects. Family 5.2.1 – Stakeholders' SWIM PKI and cyber security is expected to be completed until end of 2025.
CP1-s-AF5.3 Aeronautical information exchange	Upgrade/Implement Aeronautical Information Exchange System/Service is planned in the future, but starting date is not defined yet. Family 5.3.1 - Aeronautical Information Exchange is expected to be completed until end of 2025.
CP1-s-AF5.4 Meteorological information exchange	Upgrade/Implement Meteorological Information Exchange System/Service is planned. MET Hazard Enroute Observation and MET Hazard Enroute Forecast are in progress without CEF. All other requirements are planned. Family 5.4.1 –Meteorological Information Exchange is expected to be completed until end of 2025.
CP1-s-AF5.5 Cooperative network information exchange	Upgrade/Implement Cooperative Network Information Exchange System/Service is planned in the future, but starting date is not defined yet. Family 5.5.1 –Cooperative Network Information Exchange is expected to be completed until end of 2025.
CP1-s-AF5.6 Flight information exchange (yellow profile)	Upgrade/Implement Flight Information Exchange System/Service supported by Yellow Profile is planned in the future, but starting date is not defined yet. FF-ICE /R1 will affect several operations and systems within CCL . Regarding common TopSKy system it will require coordination between COOPANS members. It is expected that Family 5.6.1 – Flight Information Exchange will be implemented until end of 2025.
CP1-AF6 - Initial Trajectory Information Sharing	
CP1-s-AF6.1 Initial air-ground trajectory information sharing	No detailed plans yet. Discussion to be conducted at COOPANS level. Family 6.1.2– Initial Air-Ground Trajectory Information Sharing (Ground Domain) is expected to be implemented until end of 2027., if the industrialisation target date (31.12.2023.) will be achieved.
CP1-s-AF6.2 Network Manager trajectory information enhancement	Out of ANSP Scope
CP1-s-AF6.3 Initial trajectory information sharing ground distribution	CCL participates in the CoDE project. ACDLS Governance MoC will be signed from our side. Family 6.3.1 – Initial Trajectory Information Sharing ground distribution is expected to be implemented until end of 2027., if the industrialisation target date (31.12.2023.) will be achieved.

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

Change management process is fully in line with provisions of the Implementing regulation (EU) 2017/373:
a) procedures for both changes of the functional system and changes to the provision of the service, MS and SMS were reviewed and approved by the competent authority;
b) upon receipt of a notification the competent authority make a decision on whether to review the change or not;
c) if the change is subject to competent authority review the service provider only allow the change for which the competent authority has approved the argument to enter into operational service;
d) annual plan of the changes is submitted to the competent authority as well as quarterly reports of the current status of changes;
e) the competent authority semi-annually audits the change management process;
f) in case of the findings, ANSP identify the root cause, define a corrective action plan that meets the approval by the competent authority and finally demonstrate corrective action implementation.

In RP3 prepatory and planning work regarding two changes will be done, which will require careful change management.

Changes related to the boundary between the TMA and the ENR airspace are being considered. Croatia is also considering implementing an airspace classification change, subject to an approval from all stakeholders.
The implementation of the airspace changes is and will be consulted with the Network Manager, to ensure that desired capacity benefits will be achieved. Thereafter, detailed transition plans are established with a well-defined oversight structure.

ATM System Modernization
Based on extensive experience and achievements, COOPANS is extending its ambition to cooperate on the entire ATM platform, integrating all ATM system solutions into one coherent and efficient, scalable and flexible COOPANS Digital ATM platform in the en-route and approach domains. The key requirements have been identified from the future ATSP customers, like automation in order to reduce workload per flight, lower costs for the end users, scalable capacity on demand, resilience to contribute to availability and of course – safety and security. The new disruptive technologies and environmental friendly solutions in aviation are going to support future growth and air traffic versatility.

The agile development of the future platform corresponds to the latest change management best practice. Through collaboration, CCL is able

SECTION 5: TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

5.1 - Traffic risk sharing parameters

5.1.1 Traffic risk sharing - En route charging zones

5.1.2 Traffic risk sharing - Terminal charging zones

5.2 - Capacity incentive schemes

5.2.1 - Capacity incentive scheme - Enroute

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

5.2.1.2 Rationale and justification - Enroute

5.2.2 - Capacity incentive scheme - Terminal

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

5.2.2.2 Rationale and justification - Terminal

5.3 - Optional incentives

Annexes of relevance to this section

ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING

ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES

ANNEX K. OPTIONAL INCENTIVE SCHEMES

5.1 - Traffic risk sharing

5.1.1 Traffic risk sharing - En route charging zones

Croatia			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

5.2 - Capacity incentive schemes

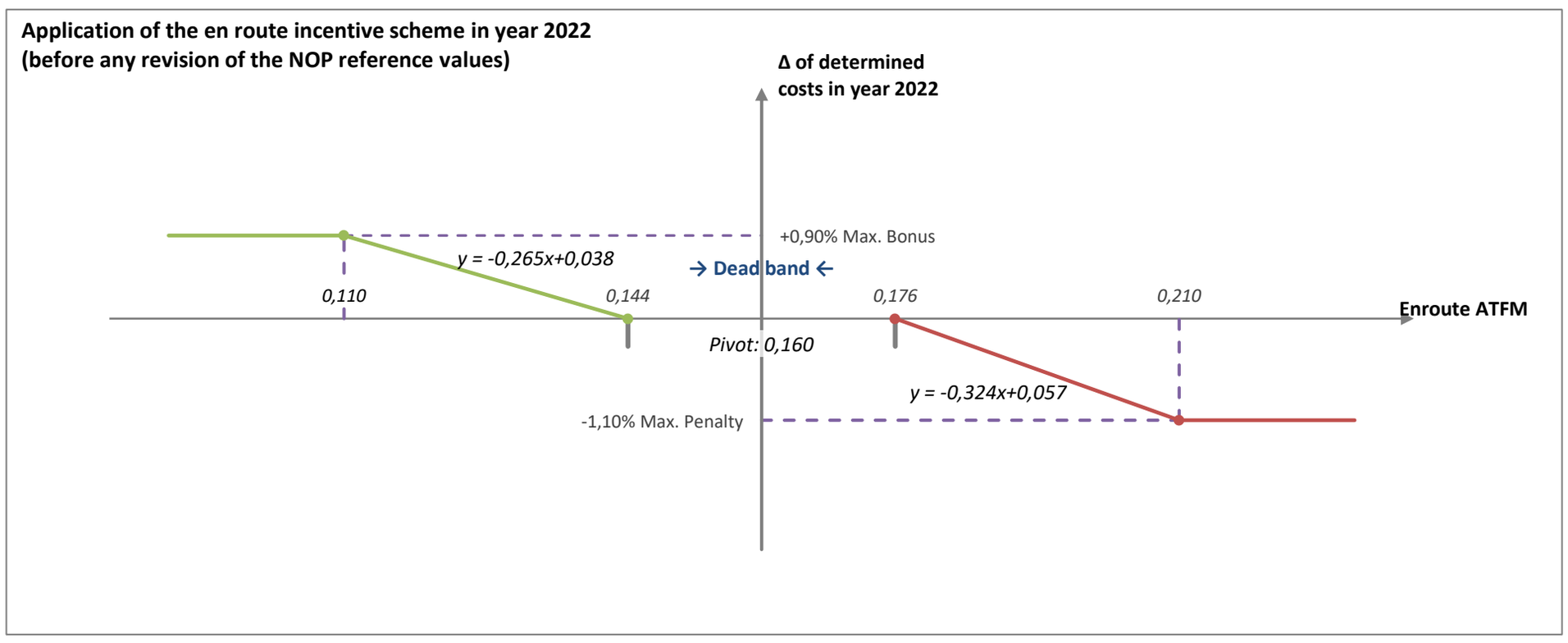
5.2.1 - Capacity incentive scheme - Enroute

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

Enroute	Expressed in	Value
Dead band Δ	%	±10,0%
Max bonus (≤2%)	*% of DC*	0,90%
Max penalty (≥ Max bonus)	*% of DC*	1,10%
The pivot values for RP3 are	fixed	

Croatia Control

		2020	2021	2022	2023	2024
NOP reference values (mins of ATFM delay per flight)				0,16	0,17	0,17
Alert threshold (Δ Ref. value in fraction of min)				±0,050	±0,050	±0,050
Performance Plan targets (mins of ATFM delay per flight)				0,16	0,17	0,17
Pivot values for RP3 (mins of ATFM delay per flight)				0,16	0,17	0,17
Financial advantages / disadvantages	Dead band range			[0,144-0,176]	[0,153-0,187]	[0,153-0,187]
	Bonus sliding range			[0,11-0,144]	[0,12-0,153]	[0,12-0,153]
	Penalty sliding range			[0,176-0,21]	[0,187-0,22]	[0,187-0,22]



5.2.1.2 Rationale and justification - Enroute

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

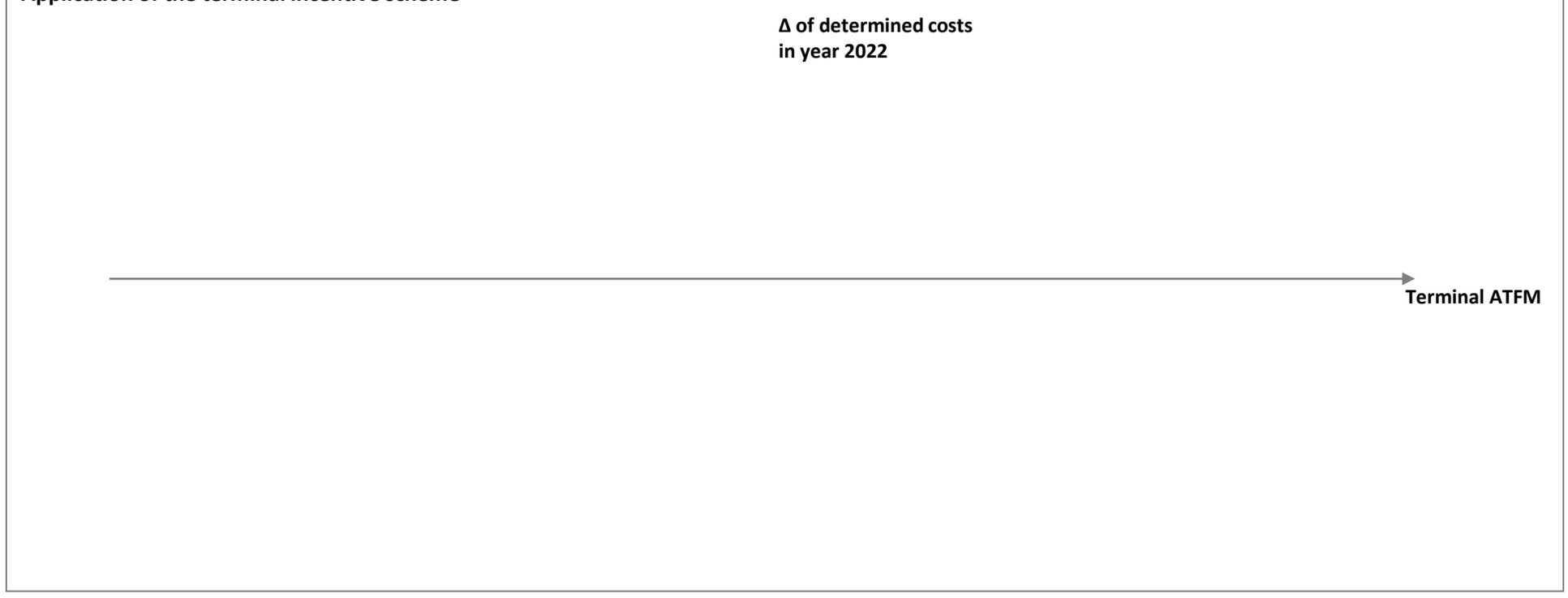
5.2.2 - Capacity incentive scheme - Terminal

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

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

		2020	2021	2022	2023	2024
Performance Plan targets (mins of ATFM delay per flight)				-	-	-
Bonus/penalty range Δ (in fraction of min)				±0,000	±0,000	±0,000
Pivot values for RP3 (mins of ATFM delay per flight)						
Financial advantages / disadvantages	Dead band range			-	-	-
	Bonus sliding range			-	-	-
	Penalty sliding range			-	-	-

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**

*** Refer to Annex I, if necessary.*

SECTION 6: IMPLEMENTATION OF THE PERFORMANCE PLAN

6.1 Monitoring of the implementation plan

6.2 Non-compliance with targets during the reference period

6 - IMPLEMENTATION OF THE PERFORMANCE PLAN

6.1 Monitoring of the implementation plan

Description of the processes put in place by the NSA to monitor the implementation of the Performance Plan including the yearly monitoring of all KPIs and PIs defined in Annex I of the Regulation and a description of the data sources
Croatian Civil Aviation Authority, as the NSA for Croatia, monitors the performance of air navigation services provided in Croatia to assess whether the performance targets contained in the Performance plan are met. The process has been established for oversight of all KPAs within the scope of the Performance plan for RP3. Following processes are covered by: • Data collection; • Data assessment; • Data validation; • Documents verification. There are two types of monitoring procedures set to meet the requirements set out in Article 37.1 in Regulation (EU) 2019/317: • Annual monitoring: to report on the actual performance of the previous year • Continuous monitoring: carried out during the year to identify when targets risk not being met The monitoring of progress in achieving the performance targets set in Reg. (EU) 2019/317, Reg. (EU) 2020/1627 and new (UE) Decision 2021/891 is performed by dedicated NSA inspectors and specialist, using specific methods according to the internal procedures and check lists developed at national level, using the best practices from the previous reference periods Croatian NSA prepares Annual monitoring reports submitted to the EC in respect to the performance legislation.

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 of the target values would not be met, Croatian Civil Aviation Authority will initiate actions to identify potential underlying issues, coordinates with ANSP, if found proportionate and justified perform audits or inspections, issue non-conformities and request corrective measures designed by the ANSP to rectify the situation, subsequently informs the EC in accordance with Art. 37, Reg. (EU) 2019/317, if it will be the case. After application of the measure, Croatian NSA validates the suitability of the measure. The results of the corrective measures are to be documented in the yearly monitoring report to the EC.

7 - ANNEXES

ANNEX A. REPORTING TABLES & ADDITIONAL INFORMATION (EN-ROUTE)
    ANNEX A.x - En route Charging Zone #x
ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)
    ANNEX B.x - Terminal Charging Zone #x
ANNEX C. CONSULTATION
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ANNEX M. COST ALLOCATION
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ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS
ANNEX S. INTERDEPENDENCIES
ANNEX T. OTHER MATERIAL
ANNEX U. VERIFICATION BY THE NSA OF THE COMPLIANCE OF THE COST BASE
ANNEX Z. CORRECTIVE MEASURES*
** Only as per Article 15(6) of the Regulation*