

# Performance Plan

# Croatia

Fourth Reference Period (2025-2029)

Status: Draft performance plan (Art. 12 of IR 2019/317)

Date of issue: 31.12.2024



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## Signatories

Performance plan details	
State name	Croatia
Status of the Performance Plan	Draft performance plan (Art. 12 of IR 2019/317)
Date of issue	30.09.2024
Date of adoption of Draft Performance Plan	30.09.2024 15.11.2024 - draft v3.0 based on EC verification of completeness RP3 PP findings 31.12.2024 - draft v4.0 based on PRB/EASA request for further clarification
Date of adoption of Final Performance Plan	03.07.2025 following Commission Decision C(2025) 2944 dated on 19.05.2025

We hereby confirm that the present performance plan is consistent with the scope of Implementing 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	
Director of the Civil Aviation Sector within Ministry of the Sea, Transport and Infrastructure  Dinko Staničić	

Additional comments	
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Document change record		
Version	Date	Reason for change
v1.0	23.07.2024	Draft for the stakeholder consultation
v2.0	30.09.2024	Performance plan draft for the submission to the European Commission (article 12 of EU 317/2019)
v3.0	15.11.2024	Performance plan draft for the submission to the European Commission (article 13 of EU 317/2019)
v4.0	31.12.2024	Performance plan draft for the submission to the European Commission (article 13 of EU 317/2019)
v5.0	03.07.2025	Update of safety targets for 2028

## SECTION 1: INTRODUCTION

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### **1.1 The situation**

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## 1 - INTRODUCTION

### 1.1 - The situation

NSA(s) responsible for drawing up the Performance Plan	Croatian Civil Aviation Agency
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#### 1.1.1 - List of ANSPs and geographical coverage and services

Number of ANSPs	1
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ANSP name	Services	Type of entity	Geographical scope
Croatia Control	ATS, CNS, AIS, MET (ATFM and ASM)	ATSP/CNSP	FIR Zagreb

#### Cross-border arrangements for the provision of ANS services\*

*\* To be reported in the performance plan: any cross-border area or group of adjacent cross-border areas of a size above 500 km<sup>2</sup>, unless the area or group of areas concerned has fewer than 7,500 controlled flight movements on average per year*

Number of cross-border area(s) where the ANSP(s) of the Member State provide(s) services in another State's charging zone(s)	1
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Cross-border service provision in the charging zone(s) of another State		
ANSP Name	Name of the cross-border area(s)	Charging zone in which services are provided
Croatia Control Ltd		Bosia and Hercegovina

Number of cross-border area(s) where ANSP(s) from another State provide(s) services in the charging zone(s) covered by the performance plan	1
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Cross-border service provision in the charging zone(s) covered by the performance plan		
ANSP Name	Name of the cross-border area(s)	Charging zone in which services are provided
ENAV	Craye area	Italy

#### 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
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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 activities	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)

<b>En-route</b>	Number of en-route charging zones	1
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En-route charging zone 1	Croatia
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<b>Terminal</b>	Number of terminal charging zones	0
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#### 1.1.4 - Other general information relevant to the plan

Relevant local circumstances with high significance for performance target setting
Due to stronger-than-anticipated traffic growth (excluding the COVID years), Croatia Control has faced a capacity shortfall since 2019, primarily due to insufficient levels of air traffic control officers (ATCO) coupled with more frequent severe weather conditions, resulting in significant air traffic flow management (ATFM) delays per flight.
In 2023, recorded IFR traffic was 35% higher than planned in the Performance plan and is forecasted to be at least 25% higher compared to the RP3

In 2023, recorded traffic was 33% higher than planned in the Performance plan and is forecasted to be at least 25% higher compared to the RP3 performance plan forecast for 2024. In response to this substantial increase in traffic, throughout RP4 Croatia Control will continue to focus on enhancing capacity through investments in new technologies, such as a new ATM system and new service provision enablers, like the Zadar facility. Additionally, there is a strong commitment to further developing the in-house ATCO training academy in order to train much needed ATCOs and thus narrow capacity gap during RP4.

Simultaneously, attention must also be maintained on other vital support functions, including engineers, technicians, and cybersecurity experts, whose roles are crucial for developing these investments at the planned pace.

Additional information
There are no additional comments.



1.2 - Traffic Forecasts

1.2.1 - En route

En route Charging zone 1

Croatia

En route traffic forecast

Local forecast

Local Forecast	2022A	2023A	2024	2025	2026	2027	2028	2029	CAGR 2024-2029
IFR movements (thousands)	713	814	881	921	971	1.015	1.058	1.096	4,5%
IFR movements (yearly variation in %)		14,1%	8,2%	4,5%	5,4%	4,5%	4,2%	3,6%	
En route service units (thousands)	2.229	2.563	2.819	3.001	3.159	3.305	3.442	3.559	4,8%
En route service units (yearly variation in %)		15,0%	10,0%	6,5%	5,3%	4,6%	4,1%	3,4%	

Specific local factors justifying not using the STATFOR base forecasts (provide justification below or refer to Annex D for more detailed explanation)
<p>Croatia has experienced a significant rise in en route traffic levels over the past decade. Between 2014 and 2024, total IFR movements increased by 69%. Excluding the COVID-19 years, this corresponds to a 10-year annual growth rate of 10.56%, or 7.93% when adjusted for the V-shaped recovery during the COVID-affected years of 2020 and 2022. As a result, the forecasted traffic for 2024 is significantly above pre-COVID levels, with a 23% increase compared to the actual traffic in 2019. This growth in IFR traffic has driven operational complexity and increased resourcing requirements, and it is expected to continue doing so in the coming years.</p> <p>During RP3, the discrepancy between actual traffic levels and those projected in Croatia's performance plan (based on the STATFOR BASE forecast from May 2021) was notable. On average, between 2022 and 2024, actual IFR movements were 34.5% higher than the forecasted figures used for performance planning. The outlook for the next seven years, according to STATFOR's seven-year forecast, indicates a steady increase in traffic (IFR movements) over Croatia, albeit with a degrading trend. The February 2024 STATFOR baseline forecast predicts an average annual growth rate of 2.7% for RP4 (2025-2029), while the expected growth rate for 2024 is only 6.1%. This is significantly below the current traffic development, which recorded a growth of 12.6% from January to May 2024.</p> <p>Given that vintage analysis has shown STATFOR typically underestimates long-term traffic development over Croatia, and considering the actual traffic growth in 2024, Croatia has decided to adopt the STATFOR February HIGH scenario as the local forecast.</p> <p>Please, see Annex D for further justification, elaboration regarding discrepancies between forecasting model and actual traffic development and more details on actual developments that are much closer to the STATFOR High scenario from February 2024.</p>

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
Croatia provided additional explanations in written according to the Action points agreed. In the document Croatia PP RP4 - ACTIONS AGREED Croatia delivered information about split between long haul Far East traffic vs. increase in the standard traffic and transition table / overview with investments that were introduced in RP3 and are still actual in RP4. Explanation regarding WACC calculation has been put in additional information document and further delivered to airspace users in the document PP RP4 - ACTIONS AGREED coupled with information about MET costs of automation that refers to en-route.

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

Topic of consultation	Applicable	Results of consultation
Establishment of determined costs included in the cost base for charges	Yes	No concerns raised by airline users.
New and existing investments, and in particular new major investments, including their expected benefits	Yes	Related to ATM cost effectiveness report, users noted that a lot of investments that CCL is undertaking are not affecting current efficiency but will have effect in the future. CCL is performing 33% better than EU average, and that even with the increase of support cost, CCL will still be among best performance in this segment, while at the same time CCL continues to implement new technologies and to prepare for the future.
Charging policy	Yes	No concerns raised by airline users.
Maximum financial advantages and disadvantages for the mandatory incentive scheme on capacity	Yes	No concerns raised by airline users.
Symmetric range ("dead band") for the purpose of the mandatory incentive scheme on capacity	Yes	Users commented that they appreciated the asymmetric scheme, but from their position it should be penalty only scheme. Croatia has decided to use asymmetric scheme as presented.
Where applicable, decision to modulate performance targets for the purpose of pivot values to be used for the mandatory incentive scheme on capacity	Yes	No concerns raised by airline users.
Establishment or modification of charging zones	No	
Where applicable, values of the modulated parameters for the traffic risk sharing mechanism	No	
Where applicable, decision to apply the simplified charging scheme	No	
Where applicable, decision to diverge from the STATFOR base forecast	Yes	Croatia used STATFOR February HIGH scenario for RP4 planning because experience shows constant underestimation of STATFOR's traffic growth projections for Croatia. Croatia believes that given vintage analysis and current traffic development, STATFOR High scenario represents the best traffic estimation and thus it is the one used for RP4 planning.

#### 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 July
Main issues discussed	PP preparation and assumptions, investments, traffic forecast, 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
The final outcome is proposed draft of RP4 PP	

Final outcome of the consultation	
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Additional comments
No additional comments.

#2 - Airspace Users	
Stakeholder group composition	IATA, Lufthansa , Flydubai, Emirates, Lauda Europe (Ryanair), CATCU, Croatia Control's Worker's Union
Dates of main meetings / correspondence	14th of August 2024
Main issues discussed	RP3 Performance Achievement, Performance Planning Drivers, Traffic, Staffing, Opex – ACC ATCO, Investment, WACC, RP4 Performance plan KPIs
Actions agreed upon	<p>1. Information about split between long haul Far East traffic vs. increase in the standard traffic - Increase of IFR GAT traffic in Zagreb ACC area of responsibility (AoR) in first 8 months of 2024 was around 12.7 percent, out to which 1 % (around 4 800 IFR GAT movements) can be attributed to the increase of the long haul Far East traffic (including ICAO regions O, V, R, Z, W and Y).</p> <p>2. Transition table / overview with investments that were introduced in RP3 and are still actual in RP4 because largest part of investments and depreciation are investment from previous RPs and name few of the projects that are included in presentation of development of the depreciation costs during RP4 based on new investment, existing investment and major investment from RP3. Based on the information provided, a decreasing trend of depreciation expense for "Existing Investments from previous RPs" is visible through out RP4 given Asset expiring depreciation period and end of useful life, while increase in both "major Investments from RP3" and "Other New Investments" is visible based on Investment finalisation and planned activation date. The "Major Investment" consists of ATM system (sustainment and transition to digital ATM platform) and Zadar training, extended APP and D-TWR center. Largest part of Depreciation related to "Existing Investments from previous RPs" consists of ATM Legacy system updates, Construction objects, Administrative and IT equipment, etc. "Other New Investments" breakdown is provided in Annex E some of the biggest and most material investments refer to to SWIM, equipment hardware replacement, ATM virtualisation platform, New AdNet system build and upgrade, VHF/UHF modernisation, ADSP oriented VCS implementation, DME network, AWOS system and many others.</p> <p>3. Additional information regarding WACC calculation has been put in additional information document.</p> <p>4. 25% of MET automation CAPEX and related depreciation are allocated to en-route, given that usage is dominantly Terminal related, however cannot be excluded from en-route in full. The above-mentioned approach is in line with ICAO Doc 9161, Manual on air navigation services economics, where, in Appendix2, Facilities and Service that provide products and functions are defined, together with their airport/en route utilisation.</p>
Points of disagreement and reasons	No points of disagreement were noted.
Final outcome of the consultation	

Additional comments
Although no points of disagreement were raised during or after the consultation, Croatia voluntarily chose to align the Cost of Capital calculation with the PRB study. This resulted in a further decrease in the Cost of Capital, and consequently, a reduction in DUC throughout the entire RP4 period.

#3 - Professional staff representative bodies	
Stakeholder group composition	Croatian air traffic controller's union, Union of employees of the Croatia Control
Dates of main meetings / correspondence	14th of August 2024
Main issues discussed	RP3 Performance Achievement, Performance Planning Drivers, Traffic, Staffing, Opex – ACC ATCO, Investment, WACC, RP4 Performance plan KPIs
Actions agreed upon	No actions agreed.
Points of disagreement and reasons	No points of disagreement were noted.
Final outcome of the consultation	

Additional comments

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#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			
			2021	2022	2023	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 does not have an airport with more than 80,000 IFR movements per year where the Implementing Regulation (EU) 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 19 July 2024.

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
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## SECTION 2: INVESTMENTS

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### **2.0 - Summary of 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 4.1.3

## 2.0 - Summary of Investments

### Croatia Control

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )					
				2025	2026	2027	2028	2029
New major investments for RP4 (Table A)	0	0	Average NBV	0	0	0	0	0
			Depreciation	0	0	0	0	0
			Cost of leasing	0	0	0	0	0
Other new investments for RP4 (below 5M€) (Table B)	72.702.206	56.510.035	Average NBV	24.233.448	31.156.991	35.988.027	38.874.546	37.304.466
			Depreciation	4.225.414	5.809.211	7.738.765	9.554.520	11.114.740
			Cost of leasing	0	0	0	0	0
Major investments from RP3 (Tables C + D)	57.427.436	42.831.134	Average NBV	10.394.982	19.399.834	26.453.348	30.591.934	32.075.645
			Depreciation	1.045.000	1.642.377	3.023.392	4.842.777	6.344.769
			Cost of leasing	0	0	0	0	0
Existing investments from previous reference periods (Table E)	0	0	Average NBV	31.308.221	23.613.868	17.594.312	13.949.640	12.128.930
			Depreciation	8.315.670	6.889.478	4.969.802	2.140.887	1.336.847
			Cost of leasing	0	0	0	0	0
Total for the ANSP in RP4	130.129.642	99.341.169	Average NBV	65.936.651	74.170.692	80.035.687	83.416.120	81.509.041
			Depreciation	13.586.084	14.341.066	15.731.959	16.538.184	18.796.355
			Cost of leasing	0	0	0	0	0





















## 2.1 - Investments - Croatia Control

Complementary information may be provided in **ANNEX E**

### 2.1.1 - Investments from RP4

<b>Table A - Number of new major investments (i.e. above 5 M€) for RP4</b>	0
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<b>Table B - Other new investments (below 5M€) from RP4</b>
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	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*	
				2025	2026	2027	2028	2029			En route*	Terminal*
Subtotal of other new investments from RP4	72.702.206	56.510.035	Average NBV	24.233.448	31.156.991	35.988.027	38.874.546	37.304.466			100%	0%
			Depreciation	4.225.414	5.809.211	7.738.765	9.554.520	11.114.740				
			Cost of leasing	0	0	0	0	0				

\* En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.

\* Given the scope of the RP4 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.

### 2.1.2 - Investments from RP3

<b>Table C - Number of major investments (i.e. above 5 M€) from RP3 performance plan</b>	2
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Ref. #	Name of major investments (i.e. above 5 M€) stemming from RP3 performance plan	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*	
					2025	2026	2027	2028	2029			En route*	Terminal*
C1	COOPANS - sustainment and transition to digital ATM platform	29.448.806	29.154.318	Average NBV	9.068.564	14.349.663	17.143.952	19.290.815	20.357.682	7	2025 - 2029	100%	0%
				Depreciation	1.040.000	1.636.377	2.838.469	4.063.083	5.389.762				
				Cost of leasing	0	0	0	0	0				
C2	Zadar training, extended APP and TWR centre	27.978.630	13.676.816	Average NBV	1.326.418	5.050.170	9.309.397	11.301.119	11.717.963	20 for buildings/ 7 for equipment	2027 building / 2029 whole project	100%	0%
				Depreciation	5.000	6.000	184.924	779.695	955.007				
				Cost of leasing	0	0	0	0	0				
Subtotal of major investments from RP3 performance plan		57.427.436	42.831.134	Average NBV	10.394.982	19.399.834	26.453.348	30.591.934	32.075.645				
				Depreciation	1.045.000	1.642.377	3.023.392	4.842.777	6.344.769				
				Cost of leasing	0	0	0	0	0				

\* En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.

\* Given the scope of the RP4 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.

<b>Table D - Number of major investments (i.e. above 5 M€) added during RP3</b>	0
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### 2.1.3 - Existing investments from previous reference periods

**Table E - Existing investments from previous RPs**

	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Lifecycle (Amortisation period in years)	Planned date of entry into operation	Allocation (%)*	
				2025	2026	2027	2028	2029			En route*	Terminal*
Subtotal of existing investments from previous RPs			Average NBV	31.308.221	23.613.868	17.594.312	13.949.640	12.128.930			100%	0%
			Depreciation	8.315.670	6.889.478	4.969.802	2.140.887	1.336.847				
			Cost of leasing	0	0	0	0	0				

\* En route/Terminal allocation within the scope of the Regulation. The total % En route+terminal should be equal to 100%.

### 2.1.4 - Detail of new major investments for RP4 from table A

Not applicable

### 2.1.5 - Details on other new investments for RP4 from table B

Overall description and justification of the costs nature and benefits of other new and existing investments in fixed assets planned over the reference period											
<p>Over the next reference period, CCL will, besides the major investment, undertake a large number of smaller (below EUR 5 million) investments aimed at ensuring continued growth and operational excellence. These investments fall into two main categories:</p> <p>1) Sustainment and Replacement (representing 42% of other CAPEX): To ensure the reliability of our operations, we will allocate resources to the sustainment and replacement of aging infrastructure and equipment. This includes, among other investments, upgrading critical surveillance radars, renewing outdated IT systems, implementing a single ADSP-oriented VCS (VCS One) and modernizing the AdIS system. These efforts will help prevent downtime and extend the lifespan of our assets and gradually introduce new technologies.</p> <p>2) Work Process Improvement (representing 34% of other CAPEX): Investing in the improvement of our work processes is crucial for enhancing efficiency and productivity. We plan to implement advanced technologies such as an ATM virtualization platform, connect CCL's VHF/UHF and SUR locations into a single network IP communication infrastructure, continue investment in the construction and upgrade of the AWOS system and implement a new CMMS system.</p> <p>Other new Investments are shown below. Pls note that the below Investments present aggregated value per investment type (DOMAIN) consisting of number of different project, each of them below EUR 5m.</p> <p>Further details are provided in Annex E.</p>											

Ref. #	Name of other new investments for RP4	Master Plan reference (if any)	Total value of the asset (capex or contractual leasing value) (in <b>national currency</b> )	Value of the assets allocated to ANS in the scope of the performance plan (in <b>national currency</b> )	Elements for the calculation of the determined costs of investments (net book value (NBV), depreciation and cost of leasing) (in <b>national currency</b> )						Description
						2025	2026	2027	2028	2029	
B1	ATM		13.810.000	10.882.072	Average NBV	4.264.960	5.595.572	6.490.035	6.536.898	5.299.039	ATM systems upgrades and replacement incl. hardware modernization/replacement, AIM upgrades (regulatory requirement), SWIM interface compliance, cyber-security improvements in ATM
					Depreciation	1.137.914	1.482.660	1.820.952	2.110.371	2.358.806	

					Cost of leasing	0	0	0	0	0	compliance, cyber security improvements in ANM network, etc. Overall 22 projects in the domain.
B2	COM		6.610.000	6.065.371	Average NBV	1.345.600	2.124.994	2.924.827	3.726.505	4.414.005	Regulatory EC and pan-European level harmonization - VOIP; ADSP oriented VCS, FAMA, etc. Overall 17 projects in the domain
					Depreciation	253.817	317.996	461.181	739.129	951.806	
					Cost of leasing	0	0	0	0	0	
B3	AWOS/MET		5.085.000	1.245.000	Average NBV	1.000.516	902.188	980.503	1.170.691	1.301.007	AWOS/AMS/VAMS update and further AWOS and VAM550 development. Overall 4 projects in the domain.
					Depreciation	101.631	149.515	164.165	194.708	216.993	
					Cost of leasing	0	0	0	0	0	
B4	BLDG		7.593.000	4.942.936	Average NBV	780.977	1.367.830	2.581.969	3.642.631	3.938.588	Mainly maintainance of obsolete buildings, including the RX centers. Overall 16 projects in the domain.
					Depreciation	25.750	38.997	140.669	371.513	415.623	
					Cost of leasing	0	0	0	0	0	
B5	NET		5.039.412	4.638.455	Average NBV	3.185.710	4.120.427	4.184.594	3.866.230	3.058.783	Continous improvement and modernisation of infrastructure, structural cabling, network infrastructure, etc. Overall 20 projects in the domain.
					Depreciation	498.967	696.549	897.013	1.128.539	1.177.316	
					Cost of leasing	0	0	0	0	0	
B6	BLDG-EEK		4.845.000	3.771.719	Average NBV	1.728.690	2.280.004	2.647.736	3.157.548	3.460.155	Continuation of facilities maintainance (electrics, lighting, climate control and security.) Overall 21 projects in the domain
					Depreciation	178.924	253.299	310.393	358.779	424.296	
					Cost of leasing	0	0	0	0	0	
B7	SUR		3.846.000	3.846.000	Average NBV	2.313.231	2.714.901	2.833.722	3.441.614	3.635.363	Major overhaul of two radar sites, together with further system update. Overall 5 projects in the domain.
					Depreciation	274.400	435.850	505.600	604.362	801.886	
					Cost of leasing	0	0	0	0	0	
B8	NAV		2.888.000	2.688.524	Average NBV	1.678.798	1.958.182	1.837.262	1.670.448	2.243.362	NAV systems upgrade and further development, such as DME network. Overall 5 projects in the domain.
					Depreciation	139.331	223.029	273.936	273.936	282.048	
					Cost of leasing	0	0	0	0	0	
B9	ICT		2.649.993	2.203.559	Average NBV	1.479.418	1.378.912	1.608.244	1.684.452	1.279.319	Mainly operational ICT sustainment and upgrades. Overall 7 projects in the domain
					Depreciation	306.056	393.118	471.149	595.531	535.366	
					Cost of leasing	0	0	0	0	0	
B10	Other		20.335.801	16.226.399	Average NBV	6.455.548	8.713.983	9.899.134	9.977.529	8.674.845	Overall 65 different projects ranging from MET, AIM to ERP and many others.
					Depreciation	1.308.625	1.818.198	2.693.708	3.177.652	3.950.600	
					Cost of leasing	0	0	0	0	0	

## SECTION 3: PERFORMANCE TARGETS AND MEASURES FOR THEIR ACHIEVEMENT

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### 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

3.3.3 - ATCO Planning

### 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 - Cost allocation ATSP/CNSP

ATSP/CNSP #x

3.4.4 - Cost allocation METSP

METSP #x

3.4.5 - Cost allocation NSA

3.4.6 - Determined costs assumptions

ANSP #x

3.4.7 - Pension assumptions

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

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

3.4.10 - Restructuring costs

### 3.5 - Additional KPIs / Targets

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

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

3.6.2 - Interdependencies and trade-offs between capacity and environment

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

3.6.4 - Other interdependencies and trade-offs

### Annexes of relevance to this section

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

ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX 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

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### 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) Justifications for the local safety performance 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				
Croatia Control		2025	2026	2027	2028	2029
		Target	Target	Target	Target	Target
	Safety policy and objectives	B	B	B	C	C
	Safety risk management	B	B	B	C	D
	Safety assurance	B	B	B	B	C
	Safety promotion	B	B	B	C	C
	Safety culture	B	B	B	B	C
Additional comments		There are no additional comments.				

b) Justifications for the local safety performance targets

<p>Croatia has met or exceeded the safety targets during RP3. Therefore, it is expected that Croatia will meet the European targets in the safety domain without delay. However, the processes will continue to evolve to ensure that these expectations are not only met but exceeded.</p> <p>Croatia Control is confident that there will be no degradation of maturity in regard to safety and safety management. Period of 5 years (RP4) is a long period of time during which certain demanding changes in the technological sense are expected, which are related to the safety management system and the company's operations in general. Also, taught by the experience from RP3, especially in the area of risk management and safety culture, a conservative approach enabled us to spend more time on better preparation and implementation of the appropriate measures and focus all available resources on the areas that are most important.</p> <p>The planned reduction of maturity level by more than one level (from maturity level D to maturity level B) is necessary for the reason that CCL Ltd. plans to carry out a comprehensive revision of the methodology in the field of Safety risk management through RP4. In order to raise the quality of the Operational risk baseline assessment as well as certain improvements in the Risk control framework, CCL Ltd. considers that a minimum of two to three years is needed for the development and adaptation of the new methodology. It should be noted that in the first part of the RP4 period, the existing risk management methodology will be used, and new methodologies will be developed in parallel.</p> <p>We consider this approach justified and in accordance with regulatory requirements.</p>
<p><i>* Refer to Annex O, if necessary.</i></p>

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

<p>Croatia Control will adopt and meet the European targets for RP4.</p> <p>Croatia Control operates a proactive safety management system designed to identify and mitigate safety risks early. CCL has planned activities and allocated resources to ensure continuous improvement in safety performance and the effectiveness of its Safety Management System (SMS). Three main leading safety performance indicators, closely monitored at Croatia Control, are the Effectiveness of the Safety Management System (SMS), outputs from internal risk monitoring, and Safety Culture reporting. Additionally, lagging safety performance indicators, such as trends in separation infringements and runway incursions, provide data to help establish safety trends.</p> <p>The safety processes at Croatia Control have consistently met high standards and will continue to evolve to exceed expectations. The Safety Management System regularly achieves target maturity levels in accordance with the EoSM. Croatia Control's Annual Report, which includes safety data and KPIs, is published on the CCL website. The use of safety tools like ETOKAI, the Safety Dashboard, ASMT, CMMS, and others enables day-to-day monitoring of safety performance.</p> <p>The activity plan related to the development of the Safety risk management methodology can be found in the CCL Management Systems Plan. The organization's long-term investment program provides improvements in safety that address key risks e.g. ASMT, database, strategic initiative safe forward, ATC one, ATM projects. The organization identifies and manages performance deviations deficiencies from its operational baseline through the CCL Safety Review Board and Safety Action Group.</p> <p>NSA will continuously monitor Effectiveness of Safety Management and all necessary steps to assure that Croatia Control will achieve safety performance targets.</p>
<p><i>* Refer to Annex O, if necessary.</i></p>

## SECTION 3.2: ENVIRONMENT KPA

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### 3.2 - Environment targets

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

- a) Environment national performance targets
- b) Justifications for the local environment performance targets
- 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

	2025	2026	2027	2028	2029
National reference values	1,46%	1,45%	1,44%	1,43%	1,42%

	2025	2026	2027	2028	2029
	Target	Target	Target	Target	Target
National targets	1,46%	1,45%	1,44%	1,43%	1,42%

b) Justifications for the local environment performance targets

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 local environment performance targets

Croatia plays a significant role in the ERNIP Network Cooperative Decision-Making Process through active participation in RNDSG, ASMSG, NETOPS, and NDOP. This collaboration ensures optimized airspace design and development, the planning and implementation of an improved European ATS route network, and the optimization of civil and military airspace structures and ATC sectors.

Croatia is part of the South East Common Sky Initiative Free Route Airspace (SECSI FRA), which merged the SAXFRA (Slovenian Austrian Cross-border Free Route Airspace) and SEAFRA (South-East Axis Free Route Airspace, a project involving ANSPs from Bosnia and Herzegovina, Croatia, Serbia, and Montenegro).

The successful implementation of SECSI FRA was acknowledged by NM as a significant step towards achieving Free Route airspace across Europe.

Furthermore, on March 21, 2024, SECSI FRA was connected to FRAIT (Italian Free Route Airspace). Cross-border FRA operations are now available 24/7 between FRAIT and SECSI FRA from flight level FL195/FL205 to FL660. This initiative aims to enable airspace users to plan FPL routes according to their desired flight profiles, increasing cost efficiency and reducing environmental impact by minimizing fuel consumption and greenhouse gas emissions. Besides establishing the FRA itself, the initiative also aims to maintain or improve safety and capacity levels.

The plan during RP4 is to connect SECSI FRA with FRACZECH, establishing a seamless connection with Central Europe by 2026. Additionally, sectorization improvements between Zagreb ACC, Beograd ACC, and Budapest ACC are anticipated in 2026. By the end of the decade, the plan is to enable cross-border operations between SECSI FRA and Hellas FRA, and eventually with SEE FRA (comprising the airspace of Bulgaria, Hungary, Romania, Slovakia, Moldova, and the Czech Republic), facilitating flight planning in FRA areas covering almost a third of Europe.

Please note that after the implementation of FRA, Croatia has significantly reduced its maneuvering area for further improvements. Achieving the ENV KPA target is now primarily influenced by elements beyond the control of ANSPs.

*\* Refer to Annex P, if necessary.*

## SECTION 3.3: CAPACITY KPA

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### 3.3 - Capacity targets

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

- a) National capacity performance targets
- b) Justifications for the local en route capacity performance targets
- c) Main measures put in place to achieve the local en route capacity performance targets

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

- a) National capacity performance targets
- b) Justifications for the local terminal capacity performance targets, including contribution to the improvement of the European ATM network performance
- c) Main measures put in place to achieve the local terminal capacity performance targets

#### 3.3.3 - ATCO planning

- a) ATCOs in the scope of the performance plan
- b) ATCO planning at ACC level
- c) ATCO training

### 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

	2025	2026	2027	2028	2029
National reference values	0,29	0,23	0,21	0,18	0,18
	2025	2026	2027	2028	2029
	Target	Target	Target	Target	Target
National targets	0,29	0,23	0,21	0,18	0,18

b) Justifications for the local en route capacity performance targets

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 local en route capacity performance targets

There are three key improvements that instill confidence in meeting the capacity targets across RP4: new airspace reorganization and capacity improvements, operational and rostering enhancements, and ATCO recruitment and training initiatives.

New Airspace Reorganization and Capacity Improvement Evolution

Airspace re-sectorization will be utilized to meet the increasing capacity needs in the Zagreb FIR. During RP3, Croatia Control implemented a fourth lateral sector, the 'Central' sector, which largely comprises the eastern side of the West Sector and a portion of the southwest of the North sector. This new sector includes four vertical splits, allowing ACC Zagreb to technically open 16 ACC sectors. Planning for this airspace change was conducted in close cooperation with the Network Manager. In 2022/2023, Croatia Control Ltd. conducted a CAPAN Study to assess the impact of the new sectorization, resulting in an upward revision of sector capacities. The NOP 2024-2029 Croatia Capacity Baseline shows a nearly 15% increase in capacity in 2023, reflecting CCL's continuous efforts towards capacity improvements.

For long-term airspace capacity (within and beyond RP4), CCL plans to reconfigure airspace sectors based on forecasted traffic development. Also, Croatia Control plans to reassess sector capacities with new CAPAN studies (2026 and 2029) to evaluate potential capacity increases from new airspace reorganization. In 2028, the implementation of the new extended TMA airspace which will consolidate all current TMAs, is expected. This reorganization should bring additional benefits at the ACC level by optimizing the use of ACC sectors and ATCO resources, ensuring greater throughput on a sector level basis. The new Zadar training, extended APP, and TWR center will be crucial for achieving the new TMA Adria airspace reorganization, providing further capacity increases and optimized resource usage.

Operational and Rostering Improvements

In 2028, CCL plans to implement a new ATM System, TOPSKY-ATC ONE, which will introduce new functionalities to enable ATCOs to manage traffic more efficiently while maintaining a high level of safety. The benefits of this new ATM system are expected to extend beyond RP4, with at least a 10% capacity increase. Enhanced ATFCM measures will also be introduced in line with NM guidelines and recommendations to minimize ATFM delays, allowing airspace users to perform their operations with high punctuality. Capacity improvements will be supported by new COOPANS system functionalities, such as Vertical SEP tool, MTCD improvements, intra-sector coordination enhancements, Multi QDM, Tactical Controller Tool (TCT), and Time Based Separation (TBS). These enhancements will reduce ATCO workload and improve system agility.

CCL will continuously improve traffic growth management through reviews of sector opening schemes and rostering patterns. New shifts will be introduced to accommodate peak traffic demand periods. During high-demand summer periods, operational ATCOs with supplementary managerial roles will increase their operational shifts to support operations, reducing their involvement in other duties temporarily. 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’

The rostering tool is continuously updated, and additional features are expected to be implemented during RP4, enabling greater flexibility and ATCO utilization.

ATCO Recruitment and Training

During RP3, CCL implemented a new in-house training organization emphasizing higher capability requirements and training. CCL proactively selects and trains new ATCOs, developing a methodology to identify the number of ATCOs needed to match forecasted traffic demand. This methodology is implemented through close cooperation between the ATM department, Human Resources, and the Training Organization. Annually, CCL trains around 35 ACC ATCO students at various stages of training, ensuring future capacity needs are met efficiently. Recruitment remains a key area to ensure adequate capacity provision in 2024 and beyond.

*\* Refer to Annex Q, if necessary.*

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

a) National capacity performance targets

	2025	2026	2027	2028	2029
	Target	Target	Target	Target	Target
National targets					
Additional comments	Not applicable.				

b) Justifications for the local terminal capacity performance targets, including contribution to the improvement of the European ATM network performance

Not applicable.

\* Refer to Annex Q, if necessary.

c) Main measures put in place to achieve the local terminal capacity performance targets

Not applicable.

\* Refer to Annex Q, if necessary.

### 3.3.3 - ATCO planning and training

#### Croatia Control

#### a) ATCOs in the scope of the performance plan

ATCOs in the scope of the performance plan		Actual	Forecast	Planned				
		2023	2024	2025	2026	2027	2028	2029
Number of ATCO in OPS (year-end FTEs) employed by the ANSP (for services within the scope of the performance plan)	ACC	100,3	104,6	115,4	121,6	132,8	137,5	142,3
	APP	89,0	91,6	97,0	96,9	100,8	103,7	112,0
	TWR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of ATCOs in OPS (year-end FTEs) allocated to the en route cost base(s)		189,3	196,2	212,4	218,6	233,5	241,2	254,3
Number of ATCO on other duties (year-end FTEs) employed by the ANSP		27,5	27,9	28,8	28,6	28,8	28,6	28,6

#### b) ATCO planning at ACC level

	Actual	Forecast	Planned				
	2023	2024	2025	2026	2027	2028	2029
<b>Zagreb (LDZO ACC)</b>							
Number of additional ATCOs in OPS planned to start working in the OPS room (FTEs)	1,7	4,2	10,8	8,1	14,3	5,9	8,8
Number of ATCOs in OPS planned to stop working in the OPS room (FTEs)	2,6	0,0	0,0	-1,8	-3,2	-1,2	-4,0
Number of ATCOs in OPS planned to be operational at year-end (FTEs)	100,3	104,6	115,4	121,6	132,8	137,5	142,3

#### Additional comments

Please note that, as required, the number of additional ATCOs in OPS is presented here in terms of Full-Time Equivalents (FTEs). For example, in 2023, seven new ATCOs began working as ACC ATCOs in OPS. However, since most of them obtained their licenses in late 2023 (October and November), they cumulatively increased the FTE count by only 1.7. At the same time, during 2023, five ACC ATCOs either lost their licenses or left the company, resulting in a 2.6 decrease in FTEs.

#### c) ATCO Training

ATCO trainees of the ANSP		Actual	Forecast	Planned				
		2023	2024	2025	2026	2027	2028	2029
Number of trainees planned to enter the training program(s) during the year.		12	14	24	24	24	18	18
Number of trainees expected to complete the training program(s) during the year based on statistical estimates.		15	19	11	20	18	24	24
Number ATCO trainees at year end.		25	20	33	37	43	37	31

Description of the training process, including details on the average failure rate and the process used to allocate newly qualified ATCOs between ACC, APP and TWR positions.

CCL ATCO TO provides training pursuant to the Commission Regulation (EU) 2015/340 including applicable Acceptable Means of Compliance (AMC) for: Basic Training, Rating Training for ADC, APS and ACS and Unit Training for 16 different locations. Duration of training (Initial and Unit) for ADC and APS is up to 2 years. Duration of training for ACS is approximately 2.5 years. Success rate is: ADC 90%, APS: 85% and ACS 50%. Hereby presented numbers represents only ATCO trainees in the scope of the performance plan (i.e. ACS and APS).

## SECTION 3.4: COST-EFFICIENCY KPA

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### 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) RP4 cost-efficiency performance targets
- 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) Justification of the consistency of the local cost-efficiency performance targets with the Union-wide targets
- 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
- f) Main measures put in place to achieve the targets for determined unit cost (DUC) for en route ANS
- g) Verification by the NSA

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

Terminal Charging Zone #x

- a) RP4 cost-efficiency performance targets
- 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) Justifications for the local terminal cost-efficiency performance targets, including contribution to the improvement of the
- e) Main measures put in place to achieve the targets for determined unit cost (DUC) for terminal ANS
- f) Verification by the NSA

#### 3.4.3 - Cost Allocation ATSP/CNSP

ATSP/CNSP #x

- a) Summary of services provided
- b) Allocation of costs by segment
- c) Allocation of costs related to the provision of approach services
- d) Description of other services and activities outside the scope of the performance plan and their financing
- e) Changes in cost allocation methodology
- f) Verification by the NSA

#### 3.4.4 - Cost Allocation METSP

METSP #x

- a) Summary of services provided
- b) Allocation of costs by segment
- c) Breakdown of determined meteorological costs between direct and core costs and allocation between en route and terminal services
- d) Meteorological direct costs and allocation across charging zone(s)
- e) Meteorological core costs and allocation across charging zone(s)
- f) Changes in cost allocation methodology
- g) Verification by the NSA

#### 3.4.5 - Cost allocation NSA

- a) Supervision costs
- b) Search and rescue costs (if reported as part of the NSA costs)
- c) Changes in cost allocation methodology
- d) Verification by the NSA

#### 3.4.6 - Determined costs assumptions

ANSP #x

3.4.6.1 - Operating costs

3.4.6.2 - Capital costs

3.4.6.3 - Costs for VFR exempted flights

3.4.6.4 - NSA verification

#### 3.4.7 - Pension assumptions

3.4.7.1 Total pension costs

3.4.7.2 Assumptions for the "State" pension scheme

3.4.7.3 Assumptions for the occupational "Defined contributions" pension scheme

3.4.7.4 Assumptions for the occupational "Defined benefits" pension scheme

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

#### 3.4.9 - 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 RP4, which induce additional costs
- b) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP4
- c) Detailed information on the additional costs of measures necessary to achieve the capacity targets for RP4 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

#### 3.4.10 - Restructuring costs

3.4.10.1 Restructuring costs from previous reference periods to be recovered in RP4

3.4.10.2 Restructuring costs planned for RP4

#### **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

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

7,5314

a) RP4 cost-efficiency performance targets

En route charging zone Croatia	Baseline 2019	Baseline 2024	RP4 cost-efficiency targets (determined 2025-2029)					2029D vs. 2019B (CAGR)	2029D vs. 2024B (CAGR)
	2019 B	2024 B	2025 D	2026 D	2027 D	2028 D	2029 D		
Total en route costs in nominal terms (in national currency)	89.079.972	115.597.815	123.214.871	130.302.401	136.878.317	143.205.958	148.385.570	5,8%	5,1%
<b>Total en route costs in real terms (in national currency at 2022 prices)</b>	<b>98.203.027</b>	<b>105.467.959</b>	<b>110.925.414</b>	<b>115.363.123</b>	<b>119.245.195</b>	<b>122.678.965</b>	<b>125.314.532</b>	2,7%	3,5%
Total en route costs in real terms (in EUR2022) <sup>1</sup>	98.203.027	105.467.959	110.925.414	115.363.123	119.245.195	122.678.965	125.314.532	2,7%	3,5%
YoY variation			5,2%	4,0%	3,4%	2,9%	2,1%		
Total en route Service Units (TSU)	2.191.890	2.819.000	3.001.000	3.159.000	3.305.000	3.442.000	3.559.000	5,5%	4,8%
YoY variation			6,5%	5,3%	4,6%	4,1%	3,4%		
<b>Real en route unit costs (in national currency at 2022 prices)</b>	<b>44,80</b>	<b>37,41</b>	<b>36,96</b>	<b>36,52</b>	<b>36,08</b>	<b>35,64</b>	<b>35,21</b>	-2,6%	-1,2%
Real en route unit costs (in EUR2022) <sup>1</sup>	44,80	37,41	36,96	36,52	36,08	35,64	35,21	-2,6%	-1,2%
YoY variation			-1,2%	-1,2%	-1,2%	-1,2%	-1,2%		

National currency	EUR
<sup>1</sup> Average exchange rate 2022 (1 EUR=)	1,00
Forecast inflation index 2024 - Base 100 in 2022	112,46

*\* please note that Croatia adopted the euro as it currency on 1st January 2023*

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

En route charging zone Name of the CZ	Baseline 2019	Baseline 2024	Actuals 2019	Forecast 2024	2019 Baseline adjustments	2024 Baseline adjustments
	2019 B	2024 B	2019 A	2024 F		
Total en route costs in nominal terms (in national currency)	89.079.972	115.597.815	89.079.972	115.597.815	0	0
<b>Total en route costs in real terms (in national currency at 2022 prices)</b>	<b>98.203.027</b>	<b>105.467.959</b>	<b>98.203.027</b>	105.467.959	0	0
Total en route costs in real terms (in EUR2022) <sup>1</sup>	98.203.027	105.467.959	98.203.027	105.467.959	0	0
Total en route Service Units (TSU)	2.191.890	2.819.000	2.193.426	2.819.000	-1.535	0

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	0
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c.2) Adjustments to the 2019 service units

	Actual service units (M2)	Coefficient M2/M3	Source	Actual service units (M3)	Service units adjustment
Impact of transition to actual route flown	2.193.426	-0,07%	CRCO correction factor May 2019 (on 12 months)	2.191.890	-1.535

Other adjustment to the 2019 service units	No
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<b>Total adjustments to the 2019 service units</b>	<b>-1.535</b>
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c.3) Adjustments to the 2024 baseline value for the determined costs

Number of adjustments	0
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**c.4) Adjustments to the 2024 service units**

Other adjustment to the 2024 service units	No
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**d) Justification of the consistency of the local en route cost-efficiency performance targets with the Union-wide targets**

<p>The en route cost-efficiency performance targets of Croatia are consistent with the Union-wide targets.</p> <p>Considering the current traffic development and the deviation of the February Base scenario traffic forecast from the actual traffic trends recorded in 2024, and also historical discrepancies between forecast and actual traffic, Croatia has used the STATFOR February 2024 HIGH scenario for the 2024F Baseline calculation. Please, refer to Annex D for the justification.</p> <p>The 2024 cost estimation is based on the financial effects of the NSA and SAR estimated costs for 2024. The ANSP cost estimation is based on Annual Plan for 2024 and takes into account all the latest developments such as the actual latest cost performance recorded during the first half of 2024, unplanned increases in inflation during 2024 (with the current average inflation at 4.82% compared to the 3.74% used for annual planning purposes) but also take into account other information not know or significantly changed while scrutinizing 2024FC for the performance planning purposes.</p>
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*\* 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 RP4	No	
Restructuring costs planned for RP4	No	

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

<p>The plan is based on the latest actual figures and most relevant and latest forecasts and assumptions. Croatia will monitor its implementation using an integrated management system approach. Mitigation measures will be taken in case of deviations from the performance plan.</p> <p>The approach for RP4 is performance-driven and is based on:</p> <ul style="list-style-type: none"><li>- A flexible rostering scheme for operational personnel allows better staff utilization during peak days.</li><li>- The increase in staff costs is mainly driven by the employment of new ATCOs to close the capacity gap from RP3 and accommodate traffic development in the new reference period.</li><li>- The capital investment plan is driven by the need to continue investing in new technologies and capacity improvement projects, including significant airspace changes (such as the new ATM system and Digital TWR) as well as continual investments in technical resilience. An adequate number of ATSEP staff (engineers and technicians) is a prerequisite for this.</li><li>- The accelerated retirement regulation, which allows for a large window for ATCO retirement (up to ten years), makes ATCO planning more difficult. Any differences between planned and actual pension costs will be addressed in accordance with the provisions of EU 2019/317, Article 28.6(c)</li><li>- The existing long-term loan, scheduled to be fully repaid in 2026, has a fixed interest rate of 1.5%.</li></ul>
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*\* Refer to Annex R, if necessary.*

**g) Verification by the NSA**

Confirmation by the NSA that the data and information included in this section have been verified in accordance with Art. 22(7) of IR 2019/317	Yes
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3.4.3 - Cost allocation ATSP/CNSP - Croatia Control

Complementary information may be provided in ANNEX M

a) Summary of services provided

Air navigation services provided		Description of the services provided by the concerned entity
ATS/ATM	Yes	Croatia Control provides air traffic management functions as the aggregation of the airborne and ground-based functions (air traffic services, airspace management and air traffic flow management) required to ensure the safe and efficient movement of aircraft during all phases of operations, together with air navigation services, flight procedure design and maintenance and services consisting in the origination and processing of data and formatting and delivering data to general air traffic for the purpose of safety-critical air navigation.
Communication	Yes	Croatia Control provides the aeronautical communication services which include: <ul style="list-style-type: none"><li>•Air-ground voice communication,</li><li>•Air-ground data communication</li><li>•Ground-ground voice communication,</li><li>•Ground-ground data communication</li></ul> These services enable communication between air traffic control and pilots/airplanes, as well as among particular air traffic control centres.
Navigation	Yes	Croatia Control provides the navigation services to the pilots/airplanes in order to navigate in all airspace volumes within the area of responsibility of Croatia Control. It includes instrument landing systems at the airports as well as other navigation aids such as DME, VOR and NDB.
Surveillance	Yes	Croatia Control provides surveillance services which are normally used by the air traffic controllers who provide ATS/ATM. Surveillance services for the en-route and approach phases of flight include Mode S secondary radars, primary radar and the wide area multilateration. Moreover, the A-SMGCS system is available at for the Zagreb airport (advanced surface movement ground and control system), consisting of the multilateration equipment and the surface movement radar, and the A-SMGCS enables surveillance at the airport manoeuvring areas which are under responsibility of Croatia Control. All the surveillance systems are accompanied by data processing systems which enable appropriate surveillance picture on the displays used by the air traffic controllers.
Search and rescue	Yes	Initial call and coordination during the search and rescue are conducted by Croatia Control. Hereto, Croatia Control provides support in all phases of terrain search and rescue to Croatian emergency services responsible for terrain operations.
Aeronautical Information	Yes	Croatia Control provides aeronautical information services in compliance with respective EU regulations and international standards and recommended practices required to ensure the flow of information necessary for the safety, regularity and efficiency of international and national air navigation within the area of its responsibility.
Meteorological services	Yes	Croatia Control provides aeronautical meteorological (MET) services according to international and EU requirements, contributing to the safety and efficiency of air navigation. MET services are provided by aeronautical meteorological stations, aerodrome meteorological offices and a meteorological watch office for FIR Zagreb.
Services to OAT	Yes	Military flights are mostly conducted in Military reserved areas (for training and exercise purposes). For all Military flights including OAT in controlled airspace provision of ATS is provided to ensure safe GAT operations. There is no ATS provided during OAT activity in segregated areas (Military responsibility), unless there is an active crossing of civil GAT through active TRA.
Cross-border ATS	Yes	Croatia Control provides Air Traffic Services (ATC, FIS , ALR) within the Cross Border Area covering the part of Bosnia and Herzegovina, as reported within the scope of RP4 Performance Plan.

Description of the methodology used for allocating costs of facilities or services between different air navigation services based on the list of facilities and services listed in ICAO Regional Air Navigation Plan European Region (Doc 7754) as last amended and a description of the methodology used for allocating those costs between different charging zones.
The allocation of business resources according to specific charging zones and services adheres to the provisions and guidelines set forth in the Performance & Charging Regulation, the Eurocontrol Principles for Establishing the Cost Base for En Route Charges and Calculation of the Unit Rates, as well as our internally developed and implemented Cost Allocation Methodology (Policy). This methodology includes a defined process for Cost Allocation and Cost Base Development.
The final results are referenced in the company’s statutory accounts through an internally produced Translation Report. This report reconciles the relevant parts of the company’s statutory accounts with the respective cost bases and vice versa.
The allocation principles are in line with the applicable regulation and reviewed/approved yearly by NSA. Based on the E&Y compliance review, the process is well designed and is in line with the applicable methodology and the criteria provided by Article 22, paragraph 4 of Implementing Regulation (EU) No 2019/317.
For more details, please refer to Additional Information.

b) Allocation of costs by segment

ANSP costs by segments (in nominal terms in '000 national currency)	2025	2026	2027	2028	2029
Determined costs for en route charging zone(s) in the scope of the performance plan	114.355	121.113	127.545	133.847	138.874

Determined costs for terminal charging zone(s) in the scope of the performance plan	N/A	N/A	N/A	N/A	N/A
Forecasted costs for terminal services at airports outside the scope of the performance plan	N/A	N/A	N/A	N/A	N/A

Description of the criteria used to allocate costs between terminal and en route services in accordance with Article 22(5), including at airports outside the scope of the performance plan
For more details, please refer to Additional Information.

**c) Allocation of costs related to the provision of approach services**

Allocation of costs related to approach services (in nominal terms in '000 national currency)	2025	2026	2027	2028	2029
Total determined costs for approach services	N/A	N/A	N/A	N/A	N/A
Determined costs for approach services allocated to the en route charging zone(s)	N/A	N/A	N/A	N/A	N/A
Determined costs for approach services allocated to the terminal charging zone(s) within the scope of the performance plan	N/A	N/A	N/A	N/A	N/A

Description of the methodology used for establishing approach costs and allocating them between en route and terminal services, including the distance from the relevant airport(s) used for allocating approach costs and description of the operational requirements on the basis of which that distance has been defined
All of CCL's business resources are allocated among regulatory defined charging zones (en route and terminal zones) and air navigation services based on the list of facilities and services outlined in the ICAO Regional Air Navigation Plan for the European Region (Doc 7754). Since approach services are not included in Doc 7754 nor in Regulation (EU) 2019/317, and considering that resources used in terminal manoeuvring aera are integral part of CCL's resources which are allocated on afore mentioned charging zones and services, CCL is not categorizing approach-related resources under a specific "approach service" and thus we could not submit required information. To allocate approach ATCOs, the "20 km rule" concept was utilized.
The allocation principles are in line with the applicable regulation and reviewed/approved yearly by NSA. Based on the E&Y compliance review, the process is well designed and is in line with the applicable methodology and the criteria provided by Article 22, paragraph 4 of Implementing Regulation (EU) No 2019/317.

**d) Description of other services and activities outside the scope of the performance plan and their financing**

Based on the description of the services provided under item a) above, describe the nature of the activities outside the scope of the performance plan, the related costs and the arrangements in place to finance them as well as the methodology used by the NSA to ensure that these amounts are excluded from the cost bases charged to airspace user
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Terminal ANS at airports (outside the scope of the performance plan)	Yes
If yes, description of the nature of the services provided and the geographical scope	
Please refer to the Additional information.	
If yes, description of the arrangements for the financing of the services provided	
The provided service is financed through unit rates charged for the service. These rates are calculated annually based on a full-cost recovery methodology, following desktop consultations with users. All terminal navigation charges are published in ICAO (Doc 7100), on the Eurocontrol website, and in other relevant publications.	

Services to OAT	Yes
If yes, description of the arrangements for the financing of the services provided	
Services for OAT are provided solely to ensure the safe operation of other GAT flights. Therefore, cost of the OAT flights, like any other exempted flights, are reimbursed to the ANSP from the State budget according to the financial agreement between the CCL and the Ministry of Transport.	

Other ANS	No
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Non ANS	No
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**e) Changes in cost allocation methodology**

Are there changes in the cost allocation criteria with respect to the previous reference period?	No
If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline.	
Cost allocation criteria did not change regarding the previous reference period.	

**f) Verification by the NSA**

Confirmation by the NSA that the data and information included in this section have been verified in accordance with Art. 22(7) of IR 2019/317	Yes
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3.4.5 - Cost allocation - NSA

Complementary information may be provided in ANNEX M

a) Supervision costs

Description of the supervision activities performed by the NSA(s), the underlying assumptions used to estimate the related determined costs and the main
Croatian Civil Aviation Agency, as the NSA for Croatia, monitors the performance of air navigation services provided in Croatia in accordance with the applicable regulation. It includes a logical and substantial data control, process analyses and verification of regulatory compliance. NSA planned cost assumption includes cost development in all cost categories Other operating costs are assumed to be increased by inflation, operating needs such as digitalization, which is also a main factor for amortization increase, rent of new premisses and minor changes in other operating costs related to ordinary operations. Increase in staff costs are planned in relation to the future CCAA employment policy.

Description of the methodology used to allocate NSAs supervision costs between en route and terminal as well as across different charging zones
There are one en route and two terminal zones in Croatia. The Agency is using bottom-up allocation tool – Cost Allocation per Funding Sources. The process differentiates job descriptions and nature of work when taking FTE’s and other costs into account - staff costs and other operating costs are allocated in accordance with the staff engaged in the supervisory activities. Developed allocation model forms a basis for development and structuring of NSA cost base calculation (ER and TNC).

b) Search and rescue costs (if reported as part of the NSA costs)

Description and underlying assumptions for search and rescue costs and main factors explaining the variations over the reference period
SAR costs are assumed to be increased mainly with the aim to maintain and improve preparedness, readiness and equipment of the SAR units in order to increase capabilities of search and rescue service. It includes staff enforcement and new equipment through depreciation costs. Until 2029, significant modernization is planned, including the following key investments: - Implementation of aircraft, drone, and pilot detection systems - More modern aircraft search and rescue equipment - Equipping the Remote Pilot Training Center and procurement of specialized drones - Equipping the future ASAR training center and covering training center operational costs - Investment in proprietary AI systems (servers and other equipment) and development of recognition models - Procurement of mobile device detection systems for locations where base stations are not available  Additionally, intensive training of all participants is planned through the National Civil Protection Training Center, including specialized training programs for remote pilots. National and international exercises are also planned, which will further enhance operational capabilities and interstate cooperation. All these activities require increased costs but are necessary to maintain a high level of readiness and efficiency of the search and rescue service, especially considering that we will be the presiding country of the Regional Advisory Committee for Aeronautical Search and Rescue (RASARAC).

Total search and rescue costs for the entity providing search and rescue services (in nominal terms in '000 national currency)	2025	2026	2027	2028	2029
Determined costs for en route charging zone(s) in the scope of the performance plan	2.518	2.593	2.671	2.751	2.833
Determined costs for terminal charging zone(s) in the scope of the performance plan	-	-	-	-	-
Forecasted search and rescue costs outside the scope of the performance plan	-	-	-	-	-

Description of the methodology used to allocate search and rescue costs to civil aviation and in the scope of the performance plan, including the proportion of search and rescue costs included in the scope of the plan as compared to total search and rescue costs incurred by the entity
SAR costs are mainly financed through the state budget while the costs in the scope of performance plan are allocated using the cost allocation methodology based on Cost Allocation per Funding Sources. The costs included in the performance plan can be categorized into three main components:  1. Personnel costs related to SAR operations and training 2. Contingency costs for unforeseen SAR events and emergency responses 3. Major procurement costs specifically dedicated to aircraft search and rescue equipment and infrastructure

Description of the methodology used to allocate search and rescue costs to civil aviation between en route and terminal as well as across different charging zones
The process differentiates job descriptions and nature of work when taking FTE’s and other costs into account - staff costs and other operating costs are allocated in accordance with the staff engaged in the supervisory activities.

c) Changes in cost allocation methodology

Are there changes in the cost allocation criteria with respect to the previous reference period? If yes, please provide the description and justification of the changes and impact(s) on the determined costs and/or baseline.	No
There are no changes in the cost allocation criteria with respect to the previous reference period.	

d) Verification by the NSA

Confirmation by the NSA that the data and information included in this section comply with the requirements of Article 15(2) Regulation (EC) No 550/2004 and with IR 2019/317.	Yes
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### 3.4.6 - Determined costs assumptions - Croatia Control

#### 3.4.6.1 - Operating costs

##### a) Staff costs

Number of entries	4
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#	Staff costs building blocks (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Actual	Forecast	Determined				
				2023	2024	2025	2026	2027	2028	2029
1	Salary costs	Salary cost including all staff personal development(new employment, salary decrease for post retirement, ATCO trainees etc.)	En-route charging zones	52.516	62.014	69.295	73.384	77.478	80.425	83.772
			Terminal charging zones							
2	Other staff costs	Overtime and other staff compensation stemming from national legislation and collective agreement	En-route charging zones	7.983	8.260	2.362	2.485	2.694	2.919	3.200
			Terminal charging zones							
3	Define contribution	Pension insurance based on individual capitalized savings	En-route charging zones	1.325	1.348	1.436	1.465	1.489	1.505	1.510
			Terminal charging zones							
4	Severence	One-off compensation to an employee after employment has ended.	En-route charging zones	500	91	60	1.582	1.083	1.779	866
			Terminal charging zones							
Total staff costs			En-route charging zones	62.324	71.714	73.152	78.916	82.743	86.628	89.347
			Terminal charging zones	0	0	0	0	0	0	0

Accounting provisions included in total staff costs		En-route charging zones	0	0	0	0	0	0	0
		Terminal charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Assumptions underlying the determined pension costs and expected evolution over Reference Period 4 (for Main ANSP please refer to tab 3.4.7)	Please refer to 3.4.7	En-route charging zones	4.100	3.859	4.072	5.749	5.366	6.181	5.410
		Terminal charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Description of the main factors explaining the planned variations of staff costs over the reference period										
The increase in staff costs is mainly driven by the overall rise in the number of employees, particularly the increase in Air Traffic Control Officers (ATCOs) needed to manage the expected rise in traffic. This includes addressing the capacity gap identified in RP3 due to a significant and unplanned traffic increase (+31.7% in 2023A and +25.2% in 2024FC compared to the RP3 performance plan forecast). The number of ACC ATCOs is expected to increase by 40% from 2023A to 2029P, while the number of APS ATCOs will rise by 25% due to the new TMA planned to be operational by the end of the reference period.										
Another main driver is the increase in ATSEP personnel, resulting from delayed employment in RP3 and the ongoing significant efforts needed to support major investments initiated in RP3 and planned for RP4. It is worth noting that the support staff in 2029P will be only 2% higher than the initially planned support staff for 2024 in the RP3 performance plan. Aforementioned, clearly depicts CCL willingness to maximize internal efficiency despite significant increase of traffic and continuation of the CAPEX program.										

##### b) Other operating costs

Number of entries	3
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#	Other operating costs building blocks (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Actual	Forecast	Determined				
				2023	2024	2025	2026	2027	2028	2029

1	Raw materials and energy	The costs of energy and other raw materials	En-route charging zones	1.357	1.719	1.868	2.046	2.301	2.396	2.507
			Terminal charging zones							
2	External services	The item consists of costs of SaaS costs, network lease and expenditures for data transmission services, costs of maintenance and calibration of equipment, training cost etc.	En-route charging zones	8.216	12.131	12.806	12.716	12.883	14.351	14.157
			Terminal charging zones							
3	Other	The item consists of various contributions, insurance premiums, licences, data usage and other costs not classified as above.	En-route charging zones	5.816	5.802	6.510	6.364	7.043	7.000	7.228
			Terminal charging zones							
Total other operating costs			En-route charging zones	15.389	19.652	21.185	21.126	22.227	23.747	23.892
			Terminal charging zones	0	0	0	0	0	0	0

Accounting provisions included in total other operating costs	Jubilee, severance and unused holiday provision.	En-route charging zones	799	0	0	0	0	0	0
		Terminal charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Costs for ground-ground communication services	Lease of ethernet telecommunication capacities for WAN A,B and C and analog and digital connections. Overheads allocated based on allocation key but not included in the overview.	En-route charging zones	1.438.658	1.610.257	2.401.200	2.418.600	2.462.100	2.536.050	2.579.550
		Terminal charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Costs for air-ground communication services via terrestrial link	Framework agreements for the rental of ATN/VDLm2 services (primary and secondary ACSP) together with lease of ethernet telecommunication capacities for WAN A,B and analog and digital connections. Overheads allocated based on allocation key but not included in the overview.	En-route charging zones	436.132	467.413	590.655	633.225	645.814	663.003	675.834
		Terminal charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Costs for air-ground communications services via satellite link	Service is free based on a "pilot" project until end of 2025. Further potential arrangements not confirmed nor included.	En-route charging zones	0	0	0	0	0	0	0
		Terminal charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Description of the main factors explaining the planned variations of other operating costs over the reference period										
During the RP4, a steady increase in other operating costs is expected. The main drivers are:										
- Inflation. Please note that CCL will experience a delayed effect of inflation due to long-term contracts (4 years) in fixed-prices for overhead and other operational expenses. Most of these contracts will expire in 2024 and 2025, leading to a significant increase in OPEX costs thereafter.										



- An increase in the number of employees including ATCO training, and  
- The addition of CAPEX, which brings related effects such as the leasing of new lines, data transmission, insurance, and maintenance.

Additionally, we have considered the growing number of suppliers transitioning from a software-as-a-product model to a software-as-a-service (SaaS) model. Numerous suppliers, including those providing ERP, virtualization platforms, most firewall vendors, and new cloud security systems, have already approached us with SaaS concepts. The most substantial impact comes from the new ATM system, where the new concept will significantly increase OPEX costs over the years.

c) Exceptional items

Number of entries	0
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Accounting provisions included in total exceptional items	En-route charging zones	0	0	0	0	0	0	0
	Terminal charging zones	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Description of the main factors explaining the planned variations of other exceptional items over the reference period

Croatia control did not planned for any exceptional items.

d) Accounting provisions

Number of entries	2
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#	List of provisions included in the determined cost (in nominal terms in '000 national currency)	Description of the composition of each item	Charging zones	Value of the provision at end 2023	Forecast	Determined				
					2024	2025	2026	2027	2028	2029
1	Jubilee and severance provision	The provision consists of the severance and jubilee awards provision based on actuarial calculation, and in accordance with the Staff collective agreement	En-route charging zones	230	0	0	0	0	0	0
			Terminal charging zones							
2	Unused holiday provision	Unused holiday provision based on "in house" calculation (actual unused holidays & salary)	En-route charging zones	569	0	0	0	0	0	0
			Terminal charging zones							
Total exceptional items			En-route charging zones	799	0	0	0	0	0	0
			Terminal charging zones	0	0	0	0	0	0	0

3.4.6.2 - Investment costs

a) Depreciation costs

Method adopted for the calculation of the depreciation cost (point 1.3 of Table 1):	Historical
If current cost accounting is applied, equivalent historical cost accounting figures have to be provided in Annex E in order to allow for comparison	

b) Cost of capital

Description of the assumptions used to compute the cost of capital (point 1.4 of Table 1), including the composition of the asset base, the return on equity, the average interest on debts and the shares of financing of the asset base through debt and equity
<p>The cost of capital calculation is based on the capital employed value (including non-depreciable assets) specific to each charging zone, with WACC parameters defined company-wide (e.g. RoE, CoD%, D/E%). The cost of capital has been strongly influenced by the company's WACC calculation development using the "Efficient WACC" methodology and changes in capital employed. These changes are highly dependent on the expected dynamics and magnitude of planned CAPEX realization and activation. Projected net current assets have been assumed exclusive of projected interest-bearing and CPT-related items.</p> <p>The Efficient WACC methodology is based on PRB's Cost of Capital Study - Methodology review and update from June 2024.</p>

Cost of capital assumptions	Description of each item
NBV fixed assets	NBV of Buildings, PPE, Vehicles, SW, HW and other tangible and intangible non-interest bearing asset which is assumed to be supporting the business long term.
Adjustments total assets	N/A
Net current assets	Short term receivables balances (excl. CPT related), inventories, creditors (excl. CPT related) and other non-cash and non-interest bearing short term net working capital. Present value of the "revenue gap" related receivables recognized according to IFRS 15 steaming from the 2020/2021 under-recovery rights have been assumed part of the regulated RP4 asset base following the provisions of existing Performance & Charging regulation.
Cost of capital %	The Efficient WACC methodology is based on PRB's Cost of Capital Study - Methodology review and update from June 2024. For more information and all Cost of Capital related items please refer to Annex B. of the Performance plan (Additional information).
Return on equity	CAPM was used for the ROE calculation. For more information please refer to Annex B. of the Performance plan (Additional information).
Average interest on debts	The Cost of Debt was based on PRB's Cost of Capital Study – Methodology Review and Update from June 2024, using the risk-free rate adjusted for the debt premium. The resulting sum ranges between 4.0% and 4.3%.
Share of financing through equity	The "Efficient WACC" calculation methodology was applied for RP4 gearing percentage. Based to the CoC study update from June 2024, the share of financing through equity is 66.3%.

#### 3.4.6.3 - Costs for VFR exempted flights

Description of the methodology and assumptions used to establish the costs of air navigation services provided to VFR flights, when exemptions are granted for VFR flights in accordance with Article 31(3), 31(4) and 31(5)
<p>Even though substantially insignificant in terms of value, costs of VFR flights have been projected based on the relation of VFR related service units towards the total number of TSUs. 2023A share was considered adequate approximation of a RP4 pattern. Actual costs reported in Table 1 reporting tables were determined based on the ratio of year N actual VFR related service units towards the year N total TSU.</p> <p>Nonetheless, Croatia treats VFR flights exempted and does not charge those to airspace users.</p>

#### 3.4.6.4 - NSA verification

Findings of the verification by the NSA (under Art. 22(7) of IR 2019/317) of the compliance of the determined costs of the ANSP 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 Article 15(2) of Reg. 550/2004 and Article 22 of IR 2019/317.

### 3.4.7 - Pension assumptions

#### Croatia Control

#### 3.4.7.1 Total pension costs, including retirement and pre-retirement schemes (in nominal terms in '000 national currency)

Pension costs per segment	2025D	2026D	2027D	2028D	2029D
En-route activity	4.072	5.749	5.366	6.181	5.410
Terminal activity	N/A	N/A	N/A	N/A	N/A
Other activities	N/A	N/A	N/A	N/A	N/A
<b>Total pension costs</b>	<b>4.072</b>	<b>5.749</b>	<b>5.366</b>	<b>6.181</b>	<b>5.410</b>

#### 3.4.7.2 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
--	----

State pension costs	2025D	2026D	2027D	2028D	2029D
Total pensionable payroll to which this scheme applies	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%
<b>Total pension costs in respect of this scheme</b>	<b>2.576</b>	<b>2.702</b>	<b>2.795</b>	<b>2.897</b>	<b>3.035</b>
Number of employees the employer contributes for in this scheme	242	253	262	271	284

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 RP4

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 and based on the PAYG (pay-as-you-go) principle. The second pillar is a fully-funded scheme for employees, privately managed by pension companies, and institutionally separated from the PAYG scheme, regulated by separate legislation. Financing for the first and second pillars comes through a contribution rate of 20%, levied on gross earnings and paid by employees.

The third pillar is a voluntary private pension scheme, which is divided into personal and occupational schemes.

Persons working in arduous (e.g., air traffic controllers) or hazardous occupations are granted special treatment and can retire earlier without reductions in pension benefits. In such cases, the insurance periods are calculated in extended duration, and the age for entitlement to the old-age pension is decreased, depending on the degree of increment of the insurance periods. The 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, separately for retirement and early retirement

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

The employer contribution rate to the scheme is exclusively defined by the Croatian Government and is therefore beyond CCL's control. National legislation regarding arduous and hazardous occupations was revised in 2021, so no further alterations are expected during RP4. CCL maintains reasonable control over the realization of the RP4 staff plan and will aim to execute the staff plan according to the development of the relevant business environment, including closing the ATCO gap from RP3, traffic development, and the CAPEX plan.

#### 3.4.7.3 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?	Yes-2
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Severence	2025D	2026D	2027D	2028D	2029D
Total pensionable payroll to which this scheme applies	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
<b>Total pension costs in respect of this scheme</b>	<b>60</b>	<b>1.582</b>	<b>1.083</b>	<b>1.779</b>	<b>866</b>
Number of employees the employer contributes for in this scheme	7	15	9	18	10

Voluntary pension insurance based on individual capitalized savings	2025D	2026D	2027D	2028D	2029D
Total pensionable payroll to which this scheme applies	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
<b>Total pension costs in respect of this scheme</b>	<b>1.436</b>	<b>1.465</b>	<b>1.489</b>	<b>1.505</b>	<b>1.510</b>
Number of employees the employer contributes for in this scheme	754	786	803	809	814

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 RP4

See comment under 3.4.7.2.

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Description of the assumptions underlying the calculations of pension costs comprised in the determined costs, separately for retirement and early retirement pension schemes
Table 3.4.7.3 comprises "occupational" pension costs stemming from the employment rights defined in the existing collective agreement. This includes one-off severance payments (planned for employees expected to retire from the company) and the pension-related ("MIO") defined contributions, which are applicable monthly to all employees. Since the resulting pension rights and values are governed by specific provisions in the collective agreement, the total pensionable payroll to which the scheme applies cannot be reliably estimated; only the total pension costs in respect of the scheme can be determined.

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
The government maintains exclusive control over the current and future terms and conditions governing the eligible retirement age. National legislation regarding arduous and hazardous occupations was revised in 2021, with no further changes expected during RP4. CCL has significant control over the implementation of the RP3 staff plan and the costs associated with the collective agreement.

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

Are there different defined benefits schemes applicable? If yes, how many?	No
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### 3.4.8 - Interest rate assumptions for loans financing the provision of air navigation services

#### Croatia Control

Select number of loans	2
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Interest rate assumptions for loans financing the provision of air navigation services (Amounts in nominal terms in '000 national currency)
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EIB		2025D	2026D	2027D	2028D	2029D
Description		Face value= EUR 20 mio Date of subscription to the loan: 12th September 2002. Type of loan: bank loan Type of interest rate: specific fixed rates associated to specific loan tranches End of period values presented in line with information on page 44 of the guidance materials; note that this results in unrealistic average weighted interest rates (row 249). In the beginning of 2025 loan will be repaid in full.				
Remaining balance		-	-	-	-	-
Interest rate %	Fixed	4,50%	4,50%	4,50%	4,50%	4,50%
Interest amount		1	-	-	-	-

ZABA / Unicredit Group		2025D	2026D	2027D	2028D	2029D
Description		Purpose: Working capital financing Face value = 200 M HRK (26.5 M EUR) Date of subscription to the loan: 03.12.2021. Type of loan: bank loan Type of interest rate: fixed rate assumed at 1.40% Note: End of period values presented in line with information on page 44 of the guidance materials; note that this results in unrealistic average weighted interest rates (row 249).				
Remaining balance		10.618	5.309	-	-	-
Interest rate %	Fixed	1,50%	1,50%	1,50%	1,50%	1,50%
Interest amount		199	119	40	-	-

Other loans	2025D	2026D	2027D	2028D	2029D
Description					
Remaining balance					
Average weighted interest rate %	-	-	-	-	
Interest amount					

Total loans		2025D	2026D	2027D	2028D	2029D
Total remaining balance		10.618	5.309	-	-	-
Average weighted interest rate %		1,89%	2,25%	-	-	-
Interest amount		200	119	40	-	-

3.4.9 - 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 RP4?	No
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3.4.10 - Restructuring costs

3.4.10.1 Restructuring costs from previous reference periods to be recovered in RP4

Restructuring costs from previous reference periods approved by the European Commission?	No
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3.4.10.2 Restructuring costs planned for RP4

Restructuring costs foreseen for RP4?	No
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Additional comments
N/A

**3.5 Additional KPIs / Targets**

**Annexes of relevance to this section**  
ANNEX J. OPTIONAL KPIS AND TARGETS



3.5 - Additional KPIs / Targets

Number of additional KPIs	0
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## SECTION 3.6: DESCRIPTION OF KPAS INTERDEPENDENCIES AND TRADE-OFFS INCLUDING THE ASSUMPTIONS USED TO ASSESS THOSE TRADE-OFFS

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

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

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

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

a) With regard to the over-riding safety objectives, what pressures does your organisation experience in meeting the cost, capacity and environmental KPAs? Describe how you ensure that these pressures do not negatively impact safety within your organisation. Describe the mitigation measures that have been introduced to demonstrate that safety performance has been sustained and what monitoring has been envisaged to measure the effectiveness of those mitigations.

Safety is of paramount importance for CCL, but CCL imperative is to fully fulfill all KPIs in all KPAs and to be efficient as much as possible. CCL has employed reliable processes and Integrated Management System (IMS) that ensure the meeting of safety, cost, capacity and environmental KPAs. All negative impacts and risks on safety are identified and appropriate measures are taken.

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.

b) What are the main assumptions used to assess the interdependencies between safety and other KPAs? Please provide a detailed analysis.

Describe the analysis methodology and the data that has been used to assess the interdependencies between safety and other KPAs. What indicators, in addition to those described in the Regulation, are used for monitoring during the reference period to ensure that the targets in the KPAs of capacity, environment, and cost-efficiency are not degrading safety?

CCL has established an integrated management system (IMS) which defines the framework for the implementation of activities from within its scope of work, with the aim to achieve all KPIs from all KPAs and enhance the efficiency of service provision and air traffic safety. IMS includes: Safety Management, Management System (QMS, ENV, OHS), Compliance Monitoring, Security Management (including information and cyber security), Contingency Management, Enterprise Risk Management, Performance Management and Change and Project Management. The important process indicators, including all KPIs and PIs from all KPAs, are defined and regularly monitored. If some deficiencies, nonconformities or risks are identified appropriate measures are introduced.

All parts of the integrated management system are subject to regular oversights by the Croatian CAA (CCAA) and the accredited certification organization.

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. Further, 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

c) Describe the organisation's philosophy for managing competing priorities between the KPAs effectively – for instance delaying programmes to manage competing demands. It is expected that the organisation uses its business risk management processes to assess the consequential risks of the organisation's competing priorities to achieve its business goals.

During the summer season, Croatia Control maximizes the use of Air Traffic Control Officer (ATCO) resources by reducing administrative shifts and prioritizing operational work. This approach increases capacity during the high-traffic period, ultimately benefiting airspace users by providing a higher quality of service.

<p>d) What trade-offs in safety have been accepted to manage resources shortfalls in realising the organisation’s objectives to meet the cost, capacity and environment KPA targets? Have trade-offs restricted the release of staff for safety activities, such as safety training (ATC training excepted), safety surveys, safety audits, safety assessments, safety studies and analyses?</p>
<p>To manage resource shortfalls while meeting cost, capacity, and environmental KPA targets, we prioritize maintaining the highest levels of safety. We have enhanced operational efficiency through advanced technologies and processes, ensuring critical safety activities like ATC training remain unaffected. Non-critical safety activities may experience temporary adjustments, but we always adhere to regulatory and safety standards. Our flexible resource management and collaboration with stakeholders ensure that safety remains uncompromised. We continuously strive to balance resource allocation effectively while upholding our</p>
<p>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 in line with planned changes that will enable targets in other KPAs to be achieved? Please provide a detailed explanation</p>
<p>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.</p>

### 3.6.2 - Interdependencies and trade-offs between capacity and environment

<p>The Republic of Croatia is one of the first implementers of Free Route Airspace (FRA) in European airspace, significantly contributing to reducing flown flight plan route lengths by 25,000 to 75,000 nautical miles per day at the network level, as described in the latest version of the Network Operations Plan (NOP). This contribution supports the gradual implementation of the FRA concept across European airspace and the rapid expansion of cross-border FRA. The Republic of Croatia boasts one of the lowest environmental KPI target values, indicating that the current FRA implementation has yielded positive benefits. However, potential capacity shortages within Croatian airspace and neighboring airspace during summer traffic peaks, coupled with more frequent severe weather conditions, may impact route choices, leading airspace users to fly alternate routings.</p>
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### 3.6.3 - Interdependencies and trade-offs between cost-efficiency and capacity

The ability of Croatia Control to meet planned capacity requirements, particularly towards the end of RP4, depends heavily on recruiting both Air Traffic Control Officers (ATCOs) and support staff (primarily engineering), along with implementing major investments necessary for increasing capacity by the end of RP4 and beyond.

Towards the end of the RP4 period, the ATCO staff pool will need to be increased to close the staffing gap observed at the end of RP3 (and even RP2) by 2029. Planned staffing level will allow for efficient management of peak periods, meeting RP4 capacity targets, and utilizing the planned sectorization arrangement according to the Capacity Plan published in the NOP. As a certified Training Organization, CCL will continue to be a strong enabler of the required efficiency through reduced training duration, potentially better success rates, and flexible training to meet forecasted capacity requirements in terms of ATCO numbers. This will also allow for efficient adjustments given future uncertainties.

The COOPANS Alliance is in the final stages of signing a contract for the purchase of next-generation systems, which will ensure an increase in capacity starting in 2028. Enhanced ATCO support will be needed to foster the design and development of these next-generation systems while simultaneously meeting CAP targets.

The implementation of the new Zadar Centre will enable the consolidation of Adriatic TMAs, bringing additional benefits at the ACC level through more efficient use of ACC sectors and ATCO resources, thus enabling further capacity increases. The Zadar Centre is expected to achieve greater sector throughput at the ACC level,

3.6.4 - Other interdependencies and trade-offs

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## SECTION 4: CROSS-BORDER INITIATIVES AND SESAR IMPLEMENTATION

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### **4.1 - Cross-border initiatives and synergies**

- 4.1.1 - Cross-border areas where the ANSP provides ANS outside the State's charging zone(s) in the scope of the performance plan
- 4.1.2 - Planned or implemented cross-border initiatives at the level of ANSPs
- 4.1.3 - Investment synergies achieved at FAB level or through other cross-border initiatives

### **4.2 - Deployment of SESAR Common Projects (CP1)**

### **4.3 - Change management**

#### **Annexes of relevance to this section**

ANNEX N. CROSS-BORDER INITIATIVES

ANNEX V. CONSISTENCY OF INVESTMENTS WITH ATM MASTER PLAN

## 4.1 - Cross-border initiatives and synergies at the level of the ANSP(s)

### 4.1.1 - Cross-border areas where the ANSP(s) provide(s) services outside of the State's charging zone(s) in the scope of the performance plan

*As indicated in section 1.1.1, the cross-border area(s) reported below are those cross-border areas or groups of adjacent cross-border areas of a size above 500 km<sup>2</sup>, unless the area or group of areas concerned has fewer than 7,500 controlled flight movements on average per year.*

Number of cross-border area(s) where the ANSP(s) of the Member State provide(s) services in another State's charging zone(s)					1		
Cross-border area(s) #1		Situated in:		Bosnia and Herzegovina			
Geographical scope of the cross-border area(s)		Cross Border Area is defined according to “Agreement on delegation of ATS services between the Republic of Croatia and Bosnia and Herzegovina” and is described in AIP.					
		The ATS provision in the portion of airspace of Bosnia and Herzegovina has been delegated from Bosnia and Herzegovina DCA to Croatia Control Ltd., ATCC Zagreb.					
		The Zagreb ATCC is responsible for the provision of the ATS within the airspace of Sarajevo FIR: - from 9500 FT AMSL to FL 660 with following coordinates:450912N 0170950E - 450804N 0170912E - 450342N 0170647E - 445753N 0170334E - 445013N 0170011E - 444235N 0165729E - 443522N 0165457E - 443254N 0165405E - 441813N 0164859E - 435234N 0164016E - westbound along FIR boundary LDZO/LQSB to point of origin excluding the airspace of TMA Banja Luka.					
		The airspace is classified as class C: - from FL 155 to FL 660 within following coordinates:430230N 0173942E - 425336N 0175710E - 424808N 0180750E - 423500N 0183311E - southbound along FIR boundary LYBA/LQSB - westbound along FIR boundary LDZO/LQSB to point of origin.					
		The airspace is classified as class C: - from 9500 FT AMSL TO FL 155 within following coordinates:425336N 0175710E - 424808N 0180750E - 423500N 0183311E - southbound along FIR boundary LYBA/LQSB - westbound along FIR boundary LDZO/LQSB - 425135N 0175134E to point of origin.					
Rationale for establishing the cross-border area, including performance benefits		The airspace is classified as class D: - from 1500 FT AMSL to FL 155 within following coordinates:425758N 0174115E - 425330N 0174728E - westbound along FIR boundary LQSB/LDZO to point of origin. The airspace is classified as class D.					
Rationale for establishing the cross-border area, including performance benefits		Cross Border Area has been established purely for operational reasons enabling more efficient operations for crossing en-route traffic to/from Hungary and Italy (vice versa), inbound/outbound and domestic flights to/from Croatian Adriatic Airports. The Cross-Boarder Area was created primarily because of the specific shape of the Republic of Croatia and it ensured greater capacity benefits as it enabled reduced communication and coordination procedures in a relatively small portion of airspace.					
Size of the cross-border area (km2)		10.000 km2					
Estimated annual number of flights		Around 30% of total CCL AoR number of flights on annual basis for RP4.					
Estimated annual number of SUs, if available		Not available					
Description of the services provided by the ANSP in the cross-border area							
Air Traffic Service (Air Traffic Control, Flight Information Service, Alerting Service)							
Annual cost incurred by the ANSP for the provision of services in the cross-border area			2025	2026	2027	2028	2029
			3.318.070	3.318.070	3.318.070	3.318.070	3.318.070
Methodology used to estimate/establish these costs							
The share of the CCL in BiH cost base has been bilaterally agreed.							
Have these costs been excluded from the determined costs in the scope of the performance plan?						No	
The Cross Border Area was established purely for operational reasons to enable more efficient operations. The services provided in Bosnian and Herzegovinian (BiH) airspace are an integral part of CCL's daily operations and cannot be treated differently. The same ACC ATCOs provide ATS services using the same ATM system and CNS equipment, with BiH airspace being an integral part of AOR Zagreb's sectorization. Therefore, these costs are included in the CCL's determined costs.							
To avoid double-charging these costs, all revenue from services provided in BiH airspace is treated as other revenue from commercial activities and thus reimbursed to the airspace users through reduction of the Croatia unit rate.							
Description of the financial arrangements in place to cover these costs							
The costs are covered via BiH cost base.							
Additional comment							

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

Number of cross-border initiatives		4
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Initiative #1	
Name	FAB CE Airspace Task Force
Description	<p>The previously existing 'FAB CE cross-border airspace improvements' activity has been superseded by the establishment of the FAB CE Airspace Task Force (ATF) which, together with the NM, assesses potential changes to FAB CE (static) sector alignment. The FAB CE Airspace Task Force is a dedicated group working in co-operation with the Network Manager (NM) and adjacent air navigation service providers (DANUBE FAB, PANSA, SMATSA) tasked with transforming the EAAS 2025 and 2030 Visions to implementable airspace design solutions. The FAB CE Airspace Plan 2023 was developed to implement the concepts of the European Airspace Architecture Study (EAAS) in the domains of airspace and capacity.</p> <p>The FAB CE Airspace Task Force continued to work closely with NM and ANSPs outside FAB CE to expand FRA across the important central/south-east European airspace region. Following the signature of a joint declaration in summer 2021 to deepen the cooperation between the functional airspace blocks, the new cross-border interface was established between the Karlsruhe SÜD Free Route Airspace in Germany and the SECSI FRA (Southeast Europe Common Sky Initiative Free Route Airspace) on the border with Austria. Implementation started in stages from 24 March 2022 and was finalised on 18 May 2023. Following the update of concept-of-operations documents and a comprehensive safety analysis, the Czech Republic joined the South-East Europe Free Route Airspace (SEE FRA) area on 23 February 2023. Activities for the new cross-border interface between SECSI FRA and FRAIT (Free Route Airspace Italy) have been aiming at its realisation on 21 March 2024. All initiatives will allow airspace users to use more climate-friendly flight profiles.</p>
Expected performance benefits	<p>SAFETY: The baseline assumption is that the potential implementation of FRA in the region is safety neutral or positive, i.e. the level of safety does degrade due to the introduction of FRA.</p> <p>FLIGHT EFFICIENCY: The project will contribute to increased flight efficiency through coordinated step-by-step implementation and further development of regional FRA initiatives.</p> <p>CAPACITY: The project will contribute to increased capacity through optimized sectorisation and coordinated capacity planning.</p> <p>COST EFFICIENCY: The project will contribute to improved cost efficiency through more efficient use of resources due to coordinated approach.</p> <p>OPERATIONAL EFFICIENCY: Advanced ATS required for FRA implementation will have a positive impact on all aspects of operational efficiency.☑</p>
Additional comments	<p>The project is linked to the ATM Master Plan L3 objective: AOM21.2</p> <p>SESAR Key Feature: Advanced Air Traffic Services</p> <p>DP2022 Families: AF 3.2.1, AF 3.2.3, AF 3.2.4, AF #4</p> <p>The project is contributing to meeting the following FAB CE Strategic Objectives (FSO):</p> <ul style="list-style-type: none"> <li>•FSO5, target 5.1: Implement Free Route Airspace "Baseline scenario".</li> <li>•FSO10, target 10.3: Incorporate actions supporting the SESAR deployment (Deployment Plan / Programme 2015) in the joint FAB CE planning process and planning documentation.☑</li> </ul>

  

Initiative #2	
Name	Common CNS Infrastructure Planning
Description	<p>In the FAB CE, CCL participates in the process of the yearly common surveillance preventive maintenance planning, in order to avoid overlapping of the time-slots of maintenance of the interdepending radars.</p> <p>CCL provide radar data from its two radar sites to BHANSA, neighbouring ANS provider in Bosnia and Herzegovina, in order to optimise surveillance cost in the region while enabling enough good radar picture for BHANSA tracker and their ATCOs. The maintenance planning of these two radars is coordinated with BHANSA.</p> <p>CCL has started the process to establish the X-border DME service with neighbouring ANSPs. This is documented in the respective SLAs. For instance, as of May 2024, 2 DMEs that are operated by CCL, are also possible to be used for the navigation in AoR of SMATSA. And vice- versa, 1 DME operated by SMATSA and 3 DMEs operated by BHANSA are also possible to be used in the CCL AoR. The negotiations between CCL and ENAV are in progress with the plan to result with the SLA in 2025 which will enable use of 8 DMEs operated by ENAV in CCL's AoR too.</p> <p>CCL has established Technical service level agreements with most of neighbouring ANSPs. Also, where the SLAs do not exist, CCL started negotiations in order to have formal agreements on the technical level.</p> <p>CCL plans to cooperate and coordinate with neighbouring ANSPs and other partners, in the infrastructure planning, in line with the future national MON concept and in line with the future European CNS Evolution Plan.</p>
Expected performance benefits	COST EFFICIENCY: More efficient use of resources



Additional comments	
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Initiative #3	
Name	FAB CE TSA/TRA Harmonisation
Description	<p>Activities of the FAB CE-created special task force (TF) to support the JCMACC initiative to progress on TRA/TSA harmonisation were concluded by approval of all deliverables. The objectives of the task force - to map the current TSA/TRA utilisation principles in FAB CE; assess these principles in the framework of the requirements of EC Regulations, EUROCONTROL ERNIP guidelines and other relevant documentation to address the potential differences of the national implementations with international requirements; and consider future TSA/TRA needs in light of EAAS 2025 /2030 vision and known FAB CE military requirements – have been reached. Guidelines for ASM performance monitoring and measurement were delivered and now the States and ANSPs can move to implementing the various recommendations through existing structures.</p> <p>The assessment to highlight differences in TSA-TRA utilization between the FAB CE States and to make recommendations for potential harmonization for further consideration is completed. The proposed topics are subject to further elaboration in the form of a project plan (or similar) to fully scope the associated tasks and work. These activities will continue also in RP4.</p>
Expected performance benefits	COST EFFICIENCY: More efficient use of resources
Additional comments	<p>The project is contributing to meeting the following FAB CE Strategic Objectives (FSO):</p> <ul style="list-style-type: none"> <li>• FSO1: Jointly develop and implement FAB CE airspace compliant with ANSP requirements and the EAAS</li> </ul>

Initiative #4	
Name	FAB CE ATCO Selection criteria and process benchmarking
Description	<p>To address a challenge in recruiting air traffic controllers, FAB CE ANSPs developed a series of recommendations on recruitment and training in a new report FAB CE ANSPs ATCO Selection Criteria and Process Benchmarking. The main deliverables in the report have been to identify all possible measures to improve FAB CE ANSPs and their success rates in ATCO selection and training; share best practices in the human resources domain; and establish a baseline for further assessments and benchmarking. In the initial recruitment phase, the report recommends that a pre-briefing call is made to ATCO applicants to ensure expectations on both sides are clear. ANSPs should consider launching recruitment campaigns on social media so the key demographic is targeted. The type of language used in the recruitment campaigns may need to be adapted to different generational perceptions and expectations. The report authors also recommend starting a campaign in high schools around the benefits of working in air traffic management. Staff planning also needs to be improved, incorporating a more accurate and long-term staffing plan so the recruitment process can be more closely tied to future demand for new personnel. It will be important that any analysis of ATCO selection related data should be improved, results shared between the FAB CE ANSPs and ANSP branding strengthen, to see ANSPs as an attractive employer.</p> <p><del>The project was completed in RP3, the implementation of the outcomes will continue in RP4.</del></p>
Expected performance benefits	<p>CAPACITY: More efficient ATCO selection process</p> <p>COST EFFICIENCY: More efficient use of resources</p>
Additional comments	<p>The project is contributing to meeting the following FAB CE Strategic Objectives (FSO):</p> <ul style="list-style-type: none"> <li>• FSO1: Jointly develop and implement FAB CE airspace compliant with ANSP requirements and the EAAS</li> </ul>

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

Details of synergies in terms of common infrastructure and common procurement
<p><b>FAB CE</b></p> <p>CCL participates in the process of the yearly common surveillance preventive maintenance planning, in order to avoid overlapping of the time slots of maintenance of the interdependent radars. FAB CE has drawn up a service level agreement (SLA) to avoid data overloads between airborne and ground-based stakeholders exchanging operational data on 1030/1090MHz frequencies. The new FAB CE SLA has defined a new set of rules and procedures for the exchange of information on the existing or potential frequency-load situations to avoid any downgrade of the surveillance services. The aim of the coordination activity between FAB CE air navigation service providers with this work is to avoid overloads as a result of which onboard transponders are rendered inoperable. It will also alert partners if there is an SSR frequency issue in the event implementing new systems or managing military exercises.</p> <p><b>COOPANS</b></p> <p>CCL together with 5 other partnering ANSPs, jointly defines technical specification for the major ATM system, thus optimising cost and aligning with SESAR. For more details please refer to Annex E.</p>

#### 4.2 - Deployment of SESAR Common Projects (CP1)

CP1 ATM Functionality (CP1-AF)/ Sub-functionality (CP1-s-AF)	Target date of implementation	Date of actual/expected deployment of s-AF	Description of realised and/or planned investment(s) related to the deployment of s-AF	Relevant investments (Ref. # as per section 2)	RP4 determined costs related to the sub-AF (in national currency and in nominal terms)				
					2025	2026	2027	2028	2029
CP1-AF1 - Extended AMAN and Integrated AMAN/DMAN in High-Density TMAs									
CP1-s-AF1.1 AMAN extended to en-route airspace	31.12.2024								
CP1-s-AF1.2 AMAN/DMAN Integration	31.12.2027								
CP1-AF2 - Airport Integration and Throughput									
CP1-s-AF2.1 DMAN synchronised with predeparture sequencing	31.12.2022								
CP1-s-AF2.2.1 Initial airport operations plan (iAOP)	31.12.2023								
CP1-s-AF2.2.2 Airport operations plan (AOP)	31.12.2027								
CP1-s-AF2.3 Airport safety nets	31.12.2025								
CP1-AF3 - Flexible Airspace Management and Free Route Airspace									
CP1-s-AF3.1 Airspace management and advanced flexible use of airspace	31.12.2022								
CP1-s-AF3.2 Free route airspace	31.12.2025								
CP1-AF4 - Network Collaborative Management									
CP1-s-AF4.1 Enhanced short-term ATFCM measures	31.12.2022								
CP1-s-AF4.2 Collaborative NOP	31.12.2023								
CP1-s-AF4.3 Automated support for traffic complexity assessment	31.12.2022								
CP1-s-AF4.4 AOP/NOP integration	31.12.2027								

CP1-AF5 - SWIM									
CP1-s-AF5.1 Common infrastructure components	31.12.2024								
CP1-s-AF5.2 SWIM yellow profile technical infrastructure and specifications	31.12.2025	30.06.2025	Design and Development of a standard SWIM solution and implementation of the local SWIM integration platform	B1	234.615	455.456	433.204	410.951	388.699
CP1-s-AF5.3 Aeronautical information exchange	31.12.2025	30.03.2028	<p>Common COOPANS solutions:</p> <ul style="list-style-type: none"> <li>- TopSky upgraded System</li> <li>- Local SWIM Platform</li> <li>- Definition of operational concepts, procedures and roles and responsibilities</li> <li>- Upgrade of Local SWIM Platform to handle all COOPANS common CP1 services</li> <li>- To implement a SWIM capability based on common architecture for all Members</li> <li>- To take control of information flows between systems</li> <li>- To build competence, resources and technical infrastructure for development and operation of SWIM.</li> </ul> <p>Related work to ensure TopSky-ATC One while becoming CP1 compliant also extract the operational benefits of CP1 in terms of improved information exchanges and operations incl cost savings.</p> <p>TopSky-ATC One solution for remaining CP1 requirements, based on COOPANS CP1 SWIM infrastructure design, integration and further development of local SWIM integration platform. Including test and validation of COOPANS upgraded system, preparation and performing of related training.</p>	C1, B1. B10	833.635	1.317.412	1.387.393	1.431.892	1.400.651
CP1-s-AF5.4 Meteorological information exchange	31.12.2025	30.03.2028	<p>Only En-route MET (En-route Significant Weather Information Subscription and Request Service) is COOPANS common functionality.</p> <p>TopSky can handle GRIB2 data, but not over SWIM. Full compliance is expected with implementation TopSky-ATC One.</p> <p>Function incorporates reception of MET information (GRIB2) from MET office SWIM/WXXM services</p>	C1, B1, B9, B10	14.703	38.618	54.777	114.369	138.439
CP1-s-AF5.5 Cooperative network information exchange	31.12.2025	N/A	COOPANS Members are using NM tools	C1	4.337	7.711	10.924	13.494	15.100

CP1-s-AF5.6 Flight information exchange (yellow profile)	31.12.2025	30.03.2028	<p>TopSky-ATC One system shall consume ARES information. The new eFPL format and the processing of the new data fields are to be developed. This phase (FF-ICE/R1) concerns addresses the exchange of enriched pre-departure flight information, using SWIM information services. FF-ICE/R1 is the first step initiating the business transformation required for TBO, which will be implemented in the second phase of TopSky-ATC One.</p> <p>Features:</p> <ul style="list-style-type: none"> <li>- Connection to EUROCONTROL NM SWIM/FIXM services for FF-ICE/R1 to receive initial flight plan information</li> <li>- Processing the FF-ICE/R1 information for flight plan creation/update in the system – substituting to legacy FPL2012 messaging and processing additional information provided by FF-ICE/R1, and properly processing erroneous messages</li> </ul>	C1, B1	15.654	53.555	84.944	235.984	292.804
<b>CP1-AF6 - Initial Trajectory Information Sharing</b>									
CP1-s-AF6.1 Initial air-ground trajectory information sharing	31.12.2027	30.03.2028	<p>Thales and COOPANS will initiate common workshops to analyse and define the AF6 ADS-C/EPP concept to receive and process the EPP data in TopSky-ATC One. During the development phase of TopSky-ATC One and in particular in the Visibility Points and via innovation platform , COOPANS should report progress and test results to the SDM, to demonstrate that there is a viable roadmap to achieving the ADS-C/EPP requirements.</p> <p>The capability of ground distribution of the EPP data, distributed through a SWIM service, should be initiated and implemented in local infrastructure, eg via local SWIM integrations platform. Early test and validation activities should be initiated to evaluate the full chain of distributing and receiving EPP exchange in the ground network, via local SWIM platform or other, until receiving and processing the EPP data via new TopSky-ATC</p>	C1	11.459	41.251	66.459	211.645	262.936
CP1-s-AF6.2 Network Manager trajectory information enhancement	31.12.2027								

CP1-s-AF6.3 Initial trajectory information sharing ground distribution	31.12.2027	30.03.2028	<p>Thales and COOPANS will initiate common workshops to analyse and define the AF6 ADS-C/EPP concept to receive and process the EPP data in TopSky-ATC One.</p> <p>During the development phase of TopSky-ATC One and in particular in the Visibility Points and via innovation platform , COOPANS should report progress and test results to the SDM, to demonstrate that there is a viable roadmap to achieving the ADS-C/EPP requirements.</p> <p>The capability of ground distribution of the EPP data, distributed through a SWIM service, should be initiated and implemented in local infrastructure, eg via local SWIM integrations platform.</p> <p>Early test and validation activities should be initiated to evaluate the full chain of distributing and receiving EPP exchange in the ground network, via local SWIM platform or other, until receiving and processing the EPP data via new TopSky-ATC One HMI.</p> <p>Features:</p> <ul style="list-style-type: none"> <li>- Connection to a centralised ground-based ADS-C server via provided SWIM service, to receive the EPP information</li> <li>- Further EPP processing as defined in AF6.1</li> </ul>	C1	8.551	30.784	49.597	157.944	196.221
Total RP4 determined costs for common project related to the sub-functionalities across charging zones for the concerned entity					1.122.953	1.944.787	2.087.297	2.576.278	2.694.850

### 4.3 - Change management

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

The change management process aligns comprehensively with the provisions of Implementing Regulation (EU) 2017/373:

- a) Procedures for changes to both the functional system and the provision of services, including MS and SMS, have been reviewed and approved by the competent authority.
- b) Upon receiving a notification, the competent authority decides whether to review the change.
- c) If the change is subject to review, the service provider will only implement the change once the competent authority has approved the argument for it to enter into operational service.
- d) An annual plan of changes is submitted to the competent authority, along with quarterly reports on the current status of changes.
- e) The competent authority conducts semi-annual audits of the change management process.
- f) In case of findings, the ANSP identifies the root cause, defines a corrective action plan that meets the approval of the competent authority, and demonstrates the implementation of the corrective action.

For RP4, preparatory and planning work regarding two significant changes will be undertaken, necessitating meticulous change management.

One change involves the boundary between TMA and ENR airspace, while Croatia is also considering an airspace classification change, pending approval from all stakeholders. The implementation of these airspace changes will be consulted with the Network Manager to ensure desired capacity benefits are achieved. Following this, detailed transition plans with a well-defined oversight structure will be established.

#### ATM System Modernization

Based on extensive experience and achievements, COOPANS is expanding its cooperation across the entire ATM platform, integrating all ATM system solutions into a unified, efficient, scalable, and flexible COOPANS Digital ATM platform for en-route and approach domains. Key requirements identified from future ATSP customers include automation to reduce workload per flight, lower costs for end users, scalable capacity on demand, resilience to enhance availability, and, crucially, safety and security. New disruptive technologies and environmentally friendly solutions in aviation are poised to support future growth and air traffic versatility.

The agile development of the future platform adheres to the latest change management best practices. Through collaboration, CCL can deliver cost-efficient changes with increased agility in testing and deployment, as evidenced by the flexibility in delivering controller tools in response to evolving forecasts.

## SECTION 5: TRAFFIC RISK SHARING ARRANGEMENTS AND INCENTIVE SCHEMES

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### 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
  - a) Parameters for the calculation of financial advantages or disadvantages - En route
  - b) Pivot values - En route
  - c) Modulation mechanism (if applicable)
- 5.2.2 - Capacity incentive scheme - Terminal
  - a) Parameters for the calculation of financial advantages or disadvantages - En route
  - b) Pivot values - Terminal
  - c) Modulation mechanism (if applicable)

### 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 - En route

a) Parameters for the calculation of financial advantages or disadvantages - En route

En route	Expressed in	Value
Dead band Δ	%	±10,0%
Max bonus (≤2%)	% of DC	0,90%
Max penalty (≥ Max bonus)	% of DC	1,10%

b) Pivot values - En route

Basis for the annual setting of pivot values	Modulated
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c) Modulation mechanism (if applicable)

*Section to be filled out only if the option for modulated pivot values has been selected under b) above.*

Modulation mechanism of pivot values	Both A) and B)
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Based on the modulation mechanism(s) selected above, provide a detailed description of the principles and methodology used to modulate the pivot values

Option A) - Modulation based on unforeseen changes in traffic

1) the pivot value for the year N is <b>equal</b> to the yearly update of reference values provided by the Network Manager in the NOP	Yes
2) the pivot value for year N is <b>informed</b> by the yearly update early update of reference values by the Network Manager in the NOP	No
If 2) applies describe the principle and formulas on the basis of which the pivot values are calculated	
N/A	

Option B) - Modulation limiting pivot values to C, R, S, T, M, P delay codes

The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual
Explanation on the methodology used to modulate the pivot values accordingly
A number of states in the Central-Eastern European region continued to face weather phenomena in the recent year (especially CB thunderstorms during the summer period) which resulted in high delays due to weather reasons. NM acknowledged in the Network Operations Report 2023 that there was a higher impact of disturbances within the network (e.g. adverse weather) due to saturation of sector capacities compared to former years. Trajectory prediction decreased due to: added traffic flows, deviations due to weather, intruding aircraft from adjacent ATC units due to weather/CBs. It can be expected that with climate changes the weather will become even more unpredictable.
In 2023, weather continued to contribute significantly to the overall en-route ATFM delay representing 67% of the total delay in 2023. The Croatia therefore proposes an incentive scheme in which it would not be penalised for effects beyond CCL's control. The Croatia will only apply the C, R, S, T, M, P codes in the incentive scheme.
The pivot value will be calculated using the rolling average of the C, R, S, T, M, P caused delays experienced in last three year.

Additional information in the case of the combination of A) and B)

If the modulation of pivot values is based on both options A) and B) above, provide additional information on how these two modulation mechanisms are applied in combination with each other
The pivot value will be calculated taking into account both, the yearly update of reference values provided by the Network Manager in the NOP (Option A) and using the rolling average of the C, R, S, T, M, P caused delays experienced in last three year (Option B) using the formula: (pivot value for year n is the reference value from the November release of year n-1 of the NOP) * (three year rolling average of the CRSTMP caused delays).

5.2.2 - Capacity incentive scheme - Terminal

a) Parameters for the calculation of financial advantages or disadvantages - Terminal

Terminal	Expressed in	Value
Dead band $\Delta$	Select	N/A
Max bonus ( $\leq 2\%$ )	% of DC	N/A
Max penalty ( $\geq$ Max bonus)	% of DC	N/A

b) Pivot values - Terminal

Basis for the annual setting of pivot values	Click to select
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c) Modulation mechanism (if applicable)

Section to be filled out only if the option for modulated pivot values has been selected under b) above.

Modulation mechanism of pivot values	Click to select
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Based on the modulation mechanism(s) selected above, provide a detailed description of the principles and methodology used to modulate the pivot values

Option A) - Modulation based on unforeseen changes in traffic

The pivot value for year N is modulated in order to enable significant and unforeseen changes in traffic to be taken into account	Click to select
Description the principle and formulas on the basis of which the pivot values are calculated	

Option B) - Modulation limiting pivot values to C, R, S, T, M, P delay codes

The scope of the incentives is limited to delay causes related to ATC capacity, ATC routing, ATC staffing, ATC equipment, airspace management and special events with the codes C, R, S, T, M and P of the ATFCM user manual
Explanation on the methodology used to modulate the pivot values accordingly

Additional information in the case of the combination of A) and B)

If the modulation of pivot values is based on both options A) and B) above, provide additional information on how these two modulation mechanisms are applied in combination with each other

## SECTION 6: IMPLEMENTATION OF THE PERFORMANCE PLAN

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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 and new (EU) Implementing Decision 2024/1688 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

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

ANNEX A.x - En route Charging Zone #x

### ANNEX B. REPORTING TABLES & ADDITIONAL INFORMATION (TERMINAL)

ANNEX B.x - Terminal Charging Zone #x

### ANNEX C. CONSULTATION

### ANNEX D. LOCAL TRAFFIC FORECASTS

### ANNEX E. INVESTMENTS

### ANNEX F. BASELINE VALUES (COST-EFFICIENCY)

### ANNEX G. PARAMETERS FOR THE TRAFFIC RISK SHARING

### ANNEX H. RESTRUCTURING MEASURES AND COSTS

### ANNEX I. PARAMETERS FOR THE MANDATORY CAPACITY INCENTIVES

### ANNEX J. OPTIONAL KPIs AND TARGETS

### ANNEX K. OPTIONAL INCENTIVE SCHEMES

### ANNEX L. JUSTIFICATION FOR SIMPLIFIED CHARGING SCHEME

### ANNEX M. COST ALLOCATION

### ANNEX N. CROSS-BORDER ANS

### ANNEX O. JUSTIFICATIONS FOR THE LOCAL SAFETY TARGETS

### ANNEX P. JUSTIFICATIONS FOR THE LOCAL ENVIRONMENT TARGETS

### ANNEX Q. JUSTIFICATIONS FOR THE LOCAL CAPACITY TARGETS

### ANNEX R. JUSTIFICATIONS FOR THE LOCAL COST-EFFICIENCY TARGETS

### ANNEX S. INTERDEPENDENCIES

### ANNEX T. OTHER MATERIAL

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

### ANNEX V. IMPLEMENTATION OF ATM MASTER PLAN

### ANNEX Y. RESPONSES TO COMPLETENESS VERIFICATION

### ANNEX Z. CORRECTIVE MEASURES