

# ANNUAL REPORT 2022

# CROATIA CONTROL LTD. ANNUAL REPORT 2022



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# MESSAGE FROM THE DIRECTOR GENERAL

# A YEAR OF EXCEPTIONAL RESULTS



I am delighted to introduce Croatia Control's (CCL) Annual Report for 2022, which is the record year for not only in the sense of traffic-related data but also in the sense of overall business outcomes.

After two years of the global pandemic, the air passengers have expressed their desire to take to the skies again as the pandemic had come under control. The traffic has recovered significantly despite the Omicron spike at the beginning of 2022 as well as the invasion of Ukraine which started on February 24, 2022 and continues having significant socioeconomic impact on all aspects of the European economy, including aviation.

#### RETURN TO PRE-PANDEMIC TRAFFIC LEVELS

Here are a few data points demonstrating CCL's recovery even beyond pre-pandemic level: there were 713 thousand flights in Croatian airspace, which is 0.8 % more than in 2019; the highest number of flights per day was recorded on July 9, 2022 - the total number of 3306 flights or 50 more than on the busiest day in 2019. At the same time, CCL maintained to provide safe and effective air navigation services with lower en route delay compared with the record year 2019.

The total traffic surpassed all forecast scenarios which had taken into consideration geopolitical, macroeconomic and other impacts of Russia's war of aggression as well as of increasing inflation rate. CCL earned EUR 131.3 million in total revenues, while 2022 resulted in the profit for the year of EUR 11.9 million.

# IN-HOUSE ATCO TRAINING AND NEW SERVICES

Following the establishment of the integrated training system for all types of ATCOs in the previous year, the first area and approach ATCOs finished in-house training in 2022. It is a big accomplishment for CCL because after a decade of training ATCOs all across Europe, we have shown that we have knowledge, technology, and capacity to train our own ATCOs. Besides the modern infrastructure, the most important factor in the training system are our experts – lecturers, instructors, assessors and training managers.

We pay special attention to our employees because their knowledge and experience are the fundamental strength of the company. Creating an inclusive, safe and enjoyable place to work for all employees is our major priority. Extensive social dialog dominated the year, and it resulted in the new Labor Agreement and the new organizational structure.

At the beginning of 2022, CCL was certified for the provision of Flight Procedure Design (FPD) service in line with the EU legislation, a new service that places us among reputable air navigation service providers. This service comprises design, documentation, and validation procedures for all phases of a flight, from take-off and en route flying to landing at the destination airport.

# **NEW TECHNOLOGIES**

Our priority is to introduce state-of-the-art technology and to develop systems and infrastructure for enhancing the quality of our services and safety of air traffic. CCL's major investment in 2022 was the upgrade of harmonized COOPANS ATM system with new functionalities for safer service provision and support to capacity optimization.

In addition to intensive training of new ATCOs, the company's top priority is continuous deployment of modern technologies. Together with our COOPANS Alliance partners, we decided to participate in innovation projects of SESAR 3 program to accelerate the delivery of the Digital European Sky through research and innovation.

Following the application under the 2022 CEF Transport call, the COOPANS Exodus project, dealing with the deployment of the delegation of airspace via virtual center concept, was accepted by the European Commission for CEF funding which amounts to approx. EUR 34.3 million (50% of the total value). CCL will participate in this showcase project the main benefits of which will be enhanced ATM interoperability and resilience in six states.

In conclusion, let me say that fast and dynamic changes in air traffic pose new challenges to all relevant stakeholders in the industry. Within this context, CCL gives priority to achieving high levels of air traffic safety and quality, which is the best way to meet the expectations of our users. I am confident that we shall continue meeting our goals thanks to the full support and dedication of CCL's employees.

Director General

Mario Kunovec-Varga

# COMPANY PROFILE

# HISTORY

Croatia Control Ltd. (CCL) is an air traffic service provider fully owned by the Republic of Croatia.

CCL's priority is to provide safe, efficient and ecologically acceptable ANS to civil and military users in airspace over Croatia, as well as in airspace above the eastern part of Adriatic and the northwestern part of Bosnia and Herzegovina.

CCL ensures a high level of air traffic safety according to the Single European Sky legal framework and develops and uses state-of-the-art technology to increase the efficiency of air traffic.

CCL was founded in 1998, a year after Croatia's accession to Eurocontrol. Before 1998, the Air Traffic Services Authority as a part of the Ministry of Transport was responsible for the provision of ANS in Croatia.

# MISSION & VISION

Our mission is to provide safe and quality air navigation services to the complete satisfaction of our users and owners. We will achieve our mission by cooperating with our partners in the European air traffic management network and fostering highly qualified employees and a motivating environment.

We strive to be among the leading air navigation service providers in Central Europe. We will achieve our vision through a flexible organization, adapting to the needs of our users.

# ORGANIZATIONAL VALUES

The values we nurture make our team successful and us an excellent employer:

- → Safety and Quality
  - » Safety always comes first.
- → Excellence
  - » We create added value for all stakeholders.
- → Adaptability
  - » We choose actions responsibly in different situations.
- → Cooperation and Teamwork
  - » We cherish cooperation and partnership with all stakeholders.
- Boldness and Development
  - » We accept new challenges and strive for overcoming obstacles or achieving something of value.



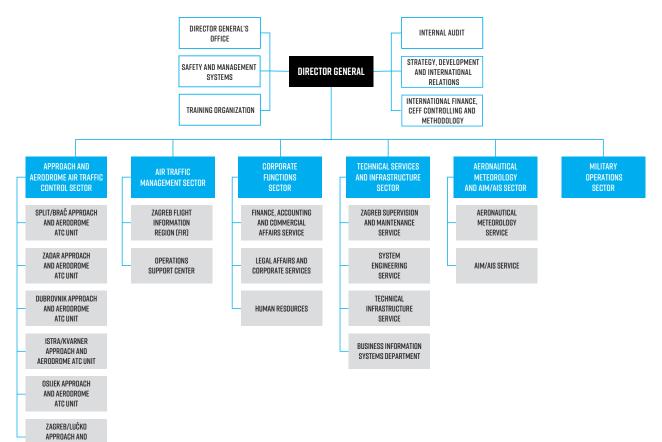
# CORE BUSINESS

CCL is certified for the provision of the following services and functions:

- ✤ Air Traffic Services (ATS)
- ✤ Communication, Navigation and Surveillance Services (CNS)
- ✤ Aeronautical Information Services (AIS)
- earrow Aeronautical Meteorological Services (MET)
- ✤ Flight Procedure Design Services (FPD)
- ✤ Airspace Management (ASM)
- ✤ Air Traffic Flow Management (ATFM)

# ORGANIZATIONAL STRUCTURE

The company is headquartered in Velika Gorica, and has six regional ATC units (Zagreb/Lučko, Istra/Kvarner, Zadar, Split/Brač, Dubrovnik and Osijek) responsible for the provision of approach and aerodrome ATC, technical support, MET and administrative services.



# INTERNATIONAL COOPERATION

AERODROME ATC UNIT

High priority is given to international relations and participation in various international alliances.



#### COOPANS

COOPANS is an international partnership between ANSPs of Austria (Austro Control), Croatia (Croatia Control), Denmark (Naviair), Ireland (Airnav Ireland), Portugal (NAV Portugal) and Sweden (LFV).

The COOPANS Alliance capitalizes on joint and harmonized system development between members through industry partnership, and positively influences the European environment to operate a world-class, safe, sustainable and cost-effective system.

COOPANS Alliance is considered as the leading example of such industrial partnership in Europe with 17 years of joint work and 12 years of common operational and harmonization experience. COOPANS continuously performs the synchronized deployment of harmonized software at all 8 ACCs across 6 ANSPs.

A major milestone has been achieved in 2022, COOPANS youngest partner – NAV Portugal successfully implemented and went operational with TopSky-ATC system and now all partners are running on the same system solution. COOPANS Build B3.8 became operational and new operational builds B3.9 and B3.10 were contracted.

With B3.8 partners have improved or implemented the following functionalities:

- ➔ FAST (Final Approach Separation Tool), a tool for implementing Distance Based / Time Based Separation for arrival aircraft sequences with a view to optimizing the runway capacity.
- MTCD (Medium Term Conflict Detect) is a vital controller tool for identifying medium term conflicts based on Flight Plans. It is a key enabler to implementing operations such as free route airspace.
- → SWIM (System Wide Information Management) is a collection of new data exchange data formats that will facilitate future data transfers, between all service providers. ANSP's are required to demonstrate compliance with these formats as part of the Common Projects Mandate.



COOPANS recognised the technological opportunities and emerging European initiatives in recent years. A major overhaul of the ATC system has been planned and the strategic objectives have been set. COOPANS aims in significant capacity improvements due to expected increasing traffic demands, next level of system resilience with no unintended downtime towards airspace users.

COOPANS aims to proactively influence the European ATM environment and prepare the infrastructure and organization to become an ATM data service provider to support stakeholders in the ATM value chain.

COOPANS became a founding member of SESAR 3 Joint Undertaking and is supporting European innovation and development initiatives. A comprehensive list of co-funding applications has been prepared in all area Exploratory Research – RELEASE project, Industrial Research – ISLAND, Network TBO and ATC TBO projects. SESAR 3 is coordinating the DSD call 2022 (CEF/CINEA) where COOPANS submitted the application for EXODUS project which will deliver COOPANS Innovation platform with the new TopSky-ATC One software.

COOPANS representatives chaired the Strategy Board of A6 Alliance and submitted an application for chairing A6 Alliance in 2023 as well as supporting work in SESAR Deployment Manager.

# A6

The A6 Alliance works with SESAR and is a part of both SESAR Joint Undertaking, which works on the development of new systems and procedures for modernizing the European ATM system, and SESAR Deployment Manager, which works on the implementation of the new systems and procedures in Europe.

#### CANSO

CCL operates within CANSO Europe and actively participates in the work of various committees. Civil Air Navigation Service Organization is recognized as a global voice of the ATM industry and represents the views and interests of members at relevant European and international institutions and on a range of contemporary issues across the industry.

#### GATE ONE

Gate One is a cooperation of 13 ANSPs grouped into 3 FABs (FAB CE, Baltic FAB, Danube FAB) and 2 non-EU FIRs (Belgrade and Skopje). Its purpose is promoting efficient European ATM, strengthening the cooperation of ANSPs and facilitating the stronger and better coordinated representation of the countries in European decision-making processes.

# MET ALLIANCE

MET Alliance is a group of national aeronautical meteorological service providers from Austria, Belgium, Germany, Ireland, Switzerland, the Netherlands, France, Luxembourg and Croatia. Sharing the knowledge and common resources is the way in which MET Alliance wants to improve and rationalize the provision of aeronautical meteorology services.

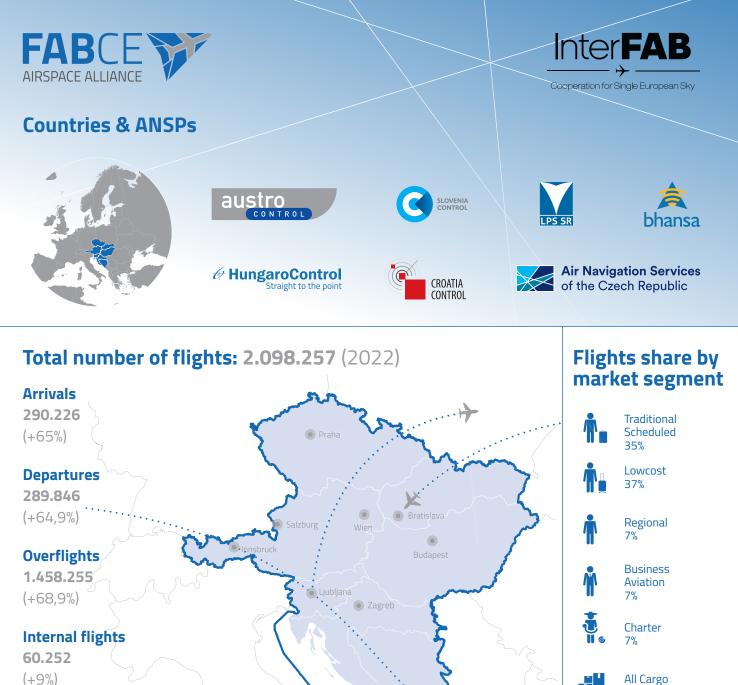
# FAB CE

The Functional Airspace Block Central Europe is a joint initiative of Croatia, Austria, Bosnia and Herzegovina, Hungary, the Czech Republic, Slovakia and their ANSPs. The establishment of FABs is an obligation arising from an interstate agreement under the SES regulation. The aim of this regional association is to increase air traffic safety, reduce delays and costs for airspace users and protect the environment.

During 2022 as part of the implementation of the FAB CE Strategy and the High-Level Plan, a certain number of activities/projects were initiated in the operational, technical and human-resource domains.

Activities and projects in the operational domain relate to the: harmonization of the FAB CE airspace development in accordance with the European Airspace Architecture study, implementation of harmonized ATFCM solutions and improvements for FAB CE Network performance, harmonization of flexible airspace structures (TSA/TRA) and exchange of best practices and compliance of U-Space airspace implementation.

In the technical domain, among others Smart procurement of spare parts project has been initiated. The new activity relates to the HR domain with an aim of identifying the ATCO selection and training best practices at FAB CE level.





# **Top 10 airports** Average daily movements

Bratislava

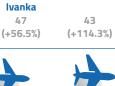
47

2026

2.508.982

5%

Others 2%



Innsbruck

# **Traffic Forecast Base Scenario**





2025 2.450.399

2027 2.564.562

# CORPORATE GOVERNANCE

CCL's governance structure comprises the Assembly, the Supervisory Board and the Management.

#### ASSEMBLY

The Assembly consists of:

- ➔ Oleg Butković, Vice President of the Croatian Government and Minister of the Sea, Transport and Infrastructure – President
- ➔ Zdravko Marić, PhD, Minister of Finance Member (until July 15, 2022)

Marko Primorac, PhD, Minister of Finance – Member (from July 15, 2022)

 Mario Banožić, PhD, Minister of Defense – Member

# SUPERVISORY BOARD

The Supervisory Board monitors the activities of the Company. It appoints the Director General of the company on the basis of open competition for a period of five years. The Director General can be re-appointed for another term.

The Supervisory Board consists of five members, four of whom are appointed and may be recalled by the Assembly and one of whom is a company employee. Members can be reappointed.

The members of the Supervisory Board are:

- → Vildana Megla President
- ➔ Dora Matošić, MSc Deputy President
- → Saša Crnec Member (until March 2, 2022)
- Željko Gojko Member (elected by the employees)

#### MANAGEMENT AND EXECUTIVE DIRECTORS

- → Vlado Bagarić, Director General (until April 12, 2023)
- ✤ Mario Kunovec-Varga, MSc, Director General (appointed on April 13, 2023)

Vlado Bagarić was appointed to the position of Director General on September 29, 2017 for a period of six months, and then on April 12, 2018 for a term of five years. On April 13, 2023 the Supervisory Board appointed Mario Kunovec-Varga as Director General.

Pursuant to the Act on the Establishment of Croatia Control Ltd. and the Articles of Association, the Company management is one person - Director General, who is appointed and recalled by the Supervisory Board of the Company. The Director General is appointed for a term of five years on the basis of public competition, and the same person may be re-appointed as the Director of the Company. The Director General defines business policy, adopts plans, decisions and other acts in accordance with his power, organizes and manages the business of the Company.

In accordance with the new organization which entered into force on November 1 2022, CCL is organized in 6 sectors, the largest of which are Approach and Aerodrome Air Traffic Control Sector and Air Traffic Management Sector. These sectors are in charge of the implementation of operations and central operations of air navigation services, particularly of air traffic control, alerting service, flight information and preflight information service, all aimed at safe, orderly and smooth operating of air traffic.

All sectors are managed by executive directors, who are responsible for their operation. The special organizational units of the Director's Office are independent offices managed by the Heads of Offices. Executive Directors are appointed by Director General for the period of three years which may be extended. Executive directors were appointed on November 1, when the new organizational structure came into force.

SECTOR	FROM JANUARY I, 2022 To november I, 2022	FROM November 1, 2022
<b>Air Traffic Management Sector (ATM Sector)</b> Area Control Center and Operations Support Center are the organizational unit of the ATM Sector.	Dubravko Meco,	Dubravko Meco, Executive Director of ATM Sector
Approach and Aerodrome Air Traffic Control Sector Approach and Aerodrome ATC Units, i.e. regional ATC units Split/Brač, Zadar, Dubrovnik, Istra/Kvarner, Osijek and Zagreb/Lučko are the organizational units within the Sector.	Executive Director of ATM Sector	Jakša Žižak, Executive Director of Approach and Aerodrome ATC Sector
Aeronautical Meteorology (MET) and AIM/AIS Sector The sector is responsible for the provision aeronauti- cal meteorology and aeronautical information services		Amela Jeričević, Executive Director
Technical Services and Infrastructure Sector The Sector's primary task is the continuous moderni- zation of technical systems with the aim of increas- ing air traffic safety and improving the overall level of air traffic control and management services, as well as for the design, construction and supervision and investment maintenance of facilities and associated infrastructure.	Alen Sajko, Executive Director of CNS, MET and AIM Services Sector	Juraj Maštrović, Executive Director
<b>Corporate Functions Sector</b> This Sector performs centralized functions of manag- ing financial, legal and corporate services. It also has the central role in human resources management.	Teo Bratinčević, Executive Director	Teo Bratinčević, Executive Director
<b>Military Operations Sector</b> This Sector is responsible to coordinate the provision of services to military aircraft with the Ministry of Defense.	Nedeljko Zmajić, Executive Director of Military Opera- tions Unit	Nedeljko Zmajić, Executive Director of Military Opera- tions Sector

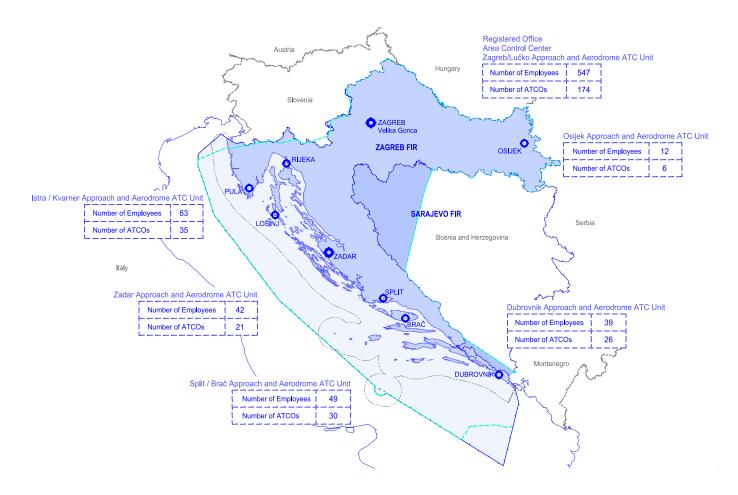


# OPERATIONS AND INFRASTRUCTURE

# **OPERATIONAL UNITS**

CCL's main operational units are as follows:

- → Zagreb ATCC: Zagreb Air Traffic Control Center provides area control services for both Zagreb Control Area (CTA) and a part of the CTA in Sarajevo FIR. It also provides approach control services in Zagreb TMA.
- ✤ Zagreb/Lučko Aerodrome Control: provides tower control in Zagreb Control Zone and Lučko aerodrome Control Zone (CTR)
- ➔ five regional ATC units providing approach and tower control: Osijek, Istra/Kvarner, Zadar, Split/Brač, Dubrovnik)



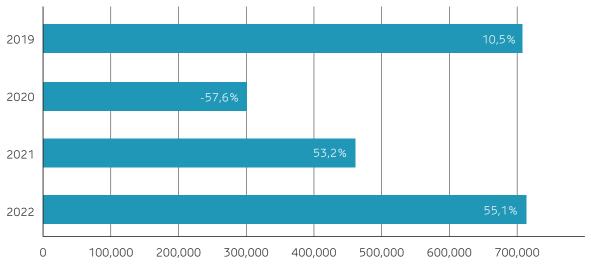
AREA OF RESPONSIBILITY FOR UPPER AIRSPACE (FL 285 - FL 660)

# TRAFFIC FLOW

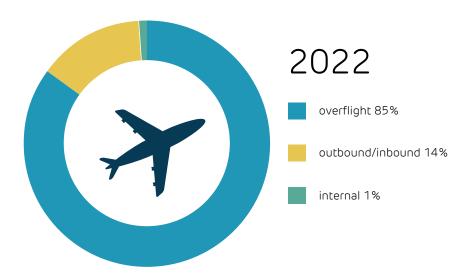
When speaking of the number of fights on the South-East Axis, the largest increase in traffic in 2022 when compared to 2019 was from Germany to Turkey, then between Great Britain and Greece, Germany and Greece and France and Turkey.

The highest number of flights per day was recorded on July 9, 2022 - the total number of 3306 flights.

All of these flows were managed by Zagreb ACC, since 85% of overall traffic is en route.



IFR GAT OPERATIONS 2019-2022



DISTRIBUTION OF FLIGHTS IN CROATIA

# OPERATIONAL IMPROVEMENTS

Operational improvements are planned through business activity in the regular process of annual planning of changes in CCL in order to meet the goals most often arising from regulatory requirements, but also from the requirements arising from agreements with cross-border partners, most often in terms of ATM system development or airspace development.

These improvements relate to the development of air traffic and are in ideal cases implemented before the expected circumstances occur. Due to the impact of the pandemic, there was a disruption in expected growth in 2020 and 2021, but in the first half of 2022 CCL noted a gradual return to the traffic levels of the reference year 2019, with summer traffic exceeding the 2019 level for the same period.

The previously prepared changes aimed at improving operational implementation and efficiency did not have any effect in the pandemic years 2020 and 2021 due to reduced traffic demand and ubiquitous measures intended to limit the flow of passengers. For these reasons, the season 2022 is the first season for which the positive effects of implemented technological changes could be measured.

The implementation of the fourth lateral sector was carried out in order to optimize traffic flow and reduce delays primarily on LDHW sector, which had until then been generating most delays without the possibility of being collapsed since it was an elementary sector. The portion of west and north sector group has been reduced because the central sector is located in between, and it takes over a part of important traffic flows on the South-East Axis. After the season, a 3.6% increase in traffic at ACC level was measured with 7.75% less sector hours and 35.5% less minutes of delay, which is a confirmation of the effectiveness of the implemented change, especially in the context of achieving performance plan capacity targets.

Another important operational improvement arises from COOPANS cooperation in the area of ATM systems upgrade to version 3.8 with the implementation of new functionalities for safer service provision and support to capacity optimization.

In 2022 procedure adjustment took place for Rijeka Airport by adding new STAR procedures. Changes were made for RNAV SID/STAR and RNP APCH procedures at several airports. At the same location, a new operating concept, called a two-sector assistant was introduced, designed for TMA Pula with the aim of optimizing the utilization of ATCOs.

# CIVIL-MILITARY COORDINATION

In Croatian airspace CCL is also responsible for the provision of services to the Ministry of Defense of the Republic of Croatia and its Air Force.

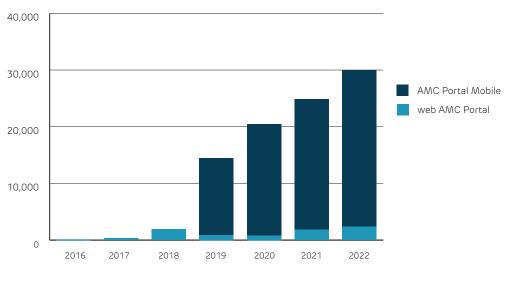
For the purpose of maintaining a high level of safety and quality, relevant air traffic data are regularly exchanged between these two parties, which is the basis for creating the conditions for an efficient protection of the airspace without affecting the safety of all users.

In order to enable more efficient and flexible use of the airspace, the civil-military Airspace Management Cell has been established.

#### UAS

For some years we've been witnessing a steady increase in reported UAS operations of civilian private and commercial users through the AMC Portal system. There has also been a noticeable trend in the growth of new ways of using UAS technology and exploring areas and concepts for their future application on a commercial basis. The new Regulation on Airspace Management (it came into force in February 2023) defines UAS geographical zones with clearly

regulated rules and restrictions relating to UAS operations in Croatia, especially in the vicinity of controlled airports. These rules and restrictions are implemented in AMC Portal and are clearly visible to all UAS users in accordance with the requirements of EU regulations.



THE NUMBER OF UAS OPERATIONS VIA AMC PORTAL IN THE PERIOD 2016 - 2022

The use of UAS by government users (MOD, Ministry of the Interior, Civil Protection, Firefighting Service, Croatian Mountain Rescue Service etc.) significantly contributes to the protection of the state border, territorial sea, people and property, and sometimes it is crucial for the search and rescue of people and supervision and protection of infrastructure and natural resources of the Republic of Croatia.

In order to maintain the level of safety of all airspace users and to reduce the adverse impact on air traffic, CCL has started proactively with the coordination of government UAS activities. Separate procedures have been developed for the purpose of carrying out the operational tasks of the Croatian emergency services via AMC Portal system. These procedures enable safe access to airspace in a very short time through rapid coordination of the relevant CCL organizational units.

In 2022, CCL employees from ASM/UTM Department and MET Sector held 12 training courses for 75 government employees (Ministry of the Interior, Croatian Mountain Rescue Service, Fire-fighting Service, Civil Protection etc.). CCL is actively involved in the training of government remote UAS pilots and other key personnel. Training courses cover safe use of airspace, meteorology applicable to UAS operations, planning procedures, coordination with airspace management entities and use of the AMC Portal.

#### **ENVIRONMENT**



CCL takes appropriate actions to decrease fuel consumption of airspace users by route design and the implementation of performance-based navigation (PBN) routes, together with the CDA/ CCO.

In 2022 CCL continued with the implementation of the PBN concept of airspace based on performance requirements of aircraft, with the aim of creating the new approach/departure routes for area navigation in lower airspace and their connection to published approach procedures. The PBN procedures are to be designed on Lošinj Airport in line with the regulations.

The expected benefits of PBN implementation are traffic flow optimization, reduction of greenhouse gasses emission, reduction of costs for the airline operators, reduction of workload for ATCOs, and increasing the predictability of flight operations.

CCL must enable the service users to take the shortest routes possible. For this reason, the target values were stipulated to be achieved by full FRA concept implementation. By its participation in SECSI FRA, CCL directly contributes to lowering the KEA inefficiency and enables the service users to take the shortest paths in a wider geographical area, thus reducing the fuel consumption and consequently reduction in CO2 and NOx emissions.

After the accession of North Macedonia and Albania to the SECSI FRA (South East Common Sky Initiative Free Route Airspace) Initiative in 2021, its merging with FRAIT (Free Route Airspace Italy) is expected, thus confirming the focus of the ANSPs on further airspace optimization in order to provide benefits for the users.

The savings are being measured four times a year, in line with predefined parameters. In 2022 the analyses of potential savings in CO2 and NOx emissions were measured on the following selected dates: January 2, April 8, August 19 and December 23 using the Eurocontrol's post-operational analysis NET Strategic Tool.

The simulation of traffic in en route network was done before and after the introduction of SECSI FRA. On the basis of comparison, the following possible savings per flight were calculated:

- → 46.5 kg of fuel
- → 147 kg of CO2 and
- $\rightarrow$  0.78 kg of NOx.

Within the framework of the Performance Plan (2019 - 2024), the target in the KPA of environment was set on the basis of KPI of en route horizontal flight efficiency of the actual trajectory - KEA. It is measured as average additional distance flown compared to the great circle distance.

The proposed target value for 2022 is set at 1.46%, which is actually a value that represents the inefficiency resulting from the comparison of the length of the en route part of the actual trajectory derived from the surveillance data and the achieved distance in the local airspace.

The calculation of this indicator is done by PRU, and it is published on PRU's web site. For 2022 the indicator was 1.53%, which is slightly higher than the proposed target value. Although the goal has not been reached, the inefficiency to the ideal trajectory is still acceptable taking into account the circumstances of high traffic growth and load on the capacities of Zagreb ACC sectors in the season.



# TECHNICAL INFRASTRUCTURE

CCL has made significant investments due to compliance with regulatory requirements and the need to enhance safety and quality of services and achieve performance targets.

However, over past three years, due to the Covid-19 pandemic, the air traffic developments as well as due to the political and economic stability status in Europe, the level of investments completion was less than the average level in RP2, i.e. 35.3 % compared to the plan, and some of the projects have been postponed to be implemented during 2023.

The table below lists the main investment projects in 2022, compared with the annual business plan for 2022:

INVESTMENT PROJECT	REVISED BUSINESS Plan for 2022 'OOO Eur	IMPLEMENTED IN 2022 / 'OOO EUR
Upgrade of COOPANS ATM system	2,424	2,402
Upgrade of other ATM systems	3,020	330
Voice communications projects, incl. the replay/ recording systems	1,141	360
Implementation of the NET-MAGnet infrastructure	1,382	1,516
Implementation of network communication infrastructure projects	1,343	312
Modernization of the ICT systems	755	561
Modernization of HVAC and electric power systems	790	312
Other investments (implemented in amount less than EUR 250,000 each in 2022)	8,759	1,124
TOTAL Investments in 2022	19,615	6,917

#### IMPLEMENTATION OF THE NET-MAGNET INFRASTRUCTURE

Implementation of the NET-MAGnet (Multiservice ATM-Grade Network) in 2022, has ensured a unique national communication infrastructure based on IP network technology, in line with the CCL's long-term business strategy. MAGnet enables other technical systems to communicate and share relevant data in a safe, secure and reliable manner due to the extended redundancy that has been achieved by the network design. This will enable more reliability and availability to the ATM/ANS technical systems and consequently better quality and safety of services to the users, even in case of potential major service disruption of any of regular telecom service providers.

#### UPGRADE OF COOPANS ATM SYSTEM

In 2022 the software upgrade of the main ATM System COOPANS Top Sky, version B3.8, was tested and put into operational service, with a number of operational improvements. In parallel, previously agreed/contracted version B3.8+ was developed and verified, while the validation is planned for 2023. Additionally, the operational and technical requirements for the future versions B3.9 and B3.10 have been specified and associated contracts signed.

# MODERNIZATION OF THE VOICE REPLAY/RECORDING SYSTEM

In 2022 the modernization of the VRRS (voice replay/recording system) was implemented. The existing systems for operational recording and reproduction of voice were replaced at the locations Zagreb, Pula, Zadar, Split and Dubrovnik by the new state-of-the-art systems in order to introduce appropriate improvements as well as to fulfill the requirements of the interoperability of the new VRRS system on VoIP interfaces.



# SAFETY AND MANAGEMENT SYSTEMS

Air traffic safety is of paramount importance to CCL. In order to further improve the quality of service provided to our users, safety and management systems were established at the corporate level. This organizational unit reports directly to the Director General.

Office for Safety and Management Systems is responsible for the organization-wide management system including:

- safety management
- y quality management
- environment management
- security management
- enterprise risk management

- performance management
- change and project management
- compliance monitoring
- occupational health and safety management
- internal control and auditing.

# SAFETY MANAGEMENT

High level of ANS safety provided by CCL has priority over commercial, operational, social and any other aspects of business. CCL's Safety Management System (SMS) is aimed at a systematic and proactive achievement of an acceptable level of safety, thus making a valuable contribution towards the safety of European air traffic in general.

# SAFETY MANAGEMENT SYSTEM

The main component of SMS is the Safety Management Manual which defines SMS organization and processes as well as basic SMS procedures, in order to comply with the SMS requirements laid down in national regulations, SES requirements and European safety standards.

# SAFETY PERFORMANCE

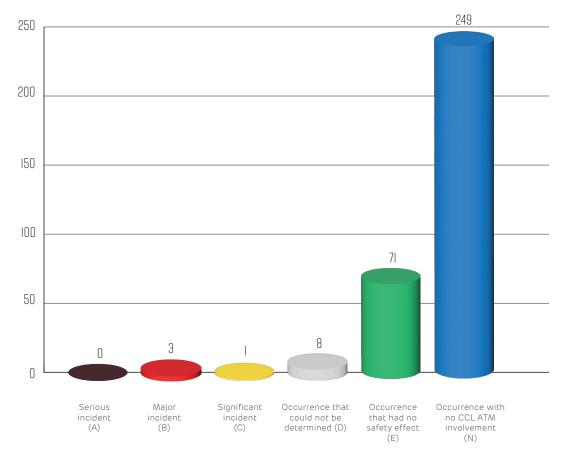
Measuring and monitoring safety performance constantly helps us improve our safety level and service. CCL key safety performance areas are in line with the Commission Implementing Regulation (EU) No. 2019/317 laying down a performance and charging scheme in the single European sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013 the purpose of which is:

✤ Level of effectiveness of Safety Management (EoSM)

All Key Performance Indicator (KPI) targets defined in the Performance Plan for 2022 have been met and the trends in Performance Indicators (PIs) that are being monitored are positive.

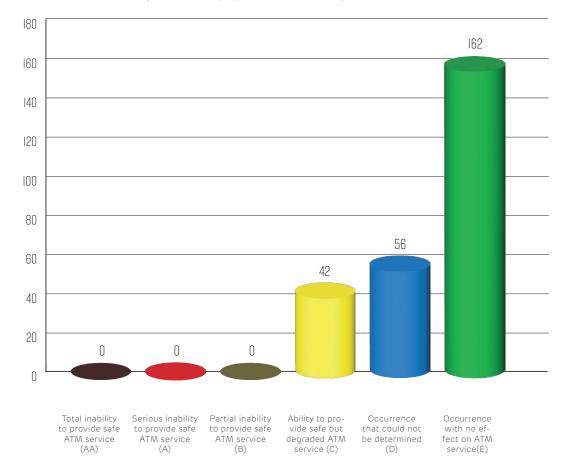
 Classification of severity of occurrences using the Toolkit for ATM occurrence investigation (TOKAI)

In 2022 there were 625 reported safety occurrences, 365 of which were ATM occurrences and 260 specific occurrences in ATM.

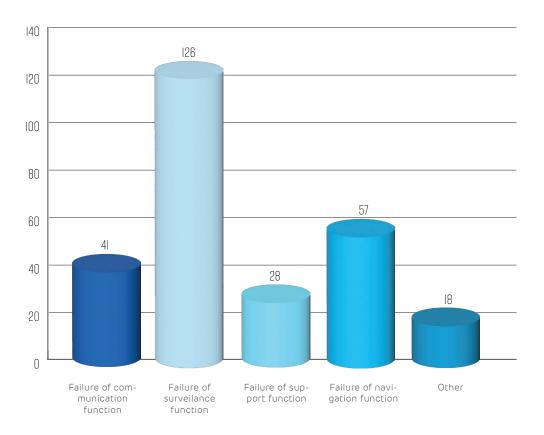


Severity of ATM occurrences was classified as follows:

Out of 9 events of separation minima infringement (SMI), CCL was directly involved in 2 events. Out of 9 events of runway incursion (RI), CCL was directly involved in 3 events.



Severity of SATM occurrences was classified as follows:



# JUST CULTURE

The Just Culture Policy and special JC procedures are set up in CCL. The JC concept has been disseminated to the staff and the management through the Intranet and safety promotion workshops in order to develop culture in which front line operators and others are not punished for actions, omissions or decisions they took and which are commensurate with their experience and training, while gross negligence, willful violations and destructive acts are not tolerated.

# QUALITY MANAGEMENT

CCL has implemented Quality Management System (QMS) for which it is certified in compliance with the ISO 9001:2015 international standard requirements.

QMS helps CCL to improve its overall performance and it provides a solid base for sustainable development. In addition, it enhances the continuous provision of services aimed at meeting customer, organizational and regulatory requirements through continuous improvement, in addressing associated risks, opportunities and ability to show conformity to specified requirements.

The quality of CCL's services is granted by an integrated QMS which is periodically reviewed and assessed for its long-term suitability, adequacy and effectiveness.

# CONSULTATION WITH SERVICE USERS

The quality of services is being continuously improved by regular consultations with users, i.e. by taking into consideration their remarks or suggestions. CCL plans the user consultation annually by its User consultation plan for the current year.

The information on user satisfaction are collected in direct communication with users by means of surveys. These surveys are published on CCL website, or are delivered by e-mail or via user forums/meetings.

After the analysis of performed consultation, the quality manager proposes the improvements of activities or service quality, and includes them as input elements in the assessment of the Company Management.

#### Consultations realized in the form of survey

TYPE OF SERVICE	TOPIC	USER PROFILE
AIS	Satisfaction with service and its products	Air carriers, airports, aeroclubs, ANSPs, MoD/Croatian Air Force, CCAA, other state bodies, data houses

#### Consultations realized in the form of forum/consultations/meetings

TYPE OF SERVICE/FUNCTION/ Process	SUBJECTS	USER PROFILE
CNS	Assessment of the efficiency of coordination processes and improvement of cooperation	MoD, Air Space Surveillance and Control Battalion
CNS	Monitoring of the implemen- tation of the Contract on the Provision of Radar Data to BHANSA	BHANSA
ATS CNS FPD	Plan for the rationalization of navigational aids in Zagreb FIR and gradual discontinuation of conventional flight procedures	Croatia Airlines, Trade Air, Jung Sky, Faculty of Transport and Traffic Sciences/Croatian Avia- tion Training Center, airports
FPD	Satisfaction with the designed instrumental flight proce- dures, proposals for improve- ment, regulatory requirements, rationalization of NAVAIDS within the framework of the PBN regulation	Airports, Croatia Airlines and other commercial airlines

TYPE OF SERVICE/FUNCTION/ Process	SUBJECTS	USER PROFILE
ATS	Improvement of service pro- vision for the needs of CAF and coordination of CCL with MoD/CAF	MoD, CAF, Croatian Air Force
ATS ASM	ASM, air traffic safety, imple- mentation of government UAS operations and the future of UAS	Aviation clubs, MSTI, CCAA, CUSA, MoD, CAF, Croatian Air Force, airspace users
ATFM	Operational cooperation, open issues and possible improve- ments on the South-East Axis in the summer season	NMOC, IATA, airports, air carriers
MET	Agreement on amendments to current contracts with the airports	Airports, general aviation, Mol, MoD, Faculty of Transport and Traffic Sciences/Croatian Avia-
	Presentation of changes in CCL products for low level flights	tion Training Center
Business planning management - financial aspect	Central Route Charges Office	IATA, AIRE
CNS	Improvement of technical cooperation to enhance the quality of air traffic control	MoD, Croatian Air Force, Air Space Surveillance and Con- trol Battalion



# ENVIRONMENT MANAGEMENT SYSTEM

CCL recognizes the importance of environmental protection, so it endeavors to reduce the negative impact on the environment by providing safe and quality ANS. CCL's EMS also covers environmental aspects, and it is ISO 14001:2015 certified. CCL has also defined the Environmental Management Policy, to ensure the identification and management of environmental risks in a systematic way.

#### INDIRECT IMPACT ON THE ENVIRONMENT

CCL has an indirect impact on the environment by continuously reducing the emis-



sion of noxious gasses and aircraft noise abatement, by optimization of the airspace and route network. Service users have at their disposal certain possibilities aimed at protecting the environment by shortening the route, and it is up to the users whether they will seize this possibility or not.

# DIRECT IMPACT ON THE ENVIRONMENT

CCL has a direct impact on the environment by means of utilization of communication, navigation and surveillance systems, by noise caused by operating devices and machines, as well as central air conditioning system, by use of renewable sources of energy and rational use of natural resources (electric energy, water and fuel for operating the equipment), as well as by producing waste.

Measuring of electromagnetic fields is performed in 2-years cycles on 94 locations, as well as for newly installed equipment, pursuant to the administrative decision of the Ministry of Health. No radiation levels have been exceeded since the introduction of measurement in 2015.

CCL demonstrates its care for the environment by rational use of energy products and improving electric energy management. CCL buys electric energy only from renewable sources. CCL is one of the first ANSPs in Europe that implemented renewable energy sources generating 345 kW for the purpose of business operations.

One of the significant changes in the power system in CCL's headquarters was the installation of the heat pumps system connected to underground wells and it is used as an air conditioning system. This system is more beneficial as far as electric energy is concerned since in summer it uses cooling effect of water from the well.

Waste management and generating hazardous waste is a significant aspect for CCL, which is continuously being monitored and updated. In waste management, CCL proceeds by respecting the basic principles and implementing waste hierarchy. Besides the municipal waste, CCL collects, separates and ecologically disposes of hazardous and non-hazardous waste.

# SECURITY MANAGEMENT

CCL's Security Management System (SecMS) ensures the security of employees and other persons in our premises, the security of facilities, technical devices and equipment, to prevent unlawful interference with service provision. CCL also protects business data which receives, produces or uses in any other way by making the access to these data available to authorized persons and institutions.

SecMS supports airspace and airport security, as regulated by the National Civil Aviation Security Program, and it plays a significant role in creating plans for business/service provision continuity and business recovery. The aim of the System is prevention and acting in accordance with the Security Policy, whereby the introduced measures must not slow down or otherwise impede our core business processes.



# ENTERPRISE RISK MANAGEMENT

CCL has introduced an Enterprise Risk Management system (ERM) compliant with internationally recognized and scientifically based methodology and standards and defined the ERM Policy.

The ERM is designed to adapt to the development of the company and changes in the risk profile and is based on a structured and systematic process that takes into account internal and external risks to which the Company is exposed.

In times of crisis, and this was the case in the past two years in which we had been exposed to the COVID-19 pandemic and two devastating earthquakes, as well as the current period of immense geopolitical turmoil and war in Ukraine, the ERM system is used to increase resilience in achieving business objectives and minimize the negative effects of the crisis.

CCL has set up the Risk Register as well as the Strategic Risks Map, and manages them actively by taking into account the identified sources and defined measures for the mitigation of the consequences of probability and severity of particular occurrences.

# **RISK CATEGORIES**

#### **Education System**

It applies to all employees, and in particular to the education of the ATCOs as a fundamental factor in the provision of services. Great attention is being paid to strict selection criteria, the implementation of the theoretical and practical part of education and the selection of the best instructors since these are critical risk management factors.

#### Technological Compliance

The provision of air navigation services requires top-quality technical and technological equipment. Through the realization of investment projects, the Company achieves technological compliance with regulations, industry requirements and the best global technological standards.

#### No. of ATCOs

Insufficient number of controllers in the context of a steady increase in air traffic and the fact that this stressful job can be performed by only a small portion of the population, is considered an important business risk. This risk is managed by planning, forecasting and effective education.

#### Human Resources Management

The management of the Company considers human resources management to be the most important factor of success, therefore it is being analyzed, measured and managed by indicators that should improve the process of HRM.

#### Project Management

The Company regards effective project management as a business risk from the aspect of safety, engagement of resources and consequences on financial effects.

#### **Cyber Threats**

The Company has recognized cyber threats as a rather significant risk, and it implements solutions in the field of cyber protection.

#### **Business Operations Continuity**

CCL has a duty and obligation to ensure business continuity in relation to identified sources of possible business discontinuity (natural disasters, pandemic, technical system/device failure, terrorist attack, industrial action). Measures in sense of increasing resilience to these threats are a high level of reliability and redundancy of operational technical systems, personnel trained to act in special circumstances, operating manuals and instructions on procedure.

#### Meeting the Performance Targets and Organizational Targets

The performance targets shall be agreed and coordinated at EU level through a performance plan. Internal organizational objectives are aligned with European performance goals and it is therefore important to actively manage the company's goals at all levels by applying risk management measures.

#### Safety Management System

CCL's mission is to provide safe and quality services. Safety aspects are embedded in business processes as well as in CCL's business culture.

#### **Financial Risks**

Financial risks managed by the company include a wide range of risks. In the narrow sense, various measures, among other risks, cover currency, interest rate and liquidity risks. New risk-related factors are timely anticipated through scenario-based planning.

#### **Regulatory Compliance**

The field of provision of air navigation services is a highly regulated activity subject to a wide range of international acts, implementing regulations as well as directives and standards that must be complied with.

#### Reputation

Reputational risk is "a risk from risk" because it is generated from other sources of variability. The risk of loss of reputation is usually due to adverse events arising from the exposure of the Company to various strategic, operational and financial risks. Loss of reputation can often have long-term consequences and any risk factor with a possible negative impact on the reputation is a threat to the survival of a company.

#### Efficiency of Strategic and Operational Planning

This risk is one of the key risks for achieving the set targets in the field of technology, human resources and securing financial resources for investment projects and operational expenditure.

# ADDITIONAL SERVICES

# AERONAUTICAL METEOROLOGY (MET)

CCL provides aeronautical meteorology services, with emphasis on the continuous improvement of services, staff education and regional cooperation. The MET Service is clearly committed to cooperation and open access to the user at European level, and since the atmosphere and weather phenomena do not know political boundaries, the need for cooperation in the coming climate changes will be even greater in the future.

In 2022 CCL conducted the validation exercise "Adverse weather areas and conflict detection tools integration" which took place within SESAR 2020, with the participation of Austro Control, Netherlands Aerospace Center and German Aerospace Center. The main benefit of the validation exercise is that an ATCO, due to a better situational awareness of thunderstorms in her/his FIR, can direct the aircraft around thunderstorms sufficiently in advance, which in turn has a positive effect on efficient air traffic flow and reduction of CO2 emissions.

In order to further improve forecast interpretation for the users, in the summer of 2022 CCL's MET forecasters once again participated in the activities of the NMOC as lead forecasters. The planned traffic flows over Europe are frequently affected by thunderstorms in summer season. Therefore timely and consistent, user (NM) oriented weather forecasts contribute to air traffic safety and throughput as well as to the reduction in delay and consequently to CO2 emissions.

The modernization of the Croatian Meteorological and Hydrological Service weather radar network resulted in full radar measurement coverage of Croatia, which contributes to timely warning of adverse weather events.

# AERONAUTICAL INFORMATION SERVICES (AIS)

CCL provides aeronautical data and information necessary for air navigation safety, regularity and efficiency.

AIM/AIS Department consists of the International NOTAM Office, operational 24 hours a day, AIM/AIS Operations Support Department and the Aeronautical Publications Department.

It provides static data in AIXM 5.1 model in the new local AIM database as well as aeronautical information products - AIP AMDT/SUP, Aeronautical Charts and AIC integrated in the eAIP, NOTAM/SNOWTAM, PIB, lists of valid NOTAMs and checklists, as well as additional publications such as VFR Manuals and VFR Chart with recommended VFR routes.

All aeronautical information products are available in the European Aeronautical Database (EAD) in electronic format via various EAD modules. The electronic AIP of the Republic of Croatia is also created from the EAD in accordance with the EUROCONTROL eAIP specification and is available both in English and Croatian. Throughout 2022, AIM/AIS Department worked on numerous preparatory activities to enable deployment of the local AIM database and its migration to the EAD/SDD, in close coordination with Eurocontrol and the system provider. This has set the ground for AIXM 5.1 data to be exchanged between the two databases as well as for the upcoming System Wide Information Management requirements.



# FLIGHT PROCEDURE DESIGN SERVICES (FPD)

As of January 27, 2022, CCL has been certified for providing the FPD services, which, according to the defined criteria, enable safe obstacle clearance for normal and regular instrument flights of aircraft.

These services encompass the design, documentation, and validation of conventional procedures and PBN procedures in the phases of:

- ightarrow standard instrument departures,
- ➔ standard instrument arrivals,
- ➔ instrument approach,
- ➔ circling approach,
- ➔ en-route flying, and
- ➔ helicopter procedures (PinS).

The process of providing FPD services also includes:

 $\rightarrow$  the production of aeronautical charts,

- ✤ the definition of polygons of minimum altitudes for radar vectoring,
- ✤ the analysis of noise and exhaust emissions,
- ✤ the analysis of the signal coverage of radio navigational aids, and
- ✤ the analysis of the impact of obstacles, areas, and zones on procedures and routes.

Flight procedures are defined with regard to aircraft performance, technical characteristics of navigation systems and aerodromes, meteorology, ecology, airspace features, user requirements, terrain, and aeronautical obstacles.

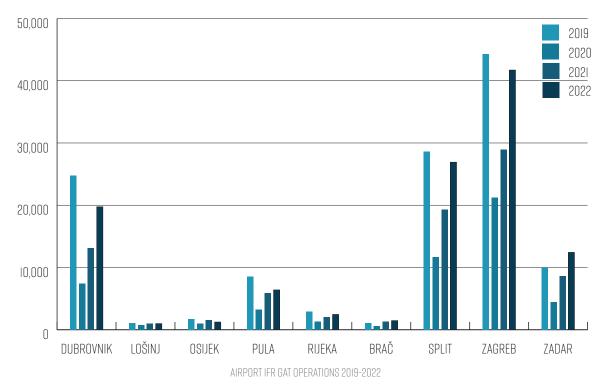
All data, procedures, and aeronautical charts for the conventional and PBN procedures for all Croatian international airports within Zagreb FIR, are published in the Integrated Aeronautical Information Package of the Republic of Croatia.

# PERFORMANCE

# TRAFFIC

2022 has been the busiest year for air traffic in Croatian airspace so far. After the record traffic in 2019 followed by the big drop in the pandemic of 2020 to the traffic levels of 2004 and 2005, the last two years have seen an increase in traffic of over 50%. Due to such large fluctuations in traffic, CCL quickly got back to the traffic level of 2019, i.e. traffic in 2022 with 713,000 flights was 0.8% higher than in 2019.

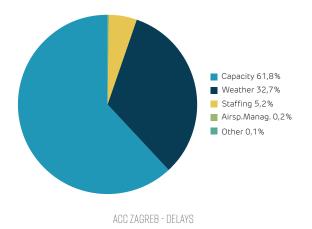
A significant recovery of traffic on most airports was noted in 2022 in comparison to 2021, however the traffic was still -8% in comparison to 2019. The exceptions are Zadar with 24% increase in traffic and Brač with 38% increase in traffic compared to 2019. In 2022, airports Zagreb and Split had 6% less traffic than in 2019. Zagreb has the largest share in total airport traffic, followed by Split and Dubrovnik.



# CONTROLLED OPERATIONS AND ATFM DELAYS

The aircraft are held (delayed) on the ground mostly during the summer period when traffic demand is higher than ACC capacity. In 2022 there were approx. 400,000 minutes of delay, i.e. 0.58 minutes per flight, out of which some 60% were due to capacity constraints.

It is a significant increase in comparison to 2021, when there were approx. 30,000 minutes of delay. However, when compared to reference pre-pandemic 2019 with approx. 610,000 minutes of delay, this is an improvement, especially when having in mind that traffic remained at the same level (101%).



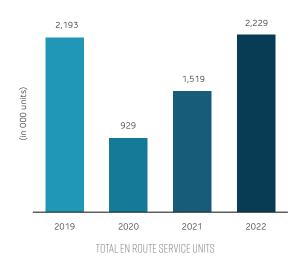
# SERVICE UNITS AND UNIT RATES

# TRAFFIC

EN ROUTE CHARGING ZONE

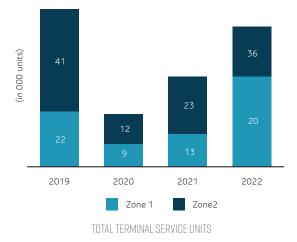
After the unprecedented deterioration in global and European air traffic due to COV-ID-19 pandemic in 2020/2021 (Croatia en route was on average -44.2% in 2020 and in 2021 compared to pre-pandemic 2019), 2022 was a year of full air traffic recovery (+46.8% compared to 2021 and marginally above 2019), thus prompting a dynamic business recovery despite the ongoing war in Ukraine and its adverse effects on European and global economies.

In 2022, a total number of 2.2 milion en route service units was realized, which was 41% above the level foreseen in the revised RP3 Performance Plan for 2022, and 1.6% above the pre-pandemic 2019.



#### TERMINAL CHARGING ZONE

In regard to traffic performance recorded in Croatian terminal charging zones comprising terminal Zone 1 (LDZA and LDZL) and terminal Zone 2 (other terminal ATCs), despite the significant recovery in 2022, these values remained below 2019 performance. In 2022, CCL realized approximately 56.8 thousand terminal service units, which is -9.5% when compared to pre-pandemic performance (but at the same time +60.4% when compared to 2021).



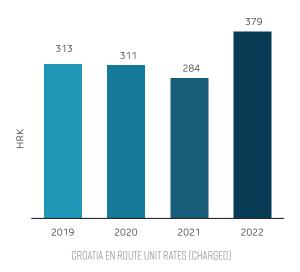
# **UNIT RATES**

#### EN ROUTE CHARGING ZONE

Total budgeted en route costs for 2022, based on the adopted revised RP3 PP for Croatia, were proposed in the amount that resulted in budgeted 2022 en route unit rate actually charged to users in the amount of HRK 379 (exclusive of administrative CRCO part).

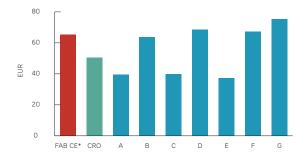
This implied the nominal increase of 33% compared to the previous year for the reason of EC postponing the application of (unit rate decreasing) "other revenues" in calculation of unit rates, from planned 2022 to planned year 2023.

The following chart shows 2022 budgeted (i.e. charged) en route unit rate for Croatia based on the adopted revised RP3 PP for Croatia, exclusive of administrative unit rate.



2022 en route unit rate for Croatia was approx. 23% below the FAB CE average (exclusive of Croatia) and was positioned in the FAB CE unit rates' middle range.

The following graph presents the comparison in budgeted en route unit rates with Croatia's neighboring states, most of which are FAB CE partners.



**Note**: Indicative budgeted FAB CE en route unit rate for 2022 for the purpose of this comparison was calculated exclusive of values for Croatia

#### 2022 BUDGETED EN ROUTE UNIT RATES

Given that Performance and Charging Regulation for RP3 (EU Regulation No. 2019/317) was amended in 2020 by COVID-19 "exceptional measures" (EU Regulation No. 2020/1627) and that revised RP3 EU-wide targets were set in spring 2021 (EU Regulation No. 2021/891), the revised Croatian RP3 Performance plan was adopted by EC in April 2022.

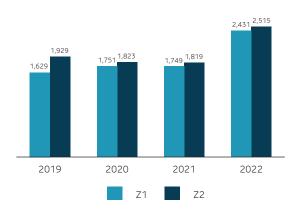
Following the provisions of Performance and Charging "exceptional measures" Regulation,

the identified gap between finally eligible (i.e. revised) and actually charged draft and provisional en route unit rate for 2020/2021 resulted in the recognition of "SES relevant long term contractual asset" which, starting form 2023, is expected to be realized the earliest by 2027.

#### TERMINAL CHARGING ZONES

Croatia operates two terminal charging zones with two individual terminal unit rates.

For the reason of significantly distorted traffic expectations (some -17% compared to 2019) existing in the time of developing terminal unit rates for planning year 2022 (i.e. end of 2021), as well as because 2022 was expected to be the first year when only a fraction (i.e. 1/7) of 2020 terminal under-recovery would be recovered through unit rate adjustment, the budgeted 2022 terminal unit rates were increased compared to the previous period, i.e. at HRK 2,431 (+39% when compared to 2021) for terminal Zone 1 (i.e. ATC center LDZA including LDZL) and HRK 2,515 (+38% when compared to 2021) for terminal Zone 2 (other ATC centers in Croatia).



CROATIA TERMINAL UNIT RATES (IN HRK)

# FINANCIAL PERFORMANCE

#### OVERALL FINANCIAL PERFORMANCE

In 2022, CCL recorded a genuine, strong and real business recovery in terms of highly recovered physical traffic volumes as well as in terms of financial position, profitability and general business performance. The Company continued with safe and genuinely highly cost efficient ANS performance with delivering associated critical infrastructure, this time within the framework of adequate service unit pricing and profitability environment following the revised RP3 Performance plan adopted during April 2022 which had finally made it possible.

This resulted in first profit-making year (HRK 89.5 M, i.e. approx. EUR 11.9 M) after the two consecutive loss reporting periods, strongly supported by en route air traffic fully recovered at the pre-pandemic 2019 levels and strong costs' management in the light of long, complex, dynamic and very challenging social dialog.

## **REVENUES AND BUSINESS INCOME**

Given the adequate en route service unit pricing environment based on the revised RP3 PP fundaments and strong en route traffic recovery, previous periods of shrinking revenues were finally and substantially turned around, so in 2022 CCL earned HRK 989.1 million (approx. EUR 131.3 M) in total revenues, which was an increase of 65.5% compared to previous year. It is in substance explained below:

## Core Business Revenues (ANS charges and other core sales)

Having in mind that en route traffic had recovered even somewhat over the pre-pandemic level, and respecting the favorable service unit pricing environment following the two years of applying the "unbalanced and provisionally set up" en route unit rates, the substantial increase of 77.9% in core business revenues (which accounted for approx. 97.3% of total income and revenues) was not such a surprise. Unfortunately, such traffic pressure, did not only generate a significant pressure on the limited operational capacities and ATFM delays, but it also resulted in HRK 204.9 M (approx. EUR 27.2 M) in traffic risk sharing adverse pressure calling for the reimbursement in the very same amount at the earliest opportunity possible.

No "revenue gap" rights following the provisions of "exceptional measures" regulation (EU Reg. No. 2020/1627) have been recognized for the year since 2022 en route unit rate environment was set upon the fully and finally adopted revised Croatian RP3 PP. Previously recognized "revenue gap" asset from 2020 and 2021, following the "exceptional measures" regulation, is expected to be realized until 2027 at the earliest.

## Other Business Revenues

Other business revenues for 2022 in the amount of HRK 24.7 million (EUR 3.3 M), accounting for 2.5% of total revenues, were significantly below the level of the previous period (-55.0%). The reason for this is significantly lower 2022 dynamics (-84.5%) in unwinding of historical provisions set up in previous periods for the financial risks that had been anticipated and expected to occur in the future (accounting for 18.3% of 2022 other business revenues).

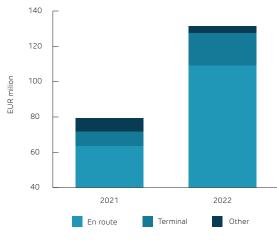
The most significant contribution towards such development comes from the fact that 2022 other business revenues witnessed no contribution from the side of provisions' unwinding revenues associated to previously created SES risk sharing elements, which had strongly contributed to year 2021.

The remaining 2022 other business revenues mostly relate to deferred income (HRK 15.5 M; approx. EUR 2.1 M) associated with the EU funding facility received for the financing of EU supported projects (accounting for approx. 62.6% in 2022 other business revenues).

## Financial Income and Revenues

It comprises positive foreign exchange fluctuations and interest income, and is considered non-operational and marginal since it amounts to 0.2% of 2022 total revenues.

As is the case in ANS industry overall, the composition of CCL total revenues is traditionally characterized by en route charges which are the most significant revenue source accounting for 83.0% in 2022 total revenues, whereas terminal charges accounted for approx. 14.1%. Both have fully recovered due to the strong traffic and unit pricing developments in 2022, and no "revenue gap" rights revenues characterize any of these two lines of revenues in 2022.

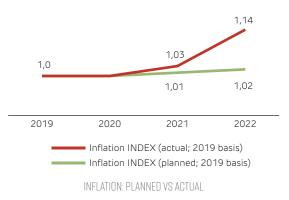




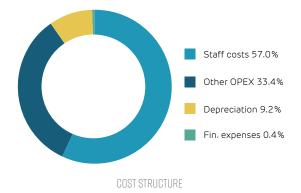
Other, non-ANS charges related business revenues (incl. core and non-core sales and nonsales revenues) accounted for only 2.9% in 2022 total together with financial revenues, since there was a lack of provisions' unwinding related revenues associated to previously created SES risk sharing elements, which had strongly contributed to 2021 records.

#### **Costs and Expenditures**

After two years characterized by a significant decline followed by a timid recovery, 2022 was the year of needed recovery in business activities, the year of bold and cost-efficient decision making, all in the light of abovethe-plan traffic recovery and long, complex, highly dynamic and challenging social dialog. Recovered business activities resulted in vivid resources' usage recovery, therefore after the two years of necessary savings, actual total costs and expenditures incurred for 2022 (HRK 812.7 M, approx. EUR 107.9 M) were 34.6% above the 2021 level, but virtually at the level of pre-pandemic 2019 which had been characterized by similar air traffic development. This being said, it is necessary to understand that because of the above-theplan, high and dynamic traffic development, the 2022 costs records showed a significant contribution from the side of additional SES "risk sharing" associated provisions (stemming from the Performance and Charging SES regulatory framework). Had this not been the case, 2022 actual total costs (HRK 676.2 M, approx. EUR 89.8 M exclusive of quoted SES "risk sharing" associated provisions) would have reflected "only" +12.0% development compared to previous year (and -4.4% compared to 2019) in light of +47.1% development in 2022 en route and terminal traffic combined with two-digit inflation (2022: 10.7%), nine times higher than expected.



Due to the recovery of business activities and strong supply-side inflation pressure, the most dynamic development was recorded within the group of other non-staff operating expenses (OPEX +32.1% compared to 2021 once netted of for SES "risk sharing" provision elements), but the staff costs traditionally remained the most significant total cost driver.



More detailed total cost development and composition is described below.

#### Staff Costs

2022 salaries were marginally above the 2019 level (+1.9%), following the 2022 en route and terminal traffic combined above the 2019 by somewhat the similar dynamics. Furthermore, 2022 salaries were +10.8% compared to 2021, thus following the 2022 inflation developments.

Staff costs were affected by the normalization of the 2022 salaries, following the expiry of the exceptional one-off salary cuts measure in 2020 and 2021. Furthermore, 2022 recorded slight intensification in needed recruitment activity (+1.6% in 2022 EOP headcount compared to previous year), which had been slowed down in 2021 and 2022 for the reason of dynamic, highly complex and challenging collective bargaining process which had significantly affected 2021 and 2022 activities. For this reason, the 2022 headcount plan had not been fulfilled.

The resulting 2022 staff costs (HRK 462.9 M, i.e. approx. EUR 61.5 M) were +10.8% compared to the previous period and above the 2019 by the rate that 2022 en route and terminal combined traffic exceeds 2019.

### Depreciation Costs

Slowed down and/or postponed 2021 and 2022 CAPEX realization due to:

- complex external environment (e.g. logistics disruption and production delays),
- → complex internal environment (e.g. highly exhausting collective bargaining, intensive union pressure and articulated industrial actions setting up the environment towards the challenging business climate),
- ✤ coupled with decommissioning of the Company's fully amortized existing assets,

this all further decreased 2022 depreciation charges (HRK 75.2 M; approx. EUR 10.0 M) compared to 2021 actuals by further 9.6%.

The realization of the substantial part of the revised RP3 CAPEX plan in the remaining period continues to be one of the central business goals confirmed by the most recent Company's plans and projections.

Other Operating Expenditures (excl. financial costs)

CCL's business costs summarized in other (non-staff) operating expenditures (i.e. OPEX; HRK 271.2 M; approx. EUR 36.0 M) once netted for the part of the OPEX associated to additional 2022 SES "risk sharing" regulatory provisions (stemming from the Performance and Charging SES regulatory framework), were (HRK 134.7 M; approx. EUR 17.9 M) by some +32.1% above the 2021 levels and still -3.3% below the comparable 2019 values. 2022 development towards the previous year was a result of a part of the postponed OPEX being brought forward from 2021 supported by the excessively strong supply-side inflation which materialized in the prices of energy and materials - mostly in general utilities, electricity and industry gas, followed by price corrections for local and international telecom leased lines, data transfer, third party SW licensing, training, transport and business missions.

However, this cost category continued recording a significant contribution to 2022 total costs value with a share of 33.4%, i.e. 19.9% once netted for the part of the SES "risk sharing" associated regulatory provisions.

### Financial Costs and Expenditures

Financial costs and expenditures comprise mostly negative foreign exchange fluctuations and interest expenses and are considered to be non-operational and marginal since they amount to 0.4% of total costs and expenditures.

## **COST EFFECTIVENESS**

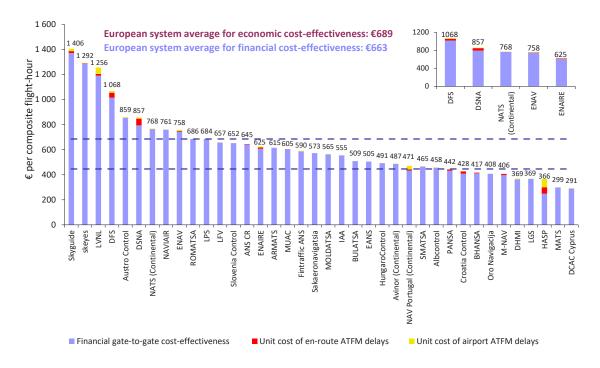
European ATM performance is regularly monitored by the Performance Review Unit (PRU). PRU's economic cost-effectiveness indicator gives an indication of how well an ANSP is providing the ANS in terms of costeffectiveness.

According to the latest ATM Cost-Effectiveness (ACE) 2021 Benchmarking Report dated May 2023, European System average for economic cost-effectiveness was EUR 689 per composite flight hour.

Due to the still recovering air traffic, ATFM delays were not a major performance issue in the period, therefore economic cost effectiveness records were in general very close to or at the level of financial cost effectiveness.

At the same time, CCL performed 37.9% better than the European system average in terms of 2021 economic cost effectiveness

(i.e. 38.3% better than the European system average in terms of financial cost effectiveness measured as ATM/CNS provision costs per composite flight average). Such performance placed CCL within the lower quartile region implying that during the same period CCL had been providing ANS within the group of top 25% performing European ANSPs in terms of economical as well as financial cost effectiveness, all significantly below the European system average.



ECONOMIC GATE-TO-GATE COST-EFFECTIVENESS INDICATOR, 2021 (FINAL FIGURES)

## COST EFFICIENCY KPA

Realized revised 2022 cost efficiency target for CCL and Croatia (ENR DUC or DUC) as adopted within the revised RP3 Performance Plan of Croatia (April 2022) were respectively 36.3% and 35.7% better than planned for the period following the:

- ✤ total ENR costs in nominal terms being 1.7% (and 1.5%) lower than 2022 revised plan for CCL (and Croatia), which at the 2022 inflation index 12.1 p.p. higher than planned resulted in total ENR costs in real terms (at 2017 prices) being -10.2% (and -9.4%) compared to the plan, with
- $\Rightarrow$  2022 en route traffic realized substantially above the planned level (+40.9%).



WE ARE HIRING



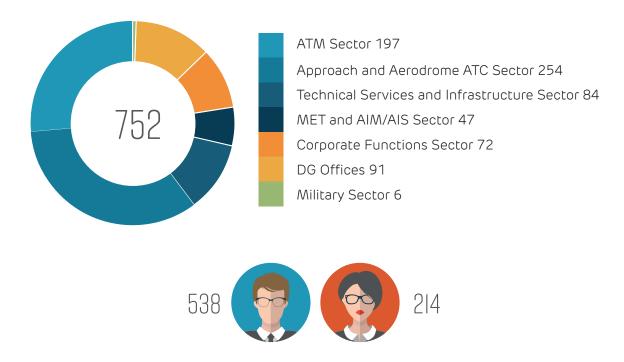


## HUMAN RESOURCES

CCL employs the staff with adequate qualifications, to enable safe, high quality and continuous provision of services.

It pays special attention to human resources management, with a training system geared to ensure training, acquiring and continuous maintaining of competencies and experience, to meet international and national standards.

## EMPLOYEES



## EMPLOYMENT AND RECRUITING

CCL is fully committed to pursuing the principle of equal opportunities and dignity of every individual in its recruiting and employment policy.

The employment was performed pursuant to the Labor Agreement, the Staff Rules, as well as the Organizational Structure and Job Classification Rules.

The total number of newly employed was 31, while 19 employees left the Company in 2022.

The selection of ATCO candidates was conducted in compliance with the predefined testing procedures, including the FEAST program and the assessment center. The selection of ATSEP, MET, ATSP and administrative personnel was conducted according to the internal testing procedures.

## EMPLOYER BRANDING

In 2022 CCL implemented an employer branding strategy. Employer branding is focused on giving clear image of us as an employer, thereby influencing the quality of job candidate applications and the ability to attract the best candidates when the company needs it.

The recognition and presence of companies in this way eventually becomes an indispensable part of the overall effort to do business sustainably and long-term.

The steps in the launch of the employer branding strategy include not only external communication with potential candidates, but also internal communication with our employees through e-mails, newsletters, posters and various activities that enable the employer brand to live and develop with the company.

The visual identity of the CCL employer brand is designed to aim for the target group to recognize and notice it, and to further differentiate CCL as an employer from other companies on the market.

## TRAINING

In 2021 CCL was successfully certificated for the ADI/TWR and APS/TCL rating training and, with an earlier certification for the basic training of all controllers and ACS rating training, an integral ATCO training system was established.

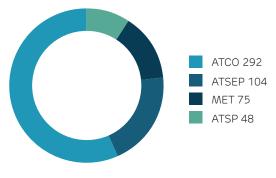
In addition to the training of new and existing ATCOs, the Training Organization also conducted initial and refresher courses for ATSEP, MET, ATSP and other operational personnel, in compliance with relevant EU regulations and respective training plans.

TYPE OF TRAINING	NUMBER OF Participants
Basic Training	16
ACS Rating Training	31
ADI/TWR Rating Training	9
APS Rating Training	9
Unit Training	42
Renewal/Revalidation Training	10
OJTI/STDI and Assessor Training	61
Conversion Training	3



Refresher trainings for 26 military controllers and 10 shift supervisors were held in 2022. ATCOs must continuously maintain ratings and endorsements on the license that, in addition to mandatory competence reviews and refreshers trainings, includes the maintenance of:

- → Class 3 medical certificate (for aviation personnel) to be reviewed every two years, and after 40 years of age each year.
- ✤ English language proficiency, for the purpose of which ELPAC test is to be taken (its validity is 3, 6 or 9 years, depending on the level achieved).



OPERATIONAL STAFF - NUMBER OF LICENSES IN 2022



ATCO TRAINING IN ZAGREB ACC

## HEALTH AND SAFETY

CCL continuously conducts preventive activities aimed at the protection of employees' occupational health and safety. Due to the pandemic, the crisis situation was still in force in 2022.

CCL established a crisis Headquarters which in cooperation with the crisis intervention team monitors crisis situations and takes preventive measures to protect CCL employees and business operations.

The beginning of the year was marked by the highest number of active COVID-19 cases in a single day, without significant impact on the ability to provide services since this situation occurred during the low season and there were no severe cases.

The rest of the year was marked by the gradual easing of measures in accordance with the decisions of the Croatian National Crisis Headquarters. In cases when an employee had close contact with a person infected with COVID, the employer allowed work from home, unless self-isolation was prescribed.



## OUTLOOK AND PRIORITIES FOR 2023

After the COVID-19 pandemic years, which caused an unprecedented crisis in the aviation sector, in 2023 CCL will face different challenges stemming from a significantly higher than the European average growth in traffic demand on the South-East Axis, depicted as a double-digit traffic growth compared to 2022.

CCL's priority in 2023 is to contribute positively to the pan-European network by providing safe and to the maximum extent possible unrestrained air traffic in Zagreb FIR. In order to do so, we will continually be narrowing the gap between needed and available ATCOs by increasing the efficiency of in-house training, while at the same time investing in new technologies with a clear goal directed towards further development and modernization of the Company.

Goals and priorities for 2023 are as follows:

#### Safety

ightarrow to reach the targets in Safety KPA as set in the approved Performance Plan

#### Capacity

- ✤ to positively contribute to the pan-European network in terms of the ATFM en route delay despite the extenuating circumstances, i.e. traffic development in the first five months of 2023 is 36% higher than the traffic used while planning the capacity profile (Croatian Performance Plan)
- ightarrow to reach baseline capacity of 186 operations within an hour

### Environment

→ to reduce inefficiency of the actual route to 1.46% compared to great circle distance

#### **Cost Efficiency**

✤ to reduce DUC value for 2023 (in EUR 2017) on en route activities by -13.2% compared to 2022

### Finance

ightarrow to maintain the financial stability indicator less than 1

### **Technical Systems**

➔ a strong investment cycle in the amount of EUR 26.5 million is planned, with an emphasis on projects that will be focused on the most modern technologies in order to increase the efficiency and safety of the air traffic service

### Other

- CCL, together with other COOPANS members and Eurocontrol, applied for the co-funding of the "Exodus" project within the CEF DSD 2022 Call. Total planned costs of the project are around 76.3 M€, and CCL's part is around 12.7 M€ with co-financing up to 50%
- ightarrow starting the in-house training of 12 ACC ATCO trainees



# FINANCIAL STATEMENTS AND AUDITOR'S REPORT

## RESPONSIBILITY FOR THE ANNUAL FINANCIAL STATEMENTS

The Management Board of the Company **CROATIA CONTROL LTD**, Velika Gorica, Rudolfa Fizira 2 ("the Company") is responsible for ensuring that the annual financial statements of the Company for the year 2022 are prepared in accordance with the Accounting Act (Official Gazette No. 78/15, 134/15, 120/16, 116/18, 42/20, 47/20, 114/22) and the International Financial Reporting Standards as adopted by the European Union, to give a true and fair view of the financial position, the results of business operations, the changes in equity and the cash flows of the Company for that period.

On the basis of the review, the Management Board of the Company has a reasonable expectation that the Company has adequate resources to continue in operational existence for the foreseeable future. Accordingly, the Management Board has prepared financial statements under the assumption that the Company is a going concern.

In preparing these financial statements, the Management Board is responsible for:

- ✤ selecting and consistently applying suitable accounting policies in line with the effective financial reporting standards;
- ✤ giving reasonable and prudent judgments and evaluations;
- ➔ preparation of the annual financial statements on the going concern principle unless such an assumption is not further appropriate.

The Management Board is responsible for keeping proper accounting records, which shall reflect with reasonable accuracy at any time the financial position, results of operations of the Company, changes in capital and cash flow of the Company, as well as their compliance with the Accounting Act and the International Financial Reporting Standards as adopted by the European Union. The Management Board is also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Signed on behalf of the Management Board

Mario Kunovec-Varga, Director General

CROATIA CONTROL LTD. Rudolfa Fizira 2 10410 Velika Gorica May 31, 2023

# INDEPENDENT AUDITOR'S REPORT

To the owner of the company CROATIA CONTROL Ltd.

## REPORT ON THE AUDIT OF ANNUAL FINANCIAL STATEMENTS

## OPINION

We have audited the accompanying annual financial statements of the company CROATIA CONTROL LTD, Velika Gorica, Rudolfa Fizira 2 ("the Company") for the year ended 31 December 2022, which comprise the Statement of Financial Position / Balance Sheet as at 31 December 2022, Statement of Comprehensive Income, Statement of Changes in Equity and the Cash Flow Statement for the year then ended, and Notes to the financial statements, including a summary of significant accounting policies and other explanations.

In our opinion, the enclosed financial statements give a fair view, in all significant respects, of the financial position of the Company as at 31 December 2022, its financial performance and the cash flows for the year then ended, in accordance to the Accounting Act and the International Financial Reporting Standards (IFRSs) as adopted by the European Union.



## **BASIS FOR OPINION**

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Annual Financial Statements section of our report. We are independent of the Company in accordance with the International Code of Ethics for Professional Accountants, including the International Standards of Independence issued by the International Ethics Standards Board for Accountants (IESBA) (IESBA Code), as well as in accordance with ethical requirements relevant to our audit of the financial statements in the Republic of Croatia and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## **KEY AUDIT MATTERS**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual financial statements of the current period. These matters were addressed in the context of our audit of the annual financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

## NON-CURRENT INTANGIBLE AND PROPERTY, PLANT, AND EQUIPMENT

## Description

Non-current intangible assets and Property, Plant, and Equipment as at 31 December 2022 amount to HRK 400.705.878, which represents 25% of the total assets. Total value of current assets was HRK 943.264.927 (58% of the assets), and its largest share in the amount of HRK 479.724.528 relates to the item Cash, which normally does not represent a complex position in the Statement of Financial Position / Balance Sheet. Given the material significance of non-current intangible and Property, Plant, and Equipment assets, its role as the key material resource in the functioning of the Company, as well as the complexity of recording of these assets (procurement, calculation of depreciation, measurement, costs capitalization etc.), it is our opinion that these positions in the Statement of Financial Position /Balance Sheet represent the Key Audit Matters.

During 2022, the procurement of mentioned assets totaled HRK 56.905.142 and related mostly to the projects of upgrading of ATM systems and projects DATA-COM and VOICE-COM domain.

Pursuant to IAS 16, a part of the gross salary in the amount of HRK 2.746.587 in 2022 was capitalized to the related projects.

See Notes 2.4; 15. and 17. to the Financial Statements.

### How these issues were addressed in the audit

Our audit procedures included, among others, as follows:

- ➔ Assessment of the harmonization of recognition of mentioned assets with the relevant IFRS.
- ✤ Testing of the internal controls related to the process of procurement of mentioned assets on the basis of the representative sample of procurement transactions.
- We assessed the prudence of useful life of assets used by the Company when calculating the depreciation as well as the depreciation start date for activated assets and depreciation end date for assets no longer in use.
- ✤ New procurements of mentioned assets in 2022 were tested on the basis of a representative sample of procurement transactions.
- ✤ On the basis of representative transactions, we tested the disposals and write-off of Property, Plant, and Equipment and intangible assets
- $\rightarrow$  We examined the capitalization of own costs.
- ✤ We determined that the process of arranging and registering the real estate ownership rights has not been completely settled. The settlement of these property legal issues is currently under way.

Through our audit procedures, we ascertained that the non - current intangible assets and Property, Plant, and Equipment in materially significant items have been recorded and published in line with the IFRS.

## POSTING TRANSACTIONS RELATED TO THE SES REGULATORY FRAMEWORK

## Description

In the Statement of Financial Position (Balance Sheet) as at 31 December 2022, the Company stated a provision, among other, for contingent liabilities arising from the SES (Single European Sky) regulatory framework in the amount of HRK 244.988.225 (31 December 2021 in the amount of HRK 108.516.052). For more detailed information, see Note 2.21., Note 10. and Note 30. in the annual financial statements.

Also, based on the SES regulatory framework, the Company reported contract assets in the amount of HRK 266.330.236 (31 December 2021 in the amount of HRK 266.330.236). For more detailed information, see Note 2.4., Note 3. and Note 27. to the annual financial statements.

Revenues from core business The Company generates based on the provision of air navigation services which are subject to a common regulatory framework based on cost and turnover plans approved by the relevant authorities (RC, EC) with certain surpluses and deficits arising from the difference between planned revenues and actual income. In situations of significant difference between planned and achieved results, the prescribed mechanism for settling the deficit or surplus of revenues arising from the regulatory framework (SES provisions) is applied. This complex mechanism requires the Company to make complex estimates with a significant level of judgment and uncertainty as it relates to a period longer than one year, which may lead to the recording of incorrect amounts of SES provisions, i.e. contract assets.

Due to the significance of the reported amounts of SES provisions and contract assets and the complexity of the valuation process, in our opinion these positions in the Statement of Financial Position / Balance Sheet represent a key audit matter.

## How these issues were addressed in the audit

Our audit procedures included, among other:

- Checking the validity of the presentation of the mentioned positions by inspecting the relevant EU regulations:
  - » Implementing Regulations (EU) 2019/317 and 2020/1627 which prescribe a mechanism for the protection of air service providers.
- ightarrow Assessment of the compliance of the policy of recognition of assets with IFRS.
- ✤ Checking the accuracy of the calculation of the required amounts of SES provisions in accordance with SES regulation.
- ✤ Checking the parameters used in the Calculation.
- ✤ Checking the accuracy of the calculation of the required amounts of contract assets.
- ✤ Comparison of calculations with the Performance Plan.

Through our audit procedures, we have verified that SES provisions as well as contract assets in material items have been recorded and disclosed in accordance with IFRS.

## OTHER INFORMATION

The Management Board of the Company is responsible for the other information. The other information includes the Annual Report and the Non-Financial Report included in the Annual Report, but do not include the annual financial statements and our Independent Auditor's Report on these statements.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

Based on the procedures performed, to the extent that we are able to assess it, we report that:

- 1. the information in the attached Annual Report are aligned, in all significant aspects, with the attached financial statements;
- 2. attached Annual Report is compiled in accordance with Article 21 of the Accounting Act; and
- 3. attached Non-Financial Report is compiled in accordance with Article 21.a of the Accounting Act is

Based on knowledge and understanding of the Company's operations and its environment acquired within the framework of the audit of the financial statements, we are obliged to report if we have established that there are significant misstatements in the attached Management Report and Non-Financial Report. In this sense, we have nothing to report.

## Responsibilities of Management Board and Those Charged with Governance for the Annual Financial Statements

Management Board is responsible for the preparation and fair presentation of the annual financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the annual financial statements, Management Board is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management Board either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those who are in charge of management are responsible for overseeing the Company's financial reporting process.

## Auditor's Responsibilities for the Audit of the Annual Financial Statements

Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- → Identify and assess the risks of material misstatement of the annual financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ✤ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- ✤ Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management Board.
- ✤ Conclude on the appropriateness of management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our Independent auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- ✤ Evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those in charge of management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also represent to those in charge of management that we have complied with relevant ethical requirements regarding independence and will communicate with them about any relationships and other matters that may reasonably be considered to affect our independence, as well as, where applicable, on actions taken to address threats to independence, and related protections.

Among the matters communicated with those in charge of management, we determine those matters that are of greatest importance in the audit of the current period's financial statements and are therefore key audit matters. We describe those matters in our auditor's report, unless law or regulation prevents public disclosure of the matter or when we decide, in extremely rare circumstances, that the matter should not be disclosed in our auditor's report because the adverse consequences of disclosure would reasonably be expected to outweigh the benefits to the public interest from such communication.

Report on Other Legal Requirements

- 1. On 15 June 2022 the Assembly of the Company appointed us on the proposal of the Supervisory Board to audit the annual financial statements for 2022.
- 2. At the date of this report, we have been continuously engaged in carrying out the Company's statutory audits, from the audit of the Company's annual financial statements for 2017, up to the audit of the Company's financial statements for 2022, which is a total of 6 year.
- 3. Our audit opinion is consistent with the additional audit report prepared for the Company's Audit Committee in accordance with provisions of Article 11 of Regulation (EU) No. 537/2014.

4. During the period between the initial date of the Company's audited annual financial statements for the year 2022 and the date of this report, we did not provide the Company with prohibited non-audit services, and in the business year prior to the aforementioned period, we did not provide services for the design and implementation of internal control procedures or risk management related to the preparation and/or control of financial information or the design and implementation of technological systems for financial information, and in performing the audit we preserved independence in relation to the Company.

Zagreb, May 31, 2022

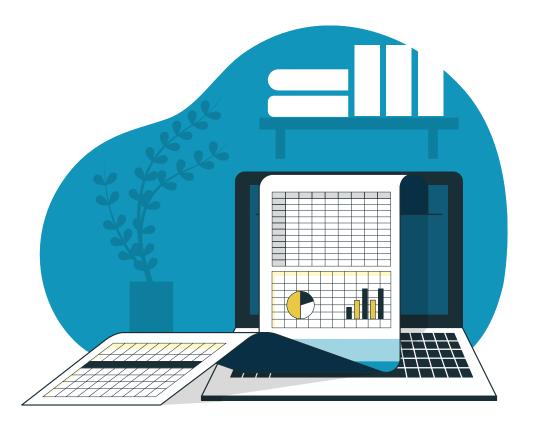
Audit d.o.o.

Trg Johna Fitzgeralda Kennedyja 6b

10000 Zagreb

Derlas Varis

Darko Karić, director, certified auditor



BALANCE SHEET		
	At 31 December 2022	At 31 December 2021
	in HRK	in HRK
ASSETS		
Intangible assets	128,189,623	126,682,015
Right of use assets	1,480,268	1,852,214
Tangible assets	272,516,255	292,463,562
Financial assets	744,354	120,275
Deferred tax assets	63,270,221	59,274,535
Long-term prepaid expenses and accrued income	207,637,830	266,330,236
NON-CURRENT ASSETS	673,838,551	746,722,837
Inventories	3,102,721	1,559,072
Accounts receivable	162,763,706	116,128,615
Receivables from employees and shareholders	302,884	388,087
Receivables from government and other institutions	5,375,483	5,552,503
Other receivables	42,792	72,487
Financial assets	226,108,059	52,883
Cash at bank and in hand	479,724,528	258,979,795
Short-term prepaid expenses and accrued income	65,844,754	6,462,501
CURRENT ASSETS	943,264,927	389,195,943
TOTAL ASSETS	1,617,103,478	1,135,918,780

CAPITAL AND LIABILITIES				
	At 31 December 2022	At 31 December 2021		
	in HRK	in HRK		
Subscribed capital	450,000,000	450,000,000		
Other reserves	259,999,750	264,544,017		
Retained earnings	-	-		
Profit/Loss for the current year	89,518,236	(4,544,267)		
CAPITAL AND RESERVES	799,517,986	709,999,750		
Provisions	352,469,747	204,933,579		
Liabilities to banks and other financial institutions	151,569,689	23,686,862		
Lease liabitlites	1,124,041	1,108,388		
Deffered tax liabilities	43,835	28,271		

CAPITAL AND LIABILITIES		
Long-term accrued expenses and deferred income	45,139,819	54,699,876
Long-term liabilities	197,877,384	79,523,397
Loan libilities and deposits	1,401,785	807,986
Liabilities to banks and other financial institutions	62,171,768	43,570,779
Accounts payable	27,685,487	37,722,543
Liabilities to employees	32,912,822	21,318,544
Liabilities for taxes, contributions and similar fees	114,502,073	18,914,951
Other short-term liabilities	23,487,626	14,805,693
Short-term accrued expenses and deferred income	5,076,800	4,321,558
Short-term liabilities	267,238,361	141,462,054
TOTAL CAPITAL AND LIABILITIES	1,617,103,478	1,135,918,780

STATAMENT OF COMPREHENSIVE INCOME		
	2022	2021
	in HRK	in HRK
Sales revenue	963,656,017	542,044,162
Other operating revenues	23,391,206	53,921,328
Operating revenues	987,047,223	595,965,490
Material costs	(74,590,151)	(61,159,814)
Staff costs	(462,869,533)	(417,711,159)
Depreciation	(75,157,309)	(83,097,539)
Other costs	(39,965,063)	(23,348,808)
Impairment	(60,722)	(574,420)
Provisions	(152,866,266)	(14,947,453)
Other operating expenses	(3,699,971)	(1,935,808)
Operating expenses	(809,209,015)	(602,775,001)
Profit/Loss from operating activies	177,838,208	(6,809,511)
Financial income	2,088,714	1,647,324
Financial expenses	(3,503,781)	(1,043,079)
Profit/Loss from financing actvities	(1,415,067)	604,245
TOTAL INCOME	989,135,937	597,612,814
TOTAL EXPENSES	(812,712,796)	(603,818,080)

STATAMENT OF COMPREHENSIVE INCOME		
PROFIT/LOSS BEFORE TAXATION	176,423,141	(6,205,266)
Profit tax	(86,904,905)	1,660,999
PROFIT/LOSS FOR THE PERIOD	89,518,236	(4,544,267)
NET OTHER COMPREHENSIVE INCOME FOR THE PERIOD	-	-
COMPREHENSIVE INCOME FOR THE PERIOD	89,518,236	(4,544,267)

## CASH FLOW STATEMENT

		2022	2021
		in HRK	in HRK
L	CASH FLOWS FROM OPERATING ACTIVITIES		
А	Profit before tax	176,423,141	(6,205,266)
	Adjustments:		
	Depreciation	75,157,309	83,097,539
	(Gains)/ losses from asset disposal and non-cur- rent asset revaluation	127,764	(6,923,375)
	Interest and dividend income	(1,239,892)	(1,039,628)
	Interest expense	2,974,655	747,412
	Provisions	147,536,168	(17,104,878)
	Foreign exchange differences (unrealized)	402,299	312,029
	Other adjustments for non-cash transactions and unrealized (gains / losses)	(3,816)	(397,426)
В	Adjustments	224,954,487	58,691,673
C= A+B	NET CASH FLOWS BEFORE CHANGES IN WORKING CAPITAL	401,377,628	52,486,407
	(Decrease) in short-term liabilities	2,151,021	(8,742,981)
	(Increase) in short-term receivables	(48,774,682)	(61,323,935)
	(Increase)/ Decrease in inventories	(1,543,649)	(7,309,668)
D	(Increase)/ Decrease in inventories Changes in working capital	(1,543,649) <b>(48,167,310)</b>	
D			
D			
D			(77,376,584)
	Changes in working capital	(48,167,310)	<b>(77,376,584)</b> (651,068)
E	Changes in working capital	( <b>48</b> , <b>167</b> , <b>310</b> ) (2,110,521)	<b>(77,376,584)</b> (651,068) 23,325,681
E F	Changes in working capital Interest expenses Profit tax paid	(48,167,310) (2,110,521) 0	(77,376,584) (651,068) 23,325,681
E F	Changes in working capital Interest expenses Profit tax paid	(48,167,310) (2,110,521) 0	(7,309,668) (77,376,584) (651,068) 23,325,681 (2,215,564)

55

CASH FLOW	STATEMENT		
	Cash inflows from sale of non-current tangible and intangible assets	39,342	66,127
	Cash inflows from interest	1,239,892	1,039,628
	Other cash inflows from investment activities	53,175	0
G	Total cash inflows from investing activities	1,332,409	1,105,755
	Cash outflows for purchase of non-current tangi- ble and intangible assets	(56,905,144)	(63,487,699)
	Cash outflows for given loans and savings depos- its for the period	(623,802)	0
	Otherc cash outflows from investment activities	(225,886,760)	(52,586)
н	Total cash outflows from investing activities	(283,415,706)	(63,540,285)
II= G+H	NET CASH FLOWS FROM INVESTING ACTIVITIES	(282,083,297)	(62,434,530)
Ш	CASH FLOWS FROM FINANCING ACTIVITIES		
	Cash inflows from the loan principals, debentures, credits and other borrowings	200,000,000	0
	Other inflows from financial activities	7,266,154	20,782,278
J	Total cash inflows from financing activities	207,266,154	20,782,278
	Cash outflows from the loan principals and bonds	(53,658,863)	(44,667,614)
	Other outflows from financial activities	(1,879,058)	(4,333,942)
К	Total cash outflows from financing activities	(55,537,921)	(49,001,556)
III= J+K	NET CASH FLOWS FROM FINANCING ACTIVITIES	151,728,233	(28,219,278)
1+11+111	TOTAL NET CASH FLOWS	220,744,733	(92,869,372)
	CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	258,979,795	351,849,167
	CASH AND CASH EQUIVALENTS AT END OF PE- RIOD	479,724,528	258,979,795
	INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	220,744,733	(92,869,372)

	Share (subscribed) capital	Other reserves	Retained earnings	Profit for the current year	Total
	in HRK	in HRK	in HRK	in HRK	in HRK
At 31 December 2016	5 450,000,000	32,927,163	38,481,567	68,972,956	590,381,686
Distribution of profit	-	68,972,956	-	(68,972,956)	-
Profit for the current year	-	-	-	91,318,246	91,318,246
At 31 December 2017	450,000,000	101,900,119	38,481,567	91,318,246	681,699,932

STATEMENT OF CHANG	ES IN EQUITY				
	Share (subscribed) capital	Other reserves	Retained earnings	Profit for the current year	Total
	in HRK	in HRK	in HRK	in HRK	in HRK
At 31 December 2017	450,000,000	101,900,119	38,481,567	91,318,246	681,699,933
Distribution of profit	-	91,318,246	-	(91,318,246)	-
Profit for the current year	-	-	-	52,702,277	52,702,277
At 31 December 2018	450,000,000	193,218,365	38,481,567	52,702,277	734,402,210
	Share (subscribed) capital	Other reserves	Retained earnings	Profit for the current year	Total
	in HRK	in HRK	in HRK	in HRK	in HRK
At 31 December 2018	450,000,000	193,218,365	38,481,567	52,702,277	734,402,210
First adoption of IFRS 16	-	-	(363,815)	-	(363,815)
Distribution of profit	-	52,702,277	-	(52,702,277)	0
Profit for the current year	-	-	-	27,113,790	27,113,790
At 31 December 2019	450,000,000	245,920,642	38,117,752	27,113,790	761,152,185
	Share (subscribed) capital	Other reserves	Retained earnings	Profit for the current year	Total
	in HRK	in HRK	in HRK	in HRK	in HRK
At 31 December 2019	450,000,000	245,920,642	38,117,752	27,113,790	761,152,185
Distribution of profit	-	27,113,790	-	(27,113,790)	0
Profit for the current year	-	-	-	(46,608,168)	(46,608,168)
At 31 December 2020	450,000,000	273,034,432	38,117,752	(46,608,168)	714,544,017
	Share (subscribed) capital	Other reserves	Retained earnings	Profit for the current year	Total
	in HRK	in HRK	in HRK	in HRK	in HRK
At 31 December 2020	450,000,000	273,034,432	38,117,752	(46,608,168)	714,544,017
Distribution of losses	-	(8,490,416)	(38,117,752)	46,608,168	0
Loss for the current ye	- Par	-	-	(4,544,267)	(4,544,267)
At 31 December 2021	450,000,000	264,544,016	0	(4,544,267)	709,999,750
	Share (subscribed) capital	Other reserves	Retained earnings	Profit for the current year	Total
	in HRK	in HRK	in HRK	in HRK	in HRK
At 31 December 2021	450,000,000	264,544,017	0	(4,544,267)	709,999,750
Distribution of losses	-	(4,544,267)		4,544,267	0
Profit for the current	-	-	-	89,518,236	89,518,236
year					

# ABBREVIATIONS

ACC	Area Control Center
ACS	Area Control Service
ACE	ATM Cost-Effectiveness
ADI	Aerodrome Control Instrument
AIC	Aeronautical Information Circular
AIP	Aeronautical Information Publica- tion
AIM/AIS	Aeronautical Information Manage- ment / Aeronautical Information Services
AIRE	Airlines International Representa- tion in Europe
AIXM	Aeronautical Information Exchange Model
AMDT	Amendment
AMC	Airspace Management Cell
ANS	Air Navigation Services
ANSP	Air Navigation Service Provider
APS	Approach Control Surveillance
ASM	Airspace Management
АТС	Air Traffic Control
ATCC	Air Traffic Control Center
АТСО	Air Traffic Control Officer
ATFCM	Air Traffic Flow and Capacity Man- agement
ATFM	Air Traffic Flow Management
АТМ	Air Traffic Management
ATS	Air Traffic Services
ATSEP	Air Traffic Safety Electronics Per- sonnel
ATSP	Air Traffic Services Personnel
BHANSA	Bosnia and Herzegovina Air Naviga- tion Services Agency
CAF	Croatian Armed Forces
CANSO	Civil Aviation Navigation Services Organization
CAPEX	Capital Expenditure
ССАА	Croatian Civil Aviation Agency
CCL	Croatia Control Ltd.

ссо	Continuous Climb Operations		
CDA	Continuous Descent Arrival		
CEF	Connecting European Facility		
CINEA	European Climate Infrastructure and Environment Executive Agency		
CNS	Communication, Navigation and Surveillance		
сом	Communication		
COOPANS	Cooperation between Air Navigation Service providers		
CRCO	Central Route Charges Office		
СТА	Controlled Area		
CTR	Control Zone		
CUSA	Croatian Unmanned Systems Association		
DG	Director General		
DSD	Digital Sky Demonstrators		
DUC	Determined En Route Unit Cost		
EAD	European Aeronautical Information Database		
EC	European Commission		
ELPAC	English Language Proficiency for Aeronautical Communication		
EMS	Environmental Management System		
ENR	En route		
EoSM	Effectiveness of Safety Manage- ment		
ERM	Enterprise Risk Management		
EU	European Union		
EURO CONTROL	European Organization for the Safety of Air Navigation		
FAB	Functional Airspace Block		
FAB CE	FAB Central Europe		
FEAST	First European Air Traffic Controller Selection Test		
FIR	Flight Information Region		
FPD	Flight Procedure Design		
FRA	Free Route Airspace		
FRAIT	Free Route Airspace Italy		

HRK	Croatian Kuna	RI	Runway Incursion
HVAC	Heating, Ventilation, and Air Condi- tioning	RP3	Third Reference Period, 2020-2024
ΙΑΤΑ	International Air Transport Associa-	SATM	Specific ATM
IOT	tion Information and Communications	SDD	Static and Dynamic Data
ICT	Technology International Ethics Standards	SeCMS	Security Management System
IESBA	Board for Accountants	SECSI	South East Common Sky Initiative
IFRS	International Financial Reporting Standards	SES	Single European Sky
ISA	International Standards on Auditing	SESAR	Single European Sky ATM Research
JC	Just Culture	SID/STAR	Standard Instrument Departure / Standard Terminal Arrivals
KEA	Key Environment Area	SMI	Separation Minima Infringement
КРА	Key Performance Area	SMS	Safety Management System
КРІ	Key Performance Indicator	STDI	Synthetic Training Device Instructor
LDZA	Aerodrome Zagreb	SUP	Supplement
LDZL	Aerodrome Lučko	тво	Trajectory Based Operations
Ltd.	Limited	TCL	Terminal Control
MAGnet	Multiservice ATM-Grade Network	тма	Terminal Maneuvering Area
MET	Aeronautical Meteorological Ser- vices	то	Training Organization
MoD	Ministry of Defense	ΤΟΚΑΙ	Toolkit for ATM Occurrence Inves- tigation
Mol	Ministry of Interior	TRA	Temporary Reserved Area
MSTI	Ministry of the Sea, Transport and Infrastructure	SA	Temporary Segregated Area
MTCD	Medium Term Conflict Detection	TWR	Tower Control Unit (Aerodrome Control Tower)
NDB	Non-Directional Beacon	UAS	Unmanned Aerial Systems
NET	Network	UTM	Unmanned Aircraft System Traffic Management
NM	Network Manager	VFR	Visual Flight Rules
NMOC	Network Manager Operations Center	VRRS	Voice Recording and Replay System
ΝΟΤΑΜ	Notice to Airmen		
OJTI	On-the-Job Training Instructor		
OPEX	Operating Expense		
PBN	Performance Based Navigation		
PIB	Pre-flight Information Bulletins		
PP	Performance Plan		
PRU	Performance Review Unit		

QMS Quality Management System

\*

## Impressum

### Published by

Croatia Control Air Navigation Services, Limited

Rudolfa Fizira 2

## HR-10410 VELIKA GORICA, CROATIA, P.O.B. 103

www.crocontrol.hr

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#### Printed by

ITG d.o.o.

CROATIA CONTROL AIR NAVIGATION SERVICES, LIMITED RUDOLFA FIZIRA 2 HR-10410 VELIKA GORICA, CROATIA, P.O.B. 103 E: DG.OFFICE@CROCONTROL.HR WWW.CROCONTROL.HR 1 4