

CROATIA
CONTROL

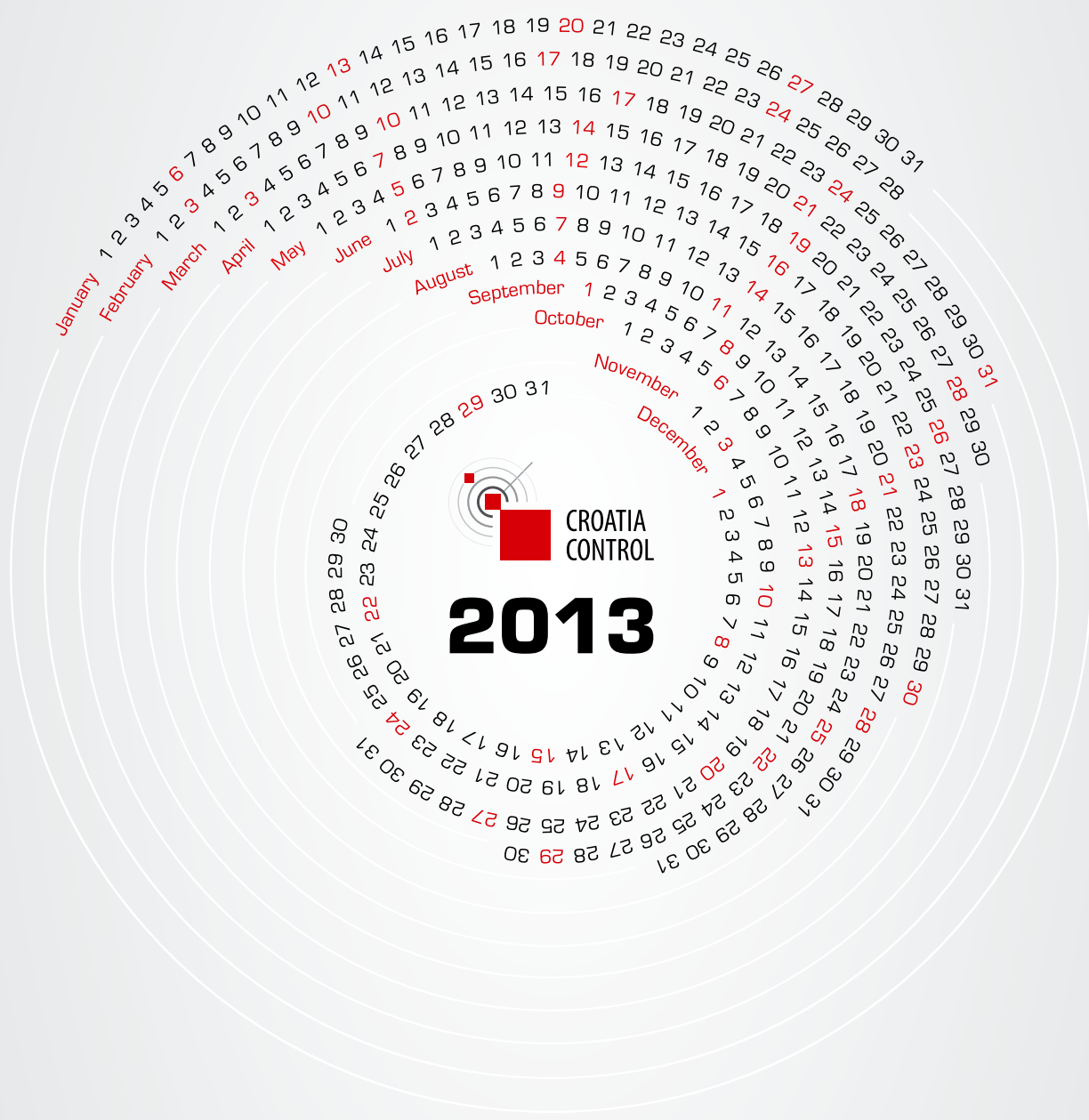
Annual Report 2013



Croatia Control Ltd

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1. Message from the Director General



Dragan Bilać

Director General

The year 2013 was successful for Croatia Control (CCL), despite a slight traffic decrease. Following the idea of FAB initiative to enhance capacity, CCL fulfilled all capacity objectives disaggregated at the European level, en-route ATFM delay and baseline capacity.

I am pleased to mention some statistical data showing that CCL's delays in 2013 were three times reduced as compared to 2012, from 0.27 to 0.09 minutes per flight. This significant achievement is the result of many combined efforts: successful social dialogue, optimization of resources, dynamic change of sector configurations, other airspace improvements and significant contribution of all staff, especially air traffic controllers.

On 17 August 2013 we also achieved a record number of 2520 aircraft flights in one day. At the same time, that was the busiest month so far.

CCL takes appropriate actions to decrease fuel consumption of airspace users, and it has been among the first ANSPs in Europe to implement the project of Free Route Airspace in cooperation with its partners, enabling airlines to use night cross-border direct routes between the areas of responsibility of the Zagreb and Belgrade Area Control Centres.

This project is one of the key improvements within the EU initiative on establishing the SES regardless of state borders, aiming to enhance safety and efficiency, and to increase capacity of air traffic in Europe.

CCL is an active promoter of regional integration and co-operation within the SES, including participation in the COOPANS association, FAB CE and inter-FAB cooperation in Gate One, a new platform of 10 ANSPs of Central and Eastern Europe established in 2013.

The new ATC simulator of the most state-of-the-art technology, within the upgrade to the COOPANS ATM system, was installed in 2013 and it is identical to the operating system that was put into operation in February 2014, based on the Thales TopSky system and applied by seven ATC Centres in five European countries. It ensures CCL's permanent harmonisation with the EU standards and competitiveness on the European ANS market.

New challenges are ahead of us, including implementation of some outstanding projects in order to meet all relevant safety and quality standards across all segments of CCL's activity.

Our publication presents our accomplishments which will hopefully be beneficial to our customers, airlines and their passengers, as well as to our professional partners and service providers.

2. Company profile

Croatia Control Ltd (CCL) is a state-owned limited liability company providing air navigation services and it was founded in 1998, a year after Croatia acceded to EUROCONTROL (the European Organisation for the Safety of Air Navigation). Croatia has been a member of the International Civil Aviation Organisation (ICAO) and the European Civil Aviation Conference (ECAC) since 1992.

2.1. History of Croatia Control Ltd

Croatia Control Ltd was founded in 1998, a year after Croatia acceded to Eurocontrol (the European Organisation for the Safety of Air Navigation). Croatia was already a member of the International Civil Aviation Organisation (ICAO) and the European Civil Aviation Conference (ECAC) since 1992. Before 1998, the Air Traffic Services Authority of Croatia was responsible for the provision of air traffic services in Croatia.

The key founding steps in the history of Croatia Control are:

- ➔ until September 1991: the Zagreb Area Control Centre operated within the Federal Air Traffic Control Authority.
- ➔ January 1992: the Air Traffic Services Authority (ATSA) of Croatia founded as part of the Ministry of Maritime Affairs, Transport and Communications.
- ➔ May 1992: Croatia's accession to ICAO.
- ➔ July 1992: Croatia's accession to ECAC.
- ➔ March 1997: Croatia's accession to EUROCONTROL.
- ➔ February 1998: CCL founded as a limited liability company.
- ➔ December 1999: CCL registered as a limited liability company at the Commercial Court.
- ➔ March 2009: CCL certified as air navigation service provider by the Ministry of the Sea, Transport and infrastructure.
- ➔ May 2011: CCL signed the Agreement on the Establishment of Functional Airspace Block Central Europe (FAB CE) covering the airspace of Austria, Bosnia & Herzegovina, Croatia, Czech Republic, Hungary, Slovak Republic and Slovenia.
- ➔ June 2011: CCL became a full member of the initiative of ANSPs of Ireland, Denmark, Sweden and Austria called COOPANS. The COOPANS Members are committed by a Framework Agreement aiming at reduced development costs, and required human and financial resources for the upgrading of their air traffic control systems.

Over the years, the traffic in Croatia was undergoing strong growth. At the same time the SES initiative was developed resulting in a large number of requirements. Croatian Air Traffic Management Project (CroATMP) was a relevant and well-planned response to these changes. The most important project within CroATMP was the implementation of ATM system Eurocat 2000E (CroaATMS). In 2011 and 2012 were also intensified activities associated with the launching of a new investment cycle including CroATMS upgrade and modernisation / COOPANS projects as the most significant within the programme CroATMP.

2.2. Mission

Our mission is to reach an outstanding quality of air navigation services compliant with national and international regulations, to full satisfaction of our service users.

The mission will be achieved in cooperation with our partners within the European ATM network, while maintaining highest safety levels and excellent quality of our services through knowledge, reliability and efficiency in operations, as well as taking care of the environment.



2.3. Vision

Croatia Control Ltd aims to achieve and maintain excellent performance, and to be among leading air navigation service providers in Europe. Our goal is to be a streamlined organisation that meets user requirements, maintains top safety level and takes responsibility for the environment. The goals will be achieved by our motivated and competent staff, providing highest quality services to the benefit of our customers and stakeholders.

2.4. Core Business

CCL's operation in 2013 was based on its 2013 Business Plan and its services to the customers were provided in a genuinely transparent and non-discriminatory manner.



The core business of Croatia Control Ltd comprises the following activities:

- ➔ provision of air navigation services (ANS) which includes:
 - provision of air traffic services (ATS), particularly air traffic control, alerting service, flight information and pre-flight information service, all aimed at providing a safe, orderly and smooth air traffic, as well

as flight data processing and storage, promulgation of safety-related information, management of air traffic flow and airspace utilisation;

- provision of communication, navigation and surveillance services (CNS);
 - provision of aeronautical information services (AIS);
 - provision of aeronautical meteorological services (MET).
- ➔ collecting, processing and issuing of aeronautical information, including special publications;
 - ➔ specifying the operating requirements for air traffic management, control and monitoring systems, equipment, infrastructure, etc.;
 - ➔ responsibility for the airspace and flight procedures design, minding the interests of military and civil users, as well as environmental protection;
 - ➔ development, construction, maintenance, monitoring and checking the function of air navigation and meteorological facilities, systems and equipment;
 - ➔ aeronautical meteorological and aerodrome climatology observations, as well as drafting and exchange of aeronautical meteorological reports;
 - ➔ preparation of aviation weather forecasts, as well as special information and warnings for the airports and routes in Croatian airspace, preparation of aeronautical meteorological documentation and performance of other tasks as specified by the ICAO documents;
 - ➔ implementation and coordination of specific engagements in various international organizations, particularly in ICAO and Eurocontrol;
 - ➔ professional and life-long training of the staff;
 - ➔ export and import of goods for own needs.

2.5. Organisational Structure

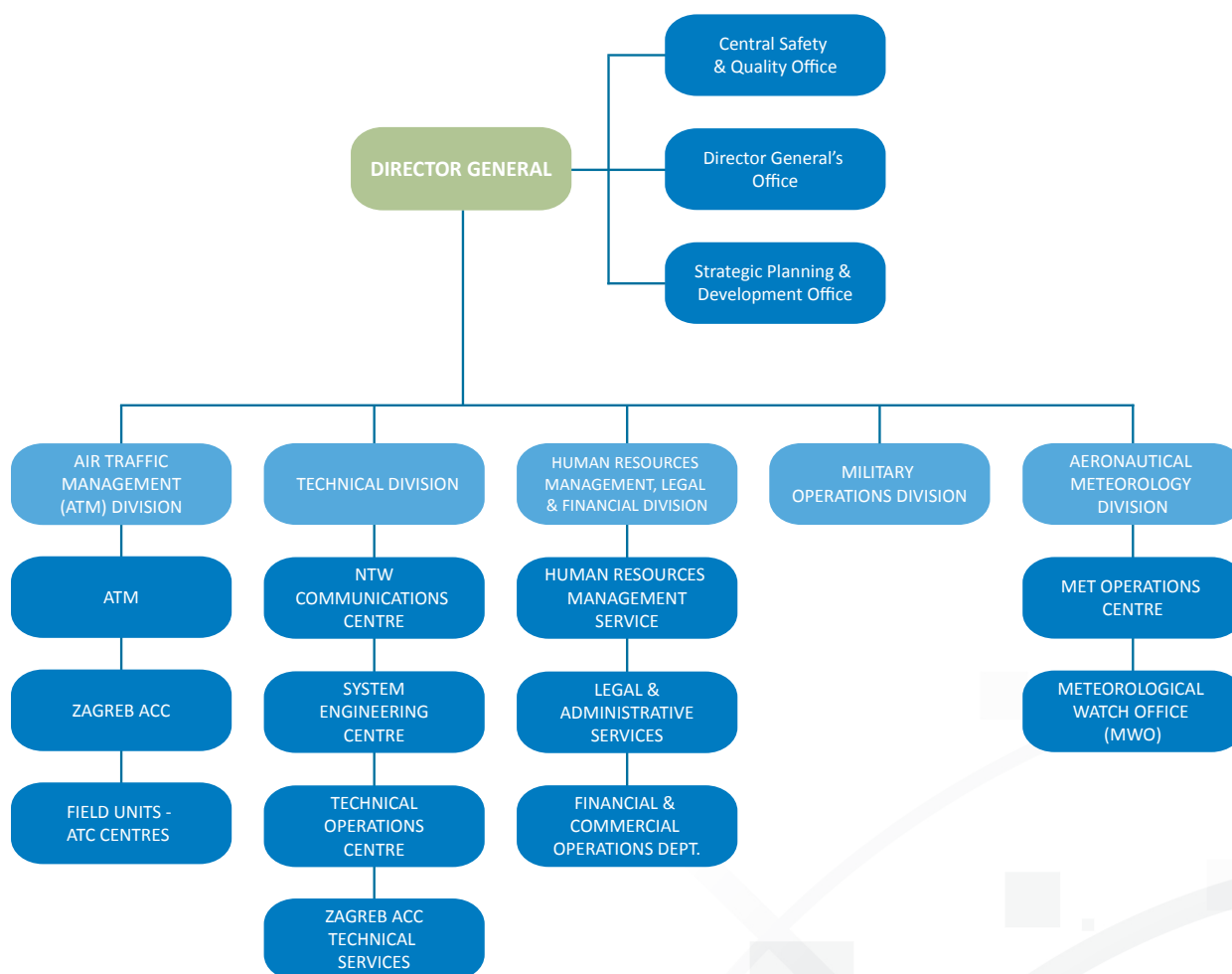


Croatia Control headquarters and regional ATC units

CCL's headquarters are located in Zagreb. The company is organised into five divisions. These are:

- Air Traffic Management,
- Technical Division,
- Aeronautical Meteorology,
- Military Operations,
- Human Resources Management, Legal and Financial Affairs.

The Air Traffic Management division includes, in addition to the Zagreb Air Traffic Control Centre, the regional ATC centres Pula, Rijeka, Lošinj, Split/Brač, Zadar, Dubrovnik and Osijek. These operational units are responsible for the provision of air traffic control, technical support, meteorological and administrative services required for smooth air traffic flow.



Main divisions and departments of Croatia Control Ltd

2.6. International Activities

Services for Bosnia and Herzegovina

CCL has been providing air traffic services in the western half of the upper airspace and in the whole lower airspace of Bosnia and Herzegovina since 2000 and 2001 respectively, in compliance with the bilateral agreements.

Regional co-operation



Functional Airspace Block (FAB CE) is a joint initiative of seven states: Austria, Bosnia and Herzegovina, Croatia, Czech Republic, Hungary, Slovak Republic and Slovenia, with their respective ANSPs, including CCL. To meet the future needs of a growing air travel and transport industry, the European ATM needs to become more flexible, harmonised and seamless. The European Commission's SES initiative aims at the unification of European airspace. The creation of FABs independent of national boundaries will optimise airspace usage and capacity, making the flow of air traffic over Europe more efficient. The FAB CE Agreement, as well as FAB CE ANSP Cooperation Agreement, were signed in May 2011. The implementation of FAB CE will maintain and, wherever possible, improve the current level of safety notwithstanding the increased traffic, through the establishment of a common safety management system. The ATM services within the FAB CE will be provided in an environment characterised by the cross-border airspace design and extensive cross-border sectorisation. The airspace design process will therefore not be constrained by borders between the FAB CE States, but will be based on operational needs and air traffic flows resulting in better horizontal and vertical flight efficiency, improvements in productivity and the consequent increase in capacity. With the FRA concept, the users will be able to freely plan a route between a defined entry and exit point, with the possibility to route via intermediate (published or unpublished) way points, without reference to the ATS route network. The step by step realisation within FAB CE will result in incremental benefits by applying FRA structures and principles and deploying FRA stepwise across the borders to a FAB CE-wide implementation by 2018.

COOPANS



The COOPANS (COOperation of ANS Providers) framework agreement between CCL, IAA, LFV, Naviair and Austro Control (providers from Sweden, Denmark, Ireland, Austria and Croatia) has gone further than the traditional relationship between Air

Navigation Service Providers and the ATM supply industry and has set the foundations for a strong and long-term partnership. COOPANS has adopted a common managerial approach where the 5 ANSPs act as one organisation together with the supplier Thales, focusing on common success. The harmonisation of functionalities and joint investments enable the implementation of an advanced and unified ATM system. Activities include, inter alia, common stepwise operational and technological evolution optimisation of life cycle costs, sharing the same system and support baseline for operation and maintenance. COOPANS members maximise benefits using common tools, methods, and operational procedures throughout the system life cycle. From a financial perspective, common procurement is defined for all major programme steps: development, integration, deployment and maintenance. COOPANS' highest priority is to provide a customer-oriented solution supporting economic efficiency and environmental protection, with a focus on maintaining the required level of safety whilst increasing capacity to meet our customers' demands. COOPANS intends to be at the forefront of the European standards, implementing the latest proven ATM tools to minimise CO2 emissions and improve situational awareness. CCL implemented the project activities during 2013, so that new ATM system based on the COOPANS latest version could be launched into operation in February 2014. This means that 7 ATC centres in 5 European countries would use the same ATM system with the same version of software. It ensures CCL's permanent harmonisation with the EU standards and competitiveness on the European market of ANS. Through joint development and cooperation with Thales all 5 ATM systems are harmonized, including all upgrades, usually twice a year. The members make joint investments and share expenses, thus reaching cost savings and safety benefits.

3. Corporate governance

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

3.1. Assembly

The Assembly consists of the Chairman - Minister of Maritime Affairs, Transport and Infrastructure and two members - Minister of Finance and the Minister of Defence.

3.2. Supervisory Board

The Supervisory Board monitors the activities of the company. The Supervisory Board appoints the Director General of the company under basis of open competition for a period of five years. The same person can be re-appointed as Director General.

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 re-appointed. The Director General of the company cannot be a member of the Supervisory Board

The members of the Supervisory Board are:

- **Prof. Darko Prebežac , Ph.D**
Chairman of the Supervisory Board
- **Dinko Staničić**
Vice Chairman
- **Željko Gojko**
Employee Representative
- **Marijana Müller**
Member
- **Hrvoje Filipović**
Member

3.3. Management

Dragan Bilać, Director General represents the Management of the Company.

3.4. Division Directors

There are five main divisions in Croatia Control Ltd, managed by the following directors:

→ **Milivoj Sever Cuglin**

Director, Air Traffic Management (ATM) Division

→ **Boris Gačina**

Director, Technical Division

→ **Anka Nikić**

Director, Human Resources Management, Legal & Financial Division

→ **Stjepan Varga**

Acting Director, Military Operations Division

→ **Alen Sajko**

Director, Aeronautical Meteorology Division

3.5. Executive Directors

There are three Executive Directors within the ATM Division:

→ **Mihajlo Jelisavčić**

Executive Director, Air Traffic Management (ATM)

→ **Siniša Belošević**

Executive Director, Zagreb ACC

→ **Josip Josipović**

Executive Director, Regional ATC Centres

4. Operations and Infrastructure

4.1. Operational Units

CCL's main operational units are as follows:

- **Zagreb ATCC:** Zagreb Air Traffic Control Centre provides area control services for both Zagreb Control Area (CTA) and a part of the Control Area (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);
- **Eight regional ATC centres providing approach and tower control:** Osijek, Rijeka, Pula, Zadar, Split, Dubrovnik, Lošinj, Brač



ATS operational units provide the following services:

- ➔ Air Traffic Control Services;
- ➔ Flight Information Services;
- ➔ Aeronautical Information Services;
- ➔ Traffic Flow Management services;
- ➔ Airspace Management Service through AMC;
- ➔ Communication Services;
- ➔ Alerting Services.

Zagreb ACC provides air traffic services in the control area of Zagreb FIR and in small parts of airspace of neighbouring providers where the responsibility for the air traffic control has been delegated to CCL under relevant international agreements. In a part of Zagreb FIR airspace, the responsibility for ATS has been delegated to neighbouring providers, which has also been done in compliance to the relevant international agreements on mutual delegation of ATS provision. Zagreb ACC also provides air traffic services in the airspace of Bosnia and Herzegovina from Flight Level 100 to Flight Level 285 in the whole of Sarajevo FIR and additionally from Flight Level 285 to Flight Level 660 in the Western part of Sarajevo FIR as provided in the relevant international agreements.

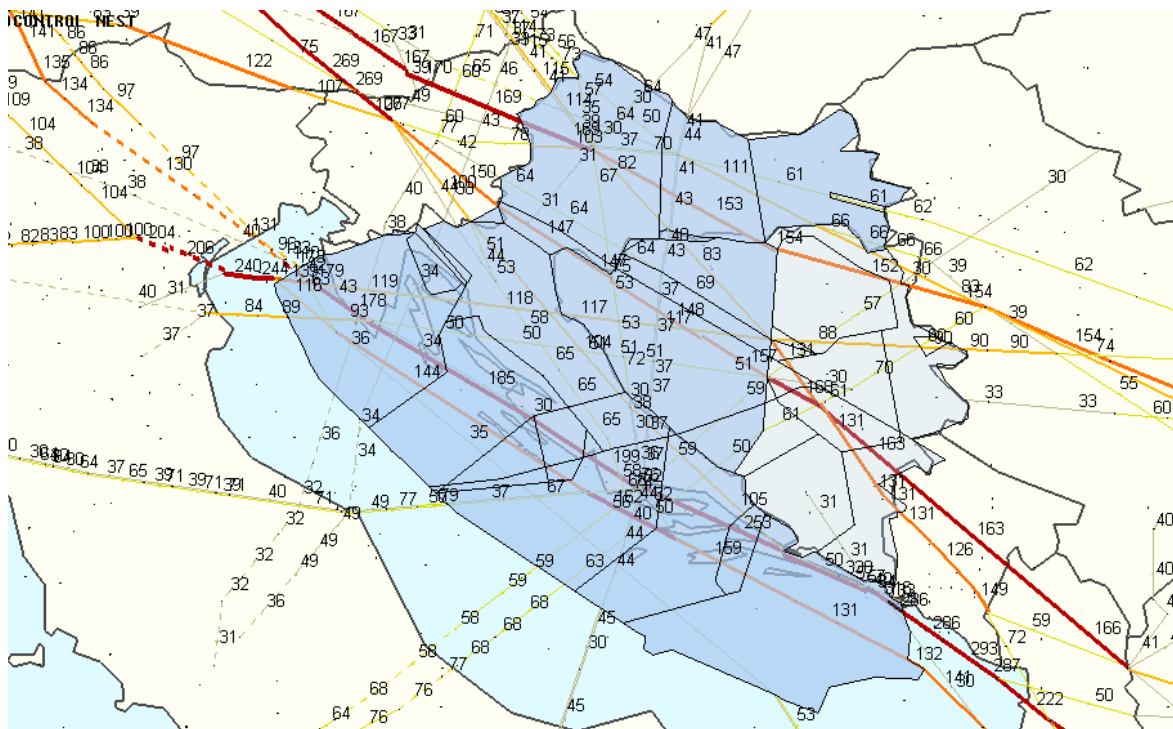


ACC Zagreb area of responsibility (AoR)

Through its provision of air traffic services for Bosnia and Herzegovina, CCL has been providing air navigation services in the context of an early example of the Functional Airspace Blocks that are the key feature of the Single European Sky. This means that operational borders of certain sector groups extend across national borders contributing to better efficiency and better flow of international air traffic.

4.2. Traffic Flows and Seasonality

The main traffic flows over Croatia in 2013 are shown in the picture below. The numbers represent the total number of IFR GAT operations on a particular route on the busiest day of summer 2013.



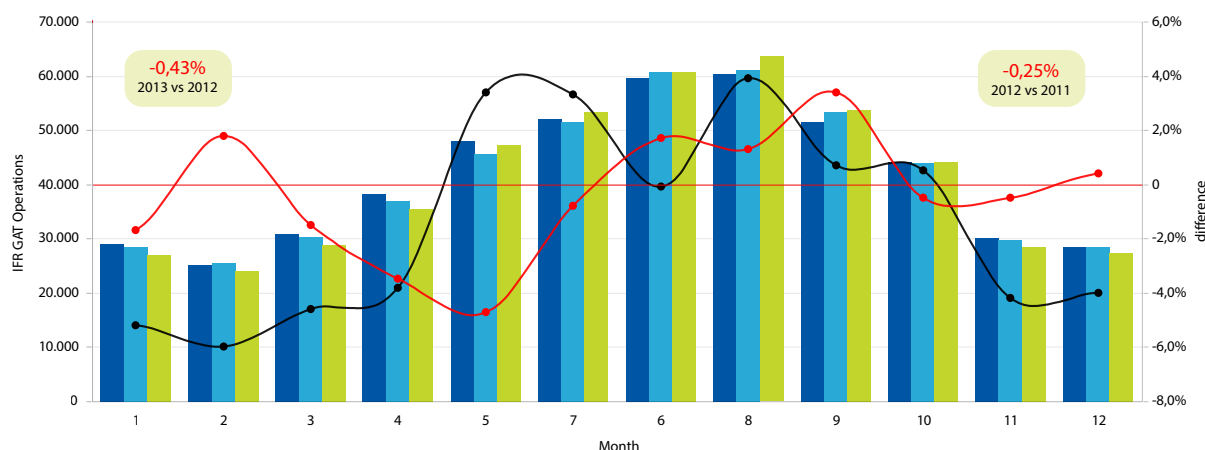
Main traffic flows over Croatia

Traffic in Croatian airspace is highly seasonal and the main flows run in South East – North West direction. The volume of traffic in the period May-October is much greater than the volume in the rest of the year. The intense seasonality of traffic means that Croatia Control faces particular challenges in achieving a balance between the required capacity and use of resources throughout the year.

Traffic routes over the entire South-East axis of the European airspace are already very close to the shortest routes, with Croatia in a lead position within FAB CE, which is an advantage both in terms of flight efficiency and in terms of reduced harmful emissions.

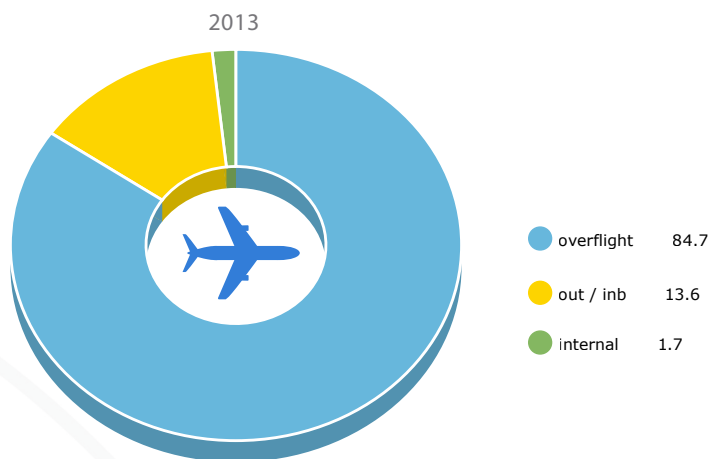
The following figure shows the total number of IFR GAT flights controlled by CCL, including the flights in the airspace of Bosnia and Herzegovina, where the provision of services is delegated to CCL.

LDZO TOTAL IFR GAT operations, 2013 vs 2012



Traffic seasonality

In 2013, 84,7% of the flights in Croatia were overflights, 1,7% were domestic flights and the remaining 13,6% were international flights, arriving at or departing from Croatian airports.



Distribution of flights in Croatia

4.3. Civil/Military Coordination

In Croatian airspace, CCL is also responsible for the service provision to the Ministry of Defence of the Republic of Croatia, all in accordance with Air Traffic Act and other applicable regulations. For the purpose of maintaining a high level of safety and quality, relevant air traffic data is regularly exchanged between these two parties, which is a basis for creating 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.

4.4. Operational Improvements

In the last decade, Croatia has achieved one of the highest increases of IFR GAT operations in the ECAC region. Overflights account for 85% of all operations, or the ENR phase, while the remaining 15% of all IFR GAT operations relate to airport departures and arrivals.

In 2013, with the aim of further increasing the efficiency of ATM and in line with other developments within the EATMN, CCL, in cooperation with SMATSA, has extended the validity of the previously implemented 30 night DCT's to 24H operation. This extended the positive impact on AO's, increased the quality of our service and contributed to the reduction of the greenhouse emissions.

Due to its geographical position in the South-East Axis flow, Croatia is located en-route which is expected to grow even further. Adequate capacity planning is thus paramount in the overall planning, as Croatia has further potential for growth coming from the shortest as well as the cheapest route options.

Free Route Airspace Concept

Utilisation of DCT routes has a direct impact on efficiency of CCL, while reducing adverse impacts on the environment. Continuous monitoring of usage of these planning options (routes) and comparing the results with those of flying along RNAV routes, allow us to track changes in fuel consumption, which in turn means less harmful emissions.

Connecting to other Free Route initiatives within the FAB CE, as well as other FABs, will be done through an overall network coordination.

Step 1	Time limited implementation of FRA / DCT in a defined airspace
Step 2	H24/7 implementation of direct connections in a defined airspace <ul style="list-style-type: none"> • 2.a. DCT within ATC units • 2.b DCT Cross border between 2 or more ATC units within FAB CE / with adjacent FABs • 2.c FRA entry / exit within ATC Units (based on conditional entry/exit points) • 2.d FRA Cross border between 2 or more ATC units within FAB CE / with adjacent FABs • 2.e FRA/DCT cross border FABCE wide
Step 3	FAB CE cross border FRA (based on conditional entry / exit points) according to EC regulation at least FL310+
Step 4	FAB CE cross border FRA plus additional seamless operations

2013 DFL Optimisation

Aircraft Operators use newer and better (more economic) aircraft types which perform better on higher levels. Furthermore, the change of traffic flows also impact the load of certain cruising levels in different parts of the AoR. For these reasons, DFL was reassessed after the season 2012 and adjusted to the new optimum.

Further optimisation of staff and roster allowed for the lateral segmentation of the SUPERTOP sector, so the operational layout of the airspace is now divided into 12 elementary sectors, shown in the following picture:

		NORTH	WEST	SOUTH		
	FL660				FL660	
TOP		TN	TW	TS		TOP
	DFL 375				DFL 375	
HIGH		HN	HW	HS		HIGH
	DFL 355				DFL 355	
UPPER		UN	UW	US		UPPER
	DFL 325				DFL 325	
LOWER		LN	LW	LS		LOWER

Capacity

Capacity is defined as the ability to provide ATS in a defined volume of airspace, taking into consideration the high safety standards achievable without significant operational changes, impact on the environment and economy. It is the maximum number of aircraft which can safely transit through an airspace within a defined time frame.

Capacity planning is one of the most important aspects in the provision of ATS and an important factor reflecting on the overall performance.

Baseline capacity

Baseline capacity is defined as an effective capacity which can be delivered and maintained in peak traffic periods and is determined annually by NM ACCESS process. This is done based on the recordings of a two week period during summertime and collection of all relevant inputs, such as exact sector opening times, DELAY produced as well as the number of operations and other relevant factors. From this information, the ACC Baseline capacity is calculated using the reverse CASA method.

Delays

Delay is measured for all regulations used throughout the year, and basically reflects a lack of capacity. The year 2013 ended with a very good result (0.09 min/flight) which was far better than the indicated in the breakdown target for Croatia (0.28 min/flight), as well as the target set by CCL. In 2013 CCL achieved 3 times less delays, compared to the year 2012 (0,27 to 0,09 min/flight).

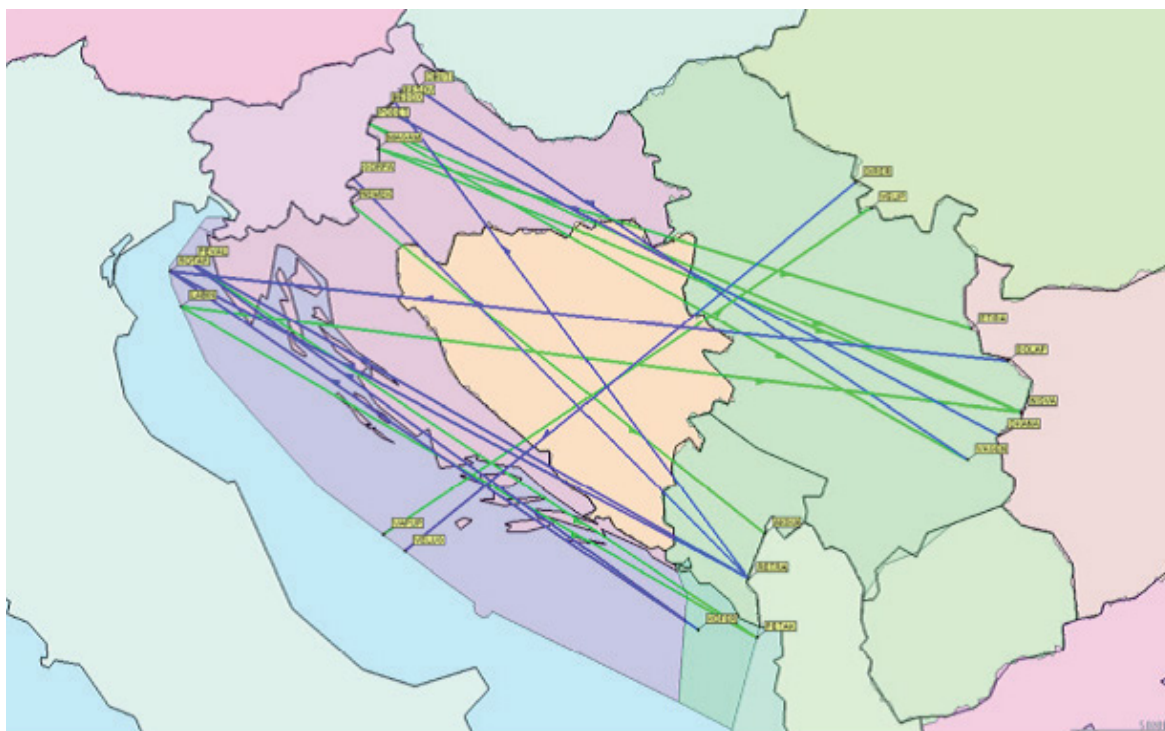
More information about delays can be found in the Chapter 7 (Performance) of this report

4.5. The Environment

To comply with LSSIP requirements and in coordination with Croatia Airlines as the major Croatian air carrier, the implementation of Continuous Descent Approach (CDA) procedures has been initiated at the Zagreb Airport.

CCL takes appropriate actions to decrease fuel consumption of airspace users. This is done by the route design (introduction of direct routes) and the development of new procedures (CDA, CCA).

In cooperation with the partners, CCL implemented cross-border direct routes between the areas of responsibility (AoR) of the Zagreb and Belgrade Area Control Centres (ACCs) as a part of the Free Route Airspace (FRA) concept.



This project is one of the key improvements within the EU initiative on establishing the SES regardless of state borders, aiming to enhance safety and efficiency, and to increase capacity of air traffic in Europe. As compared to the existing structure of routes and air traffic, the establishment of these direct routes will, just in a single night, enable a 1650 km reduction in planned route distance, which equals to savings in 5.3 tonnes of fuel, 16.2 tonnes of CO₂ emissions and 65.7 kg less NO_x. All these routes function now on the 24/7 basis

4.6. Technical Infrastructure

Overview

Highly qualified engineers and technicians have continuously been engaged in the maintenance and upgrading of the following systems: ATM Data Processing Systems, Communications Systems, including radio-communication transceiver, Navigation Systems, Radar Systems, Electric Power Systems, Network Communications Systems and Meteorological Systems.

Croatia, as a member of EUROCONTROL, shall comply with the European Single Sky Implementation Plan (ESSIP) / Local Single Sky Implementation Plan (LSSIP), which actually represents the five-year plans that include the actions to be taken by ECAC countries with a view to achieve the ESSIP objectives and improving the performance of their respective ATM systems. These Plans also include a report to be submitted by each country on the level of its compliance with SES regulations. Furthermore, certain investments are required to be in compliance with the EC Implementation Rules and ICAO mandates.

The equipment obsolescence and the resulting compromised reliability make its replacement imperative for CCL to be able to proceed with the provision of its core services. The costs of its day-to-day maintenance are getting higher and higher and in many cases the spare parts are no more available. Besides, the impracticability of installing new software into the existing hardware makes the compliance with newly emerging requirements even more difficult.

CCL has had in place a plan for the modernization and replacement of capital equipment required for the provision of its services. This plan covers critical facilities including:

- Navigation aids;
- Communications;
- Ground links;
- Surveillance sensors and processors; and
- Central ATM system comprising all tools used by CCL's ATCOs for the provision of ATC services.

2013 Investment Plan

The projects included in the investment plan for 2013 have been categorised as follows:

- CroATMS upgrade (including Emergency ATM system implementation project – ARES);
- Infrastructure replacement;
- Compliance projects
- Projects related to performance improvements.

CroATMS upgrade projects are capital investments required for imperative hardware replacement and software upgrade of the main CroATMS system to the COOPANS Top Sky ATM system version. This system is the heart of the CCL's most important infrastructure and represents the most significant item of the capital investments to be achieved through the following projects. Further, a number of other technical systems had to be implemented or upgraded in order to adopt to COOPANS ATM system to facilitate the integration into other CCL's systems of the CroATMS version as updated within the COOPANS initiative. The internal work on the systems, mainly related to system configuration, tuning and validation activities, was completed by the end of 2013. Also the emergency system ARES started to be implemented during 2013 - as an addition to ensuring operational continuity, the system will have an integrated Search And Rescue function, providing fast and precise last known aircraft position based on the data received from radars or sensors connected to the system.

While CCL has been operating CroATMS successfully, maintaining an operational ATC system is an ongoing activity requiring well-defined arrangements for software and hardware maintenance to keep the system operating optimally, as well as carrying out upgrades to the basic functionality in response to day-to-day operational needs and newly arising regulatory requirements. The challenges faced by CCL going forward include hardware obsolescence, sub optimal software upgradability and maintaining commonality and control of upgrades of remote tower systems. A HW upgrade contract and SW upgrade contract with COOPANS partners were concluded in 2011. In 2012 the system was designed, hardware procured and installed and COOPANS software configured for CCL needs in accordance with initial plans. The major milestone, site acceptance of the system, has been successfully achieved ahead of schedule in June 2013. The training of ATCOs started in November 2013 and internal activities, such as validations, as well as operational shadowing sessions were completed by the end of 2013 in accordance with the initial plan. In parallel, common COOPANS contracts for on-going system developments in order to keep the system up-to-date and comply with new SES regulations, as well as with local requirements to enhance and harmonize operational use of the ATM system, have been concluded and are in development phase. The number of new functionalities were prepared to be available for CCL's commissioning in February 2014, such as Elementary Mode S support, CCAMS, FPL2012, GRIB2 and ATM system support for CPDLC. Moreover, some of the most advanced functionalities will be available in the late 2014, notably Enhanced Mode S (DAP) and support for ADS-B and WAM.

Infrastructure replacement projects are capital investments required for the replacement of obsolete and worn out equipment in order to enable CCL to continue to provide ATM services and will be achieved through the following projects:

- Automatic Meteorological Station System Upgrade/Replacement (AMS Split, Pula)
- CCL's MW Link Transmission Network Development
- Procurement, Commissioning and Installation of VRRS
- NAV System Replacement and Modernisation
- Replacement of old NDBs
- Procurement, Commissioning and Installation of VCCS
- Aeronautical Information Database and Meteorological System Modernisation Programme

Compliance projects involve investments that are necessary to ensure compliance with the applicable global and regional regulations currently in effect, to be achieved through the following projects:

- Implementation of an International Aeronautical Message Handling Service (AMHS)
- Aeronautical Data and Information Quality Compliance with the Single European Sky Requirements Project - CroQADI

Performance related projects cover the investments to be made by CCL in order to improve its performance in terms of improved and more efficient provision of services to its users and include inter alia:

- Old ACC Building Renovation
- RWY Fibre Optic Cabling Project
- ACC/TMA VHF/UHF Radio Sites Expansion Project
- CCL IP Network Modernisation Project - CART/IWAN & Implementation & NTW Equipment
- CCL IP Network Modernization Project – NMS
- Implementation of Information Security Block (INFOSEC) for Operational Systems in Cyberspace - ExCO NG
- Construction of Wind speed and Direction Measurement System at Osijek and Brač Airports
- Terminal Telecommunication Equipment Modernisation project
- SUR System Upgrade (TMA Pula and TMA Dubrovnik)

Full list of projects scheduled for implementation in 2013 is given in the following table.

2013 Investment Plan

Projects scheduled for implementation in 2013:

Project name	Start	Operational
CCL centralised technical monitoring and control system	Before 2011	2017
ACC/TMA VHF/UHF radio system expansion project	Before 2011	2015
RRL replacement project at Zagreb ACC and Split TMA	Before 2011	2013
CCL MW link transmission network development	Before 2011	2014
NAV system replacement and upgrade project	Before 2011	2014
Terminal telecommunication equipment modernisation project	Before 2011	2014
Document management project	Before 2011	2015
ERRS Business information systems implementation project	Before 2011	2015
AMS system upgrade/replacement project (Pula, Split, Zagreb)	Before 2011	2014
Old ACC building renovation project	Before 2011	2016
Consultancy support for the projects P-2008-14 and P-2008-18	Before 2011	2015
Radar data sharing and distribution project	2011	2014
Flexible use of airspace (FUA) project	2011	2015
RWA fiber optic cabling project	2011	2015
VRRS replacement project	2011	2013
Upgrade of VCCS at Zagreb ACC as a part of CroATMMMP	2011	2015
Project of AFTN/CIDIN upgrade to AMHS	2011	2014
IP network modernisation project	2011	2013
CroATMS upgrade to COOPANS	2011	2014
UPS units replacement at TWR DU, TWR RI, TWR ZG	2011	2013
Procurement of consoles for simulator and COOPANS	2011	2016
Project of different systems adjustment to COOPANS	2011	2014
Modernisation and replacement of VCCS and emergency VCS systems	2011	2015
New ACC building and TWR infrastr. adapt. as a part of CroATM modern.	2011	2013
Emergency ATM system implementation project - ARES	2012	2014
Project of modernisation of AIS data base and MET computer system	2012	2014
NDB (beacons) procurement and replacement project	2012	2014
SUR system upgrade (TMA Pula and TMA Dubrovnik)	2012	2019
Relocation or administr. equipment from new techn. room OTE to old techn. room TTE	2012	2014
Project of multimedia equipment upgrade in conference rooms	2012	2013
Centralised monitoring room upgrade at ATC Pula	2012	2014
Fire alarm system replacement project (RS Kozjak, ATC Rijeka and ATC Lošinj)	2012	2013
Remote surveillance of MET conditions on RWY	2012	2014
Upgrade of FPS-117 radars to EMS standard	2012	2014
CMMS software procurement and installation	2013	2014
Video surveillance of maneuvering area at LDZD	2013	2014
Structured cabling upgrade: fiber-optic OTE-TTE-WTE connections	2013	2013
Administrative network WiFi modification	2013	2013
Administrative WAN capacity increasing	2013	2013
Remote units - TMA and TWR areas approach control project	2013	2014
Administrative system Internet segment upgrade project	2013	2013

Plans for investments in coming years

Projects scheduled for implementation during 2014:

Project name	Start	Operational
CCL centralised technical monitoring and control system	Before 2012	2017
ACC/TMA VHF/UHF radio system expansion project	Before 2012	2014
RRL replacement project at Zagreb ACC and Split TMA	Before 2012	2015
CCL MW link transmission network development	Before 2012	2015
Old ACC building renovation project	Before 2012	2016
Flexible use of airspace (FUA) project	Before 2012	2015
Project of AFTN/CIDIN upgrade to AMHS	Before 2012	2014
CroATMS upgrade to COOPANS	Before 2012	2014
Procurement of consoles for simulator and COOPANS	Before 2012	2016
Modernisation and replacement of VCCS and emergency VCS systems	Before 2012	2015
New ACC building and TWR infrastr. adapt. As a part of CroATM modern.	Before 2012	2014
Emergency ATM system implementation project - ARES	2012	2014
Project of modernization of AIM system and MET data processing system	2012	2016
NDB (beacons) procurement and replacement project	2012	2014
Centralised monitoring room upgrade at ATC Pula	2012	2014
Fire alarm system replacement project (RS Kozjak, ATC Rijeka and ATC Lošinj)	2012	2014
Upgrade of FPS-117 radars to EMS standard	2012	2014
CMMS software procurement and installation	2013	2014
Structured cabling upgrade: fibre optic OTE-TTE-WTE connections	2013	2014
Remote units - TMA and TWR areas approach control project	2013	2014
MWO relocation project	2013	2015
MET to ATM support system development project	2013	2017
DATA-COM systems modernization project	2014	2019
VOICE-COM systems modernization and replacement project	2014	2019
NAV systems modernization and replacement project	2014	2019
Ground-based surveillance systems upgrade	2014	2019
AWOS/MET systems modernization and replacement project	2014	2019
VAMS systems upgrade project (Rijeka, Brač, Osijek)	2014	2015
400 kW photovoltaic power plant	2014	2015
Administrative information system modernization project	2014	2014
Establishing of integrated business information system	2014	2017
3D tower simulator	2014	2014
Installation of fire escape on TWR Rijeka and TWR Split	2014	2014
Building and TWR Osijek reconstruction	2014	2014
Security and protection of sites improvement project	2014	2019



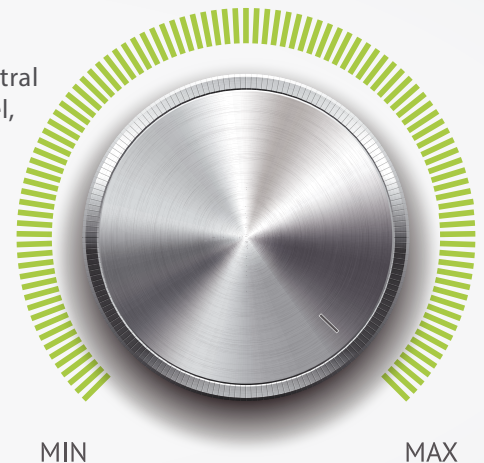
5. Safety, Quality and Security

Air traffic safety is given the highest priority in Croatia Control.

To further improve the quality of service provided to our users, a Central Safety and Quality Office has been established at the corporate level, reporting directly to the Director General.

The Central Safety and Quality Office covers the areas of:

- Safety management
- Quality management
- Security management
- Internal control and auditing



5.1. Safety Management

5.1.1. Safety Management System

Safety management system (SMS), including a safety management function has been in place since 01.01.2007. A Safety Committee, which is the highest corporate body responsible for safety issues, meets on a monthly basis and it consists of Director General, Division Directors, Executive Directors and Safety Manager.

The main component of the SMS is the Safety Management Manual which defines the SMS organisation and processes as well as basic SMS procedures, in order to comply with the SMS requirements laid down in national regulations, Single European Sky requirements, EUROCONTROL Safety Regulatory Requirements (ESARRs) setting out European safety standards.

Intensive SMS-related activities were undertaken in CCL during 2013. These included:

- Safety Occurrence Reporting and Investigations;
- Safety Surveys;
- Safety Assessments;
- External Services Safety Impact;
- Safety Monitoring;
- Competence Assurance;
- Safety Promotion;
- Safety Records;
- SMS Documentation



5.1.2. Safety Performance Indicators

As per Regulation No. 691/2010 and 390/2013 on performance scheme, there are 3 KPIs in the safety key performance area:

- a) the effectiveness of safety management (Safety Maturity);
- b) the application of the severity classification of the Risk Analysis Tool (RAT);
- c) the reporting of just culture.

During 2010, 2011, 2012 and 2013 these KPIs were discussed between CCL and Croatian Civil Aviation Agency (CCAA). Relevant EU-wide targets, as well as those at national level, have not as yet been set. In 2011, European Commission, EASA and EUROCONTROL elaborated the metrics related for the above mentioned KPIs, allowing for subsequent setting of adequate performance targets.

Based on EUROCONTROL concept and guidance, the new methodology for the Safety Maturity Study was applied in 2011, in which CCL took part as well.

In investigating/analysing the occurrences, CCL has used the ESARR 2 classification for years because it is a part of national regulation which has applied the matrix from ESARR 2 guidance material EAM2GUI1, which means that two types of occurrences are being dealt with (those relating to safe a/c operations and those relating to the ability to provide safe ATM services).

During 2012 and 2013, CCL took part in RAT training for safety and quality staff. CCL plan for RAT usage (ATM ground element) is in line with Union-wide targets for 2017 and 2019.

A list of occurrences, including their classification, causes and other relevant data for 2013 was sent by National Aircraft Accident/Incident Investigation Agency to EUROCONTROL by means of Annual Summary Template Report. Regarding the just culture, it has been disseminated to the staff and the Management through safety promotion workshops in order to develop a culture in which front line operators and others are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training but where gross negligence, wilful violations and destructive acts are not tolerated (as per the definition laid down in the Regulation (EU) 390/2013). Such approach makes employees accountable for deliberate violations of the rules but encourages and rewards them for providing essential safety-related information not blaming or punishing them for "honest mistakes".

CCL has developed Action plan for compliance with SES II regulatory requirements in the area of SMS. It is based on the results of an existing gap analysis report.

This Action plan sets out the actions to be completed by CCL in order to continue their transition towards full compliance with SES II regulatory requirements. In fact, this is a progression from EoSM level 3 (C)(implementation) to level 4 (D) (managing and measuring) by the end of 2019.

In 2013 CCL's safety activities were focused on the following objectives: improvement of effectiveness of safety management and minimise the number of serious incidents.

5.1.3. International Safety Activities

As part of its commitment to safety, CCL participates in a number of safety projects at the European level.

Focusing its outcomes on the needs of SES and SESAR, EUROCONTROL's European Safety Programme (European Safety Programme – ESP-Plus) aims to facilitate SMS regulation support in the deployments required by the European ATM Master Plan from now until the end of 2014. ESP-Plus has been used to guide CCL SMS activities and many of its objectives have been successfully implemented in CCL.

During 2013, CCL continued its active role in a number of international initiatives and processes in the safety domain, including the participation of its representative in EUROCONTROL Safety Team (comprising the safety managers of European air navigation service providers).

As a part of its contribution to the FAB CE Implementation Phase, CCL has actively participated in the Safety Sub-Committee.

5.2. Quality Management



Quality Management System (QMS) has been established, documented, applied and maintained by CCL, in compliance with the requirements of the international standard ISO 9001:2008. The certificate was issued to CCL by Bureau Veritas Croatia.

The scope of activities covered by ISO 9001:2008 certificate includes the provision of all four services (ATS, CNS, AIS, MET).

All these services are managed in compliance with applicable national and international standards. The criteria for efficient management of CCL's business processes are set by the Quality Management Manual, while the services provided to the users are described in relevant operating manuals.

The Company Management ensures, by means of the established Quality Policy, that the user requirements are identified and complied with in order to increase their measurable satisfaction.

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.

During 2013 CCL continued to upgrade QMS. CCL has established and applied British Standard for occupational health 'BS OHSAS 18001:2007. This standard will enable better health and safety of employees with a better focus on economic goals.

5.3. Security Management

CCL contributes to maintaining high levels of security in air transport.

During 2013 CCL continued to upgrade its SecMS in all key areas. Security Management Manual and all derived documents were revised according to the National Programme for the Protection of the Civil Aviation. The register of the CCL critical infrastructure has been compiled and measures for the protection it in a prescribed way have been put in place. The measures and rules regarding cooperation in security matters with a big provider of CCL services (hosting some of CCL critical infrastructure) have been successfully agreed upon and the respective Agreement is to be signed.

Apart from CCL personnel, security awareness campaign has been widened to include the employees of outsourcing companies providing long-term services to CCL.

The following key activities were also undertaken as a part of CCL Security Management System during 2013:

- ensuring the security of personnel and facilities;
- ensuring the protection of operative and administrative data and systems (risk assessment was carried out and appropriate measures taken for CCL services which are accessible via internet);
- ensuring coordination between military, police and civil authorities to secure airspace against acts of unlawful interference.

5.4. SES Certification and Safety Oversight

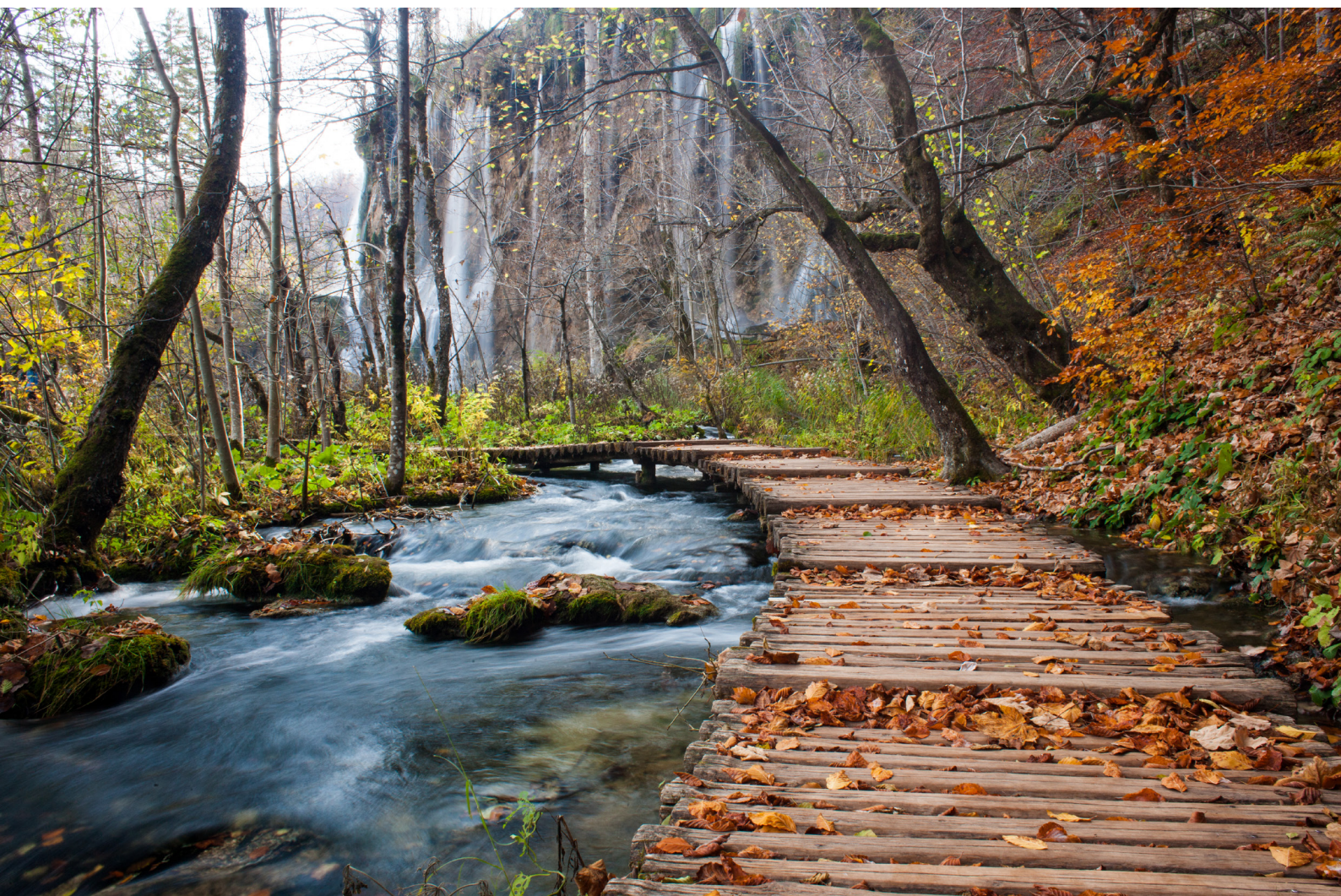


In March 2009, CCL was certified by the Ministry of the Maritime Affairs, Transport and Infrastructure, in accordance with the Regulation on the Terms and Conditions for the Certification of Air Navigation Service Providers, which is compliant with SES legislation, in particular with the EC Regulation No. 550/2004 (as amended by the Regulation No. 1070/2009), Regulation No. 2096/2005 (as amended by the Regulation No. 1035/2011) and Regulation No. 1315/2007 (as amended by the Regulation No. 1034/2011).

Afterwards, an extensive safety oversight programme was undertaken by the Croatian Civil Aviation Agency in

which CCL contributed by allocating significant resources in order to facilitate the relevant audits.

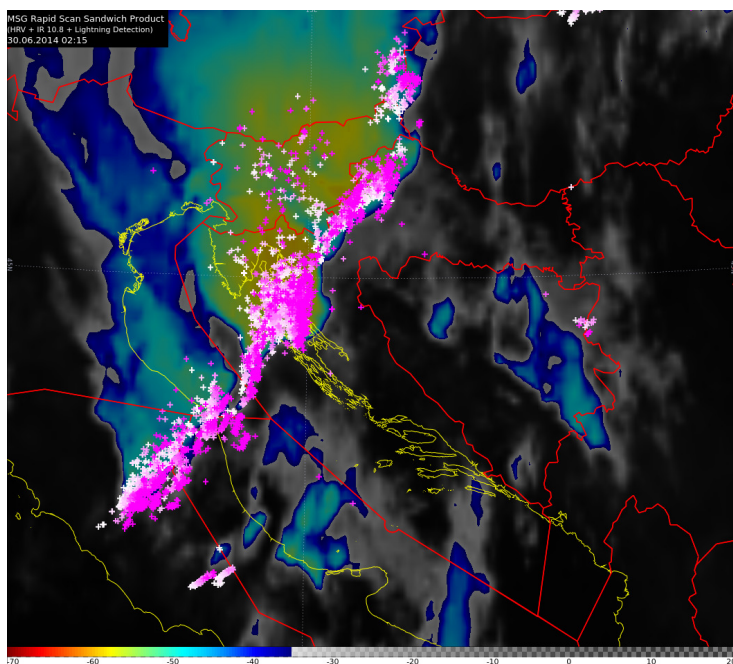
In August 2013 CCL was re-certified by the Croatian Civil Aviation Agency in accordance with SES regulations.



6. Additional Services

In addition to air traffic management, which consists of air traffic services, flow management and airspace management, CCL also provides aeronautical meteorology and aeronautical information services.

6.1. Aeronautical Meteorology (MET)



During 2013, there were many changes in CCL MET Division: reallocation of MET staff and centralization with integration of forecasting services with some new or extended MET products (TREND, AD WRNG and TAF).

An improved operational connection is also achieved with the other services within the CCL owing to the new operational system „Visual Weather“.

MET Division has organized an educational training (workshop) which was also attended by aeronautical meteorological personnel from neighbouring countries in the region and from other MET services in Croatia.

Due to the new requirements defined by ICAO regarding the English language proficiency for the aeronautical meteorological personnel, CCL held an English language proficiency refreshment for the aeronautical meteorological observers.

CCL MET Division personnel participated in the scientific conference ECAM (European conference on applications of meteorology).

In accordance with the WMO and ICAO requirements, CCL MET Division developed the system for the competence assessment for the aeronautical meteorological personnel.

Meteorology:

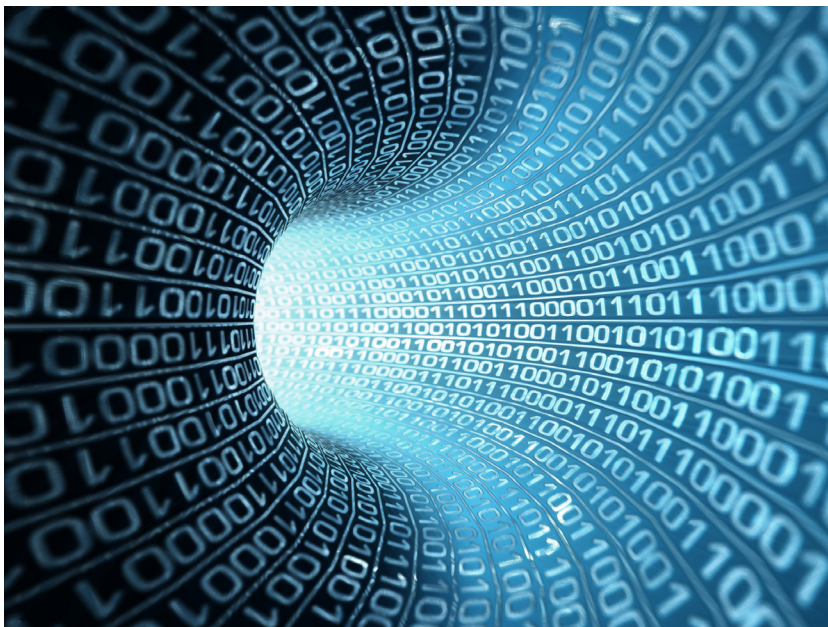
- Finalizing work on MET web page
- Becoming training organization for AMP (Aeronautical Meteorological Personnel)
- Educational training at the regional level for AMP
- Implementation of competence standards for AMP
- Project „Bora Dubrovnik“ for the EU funds
- Participating in scientific conferences
- Further strengthening of research, development and educational component of the CCL MET service
- Developing new MET products tailored for ATM

CCL MET Division is very active in EUMETNET (European Network of National Meteorological Services), where there is a specific working group – AVIMET that addresses issues of common interest within the aeronautical MET domain.

6.2. Aeronautical Information Services (AIS)

The Aeronautical Information Service (AIS) department is located in Zagreb and it provides aeronautical data and information necessary for the safety, regularity and efficiency of both international and national air navigation in Croatian airspace.

It had been certified to ISO 9001:2000 and ISO 9001:2008 standard from 2005-2011. Current CCL certificate for all services, including the AIS, confirms compliance with the requirements of ISO 9001:2008.



The AIS department consists of:

- ➔ International NOTAM office, operational 24 hours a day;
- ➔ Publications office.

Charts are prepared by the Aeronautical navigation, procedure design and cartography department located in Zagreb. Preflight briefing is provided by the ATS reporting offices (ARO) located at each aerodrome where the Aerodrome Control Service is available.

The Croatian AIS provides all elements of the Integrated Aeronautical Information Package - IAIP - (AIP AMDT/SUP, AIC, NOTAM and PIB, a list of valid NOTAMs and checklists) and additional publications such as VFR Manuals and VFR Chart with recommended VFR routes. All products are available in English or as bilingual publications, except for AICs series B that are in Croatian, which are for that reason distributed only in Croatia.

Since late 2007, AIS department has fully migrated to the European Aeronautical Database (EAD), where all aeronautical information is available in electronic format via the EAD SDO, INO and PAMS modules. All the elements from the IAIP are based on the same data source in the database (SDO), except for charts that are currently provided from a separate source and as such incorporated in the eAIP. The electronic AIP of the Republic of Croatia has been available, both in English and Croatian, since early 2012. The preparation of eAIP related charts using the EAD chart module has commenced at the end of 2013 and follows a gradual implementation plan for finalization by the end of 2015.

The ATS reporting offices (ARO) are using a local system NOTAM database for the pre-flight briefing and combine it with other relevant documentation for the briefing purposes.

Further evolution of the Aeronautical Information Services is planned through the CroQADI project stated under 4.6.3, and the Project of modernisation of the AIS Data Base stated under 4.6.6.

Aeronautical information is also provided for reference purposes through the CCL / AIS's web pages and a link to the EAD.

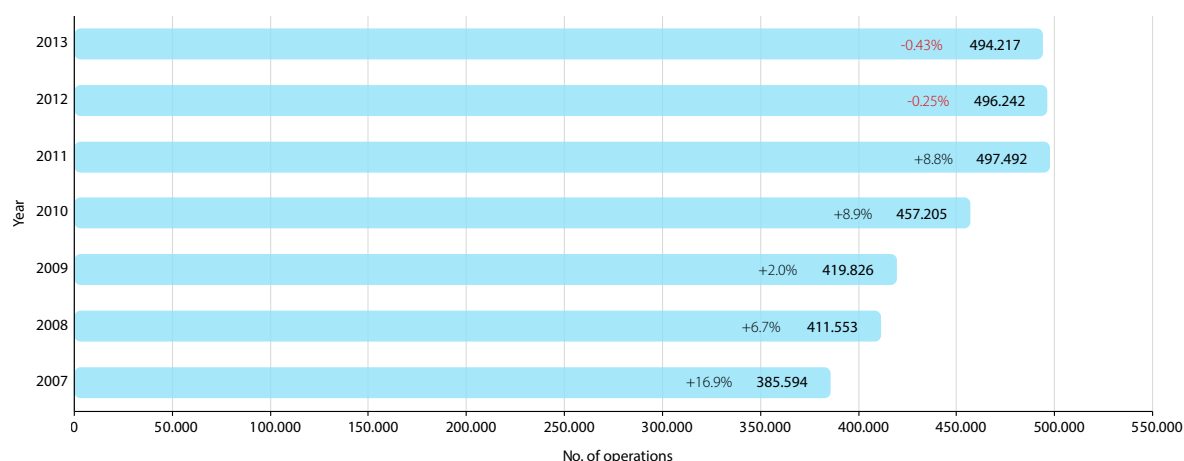
7. Performance

7.1. Traffic

CCL reported a total of 494,217 IFR GAT operations in 2013, which is a 0.43% decrease compared to 2012.

Even though STATFOR calculations anticipated yet another increase in 2013., (4,4% to 2,4%) consequent revisions of the STF reduced the ratio to 0,1% decrease. However, traffic has increased in certain summer months, up to 4% in May, June and August, while the busiest day has grown by 10%. Obviously, as an ANSP we need to be prepared for the extremes, and this particular day was handled with minor delays only, due to good preparation and delivery.



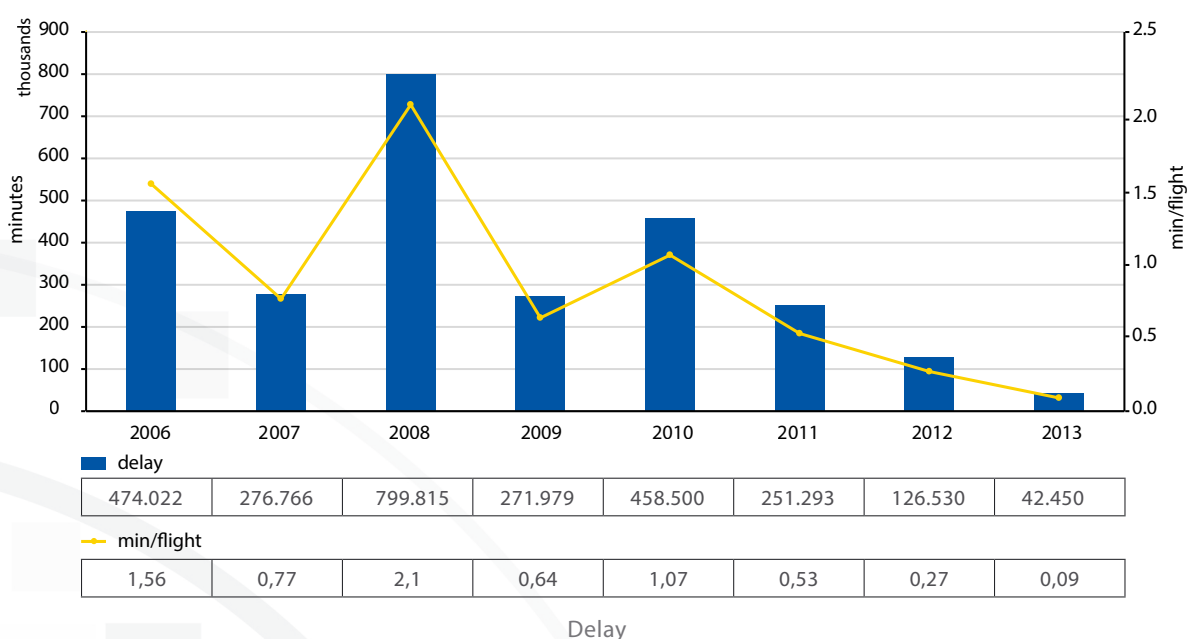


LDZOTOT Recorded IFR-GAT movements per year

7.2. Delay

In 2013, the delays were reduced by three times compared to 2012, when the same result was achieved as an example of successful operationalization of high quality plans and a good preparation for the summer season.

The delay reduction in 2013 is a direct consequence of the actions prepared for the summer 2013, and to a lesser part, a consequence of a further reduction in the number of operations. Mentioned actions include a successful social dialogue, staff contribution to the improvements, the optimisation of DFL and staff roster, and greater flexibility in sector configuration management.



The delay figures achieved in 2013 have surprised even the dyed-in-the-wool optimists, as the 0,09min/flight is a milestone improvement compared to some of the previous years. This is a result of a continuous effort in a number of operational improvements, from airspace to the flexible roster.

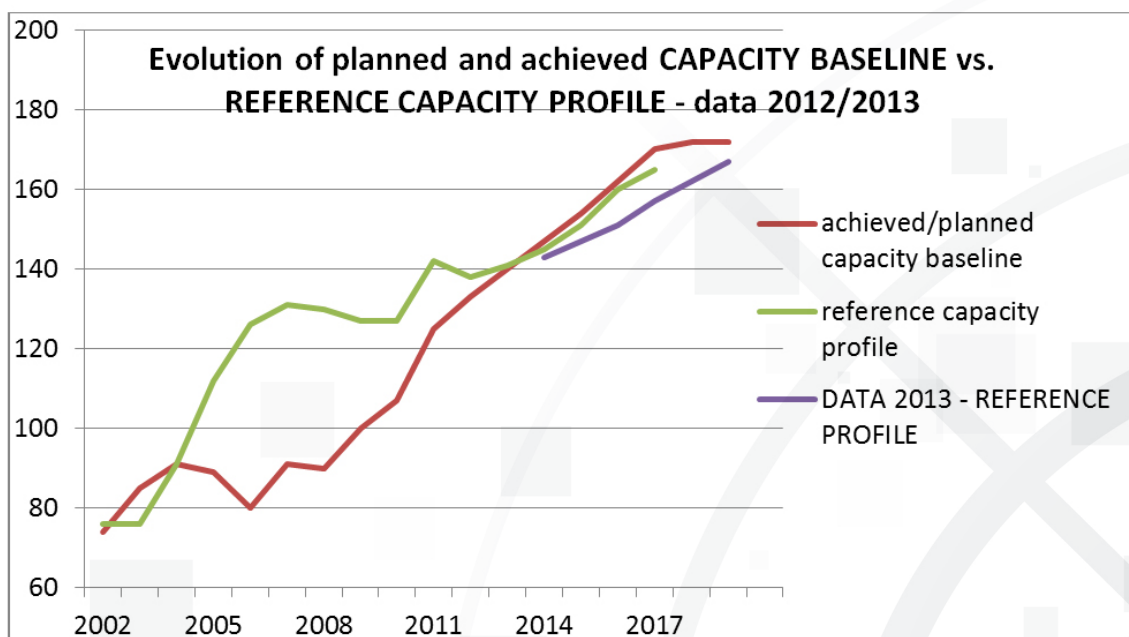
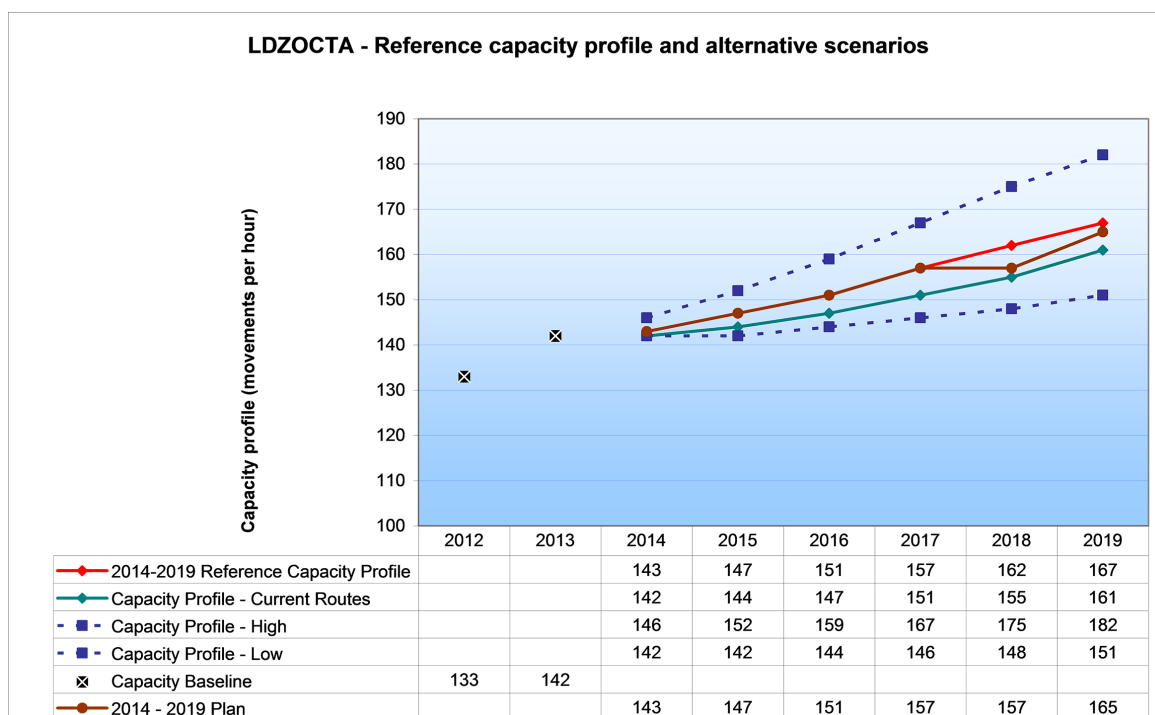
This achievement, depicted in the picture above, is finally seen as a result of continual systematic planning. At the same time, keeping the momentum, planning and provisions for the coming period oblige us to allow for greater delays in the coming years, due to a significant number of retirements, as well as the forecasted traffic development, generated by the recovery in the economy, membership in EU and increased demand for flights to Croatia as a tourist destination. Continuous rise in the summer peaks, followed by further drops in winter lag, significantly increase the price of capacity in Croatia.

Capacity improvements

Zagreb ACC baseline capacity has grown by 7% in 2013 and now amounts to 142 IFR GAT operations per hour.

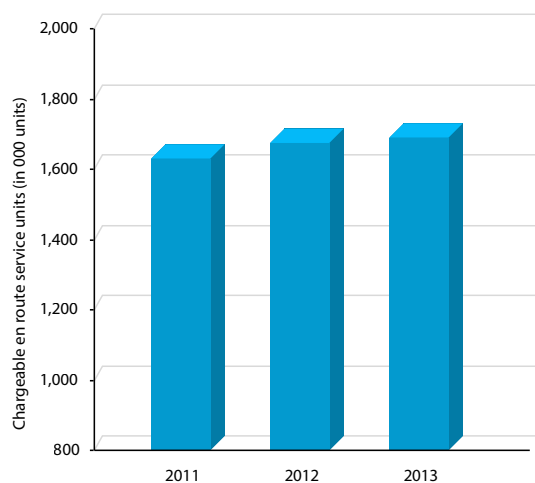
This increase of ACC capacity is the result of many combined efforts explained above.

All these achievements contributed to finally closing the capacity gap which was evident in the previous years. We are now facing a further challenge in keeping the performance within the planned and set limits.

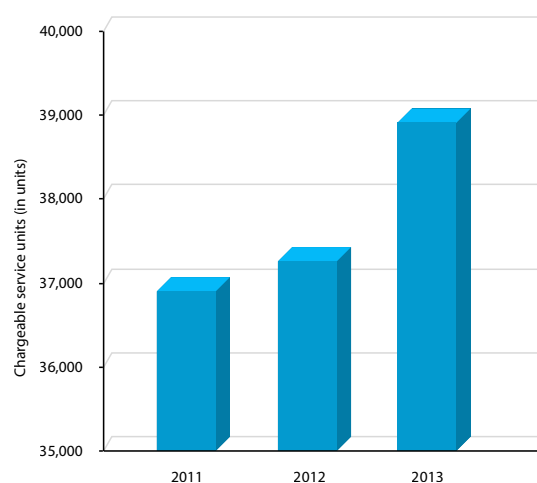


7.3. Service Units and Unit Rate

Following a significant 2011 increase (+12.7%) and given the highly adverse both regional and EU wide air traffic development during 2012, the Company still managed to increase its 2013 traffic performance by +1.0% (on top of 2012 +2,8%), reaching a historical growth of approximately 1.69 million of en route chargeable service units provided to the airspace users.



En route chargeable service units

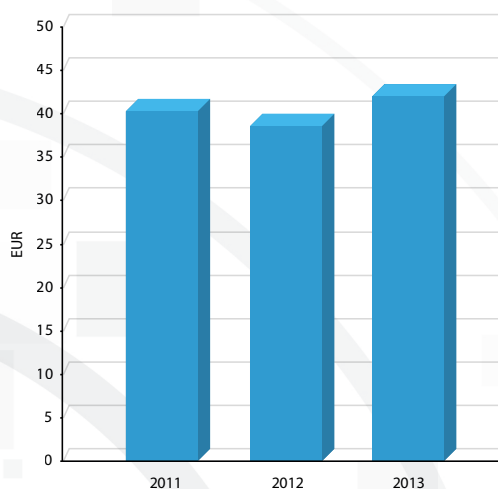


Terminal chargeable service units

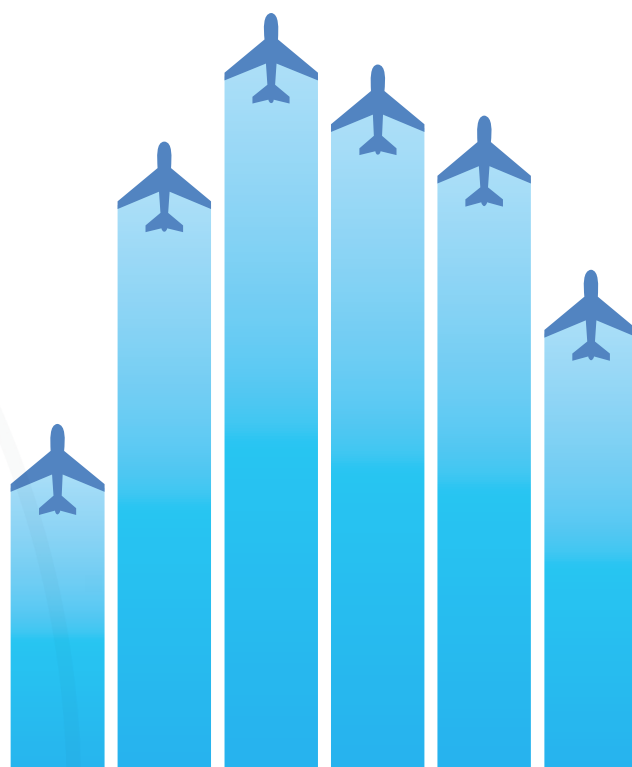
In regard to terminal traffic activities, CCL continued its upward service units generation trend. During 2013, CCL managed to further increase the total number of terminal chargeable service units by 4.4%, reaching a historical growth of approximately 38.9 thousand.

Given the expected 2013 traffic development, with a view to ensure necessary resources for 2013 CCL investment peak (i.e. CroATM/COOPANS strategic project) and with the focus on delivering the required additional capacity, all associated with a required level of safety, an increased total budgeted 2013 en route cost base was proposed (and subsequently accepted by EUROCONTROL governing bodies), resulting in en route unit rate budget being increased by approximately 7,5% at level of HRK 311.4 (EUR 41.99).

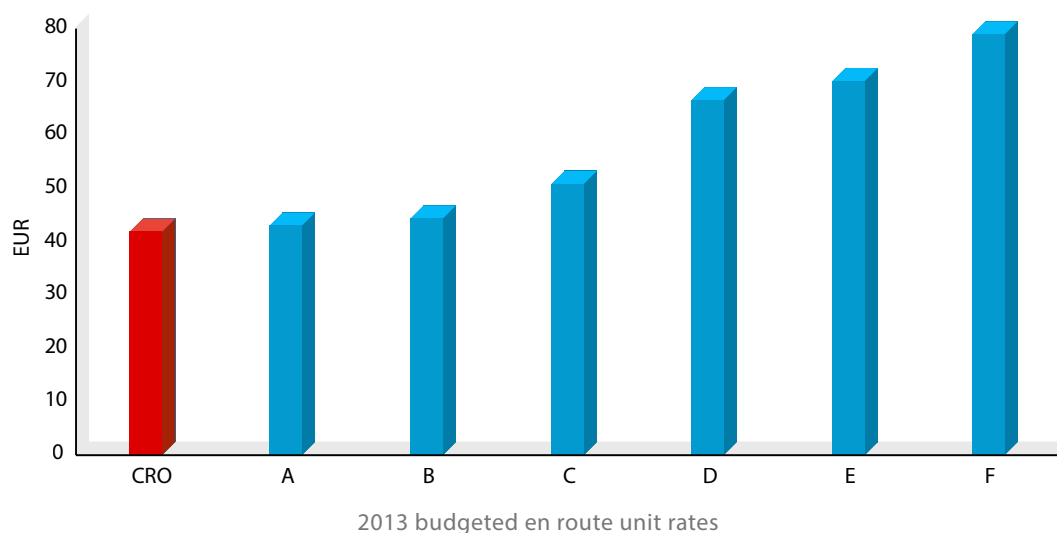
The following picture shows further evidence of the Company's budgeted unit rates trend.



Croatia en route unit rates



Despite the explained necessity of hiring additional resources in terms of 2013 cost base (for the purpose of financing such a complex and significant investment cycle, as well as for required capacity performance with the expected level of safety), CCL still managed to excel a highly competitive and cost efficient performance during 2013. As result of such efficiency, as was the case during the previous consecutive periods, Croatia has managed to offer a provision of ANS at a highly competitive en route unit rate (i.e. unit price) during 2013. According to the final budgeted figures of en route unit rates for 2013, the following are the values for the Republic of Croatia and the region.



Furthermore, regarding the en route Company performance, recorded development in 2013 terminal traffic was accompanied with budgeted 2013 terminal unit rate stability which was reaching EUR 211.3 per a single terminal service unit, applied over the single Croatian terminal charging zone (i.e. all terminals).

7.4. Costs and Income



Even though the Company has developed and provided significant and additional capacity to its users, with continuous and substantial cut down of level of en route ATFM delay during 2013 (-67%), which was all additionally supported by increased service unit provision during 2013, the Company has still significantly managed to control its actual total cost incurred during 2013 (when compared to 2013 total cost forecast which was initially presented and approved by the relevant EUROCONTROL and/or EC governing bodies and system stakeholders), which resulted in total actual 2013 costs incurred in amount of EUR 84.4 million. The aforementioned cost development proves to be even more disciplined given the even further increased 2013 traffic seasonality (on top on increased seasonality recorded in prior periods) and the highest investment cycle activities focused on modernisation and upgrade of the existing Croatian air traffic management system.

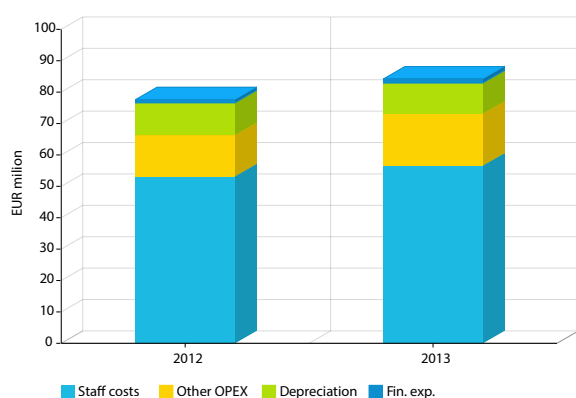
Furthermore, the Company has managed to maintain and preserve its regional (as well as EU wide) competitiveness in terms of cost efficiency, all supported by en route unit rate, planned and charged to airspace users for the provided ANS during 2013.

Most important part of the Company's total cost base relates to staff costs (making approximately 2/3 of total costs), which due to implementation of sustainable capacity development initiative (67% cut in delay over the 2012 level) resulted in the recorded 6,9% increase compared to 2012.

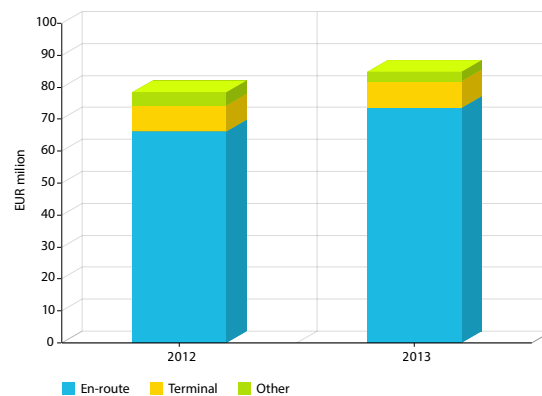
During 2013, the Company incurred approximately 12.3% increase in other operational costs over the 2013 plan, due to investment cycle peak and finalization of major long-term, strategic, complex and multinational project (CroATM/COOPANS) with all its direct and indirect influence on the Company's use of other operating resources. Furthermore, the aforementioned plan that was surpassed by 12.3% through the usage of Company's other operating resources was a consequence of substantially intensified FAB CE implementation activities, highly intensified dynamics in delivering on BH ATM transition project, (historically the highest) receivables write offs balances and increase in other operating provisions.

Decision made by COOPANS partners in terms of activating the total of COOPANS related investment (instead of partial assets activation), further supported by additional savings earned while finally negotiating 2013 projects' contract prices, all resulted in approximately 5% decrease in 2013 actual depreciation costs incurred compared to 2012.

Financial expenses accounted to approximately 2% of the Company's total costs and reported approximately 6% of increase due to the increased level of Company's debts used for financing mayor part of the aforementioned CroATM/COOPANS strategic investment.



Total costs development (@2013 average FX rate)



Total revenues development (@2013 average FX rate)

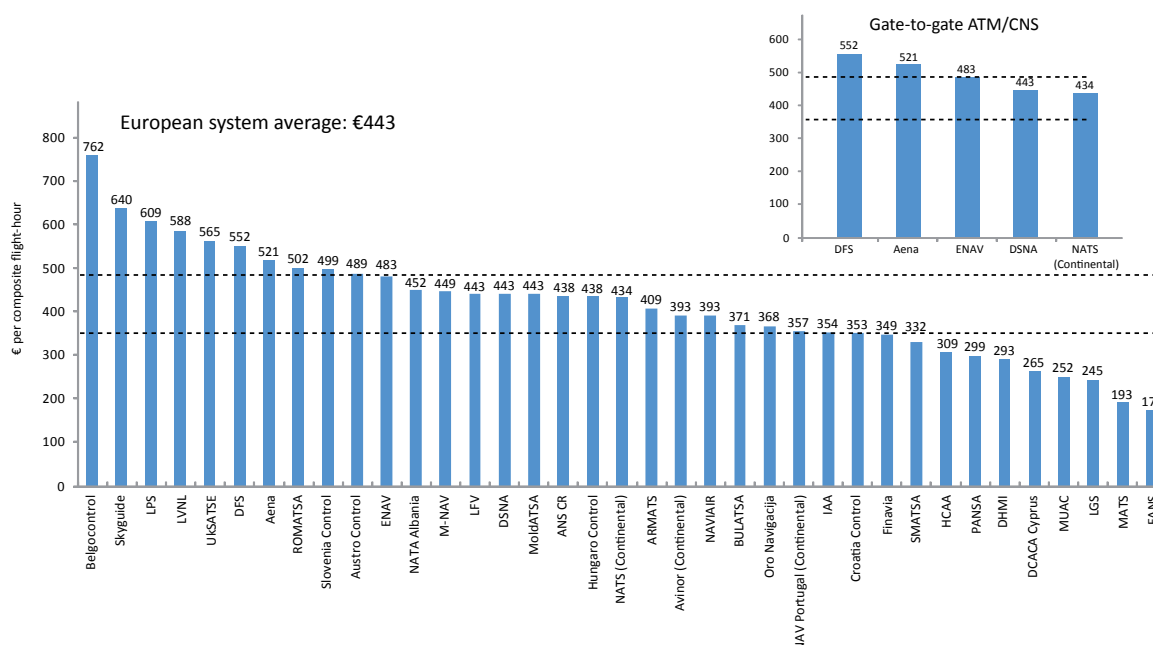
Given the highly competitive and cost efficient performance (regionally and EU wide) and due to the further developed significant and additional operational capacity (associated with substantial delay reduction over the 2012 performance), and even though the 2013 traffic seasonality have further intensified (which puts extreme pressure over the available capacity and resource planning), the Company still managed to earn around EUR 84.8 million in total revenues (presenting 8.0% increase as compared to the preceding period).

En route charges (inclusive of those charges earned for the ANS provision within the Bosnia and Herzegovina [BH] airspace) accounted for approximately 86%, terminal charges accounted for approximately 10% while other income accounted for approximately 3.5% comprising mostly non-cash reversal of long-term provisions and unrealized positive foreign exchange differences.

7.5. Cost Effectiveness

European ATM performance is regularly monitored by the Performance Review Unit (PRU). PRU's financial cost-effectiveness indicator gives an indication of how well air navigation service providers are performing in providing a cost-effective service.

According to the ATM Cost-Effectiveness (ACE) 2012 Benchmarking Report dated April 2014, Pan-European system-wide gate-to-gate ATM/CNS provision cost per composite flight-hour ("CFH") indicator was EUR 443. During the same period, the Company performed 20.3% more cost effectively compared to European system average (i.e. CCL's ATM/CNS provision cost per CFH amounted to EUR 353). Presented performance pushed the Company on the very edge of the bottom quartile, meaning that the Company joins the group of 25% best performing companies given the above mentioned indicator.



Comparison of the financial gate-to-gate cost effectiveness indicator; 2012

In 2013, CCL achieved the following performance indicators:

Financial stability, indebtedness and liquidity indicators	2012	2013
1. Coverage of fixed assets and inventories by equity capital and long-term sources	1.13	1.26
2. Share of equity capital in the sources of funding, in %	51.03	47.86
3. Debt factor, number of years	5	6
4. Total asset turnover coefficient	0.67	0.68
5. Overall liquidity coefficient	2.05	3.08
6. Time of collection of short-term receivables, in days	62	57
7. Inventories, in days kept	2	2
Business performance indicators	2012	2013
1. Total income-expenditure ratio	1.01	1.00
2. Profit/loss share in total income, in %	0.73	0.28
3. Profit/loss share in assets, in %	0.49	0.19
4. Profit/loss share per employee, in HRK	5,826	2,454

Source of data: Financial Agency - FINA, BON – 1 Form – Creditworthiness Information



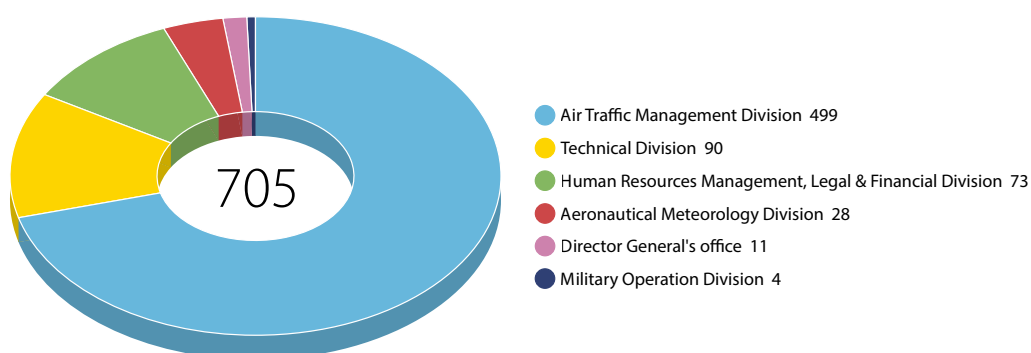
8. Human Resources

8.1. Human Resources Management Policy

Croatia Control Ltd. pays special attention to human resources management, with a training system geared to ensure training, acquiring and continuous maintaining of competencies and experience in a way to achieve international and national standards. The Company employs the staff with adequate qualifications, to enable safe, high quality and continuous provision of services

8.2. Employees

In 2013, the total number of employees in the Company was 705, out of which 500 were male and 205 were female employees. The total number of employees who left CCL in 2013 was 59. Pursuant to valid regulations and the Retirement Plan, 56 employees retired in 2013.



Air traffic controllers and on-the-job trainees make the largest share of the workforce. Their numbers at different operational units are shown below

Location	ATCOs	ATCOs with other assignments
Zagreb ACS	88	11
Zagreb APS	17	0
Zagreb ADI/TWR	20	0
Osijek ATC	3	0
Pula ATC	17	4
Split/Brač ATC	29	0
Zadar ATC	20	2
Dubrovnik ATC	18	6
Rijeka ATC	8	2
Lošinj ATC	2	0
ATCOs on other duties in ATM Division	24	0
TOTAL	246	25

8.3. Employment and Recruiting



Croatia Control Ltd. is fully committed to the principle of equal opportunities and dignity of every individual in its recruiting and employment policy.

The selection of candidates for air traffic controllers, administrative and assisting aeronautical staff was conducted in compliance with the predefined testing procedures. The FEAST (First European Air Traffic Controller Selection Test) program was used for the recruitment of air traffic controller candidates.

The selection of candidates for technical and administrative staff was conducted in Croatia Control Ltd.

8.4. Training

The Basic Training for ATCO trainees was conducted at the Faculty of Traffic and Transport Engineering, University of Zagreb.

A group of 14 ATCO trainees completed the ADI/TWR Rating Training in Deutsche Flugsicherung (DFS) and started with the Unit Training at particular units.

The second group of 10 ATCO trainees completed the ACS/RAD Rating Training at Entry Point North (EPN) and started with the Unit Training.

Seven ATCOs with a licence and APS/RAD rating/endorsement from Zagreb TMA, Zadar and Pula started with the Unit Training for the ACS/RAD rating/endorsement at the Zagreb ACC, which is planned to be completed in 2014.

Five air traffic controllers completed the ACS/RAD Unit Training at the Zagreb ACC, and acquired licences with relevant ratings and endorsements.

The Transitional Training for the work with the new COOPANS ATM System (according to the Training Plan CroATMS to COOPANS) started in the last quarter of 2013 for all ATCOs from the ATCC Zagreb, ATCC Pula, ATCC Zadar, ATCC Split and ATCC Dubrovnik, which is scheduled to be completed by 14 February 2014.

Staff development, refresher and emergency training courses were provided either by Croatia Control Ltd. or in cooperation with DFS, EPN and the EUROCONTROL Training Institute in Luxembourg (IANS).

All training plans (for ATCOs, ATSEP and all other staff) comply with current EU regulations.



9. Outlook and Priorities for 2014

In 2014, CCL will be faced with challenging and important activities. Besides the short-term goals and priorities, CCL plans to undertake some activities of paramount importance for CCL's strategic orientation. The goals and priorities for 2014 comprise of the following:

- Organizational structure
 - start of a change of the organizational structure, including a new collective agreement, was planned for 2014;
- COOPANS harmonisation
 - final step towards harmonisation of five ANSPs was planned with setting in operations the new ATM system for 2014;
- Transition of BH airspace
 - In the first phase of the transition that was planned for 2014, BHANSA plan take over the air traffic services in the most part of the lower BH airspace (below FL325). The project includes the participation of BHANSA, CCL and SMATSA.
- FAB CE:
 - development of FAB CE Performance Plan for the second reference period (RP2), establishment of FAB CE common entity and cooperation in the FAB CE bodies and projects;
- Safety
 - continuing improvement of SMS effectiveness and maturity,
- Capacity
 - further improvement of ATFM en route delay performance and
 - further improvement of baseline capacity,
- Environment
 - continuous improvement of routes and network efficiency,
- FUA
 - continuation of implementation of Airspace Management Cell,
- Quality management systems:
 - introduction of environmental management system based on ISO 14001 standard,
- Meteorology:
 - continuous improvement of the quality of MET services,
- Cooperation with the Ministry of Defence of the Republic of Croatia
 - development of general contract with the Ministry and continuous fulfilment of the Ministry's requirements while respecting the predefined operational requirements and preserving the highest level of airspace safety,
- Human resource management
 - continuous process of staff education with the aim of fully delivering the required service quality to airspace users.

10. Financial Statements and Auditor's Report

Responsibility for the 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 2013 are prepared in accordance with the Accounting Act (Official gazette No 109/07, 54/13) and the International Financial Reporting Standards effective in the European Union, to give a truthful and objective review 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 Board has a reasonable expectation that the Company has adequate resources to continue in operational existence for the foreseeable future. Accordingly, the Board has drawn up financial statements under the assumption that the Company is a going concern.

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

- ➔ selecting and consistently applying suitable accounting policies ;
- ➔ giving reasonable and prudent judgments and evaluations;
- ➔ applying valid financial reporting standards, are releasing and explaining in the financial statements any material departures; and
- ➔ drawing up the financial statements on the going concern basis unless such an assumption is not appropriate.

The Board is responsible for keeping proper accounting records, which shall reflect with reasonable accuracy at any time the financial position and the results of operations of the Company and their compliance with the Accounting Act (Official gazette No 109/07, 54/13) and the International Financial Reporting Standards. The 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 Board:

Dragan Bilać, Director General

CROATIA CONTROL LTD
Rudolfa Fizira 2
10 410 Velika Gorica

21 March 2014

INDEPENDENT AUDITOR'S REPORT

To the owners of the company CROATIA CONTROL Ltd, Velika Gorica

1. 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 2013, which comprise the Balance Sheet/ Statement of Financial Position as of that date; the Statement of Comprehensive Income; the Statement of Changes in Equity and the Cash Flows Statement for the year then ended; and the accompanying Notes to the Financial Statements which concisely set out the principal accounting policies and other explanations.

Responsibility of the Company's Management

2. The Company's Management is responsible for the preparation and fair presentation of the enclosed financial statements according to the International Financial Reporting Standards effective in the European Union and also those internal controls which are determined by the Company's Management as necessary to enable the preparation of the financial statements free of material misstatements whether due to fraud or error.

Responsibility of the Auditor

3. Our responsibility is to express an opinion on the enclosed financial statements based on the audit performed. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance that the financial statements are free of material misstatements.

An audit includes performing of procedures to obtain audit evidence supporting the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the financial statements, whether due to fraud or error. In making these risk assessments, the auditor considers internal controls relevant to the Company's preparation and fair presentation of the financial statements in order to conduct audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of internal controls. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by Company's Management, as well as evaluating the overall presentation of the financial statements.

We believe that auditing proof and evidence collected by us are sufficient and suitable as the basis for expressing our opinion.

Opinion

4. In our opinion, the enclosed financial statements, in all significant terms of reference, truthfully and fairly present the financial position of the Company as at 31 December 2013, and its financial performance and the cash flows of the Company for 2013, according to the Accountancy Act and the International

Financial Reporting Standards effective in the European Union.

Opinion on the adjustment to other legal and regulatory requirements

5. The Company's Management is responsible for the preparation of the annual financial statements of the Company for the year ended 31 December 2013 in prescribed form on the basis of the Regulation on the structure and content of annual financial statements (Official gazette No 38/08,12/09,130/10) and in accordance with the other provisions which regulate the operations of the Company ("Standard Annual Financial Statements"). The financial information set out in the standard annual financial statements of the Company are in accordance with the information stated in the annual financial statements of the Company shown on pages 4 to 40 which are the subject of our opinion, as set out in the section Opinion, above.

Opinion on adjustment to Annual statement

6. The Company's Management is responsible for the preparation of the Annual statement of the Company. As a result of the provisions of article 17 of the Accountancy Act, we are obliged to express an opinion on adjustment of the Annual statement of the Company with the annual financial statements of the Company. In our opinion, on the basis of the performed audit of the annual financial statements of the Company and the comparison with the Annual statement of the Company for the year which ended 31 December 2013, the financial information set out in the Annual statement of the Company, approved for their issuance by the Company's Management on 21 March 2014, are in accordance with the financial information set out in the annual financial statements of the Company set out on pages 4 to 40 which were the object of our opinion, as set out in section Opinion, above.

In Zagreb, 21 March 2014

BDO Croatia d.o.o.

Trg J. F. Kennedy 6b

10 000 Zagreb

Darko Karić, certified auditor

Zdenko Balen, member of the Management

STATEMENT OF INCOME / STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December 2013

	2013	2012
	in HRK	in HRK
Sales revenue	620,728,178	562,845,418
Other operating revenues	17,753,333	31,098,112
Operating revenues	638,481,511	593,943,530
Raw material and material costs	(10,710,334)	(9,846,478)
Other external costs	(43,564,606)	(46,968,592)
Material costs	(54,274,940)	(56,815,070)
Net salaries and wages	(195,470,056)	(183,258,473)
Costs for taxes and contributions from salaries	(160,488,464)	(147,620,208)
Contributions on gross salaries	(73,924,674)	(71,181,343)
Staff costs	(429,883,194)	(402,060,024)
Depreciation	(72,852,404)	(76,559,952)
Other costs	(34,176,821)	(29,534,684)
Impairment of short-term assets	(183,031)	(1,437,801)
Impairment	(183,031)	(1,437,801)
Provisions	(30,618,555)	(10,363,235)
Other operating expenses	(5,682,570)	(2,814,806)
Operating expenses	(627,671,515)	(579,585,572)
Interest income, foreign exchange gains, dividends and similar income from non-related parties and other entities	3,714,739	816,765
Financial income	3,714,739	816,765
Interest expenses, foreign exchange losses and similar expenses from non-related parties and other entities	(11,414,852)	(9,185,911)
Financial expenses	(11,414,852)	(9,185,911)
TOTAL INCOME	642,196,250	594,760,295
TOTAL EXPENSES	(639,086,367)	(588,771,483)
PROFIT BEFORE TAXATION	3,109,883	5,988,812
Profit tax	(1,301,259)	(1,642,546)
PROFIT FOR THE PERIOD	1,808,624	4,346,266
NET OTHER COMPREHENSIVE INCOME FOR THE PERIOD	-	-
COMPREHENSIVE INCOME FOR THE PERIOD	1,808,624	4,346,266

BALANCE SHEET / STATEMENT OF FINANCIAL POSITION

As of 31 December 2013

	At 31 Dec 2013	At 31 Dec 2012
	in HRK	in HRK
ASSETS		
Concessions, patents, licenses, merchandise and service brands, software and other rights	48,860,783	59,501,785
Advance payments for the acquisition of intangible assets	-	7,041,700
Intangible property in the course of preparation	211,477,788	152,848,594
Intangible assets	260,338,571	219,392,079
Land	48,649,949	48,649,949
Buildings	114,973,744	127,599,208
Facilities and equipment	109,424,832	115,519,798
Instruments, facility inventories and transportation assets	8,164,837	10,155,257
Prepayments for tangible assets	8,549,086	12,636,099
Tangible assets in the course of preparation	88,963,129	88,139,688
Tangible assets	378,725,577	402,699,999
Loans, deposits and similar assets	-	40,378,900
Other long-term financial assets	-	535,577
Financial assets	-	40,914,477
LONG-TERM ASSETS	639,064,148	663,006,555
Raw material and supplies	3,732,474	3,506,861
Inventories	3,732,474	3,506,861
Accounts receivable	101,011,318	96,449,197
Receivables from employees and shareholders	70,056	55,359
Receivables from government and other institutions	5,276,516	11,905,828
Other receivables	85,564	399,173
Receivables	106,443,454	108,809,557
Loans, deposits and similar	37,894,363	30,951,683
Financial assets	37,894,363	30,951,683
Cash at bank and in cashier	150,854,076	73,449,690
SHORT-TERM ASSETS	298,924,367	216,717,791
Prepaid expenses and accrued income	8,718,447	4,534,928
TOTAL ASSETS	946,706,962	884,259,274
OFF-BALANCE SHEET NOTES	454,784,989	532,461,683

	At 31 Dec 2013	At 31 Dec 2012
	in HRK	in HRK
LIABILITIES AND CAPITAL		
Subscribed capital	352,759,600	352,759,600
Other reserves	60,000,000	48,822,120
Reserves from net income	60,000,000	48,822,120
Retained earnings	38,481,567	45,313,181
Profit for the current year	1,808,624	4,346,266
CAPITAL AND RESERVES	453,049,791	451,241,167
Provisions for pensions, severance pays and similar liabilities	26,589,530	12,696,338
Other provisions	609,400	210,150
Provisions	27,198,930	12,906,488
Liabilities to banks and other financial institutions	356,695,509	303,782,570
Long-term liabilities	356,695,509	303,782,570
Liabilities to banks and other financial institutions	27,474,299	38,900,851
Accounts payable	27,702,676	22,413,920
Liabilities to employees	16,587,480	16,703,132
Liabilities for taxes, contributions and similar fees	19,400,648	19,413,677
Other short-term liabilities	5,806,471	8,534,234
Short-term liabilities	96,971,574	105,965,814
Deferred settlement of charges and income deferred to future period	12,791,158	10,363,235
TOTAL CAPITAL AND LIABILITIES	946,706,962	884,259,274
OFF-BALANCE SHEET NOTES	454,784,989	532,461,683

STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2013

	At 31 December 2011	Distribution of profit	Profit for the current year	At 31 December 2012
	in HRK	in HRK	in HRK	in HRK
Basic (subscribed) capital	352,759,600	-	-	352,759,600
Other reserves	48,822,120	-	-	48,822,120
Retained earnings	34,000,000	11,313,181	-	45,313,181
Profit for the current year	11,313,181	(11,313,181)	4,346,266	4,346,266
Total	446,894,901	-	4,346,266	451,241,167

	At 31 Dec 2012	Distribution of profit	Profit for the current year	At 31 Dec 2013
	in HRK	in HRK	in HRK	in HRK
Basic (subscribed) capital	352,759,600	-	-	352,759,600
Other reserves	48,822,120	11,177,880	-	60,000,000
Retained earnings	45,313,181	(6,831,614)	-	38,481,567
Profit for the current year	4,346,266	(4,346,266)	1,808,624	1,808,624
Total	451,241,167	-	1,808,624	453,049,791



CASH FLOW STATEMENT

	2013	2012
	in HRK	in HRK
I CASH FLOW FROM OPERATING ACTIVITIES		
Profit before tax	3,109,883	5,988,812
Depreciation	72,852,404	76,559,952
Increase in short-term liabilities	2,432,312	-
Decrease in short-term receivables	1,064,844	5,623,609
Decrease in inventories	-	31,444
Other cash flow increases	14,292,442	-
Total increase in cash flow from operating activities	93,751,885	88,203,817
Decrease in short-term liabilities	-	(58,247,375)
Increase in short-term receivables	-	-
Increase in inventories	(225,613)	-
Other cash flow decreases	(1,755,596)	(19,619,074)
Total decrease in cash flow from operating activities	(1,981,209)	(77,866,449)
NET CASH FLOW FROM OPERATING ACTIVITIES	91,770,676	10,337,368
II CASH FLOW FROM INVESTING ACTIVITIES		
Cash outflows for purchase of long-term tangible and intangible assets	(89,824,474)	(183,218,771)
Total cash outflows from investing activities	(89,824,474)	(183,218,771)
NET CASH FLOW FROM INVESTING ACTIVITIES	(89,824,474)	(183,218,771)
III CASH FLOW FROM FINANCING ACTIVITIES		
Cash inflows from the loan principals, debentures, credits and other borrowings	41,486,387	166,973,047
Other inflows from financial activities	40,914,477	14,230,837
Total cash inflows from financing activities	82,400,864	181,203,884
Cash outflows for repayment of loans and bonds	-	-
Other cash outflows from financing activities	(6,942,680)	(462,746)
Total cash outflows from financing activities	(6,942,680)	(462,746)
NET CASH FLOW FROM FINANCING ACTIVITIES	75,458,184	180,741,138
TOTAL NET CASH FLOW	77,404,386	7,859,735
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	73,449,690	65,589,955
CASH AND CASH EQUIVALENTS AT END OF PERIOD	150,854,076	73,449,690
INCREASE IN CASH AND CASH EQUIVALENTS	77,404,386	7,859,735



11. Abbreviations

ACC	Area Control Centre
ACS	Area Control Service
ACE	Air Traffic Management Cost-Effectiveness
AIS	Aeronautical Information Services
ANS	Air Navigation Services
ANSP	Air Navigation Services Provider
APP	Approach Control Procedure
APS	Approach Control Surveillance
ARN	Aeronautical route network
ARO	ATS Reporting Office
ATC	Air Traffic Control
ATCO	Air Traffic Controller
ATM	Air Traffic Management
ATS	Air Traffic Services
CCL	Croatia Control Limited - HKZP
CNS	Communication, Navigation and Surveillance
COOPANS	COOPeration between ANS providers
CroATMP	Croatian Air Traffic Management Project
CroATMS	Croatian Air Traffic Management System
DFL	Division Flight Levels
DME	Distance Measuring Equipment
EAD	European Aeronautical Information Database
EC	European Commission
ECAA	European Common Aviation Area
ECAC	European Civil Aviation Conference
EU	European Union
FAB	Functional Airspace Block
FAB CE	FAB Central Europe
FIR	Flight Information Region
HRK	Croatian Kuna
ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
ISO	International Organisation for Standardisation
Ltd	Limited

MET	Meteorological services
MWO	Meteorological Watch Office
NDB	Non-Directional Beacon
NOTAM	Notice to Airmen
OJT	On the Job Trainee
P-RNAV	Precision R-NAV
PRU	Performance Review Unit
QMS	Quality Management System
SMS	Safety Management System
STATFOR	EUROCONTROL Statistics & Forecasting Service
SWC	Significant Weather Chart
TMA	Terminal Manoeuvring Area
TWR	Tower Control Unit (Aerodrome Control Tower)
UN	United Nations
UNMIK	United Nations Mission in Kosovo
VHF	Very High Frequency
WAFC	World Area Forecast Centre



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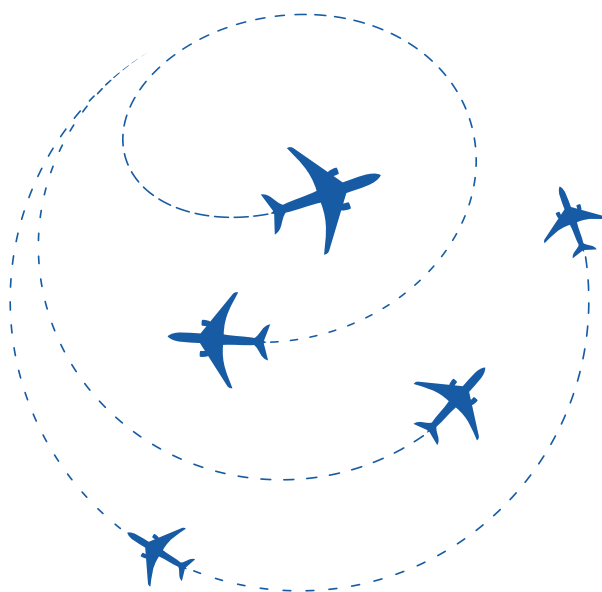
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