

## **ANNUAL REPORT**





SERBIA AND MONTENEGRO AIR TRAFFIC SERVICES SMATSA LLC BELGRADE

# smatsa 2012 Annual Report





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### Introduction

The Annual Report for 2012 represents a reliable outline of SMATSA IIc's development and accomplishment of business results.

SMATSA IIc implemented new projects, upgraded its equipment, systems and facilities, thus showing its real dedication to providing a safe and high quality standard of service to its users. In this way, SMATSA IIc is simultaneously protecting its current advantage amongst the competition. By implementing new technologies, the SMATSA IIc Air Traffic Management System was fully integrated into the European system and is ready to fulfil some of the most important operational goals of the SES concept.

Following the principles of good business and professional strategies, SMATSA IIc has achieved an important position in the field of the provision of air navigation services, as well as in the fields of training aviation personnel and flight inspection services, thus becoming the preferred partner among its associates. The professional development of employees and their competencies contributes a great deal to accomplishing the business objectives and fulfilling the set tasks, in compliance with the defined business strategy and policy. Furthermore, the development of procedures and efficient operating processes will ensure their customer's complete trust and satisfaction through the permanent upgrading of the quality of the services being provided.



## About SMATSA

Serbia and Montenegro Air Traffic Services SMATSA IIc (SMATSA IIc) was established in order to provide air traffic services within the area of its jurisdiction, as well as to perform other activities in the air navigation field. The founders of SMATSA IIc are the governments of the Republic of Serbia and State of Montenegro. SMATSA IIc fully operates in compliance with national and international regulations as well as with international agreements. In this way SMATSA IIc has become a member of the most important international aviation organizations and has been integrated into the European Air Traffic Management System as a EUROCONTROL member.

Upon the signing of the Agreement on Cooperation in the Air Traffic Domain, which was concluded between the Republic of Serbia and Montenegro on 3<sup>rd</sup> of February 2012, the Governments of the Republic of Serbia and the Montenegro also concluded the Contract on the Confirmation of the Continuity of Air Navigation Services Provision within the airspace of Serbia and Montenegro, thus confirming the continuity of the mutual air navigation services provider.

#### 2.1 Activities

The primary and predominant business activity of SMATSA IIc is the Provision of Air Navigation Services, with additional services including Air Traffic Control Officer (ATCO) training, flight training, flight inspection of ground-based radio navigation aids, consultancy services and aircraft maintenance services.

#### 2.1.1 Air Traffic Services (ATS)

SMATSA IIc is responsible for the provision of air navigation services (Air Traffic Control services – ATC services, Flight Information Service – FIS, and Alerting Service – ALR) within an area of 145,566 km<sup>2</sup>, comprising the airspace of the Republic of Serbia, the airspace of Montenegro, part of the airspace over the Adriatic Sea, as well as 55 percent of the upper airspace over the territory of Bosnia and Herzegovina.



Figure 1: Airspace and Aerodromes under the ATCC Belgrade Area of Jurisdiction

The Air Traffic Control Centre Belgrade (ATCC Belgrade), which is located at "Nikola Tesla" Airport in Belgrade, is the provider of air traffic control services.



#### Figure 2: The Air Traffic Control Centre Belgrade



#### 2.1.2 Air Traffic Control Officers' (ATCO) Training and Pilots' Training

A long tradition of over 40 years and the impressive reputation that the Training Centre has achieved in the region are the results of its high level of training standards. The training required for air traffic controller licences is conducted pursuant to the syllabus in compliance with ESARR 5 requirements and other relevant documents. More than 1900 ATCOs have been trained at the Training Centre with a success rate of more than 90 percent.

Pilot training is conducted at the SMATSA Aviation Academy, which is certified according to Joint Aviation Authorities' standards. Upon completion of training, a candidate can obtain a Commercial Pilot Licence and a Private Pilot Licence with various endorsements. To date, more than 2000 pilots have completed their training at the academy and have been employed by more than 30 international airlines.

Figure 3: The Training Centre and SMATSA Aviation Academy Complex



#### 2.1.3 Flight Inspection Service

SMATSA IIc has the technical facilities, equipment and resources required for the provision of flight inspection services of ground-based radio navigation aids from the air, and for the checking of flight procedures, for its own requirements, as well as for the requirements of external users.

Hawker Beechcraft King Air 350 aircraft equipped with the state-of-the-art flight inspection system, AD-AFIS-260, ensures a highly competitive position in the market. The checking and the flight inspection of the equipment are performed in accordance with the requirements and recommendations defined in the ICAO documents Annex 10, Annex 14, and Doc 8071.



Figure 4: Aircraft used for Flight Inspection – Hawker Beechcraft King Air 350

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#### 2.1.4 Aircraft Maintenance

Aircraft maintenance and hangar services are provided within the SMATSA Aviation Academy. The high quality aircraft maintenance services are guaranteed by the Certificate of Compliance with European Union Standards - EASA part 145, allowing the provision of services to clients throughout Europe.

Maintenance of SMATSA Aviation Academy aircraft is carried out by a team of experienced experts, certified by the Civil Aviation Directorate of the Republic of Serbia and licensed by the aircraft manufacturers. Apart from maintenance of the SMATSA Aviation Academy fleet, the maintenance team is able to provide services to other privately owned aircraft.

Figure 5: Aircraft Maintenance at the SMATSA Aviation Academy





#### 2.2 Managing Bodies and Organisational Structure

SMATSA IIc's managing bodies are the Assembly, the Supervisory Board and the CEO. The Assembly consists of six members, three of whom are from each founder'scountry. These Assembly members are the representatives from the ministries responsible for affairs relating to traffic, finance and defence in the founder's countries. The President of the Assembly is elected and relieved of duty by the members of the Assembly.

The Supervisory Board is composed of five members and is responsible for managing SMATSA IIc. The members of the Supervisory Board are elected and dismissed by the SMATSA IIc Assembly. Four members of the Supervisory Board are elected on the proposal of the Government of the Republic of Serbia, and one is elected on the proposal of the Government of Montenegro. The members of the Supervisory Board are responsible to the SMATSA IIc Assembly for their work. The tenure of office of the members of the Supervisory Board is four years.

The work and business activities of SMATSA IIc are managed by the CEO, who, upon the proposal of the founders, is appointed by the Supervisory Board.

#### Figure 6: Organisational Structure of SMATSA llc





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#### 2.3 Business Guidance

SMATSA llc is guided, in its operations, by the following key principles:

- To provide high quality services in the safest possible manner with no user discrimi nation,
- To certify its services pursuant to the relevant regulations and the standard require ments of the ISO 9001 standard,
- To fulfil users' requirements and expectations,
- To adhere to legal regulations,
- To document operational process,
- To constantly improve the quality management system,
- To continue upgrading the knowledge and skills of its employees
- To apply the most sophisticated technical and technological solutions,
- To maintain and upgrade all SMATSA llc resources,
- To cooperate with competent government bodies, educational institutions, scientific research institutes and other organisations,
- To have the appropriate relationship with its users, partners and employees,
- To maintain a healthy and safe work environment.

SMATSA Ilc's mission is the provision of high quality air navigation services to civil and military aircraft (in the ATM, CNS, MET and AIS domains) in order to maintain and enhance the safe, orderly, expeditious and efficient flow of air traffic within the airspace FIR/UIR Belgrade and within the airspace of other neighbouring countries, based on the bilateral state agreements, as well as the provision of training for air navigation service provider personnel, pilot training, flight inspection services of groundbased navigational aids and systems from the air together with aircraft maintenance services.

SMATSA Ilc's vision is to stand out as the leading ANS provider in the region, to provide a respected training centre for air navigation personnel and aircraft maintenance, as well as being a reliable provider of flight inspection services for ground-based navigational aids and systems from the air. Our goal is to be recognised as a prestigious partner among our users and other business associates.»

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# Important events in 2012

#### 3<sup>rd</sup>February, 2012 – Serbia and Montenegro signed the Agreement on Cooperation in the Air Traffic Domain

SMATSA IIc hosted those who signed the Agreement on Cooperation in the Air Traffic Domain between Serbia and Montenegro. The Minister of Infrastructure and Electricity, Mr Milutin Mrkonjić, signed the Agreement on behalf of Serbia and the Minister of Transport and Maritime Affairs, Mr Andrija Lompar, signed the Agreement on behalf of Montenegro. This agreement represents the highest achievement in establishing further concrete cooperation between all other aviation bodies in the two countries. At this occasion, Mr Nikola Stankov, the CEO of Serbia and Montenegro Air Traffic Services SMATSA IIc presented diplomas to the students of the 48<sup>th</sup> class of the ATCO Training Centre, who will work in Belgrade, Niš, Tivat and Podgorica.

#### 23<sup>th</sup> February, 2012 – CANSO European CEO Committee Meeting was held at the Air Traffic Control Centre Belgrade

Having operated in compliance with the standards of the European Union, as well as the regulations defined in the "Single European Sky" initiative, and having successfully finished its project of modernisation, SMATSA IIc was given the chance to host the 47<sup>th</sup> regular European CEO Committee meeting (EC3) for the members of the Civil Air Navigation Services Organisation (CANSO), which was, for the first time since its establishment, not held in Brussels. At the meeting, the CEOs of ATC Organisations from 25 European countries agreed on guidelines for the further upgrade of European airspace management, through the development of programmes supporting the "Single European Sky" initiative, as well as anticipating the formation of Functional Airspace Blocks (FAB).

Within CANSO, SMATSA IIc also initiated their regional meeting (CANSO Balkan Regional CEO Conference) which was attended by CEOs from Air Traffic Control Organisations from eight countries. The meeting took place on 21st February, 2012 as part of the European conference. In the meeting, the current status of air traffic control organisations in the region was considered, all in relation to the changes the entirety of Europe will face in the future, and a new opportunity for the further improvement of positive mutual cooperation was established.

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Figure 7: Signing of the Agreement on Cooperation in the Air Traffic





Figure 8: CANSO Balkan Regional CEO Conference



#### 25<sup>th</sup> April, 2012 – Contract on Confirmation of the Continuity of Air Navigation Services Provision was signed at the Air Traffic Control Centre Belgrade

The Minister of Infrastructure and Electricity in the Government of the Republic of Serbia, Mr Milutin Mrkonjić, and the Minister of Transport and Maritime Affairs, in the Montenegro Government, Mr Andrija Lompar, signed the Contract on Confirmation of the Continuity of Air Navigation Services Provision within the Air-space of Serbia and Montenegro. The signing of the contract confirmed the continuity of corporate business operations under the name of Serbia and State of Montenegro Air Traffic Services SMATSA IIc. The contract was the first concrete result of the Agreement on Cooperation in the Air Traffic Domain signed between the Governments of the Republic of Serbia and State of Montenegro on February 2012.

25<sup>th</sup> - 27<sup>th</sup> September, 2012 – The 42<sup>nd</sup> Meeting of Eurocontrol Air Space Management Subgroup (ASMSG/42) was held

In cooperation with SMATSA IIc., Eurocontrol organised the 42<sup>nd</sup> meeting of the Air Space Management Sub-group (ASMSG/42) at the Air Traffic Control Centre Belgrade between 25<sup>th</sup> and 27<sup>th</sup> September, 2012. Thirty-nine representatives of European ANSPs, regulators and Eurocontrol, as well as eight SMATSA IIc representatives attended the meeting. The participants of the meeting were extremely complimentary about the organisation of the meeting, in particular praising the conditions and facilities of the ATCC building in which the meeting took place. The topics covered during the meeting were in connection with European airspace, its capacities, utilisation and flexible usage.

Particular attention was paid to the design of military flying areas in order to protect the military users flying in them and civilians using the airspace nearby.



Figure 9: ASMSG/42 Participants at Meeting in Belgrade

#### 28<sup>th</sup> September, 2012 – The Agreement on Exchanging Radar Data was signed with ANTA

In order to increase the redundancy of radar airspace coverage in the airspace of SMATSA IIc's area of jurisdiction, Mr Nikola Stankov, the CEO of SMATSA IIc and Mr Petrit Sulaii, the CEO of the Albanian ATC ANTA, signed an Agreement on the Exchange of Radar Data, in Belgrade.

#### 9<sup>th</sup> December, 2012 - Belgrade ATCC Football Team Won the Tournament in Romania

The SMATSA IIc Football Team was the winner of the International Soccer Tournament held in the Romanian city of Sibiu from 7th to 9th December, 2012. Of the eight teams, the Belgrade ATCC team won all five matches and also won the tournament.

Figure 10: Signing of the Agreement on Exchanging Radar Data with ANTA



Figure 11: Belgrade ATCC Football Team



#### 21<sup>st</sup> December 2012 – SMATSA llc and Park Air Signed the Agreement on the Upgrade of the VHF/UHF Radio Systems

Mr Nikola Stankov, the CEO of SMATSA IIc, and Mr Nicholas Cooper, the Contract Manager of the company PARK AIR SYSTEMS, signed, in Belgrade, the Agreement on the upgrade of VHF/UHF radio systems for ground-to-air communications for the purposes of the Air Traffic Control Centre Belgrade. The Agreement will be implemented in three phases between 2013 and 2015 at the following locations: Belgrade, Rudnik, Kopaonik, Podgorica and Koševac. During this period, the replacement of the equipment that is no longer being produced will be carried out, as well as an upgrade of the remaining radio equipment at the aforementioned sites. SMATSA IIc has worked in cooperation with PARK AIR SYSTEMS since 2002.

### Operations in accordance with national and international regulations



During 2012, the European Aviation Safety Agency (EASA) performed the verification of the Republic of Serbia Civil Aviation Directorate's compliance with the regulations of the European Commission, and, from the 7<sup>th</sup> to 11<sup>th</sup> of May 2012, they paid visits to certain organisational units of SMATSA IIc and assured themselves of the efficiency of the application.

On this occasion, the safety management system of technical equipment and systems (Communication Navigation Surveillance - CNS) were audited through the analysis of operational and technical competencies as required by operational technology and defined by processes and procedures. The inspection of the establishment and implementation of EU regulations was performed in the areas of the ATM, AIS and MET services. In addition there was a presentation given on the established management system for the purpose of satisfying the requirements of European and domestic legislation concerning the provision of ANS and ATCO training. In addition, the EASA and CAD of Republic of Serbia performed their regular inspections followed by the renewal of the Aircraft Maintenance Certificate EASA.145.0298 at the SMATSA Aviation Academy in September, 2012.

A regular external audit of the established and certified quality management system for the renewal of the ISO 9001:2008 Certificate was carried out by the auditing team of the SGS (Societe Generale de Surveillance) certification company at SMATSA IIc in May, 2012. The audit was carried out at several locations, and since no non-compliances were identified during the audit, the validity of the ISO 9001 Certificate was renewed.

In September 2012, the Aviation Authority of Algeria performed an inspection of the SMATSA Aviation Academy for the verification of pilot training certification on the basis of the contract that was signed on an international tender.

Moreover, the Civil Aviation Directorate of the Republic of Serbia and the Civil Aviation Agency of Montenegro performed several regular, periodic and additional audits, the most important of these being:

• Periodic audit of SMATSA Llc with the aim of checking the compliance of SMATSA llc, as the holder of an ANSP certificate, with common safety requirements as listed in the Regulations on the Conditions and Method of Issuing an ANSP Certificate.

• Review of ongoing compliance with regulatory requirements related to air traffic controllers' training.

• Common (ACA/DCA) regular periodic assessment of the compliance of SMATSA IIc's ATS, CNS, AIS and MET services with appropriate safety regulatory requirements.

Inspections of certain operating organisational units i.e. aerodrome controls.

• Supervision of the Training Centre and inspection of the contents and dynamics of conducting training, assessment and examinations.



Conditioned by volume and the expected traffic demands, as a function of the provision of quality services to civil and military aircraft, one of the tasks of SMATSA llc is to work on the establishment of the Single European Sky (SES) initiative together with the regional and pan-European business and institutional partners, through the development of air traffic operations.

Air Traffic Management (ATM) development refers to:

• Air Space Management including preparation of navigational procedures (PANS-OPS),

• Operational technology of the ATC operational units – preparation of operational concepts, operational procedures and instructions, and

• Air traffic flow and air traffic capacity management based on planning and strategic perspective.

During 2012, SMATSA llc was actively involved in the implementation of this plan, which, at the strategic level, is defined by experts in the field of air traffic management:

• **Improved Airspace Management** has the goal of optimum route planning and maximum utilisation of available airspace, which will increase airspace capacity and efficiency but reduce delays.

• The Application of P-RNAV Procedures will enable aircraft with appropriate equipment to use this opportunity, thus optimising the paths at approach, and take-off which will increase capacity.

• The Concept of Continuous Descent -Continuous Descent Approach (CDA) at Belgrade airport will enable a significant reduction in exhaust emissions and noise near the airport.

The fixed route network in the airspace of SMATSA Llc's area of jurisdiction was upgraded during 2012. On 31st May the airway of UN142 MODRA-AKIKA was introduced replacing the DCT option with the segment of fixed route network. Simultaneously with these activities, and in accordance with the strategic direction of the company actively contributing to the project of increasing the efficiency of flying, on 08th March 2012, a set of DCT options for night flight planning in Belgrade FIR/UIR was introduced. After the successful completion of coordination with the Civil Aviation Authorities of Bosnia and Herzegovina, a number of DCT options for night flight planning were increased for options passing through the airspace of Bosnia and Herzegovina where SMATSA IIc provides air navigation services.

The results from monitoring the impact of the introduced DCT option on the operations and safety of air traffic showed that it was possible to undertake planning for steps for further improvement of the airspace. On 28th June 2012, the use of all the published DCT options for all day flight planning was facilitated. SMATSA IIc shortened the length of flight planning in order to increase the efficiency of flying and meet the requirements of the users of its services by implementing these measures. At the same time, the plans to introduce the free route concept for 2012 were compiled to.

In 2012, SMATSA IIc developed plans for the phased introduction of a cross-border DCT option for the following year. For the first phase, the options which extend through the airspace of Croatian ANSP and SMATSA IIc areas of jurisdiction were selected. The implementation of the first phase of cross-border DCT options was planned for May, 2013. Alongside, SMATSA Llc analysed the proposed cross-border DCT options spreading through Austria, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Serbia, Albania and Bulgaria. For the next phase of the introduction of cross-border DCT options, it has been planned to increase the number of options in the airspace of the SMATSA llc and CCL area of jurisdiction and to implement the agreed options passing through the air space of the Western Balkan countries.

### 5.1 Civil – Military Coordination

Within the area of air traffic management, operations pertaining to control, protection and allocation of the airspace are performed – civil-military coordination at the pre-tactical and tactical levels.

The main duties and tasks of the Department for Control, Protection and Allocation of Airspace include:

- Collection and analysis of the requirements for usage of the airspace by civil and military users,
- Resolving possible conflicting requirements,

• Making decisions regarding the efficient use of the airspace at the pre-tactical and tactical ASM level,

• Publication of the decision on the allocation of the airspace by submitting a request for NOTAM issuance ("NOTAM PROPOSAL")

• Preparation and keeping statistics on the use of TSA zones.

During 2012, the test phase began by presenting the daily decisions regarding the allocation of airspace via the "SMATSA Web Portal". The Department for Control, Protection and Allocation of Airspace actively participated in the preparation and implementation of "the concept of the flexible use of airspace" (FUA - Flexible Use of Airspace), with the preparation and creation of working documents, operating and coordinating instructions and procedures for dealing with specific situations. Additionally, the Department participated in the working groups and teams at the European level making arrangements and implementing programmes to improve safety and civil-military coordination in accordance with international standards.



Figure 12: Civil-Military Coordination at Air Traffic Control Centre

#### **5.2 Traffic Figures**

In 2012, 529,462 IFR flights were completed in the airspace of SMATSA IIc's area of jurisdiction, a decrease of 3.9 percent compared to the previous year. Overflights showed a decrease of 4.3 percent while international departures/arrivals and local flights showed a decrease of 0.8 percent.

Figure 13: Number of Flights in the Period from 2006 to 2012



Figure 14: Distribution of Flights in 2012







3,000 2,500 number of flight Peak day - number of flight 2,000 1,500 1,000 Peak hour 2.188 2.26 .892 

*Figure 16: Peak Days and Peak Hours in the Period between 2006 and 2012* 







Figure 18: The Average ATFM Delay per Flight in the Area of SMATSA IIc 's Jurisdiction from 2007 to 2012

Peak day

Peak hour

*Figure 19: Number of Take-offs and Landings per Airport from 2006 to 2012* 





Figure 21: The Number of Chargeable Service Units from 2008 to 2012



Figure 22: Average Flight Distance within FIR Belgrade and the Average MTOW from 2008 to 2012



#### Figure 23: National Unit Rate per Country in 2012



### Communication, navigation and surveillance

In 2012, for the provision of communication, navigation and surveillance SMATSA IIc aligned its business with the EUROCONTROL Specification for ATM Surveillance System Performance, which defines the minimum performances an air traffic control system should satisfy.

In order to fulfil the plan for work in this area, the following projects were implemented or initiated during the year:

• Linking the TopSky-ATC system via the AFTN network with the CCAMS central server CFMU for the centralised allocation of SSR codes.

The TopSky-ATC system was upgraded with CCAMS functionality, which has been successfully tested on the TopSky-ATC system with data from the CFMU via the AFTN/AMHS system.

• Improvement of the radar system at RS Koviona and smaller improvements at other stations.

• Fine-tuning of the ARTAS system for receiving data from the new radar sites – Manastur (Romania), Sofia TAR and Vitosha (Bulgaria), Skopje Banjski Rid (Macedonia) and Porto Romano (Albania).

• Installation of the Entry Node system to allow connection to the ETFMS.

Connecting the system with the AMHS/AFTN (for forwarding FSA messages) and RMCDE (due to forwarding ASTERIX cat062 ARTAS data and MSTS trekkers) was performed in order to prepare for the release of the operating system, which is expected in early 2013.

• Installation of the CIMACT system as required by the armies of the Republic of Serbia and State of Montenegro at Belgrade and Podgorica airports and at the Air Force Command in Zemun.

The Project task and investment programme have been prepared, and work has begun on the tender documents.

• Installation of the AIDA-NG converter to the AMHS/AFTN system to support ICAO FPL 2012.

• Improvement of the TOPSKY-ATC system for receiving and processing flight plans in ICAO FPL 2012 format.

Project, investment-technical and tender documentation have been created and a contract with Thales company has been signed. The implementation of the agreement was planned for 2013.

• Implementation of FMTP protocol with certain OLDI partners.

A local integration test was completed, and remote integration tests with BULATSA (OLDI partner Sofia) and ROMATSA (OLDI partners Arad and Bucharest).

• The introduction of a digital link for multiplexed radar receipt and delivery of OLDI and AFTN/AMHS data with Bucharest, Sofia and Skopje.

• Launching of the procurement and preparation of technical specifications for the procurement and installation of DVOR and DME equipment at Vrsac and Belgrade airports.

• Procurement and signing the contract for the delivery of eight spare anemometers for locations at Belgrade ATCC, Vrsac AC, Batajnica AC, Nis AC, Kraljevo AC, Ponikve AC, Tivat AC and Podgorica TCL.

The project will be completed during 2013 and 2014.

• Preparation of the project task, investment programme and technical specifications for the procurement of laser silometars and a visibility measurer for locations at Vrsac AC, Batajnica AC, Nis AC, Kraljevo AC, Ponikve AC Tivat AC and Podgorica TCL.

• Migration of all operational communications to the new SMATSA IIc telecommunications network.

The migration connects the new Belgrade ATCC building to the remote radar and telecommunication centres and AC facilities.

• Improvement of VHF/UHF radio systems for the requirements of Belgrade ATCC.

Investment-technical and tender documentation has been prepared and a contract has been signed with Park Air, the supplier of the equipment. The implementation of the project was planned in three phases to run until the end of 2015.

• The procurement of the ATIS/VOLMET system was successfully completed.

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• Upgrading of telecommunication infrastructure by connecting to Telekom Serbia fibre infrastructure.

• Installation and preparation for the operational use of the system for voice communication at Ponikve AC and Podgorica TCL sites and back-up of the radio and telephone systems for Podgorica TCL.

In addition to the tasks defined in the work plan for the provision of communication, navigation and surveillance, 2012 was marked by the events and activities listed below:

Between March and August an upgrade of the system software for voice communication at Belgrade ATCC from version 2.0A to version 2.2 was undertaken, as part of which the previously identified problems in the system were eliminated.

After installing the new software on the IP phone system, CiscoUnifiedCallManager, at Belgrade ATCC, IP phone recording was put into operation during the year.

At the radar stations of Koviona and Murtenica the redundant transmission line Weather Data to Belgrade ATCC was introduced in May, 2012.

A new version of software was installed on the system for recording and playback of voice communications, the DIVOS 3 Log at Belgrade ATCC, which eliminated most of the problems that had been previously identified. The same version of the software was also installed at Podgorica TCL, Batajnica AC, Kraljevo AC, Ponikve AC, Vrsac AC and Tivat AC.

In the period between May and November 2012, a procurement process was conducted and the construction of the new optical and telecommunications infrastructure was performed to meet telecommunication connectivity requirements at the premises of the SMATSA Aviation Academy with premises at Vrsac AC.

Due to the planned installation of new DVOR/DME navigational equipment at Vrsac AC and the restrictions that this defined, there was a need for the relocation of the transmitter centre at Vrsac AC (a container with the VHF/UHF transmitters of Park Air systems and multiplex equipment) to a new location. In July 2012, the installation of two new pieces of UPS equipment in Koviona, Koševac and Murtenica radar stations was undertaken. This activity represents a significant improvement from the perspective of providing continuous power supply to the stations, and thus ensuring the availability of radar data.

Two versions of the software on the AFTN/AMHS TEST AFTN/AMHS ONL system for improving the system for FPL2012 were installed and tested. In this way the conversion of a flight plan from the new format (FPL2012) into the old format (which can process the TOPSKY-ATC ONL system) was introduced, and in addition templates to fill in the new FPL format in CADAS were introduced.

A total of six installations of new software were performed on the TOPSKY-ATC system (FAM 4\_14\_6 p49.0, p51.3 FAM\_5\_0\_5, FAM 5\_0\_6 p51.7, p51.8 5 0 7 FAM, FAM and FAM 5 1 7 5 1 8 p58.1, p59.3) at which, except for the introduction of new functionality, current and emerging PCRs were resolved. Also, the new X.25 OLDI partner Bucharest was put into operational work. The beginning of the realisation of the migration from X.25 to IP connections and the transition from the FDE to FMTP protocol for exchanging OLDI messages were planned for 2013. In order to further facilitate the work of air traffic controllers in their operational capacity, in July 2012 a frequency offset was introduced, the functionality of which enabled simultaneous transmission from multiple locations for the first time. In this way the occasional requirement of controllers to be able to change the radio location during operational work was significantly reduced because no single location provides coverage of the entire area under the jurisdiction of the Belgrade ATCC.



# Safety management

SMATSA IIc devotes considerable attention to increasing safety, efficiency and economy, with constant monitoring and meeting the demands of its users as part of its effort with the trend of increasing air traffic, to improve the quality of air navigation services.

Increasing the volume of air traffic and the development of equipment and technology has created the need to constantly update safety, in accordance with the highest standards and recommended practices.

Following the basic principles of safety, SMATSA IIc applies the appropriate safety management system to ensure better understanding, acceptance and application of the high safety standards of aviation traffic. According to the last check of the level that was achieved in safety maturity, which was conducted by EURO-CONTROL/ CANSO, SMATSA LIc was ranked second in Europe.

Efforts to meet the objectives in the field of air traffic safety continued throughout 2012:

• A training programme was undertaken on how to acquire skills to implement risk assessment when introducing changes in the functional system for employees who, as part of their work, come across changes in the system for the provision of air navigation services, which could potentially affect air traffic safety.

• In the Safety Culture Regional Workshop, which was held in Luxembourg, the basic principles of measuring safety culture (Safety Culture Measurement) were presented. This process represents a strategic objective at the European level and helps to precisely determine the level of relevance of the established Safety Management System within the organisation.

In addition, an initiative was adopted for the execution of measuring safety culture at SMATSA llc, which EUROCONTROL plans to conduct next year, with the involvement of an independent body for the validation of results and for issuing recommendations.

• During the year, ten safety checks were conducted (Nis AC, Batajnica AC, Vrsac AC, Kraljevo AC, Ponikve AC, Belgrade ATCC, Podgorica TCL, Tivat AC, SMATSA Aviation Academy and Belgrade ATCC Technical Division).

#### 7.1 Safety Indicators

Defining appropriate safety indicators and targets provide better monitoring and development of the level of system safety.

As a measure of the achieved level of safety of ATM, SMATSA IIc's safety indicators and safety targets were established by the Civil Aviation Directorate of the Republic of Serbia (DCV) and the Civil Aviation Agency of Montenegro (CAA).

Analysis of these safety indicators is performed on an annual basis, taking into consideration data for the last three years. Results of the analysis of the safety indicators for 2012 were made in accordance with the "Manual on Safety," presented below.

#### 7.1.1 Event Indicators

#### **Incident Indicators**

Acceptable level of safety for incidents in which the ATM participated was less than 0,007 incident an The acceptable level of safety for incidents in which ATM was represented was less than 0.007 incidents annually (CAD) i.e. less than 0.00128 incidents per 100,000 operations (CAA). The safety objective for 2015 is less than 0.005 incidents annually (CAD), i.e. less than 0.00077 incidents per 100,000 operations (CAA).

In the period from 2010 to 2012, in the airspace of SMATSA IIc's area of jurisdiction, an average of 7.33 events in the category of "aircraft incidents" was reported annually. Based on the fact that none of the incidents involved ATM i.e. none of the incidents were the consequence of failure in the airspace of SMATSA IIc's area of jurisdiction, an acceptable level of safety was achieved.

#### Table 1: Number of Incidents on an Annual Basis

Year	Number of Aircraft Incidents without ATM influence	Number of Aircraft Incidents with ATM Influence
2010	8	0
2011	10	0
2012	4	0

#### **Serious Incidents Indicator**

The acceptable level of safety, defined according to the indicators of serious incidents, designated by CAD, is less than five serious incidents annually, or less than 0.83 serious incidents per 100,000 operations (CAA). The safety objective is less than three serious incidents annually (CAD), or less than 0.5 serious incidents per 100,000 operations, as defined by CAA.

In the airspace of SMATSA IIc's area of jurisdiction, between 2010 and 2012, an average of two events in the category of "serious incidents" was reported annually, and as a result safety criteria were fulfilled.



Figure 24: Number of Serious Incidents from 2010 to 2012

#### **Major Incidents Indicator**

The acceptable level of safety as defined by the indicators of major incidents, determined by CAD of Serbia is less than 50 major incidents annually, or less than 8.3 major incidents per 100,000 operations, as required by the CAA.

The safety objective to be achieved by 2015 is less than 30 major incidents annually (CAD), i.e. five major incidents per 100,000 operations (CAA).

With one major incident event category, as the average annual rate was reported in the airspace of SMATSA IIc's area of jurisdiction in the period from 2010 to 2012, an acceptable level of safety was achieved.
Figure 25: Number of Major Incidents from 2010 to 2012



#### **Runway Incursions Indicator**

The acceptable level of safety as defined by the CAD of Serbia is less than three runway incursions annually. According to the requirements of the CAD of Serbia, the acceptable level of safety is less than three runway incursions per 100,000 take off/landing operations.

The safety objective for 2015 is less than two runway incursions annually (CAD) and 1.5 runway incursions per 100,000 take off/landing operations (CAA).

Considering that in the period from 2010 to 2012, in the airspace of SMATSA IIc's area of jurisdiction, there were no reported runway incursions, the value indicators of runway incursions was within an acceptable level of safety.

#### 7.1.2 ATM Specific Technical Event Indicators Connected to the Availability of CNS Equipment and Systems

#### DPS (TopSky-ATC) Failure Indicator Systems

The TOPSKY-ATC system is the operating system that processes radar data and flight plans, located in the Belgrade ATCC building. The acceptable level of safety as defined by the indicator for DPS TOPSKY-ATC, determined by CAD is less than 10 failures annually.

The safety objective to be achieved by 2015 is to keep the value of the acceptable level below eight failures annually, with meeting the adopted recommendations of EUROCONTROL for the required system availability.

During the course of 2012, there were no DPS system failures, so the DPS (TopSky–ATC) system failure indicator value falls within the acceptable safety level, taking into account the triennial average of 0.33 failures per year.



Figure 26: Number of DPS Failures (TopSky-ATC) from 2010 from 2012

#### SSR Radar Stations Outage Duration Indicator

According to the recommendations of EUROCONTROL, the acceptable safety level value for SSR radar stations amounts to less than 600 minutes per year (availability of 99.8858%), when calculating the accumulated time of SSR radar outages. The safety objective by 2015 is to keep the accumulated time of outage of the SSR radar systems per year below 500 minutes.

The safety indicator value derived from the triennial sample falls within the acceptable safety level for all three SSR radar stations (Koviona, Kosevac and Murternica).

Figure 27: The Duration of SSR Radar System Outages in the Period between 2010 and 2012



#### **PSR Radar Stations Outage Duration Indicator**

According to the recommendations of EUROCONTROL, the acceptable safety level value for PSR radar stations amounts to less than 2,400 minutes per year (availability of 99.5433%), when calculating the accumulated time of PSR radar outage. The safety objective by 2015 is to keep the accumulated time of outage of PSR radar systems per year below 2,000 minutes.

In the period between 2010 and 2012 the average duration of outages at the three PSR radar stations (Koviona, Kosevac and Murternica) fell within the acceptable safety level.

Figure 28: The Duration of PSR Radar System Outages in the Period between 2010 and 2012



#### LLZ ILS 12 (CAT III) Failure Indicator

During 2012, the localizer LLZ12 (CAT III) was in full operation for 8,772 out of out of a maximum of 8,784 hours (availability 99.86%). With an average operational time of 8,716 hours per year, without any failures, in the period between 2010 and 2012, the indicator MTBO (Mean Time between Outages) for LLZ ILS 12 (CAT III) falls within the acceptable safety level set by CAD and the accepted value according to ICAO recommendations (more than 4,000 hours per triennium).

Figure 29: The Operational Time and Number of Failures of LLZ12 (CAT III) in the Period between 2010 and 2012



#### LLZ ILS 30 (CAT I) Failure Indicator

During 2012, localizer LLZ30 (CAT I) was in full operation for 8,767 hours (availability 99.81%). Taking into account the average operational time of 8,717 hours per year, and four failures, in the period between 2010 and 2012, the indicator MTBO (Mean Time between Outages) for LLZ ILS 30 (CAT III) falls within the acceptable safety level as set by CAD and the accepted value according to ICAO recommendations (more than 1,000 hours per triennium).

Figure 30: The Operational Time and Number of Failures of LLZ30 (CAT I) in the Period between 2010 and 2012



#### **Ground-Air Voice Communication Indicator**

In the period between 2010 and 2012 the number of losses and degradations of the ground-air voice communication service was on average 34.3 losses of service per year, which falls within the acceptable safety level set by CAD and is equal to less than 60 losses (incidents) or degradations of service per year. The safety objective to be achieved by 2015 is to keep the number of service losses per year below 50. In accordance with the international standards, EUROCONTROL recommendations and experience and practice of other ANSPs, SMATSA IIc has introduced internal safety indicators for all vital systems and/or their components, in addition to the stated safety indicators set by the national aviation authorities.





As of January 27<sup>th</sup> 2012, the new aeronautical meteorological service, which contains the weather forecast chart for the area of low-level flights (SWL - Significant Weather Chart – low level), has been operational. This type of chart is produced by the Aviation Weather Centre (AWC) and it shows the forecast of significant meteorological phenomena combined with the forecast of winds and air temperatures, for Belgrade FIR, from the ground to FL 150.

Prior to the introduction of SWL charts, this service had to be certified and the Certificate for the Provision of Air Navigation Services had to be supplemented, thus making it possible to issue the chart to users and to include it in the flight documentation.

As of March 2012, the flight documentation for low level flights up to FL 150 in Belgrade FIR can also be obtained via e-mail.

In order to monitor the effectiveness of what the aeronautical meteorological service provides, certain indicators have been defined, and their planned and realised values are presented in the following table.

Indicator	Planned	Realised
Promptness of distribution of documents necessary for opera- tional work	100%	89%
Accuracy of Terminal Aerodrome Forecasts (TAF)	100%	100%

Table 2: Aeronautical Meteorological Service Provision Indicators

Moreover, within the aeronautical meteorology domain, other activities were performed in relation to the following accomplishments.

- 1. Provision of spare anemometers to all aerodromes, 100%,
- 2. Enhancement of the existing VCS software, 100%,
- 3. Enhancement of the software with SAWAS Web application, 30%, and
- 4. Vrsac and Tivat working environment organisation, 50%.





Within the domain of improving the quality of user information in 2012, the main achievement was the publication of the operational version of the bilingual electronic AIP. "eAIP Serbia/Montenegro" is the first bilingual electronic AIP in the world, made in accordance with EUROCONTROL specifications and available in two versions:

- Hard copy,
- html and pdf (on CD and EAD PAMS).

Moreover, the operational version of VFR AIP on CD was published in 2012, so VFR AIP is now available in two versions as well, in hard copy and as a pdf (on CD and EAD PAMS).

In 2012 SMATSA IIc representatives played an active role in the following task forces: AIM/SWIM Team 2, EAD Evolution Task Force 8, AI Operations Sub-group 6 and AI Operations Sub-group 7.

Taking into consideration the quality objectives in AIS services provision processes, established by the document of Quality Objectives for 2012, QM.FORM.001, dated 3rd April 2012, keeping the quality assessment Q of at least 0.77 was fully achieved. The quality assessment was performed on a sample of 148 pieces of data.

Furthermore, user satisfaction analysis is performed based on quarterly data quality reports from the European AIS database SDO, PAMS and INO applications, user complaints and the User Satisfaction Questionnaire - AIS.FORM.122. The error trend in EAD applications was analysed up to the third guarter of 2012, inclusive. The AIS Division collects analyses and addresses complaints in accordance with AIS.PROC.012 - The Procedure for Addressing Complaints, and according to the published manner of communication in the case of detected errors or oversights (GEN 0.1, item 4) in aviation publications. By analysing the User Satisfaction Questionnaire -AIS.FORM.122 - it has been established that users have assessed the aviation information service provision as being excellent.

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Highly qualified and adequately trained personnel, willing to continuously upgrade their knowledge and skills, is one of the top priorities of SMATSA IIc, as the development of individual and professional potentials greatly contributes to achieving business goals, fulfilling set tasks and successfully implementing the SMATSA IIc strategy. SMATSA IIc, as an employer, offers everybody equal opportunities and strives to create an environment in which there is equality in status as well as in the process of employment, while simultaneously expecting the highest standards of professional conduct from employees.

The SMATSA IIc employee structure, according to the level of education, age and gender is presented in the following figures.

Figure 33: Structure by Gender



Figure 31: Structure by Level of Education

Figure 32: Employees' Structure by Age



### 10.1 The Training Centre – A Place for the Professional Advancement of Employees

SMATSA IIc actively invests in developing the knowledge and skills of employees. By implementing a system of high-quality and ongoing training, SMATSA IIc offers employees the opportunity to enhance their knowledge and skills in line with European and international standards in the domain of providing services in air navigation.

In 2012, the Training Centre, which is primarily engaged in the training of air traffic control officers, gained some additional authorisations/certificates:



The most important training courses completed in the Training Centre in 2012 are as follows:

- Training of 43 trainees for obtainment of their ADI rating and TEA test examination preparation,
- Training of six ATCOs for obtainment of their Area Control-Surveillance (ACS) rating,
- Training of seven ATCOs for obtainment of their Approach Control-Surveillance (APS) rating,
- · Training of six ATCOs for obtainment of their Terminal Control (TCL) rating,
- OJT Instructor training course for 15 candidates,
- Induction training course for teachers of theoretical and practical training for eight candidates,
- Supervisor training course for 18 candidates,
- Emergency situations refresher training using EUROCAT-E simulator for 190 ATCOs with radar ratings,
- Aviation English language refresher course for 139 ATCOs,
- Emergency situations refresher training for 20 ATCOs from ADC Beograd.

In 2012, 17 out of 43 ATC students gained ATC licenses for independent work in designated organisational In 2012, 17 out of 43 ATC students gained ATC licenses for independent work in designated organisational units.

As far as CNS personnel are concerned, a large number of training courses for a total of 127 employees were carried out. The courses were organised for different system upgrade and maintenance types, and included the following: VHF/UHF Park Air, DIVOS 3 log, TRS Pro-line rel. 2.0. DIVOS 3 log, TRS Pro-line rel. 2.0., Engineers basic training, MIDAS IV (refresher course), VCS 3020 X rel. 7.0 & RBS & TBS, DME FAL 2020, AWS-200 SAWAS, CNS instructor course, RMCDE, NDB NX 250/1000/2000, RSM 970 S Cirius Type 1, RSM 970 S Cirius Type 2, NDB NX 250/1000/2000, LLZ 381 N, MicroStep spare anemometers FAT, and Cisco Security service configuring. In 2012, aeronautical MET personnel training included the following courses: MET forecaster course according to the INSTR-T programme, Aeronautical MET technician's instructor course, aeronautical MET technician's course, MET forecaster-instructor course, as well as a course for the teachers of theoretical training. Furthermore, some of the most significant training courses and workshops attended by SMATSA IIc employ-ees in 2012, that involved receiving certain certificates of qualification, are shown in the following table:

No.	COURSE TITLE	NOTE
1.	SDO Data Provider	Training abroad – 2 employees
2.	Briefing Facility	Training abroad – 6 employees
3.	FrameMaker <sup>®</sup> Structured Authoring	
4.	FrameMaker <sup>®</sup> Structured Advanced	Training abroad 2 amployage
5.	apsXML <sup>®</sup> eAIP Editorial	
6.	apsXML <sup>®</sup> eAIP Administrator	
7.	In-house training for EAD INO-DU BF application use	In-house training organised for all AROs – 42 employ- ees
8.	MANIF AFM Workshop	EUROCONTROL-organised workshop for the new ver- sion of MANIF AFM frequency coordination software and preparation for migration of COM3 and COM4 tables
9.	BSS Workshop	Demonstration of BSS algorithm applied in VC system and examples of its correct practical application, organ- ised by equipment manufacturer Frequentis
10.	Basic training in navigation domain	Basic training of all pilots in navigation domain based on required performances for employment of PRNAV and RNP APCH procedures leading to augmentation of operational specification of Flight Inspection Division.
11.	King Air 350 aircraft maintenance training	Practical training in Germany for 1 King Air 350 aircraft maintenance technician
12.	Utilisation of VCS-2MET-Processing software, ver- sion 3.5, and utilization of image display and soft- ware analysis software VCS-2MET-Vision+, version 1.7	
13.	Cessna 172 Maintenance Familiarization and Garmin 1000 Training	4 employees of the Aircraft maintenance unit were certified

Table 3: The Most Significant Workshops and Training Courses in 2012

#### 10.1.1 Training for External Users at the Training Centre

In the past year, the Training Centre has additionally offered training services for external users:

- Training of self-financing class of ATCOs, six candidates,
- Emergency situations refresher training for 10 ATCOs from RS CAD,
- Refresher training for 20 ATCOs form BHDCA,
- Training of Serbian Air Force interceptor guidance unit officers.

#### 10.2 The SMATSA Aviation Academy – Just the Right Place for Pilot Training

Apart from providing training for job positions related to the provision of air navigation services, SMATSA llc also offers training services for gaining aircraft pilot licences.

During 2012, a total of 15 candidates completed their training at the SMATSA Aviation Academy, and in the following year 114 candidates from Serbia, Montenegro, Libya, Bosnia and Herzegovina, Tunisia, Mali, FYROM, the Netherlands, Croatia, Slovenia, Switzerland, Algeria, Malta and Romania, will continue their training here. Some of the most important activities that have marked the previous year, and that have assisted with the improvement of the pilot training conditions and the reputation of the SMATSA Aviation Academy, are related to the purchase of eight Cessna 172S aircraft.

Figure 34: New Cessna 172S Airplanes for Training at the SMATSA Aviation Academy



In addition to the aforementioned, a new course "Distance Learning PPL", was also implemented in 2012, thus introducing the concept of distance learning for the first time in the domain of aviation in Serbia.

One of the most significant contracts signed in 2012 relates to the practical training of 48 candidates from Algeria for obtaining their CPL(A) licence. This contract also implies the recognition of the SMATSA Aviation Academy by Algeria's National Enterprise for Aeronautic Security.

Figure 35: Signing of the Contract for the Training of 48 Candidates from Algeria at the SMATSA Aviation Academy





### Flight inspection services

SMATSA IIc performs flight inspection services of ground-based radio navigation aids from the air and the checking of flight procedures, for its own needs as well as for the requirements of external users.

By using the latest technical solutions in the domain of flight inspection, and with the ongoing upgrade of procedures, the following objectives have been achieved:

- The high precision of measured parameters,
- The possibility of repeating the procedures during the flight inspection of ground-based radio navigation aids,
- The minimal required flight time and the minimal number of engaged personnel and
- The complete fulfilment of all client requests within the agreed deadline. Apart from the existing flight inspection aircraft, the delivery of the new Hawker Beechcraft King Air 350, equipped with the AD-AFIS-112 system, is expected at the end of 2013.

During 2012, flight inspection services were performed in accordance with contracts with the following entities:



In short, 326 flight inspections and 482 hours of flight were successfully performed in 2012.



The support of the information technologies domain specialists enabled, in 2012, the completion of a large number of major projects and tasks, keeping up with standards and achievements in this domain at the international level.

• The virtual infrastructure was enhanced, and its number of users was increased. The IP telephone exchange was also upgraded in order to improve recording on the DIVOS system.

• With the introduction of the Nagios system for resource monitoring, in January 2012, the system of tracking physical and virtual IT services, as well as monitoring software, network and storage services, was established.

• In April 2012, the migration of the document management system from version MOSS 2007 to version SharePoint 2010 was performed, with more advanced functionalities for document management.

• In December 2012, at the request of ICAO, and in coordination with the Aviation Weather Centre Belgrade, the CMS system for the display of SWL charts for low level flights was introduced. The new CMS solution was also developed for students of the SMATSA Aviation Academy in Vrsac, enabling the use of electronic material in training.

• Two ASA firewalls were installed in Podgorica and Tivat in order to establish the redundancy of the connections/ links with ATCC Beograd.

• The Mail Server was migrated to a stable version due to the increase in traffic, and during the year the application for the ATCOs roster was finalised.

In order to monitor the effectiveness of the information technologies domain, certain indicators have been defined, and their planned and realised values are presented in the following table.

Indicator	Planned	Realised
The ratio of physical to virtual servers	90%	65%
The ratio of employees who use physical working stations to those who use virtual VDI computers	50%	20%
The availability time of the key IT services (SharePoint, e- mail server, CMS services for data exchange with external entities)	99.99%	99.99%

Table 4: Indicators in the Information Technologies Domain

In October 2012, SMATSA Llc representatives participated in a PENS meeting in Brussels on the linking of ANSPs to PENS infrastructure with the purpose of safe FMTP OLDI, AMHS and RDR data exchange. The meeting was also an opportunity to share experiences related to PENS between ANSPs.



According to the Investment Plan for 2012, activities connected to construction, design, reconstruction, restoration, adaptation and investment maintenance of facilities were carried out. Apart from this, the contracts to be implemented in the upcoming period were also concluded. Among the most important investments in 2012, whether initialised or realised, the following could be singled out:

> In June 2012, construction and installation works on the facilities within the transmission centre "Rudnik" at the site of Veliki Sturac, on the mountain of Rudnik, were initiated. The technical room, transformer substation room, different premises for diesel electrical generator sets, low-voltage distribution centre, drytype transformers and UPS equipment, and a spare parts storage room with workshop, will, among other things, occupy the ground floor of the building, whereas the rest area will occupy the top floor. In addition, the support equipment and facilities for electric power, water and heat supply are planned to be installed inside and outside the building in order to enable the uninterrupted functioning of the building.

> • Ongoing maintenance works in the Vrsac Aerodrome control building included the refurbishment of the interior of the building, renovations to the washrooms and replacement of any worn-out installations.

• The completion of the design and technical documentation, as well as agreement on and commencement of the work on the replacement of the damaged internal plumbing system in the ADC building in Vrsac.

• The development of the preliminary designs for the reconstruction and extension of the administrative building at 10 Trg Nikole Pasica Street in Belgrade.

• During 2012, the development of design documentation for the reconstruction of the SMATSA Aviation Academy in Vrsac was initiated, whereas the preliminary and main designs for reconstruction of the ADC Vrsac tower with the addition of a terrace, were finalised. Furthermore, the new cable infrastructure around the runway at Vrsac was constructed and the transmission centre container was moved to another location within the Vrsac aerodrome complex.

• Adequate thermo-technical equipment was procured and installed in order to fulfil the required air-conditioning parameters necessary for the operation of the existing and newly built aeronautical-technical systems.



# Quality management

As in accordance with its business policy, SMATSA llc places a significant amount of importance on satisfying the needs of its user and does its best to ensure their full confidence and satisfaction through the quality of its services and products, as well with constant improvement in quality in all phases of operational processes. The Quality Management System (QMS) was established on the basis of the requirements contained in the ISO 9001:2008 standard. The structure of the QMS has been adjusted to SMATSA llc's internal organisation thus ensuring that all activities which may have an effect on the quality of products and services are documented and efficiently applied.

Full control, supervision and permanent improvement of the system efficiency, as well as the accomplishment of the quality policy and objectives have been facilitated by the implementation, upkeep and constant improvement of the QMS.

On the grounds of the quality objectives defined on an annual basis by the Quality Committee, SMATSA llc monitors the feasibility of realisation of the objectives and identifies opportunities for improvement. The realisation of quality objectives in 2012 is presented in the following table:

No.	Quality Objective	Planned Value	Real- ised	Remark	
ATM Service	ATM Services Quality Objectives:				
1.	Delay per flight, generated by SMATSA llc	< 0.2 minutes per flight	Yes	As per EUROCONTROL DNM data, in 2012, a delay per flight generated by SMATSA IIc. was 0.0 minutes.	
2.	Maximum number of serious ac- cidents, by analysis proved to have been caused by the ATM	< 0.5 per 100,000 operations	Yes	Out of 529,462 IFR flights, 3 occurrences were recorded as serious accidents. For 2 of them, the internal analysis showed as affected by ATM, so the value for the number of serious accidents per 100,000 operations was 0.38.	
CNS Service	es Quality Objectives:				
3.	Operational availability of technical equipment and systems directly affecting the provision of A (t)	99.9%	Yes	Notwithstanding the exceptions to the system availability's desirable values, which were due to individual and group redundancy of the CNS equipment and systems, there were no interruptions in the provision of CNS services in 2012. Therefore, it can be considered that the CNS quality objective was fulfilled.	
MET Service	es Quality Objectives:				
4.	Accuracy of aerodrome forecasts (TAF)	As per ICAO Annex 3, Attach- ment B	Yes	The results of performed aerodrome forecasts (TAF) analysis: for LYBT 98.2%, for LYBE 98.5%, for LYVR 98.1%, for LYKV 96.3%, for LYNI 96.6%, for LYUZ 93.5%, for LYPG 97.8%, for LYTV 96.5%, the average value for all airports being 96.9%.	
AIS Service:	s Quality Objectives:				
5.	Quality evaluation Q	≥ 0.77	Yes	Quality evaluation was performed on a sample of 148 data items.The average score for the hereto sample is 0.761.	
TRE Service	s Quality Objectives:				
6.	Realisation of the decision on conducting training at TRE	100%	Yes	The total number of training courses com- pleted was 80 (courses for several groups of candidates or in several phases)	
7.	Realisation of Plans, Programmes and Procedures for all training at TRE	100%	Yes	All training performed at TRE was carried out in compliance with the approved plans, programmes and procedures on training performance, as well as in accordance with the anticipated schedule of performance defined in the plans.	

Table 5: SMATSA IIc's Realisation of Quality Objectives in 2012

No.	Quality Objective	Planned Value	Real- ised	Remark		
FTO Services Quality Objectives:						
8.	Realisation of the planned number of theoretical classes for 2012, for every group of candidates having commenced their training at the SMATSA Aviation Academy.	100%	No	Realisation of the objective was 97%. From the number of 23,206 planned pupil-classes, 22,406 were achieved. Failure to meet the objective was due to 2 candidates abandoning training for personal reasons.		
9.	Realisation of planned theoretical training deadlines for 2012at the SMATSA Aviation Academy.	100%	Yes	All training completion deadlines for all groups who commenced their training were met.		
10.	Realisation of the planned number flying hours for every single course commenced at the SMATSA Aviation Academy in 2012	100%	No	Realisation of the objective was 92%. Of the number of 5,105 planned flight hours, 4,955 were achieved. Failure to meet the objective was due to candidates abandoning training.		
11.	Realisation of the planned flight training completion deadlines at the SMATSA Aviation Academy for 2012	100%	Yes	All training completion dead lines for all the candidates were met.		
CAL Service	s Quality Objectives:					
12.	Realisation of the Flight Inspection Annual Plan	100%	Yes	326 flight inspections were performed as per the annual plan. 3 flight inspections were performed as per new contracts, as well as 13 non-scheduled flight inspections.		
13.	Extension of services provision	One new user	Yes	A new contract on the provision of flight inspection services was concluded with the Albanian ATC.		
MO Service	s Quality Objectives:					
14.	Realisation of the annual air-worthi- ness revalidation for aircraft used at the SMATSA Aviation Academy	100%	No	The realisation of the objective was 91.66%. Theairworthiness revalidation was anticipated on 12 aircraftand was performed for 11 of them. The failure to meet the objective was due to the delayed delivery of the Cessna 310 engine		
15.	Extension of existing contracts with maintenance services users	100%	Yes	All previous contracts with users of aircraft maintenance services are in force.		
16.	Signing and realisation of contracts on the provision of Aircraft Mainte- nance Services	Three new users	Yes	Three new contracts for the provision of aircraft maintenance services were concluded.		
QMS Servic	es Quality Objectives:					
17.	Realisation of the Internal Audits Annual Plan	100%	Yes	31 audits were performed, as planned.		

In the course of 2012, SMATSA IIc commenced preparations for the implementation of management of the environmental protection system with the intention of avoiding, reducing or controlling the harmful impacts of its activities, products or services on the environment, that is, to comply with the ISO 14001:2004 international standard requirements.



## Financial statements

#### Table 6: Income Statement, 2012-2011, in 000 RSD

ITEM	400	AOP	AMO	UNT	
	AUP	2012.	2011.		
A. REVENUES AND EXPENSES FROM ORDINARY OPERATIONS					
I Operating revenues (202+203+204-205+206)	201	8,618,076	8,466,897		
1. Sales	202	8,452,701	8,284,722		
2. Revenues from the use of own products and services	203				
3. Increase in value of products and work in progress	204				
4. Decrease in value of products and work in progress	205				
5. Other operating revenues	206	165,375	182,175		
II Operating expenses (208-212)	207	7,602,965	7,470,449		
1. Purchase cost of sold merchandise	208				
2. Cost of materials	209	214,429	232,564		
3. Cost of salaries, fringe benefits and other personal expenses	210	4,819,391	4,596,696		
4. Depreciation and provisions	211	1,112,610	1,347,182		
5. Other operating expenses	212	1,456,535	1,294,007		
III Operating profit (201-207)	213	1,015,111	996,448		
IV Operating loss (207-201)	214				
V Financial revenues	215	533,180	490,511		
VI Financial expenses	216	1,071,884	579,841		
VII Other revenues	217	152,642	99,403		
VIII Other expenses	218	398,709	382,439		
IX Profit from ordinary activities before taxation (213-214+215-216+217- 218)	219	230,340	624,082		
X Loss from ordinary activities before taxation (214-213-215+216- 217+218)	220				
XI Net profit from discontinued operations	221	16,474			
XII Net loss from discontinued operations	222		42,212		
B. PROFIT BEFORE TAXATION (219-220+221-222)	223	246,814	581,870		
C. LOSS BEFORE TAXATION (220-219+222-221)	224				
D. INCOME TAX					
1. Tax expenses of the period	225	42,530	57,643		
2. Deferred tax expenses of the period	226	203,560	194,924		
3. Deferred tax revenues of the period	227				
E. PERSONAL EARNINGS PAID TO EMPLOYER	228				
F. NET PROFIT (223-224-225-226+227-228)	229	724	329,303		
G. NET LOSS (224-223+225+226-227+228)	230				
H. NET PROFIT ATTRIBUTABLE TO MINOR SHAREHOLDERS	231				
I. NET PROFIT ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY	232				
J. EARNINGS PER SHARE					
1. Basic earnings per share	233				
2. Diminished (diluted) earnings per share	234				

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ITEM		AMOUNT	
ITEM	AOP	2012.	2011.
Assets			
A. FIXED ASSETS (002+003+004+005+009)	001	13,660,828	13,642,393
l Subscribed capital unpaid	002		
II GOODWILL	003		
III Intangible assets	004	22,906	29,719
IV Property, plant, equipment and biological assets (006+007+008)	005	13,637,922	13,612,674
1. Property, plant and equipment	006	13,637,922	13,612,674
2. Investment property	007		
3. Biological assets	008		
V Long term financial investments (010+011)	009		
1. Investments in capital	010		
2. Other long term financial investments	011		
B. CURRENT ASSETS (013+014+015)	012	3,579,918	3,469,992
l Inventories	013	157,301	181,989
II Fixed assets available for sale and assets from discontinued operations	014		
III Short term receivables, investments and cash (016+017+018+019+020)	015	3,422,617	3,288,003
1. Receivables	016	1,360,159	1,279,438
2. Receivables from over-paid income tax	017	16,846	17,539
3. Short-term financial investments	018		
4. Cash and cash equivalents	019	1,924,221	1,805,027
5. Value Add Tax and prepayments and accrued income	020	121,391	185,999
C. DEFERRED TAX ASSETS	021	825	
D. OPERATING ASSETS (001+012+021)	022	17,241,571	17,112,385
E. LOSS ABOVE EQUITY	023		
F. TOTAL ASSETS (022+023)	024	17,241,571	17,112,385
G. OFF-BALANCE SHEET ASSETS	025	111,473	46,531

Table 7: Assets, 2012-2011, in 000 RSD

#### Table 8: Equity and Liabilities, 2012-2011, in 000 RSD

ITEM	AOP	AMOUNT	
		2012.	2011.
EQUITY AND LIABILITIES			
A. EQUITY (102+103+104+105+106-107+108-109-110)	101	9,121,926	9,116,729
IOwners' equity	102	1,873,820	1,873,820
II Subscribed capital unpaid	103		
III Reserves	104	507,044	507,044
IV Revaluation reserves	105	3,062,580	3,058,107
V Unreleased gains on securities	106		
VI Unreleased losses on securities	107		
VII Retained earnings	108	3,678,482	3,677,758
VIII Loss	109		
IX Repurchased own shares	110		
B. LONG TERM PROVISIONS AND LIABILITIES (112+113+116)	111	7,611,727	7,692,913
I Long term provisions	112	627,684	665,307
ll Long term liabilities (114 + 115)	113	5,237,610	5,161,896
1. Long term loans	114	5,237,610	5,161,896
2. Other long term liabilities	115		
III Short term liabilities (117+118+119+120+121+122)	116	1,746,433	1,865,710
1. Short term financial liabilities	117	827,780	626,444
2. Liabilities from assets available for sale and assets from discontinued operations	118		
3. Liabilities from business activities	119	248,103	569,088
4. Other short term liabilities	120	654,045	655,340
5. Liabilities for Value Added Tax and public revenues and accruals and deferred income	121	11,701	8,302
6. Liabilities for Corporate Income Tax	122	4,804	6,536
C. DEFERRED TAX LIABILITIES	123	507,918	302,743
D. TOTAL EQUITY AND LIABILITIES (101+111+123)	124	17,241,571	17,112,385
E. OFF-BALANCE SHEET LIABILITIES	125	111,473	46,531

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#### Table 9: Cash Flow Statement, 2012-2011, in 000 RSD

17714	400	AMOUNT	
IIEM	AOP	2012	2011
A. CASH FLOW FROM OPERATING ACTIVITIES			
I Cash inflows from operating activities (1-3)	301	8,753,758	8,760,929
1. Sales and received advances	302	8,148,528	8,177,955
2. Interest received from operating activities	303	6,325	8,484
3. Other inflow from ordinary operations	304	598,905	574,490
II Cash outflow from operating activities (1-5)	305	7,329,032	6,654,929
1. Payments to suppliers and prepayments	306	2,289,372	1,830,364
2. Salaries, fringe benefits and other personal expenses	307	4,785,004	4,587,426
3. Interest paid	308	193,547	114,009
4. Income tax	309	61,109	123,130
5. Payments of other public revenues	310	-	-
III Net cash inflow from operating activities (I - II)	311	1,424,726	2,106,000
IV Net cash outflow from operating activities (II - I)	312		
B. CASH FLOW FROM INVESTMENT ACTIVITIES			
I Cash inflows from investments activity (1-5)	313	-	9
1. Disposal of shares and stakes (net inflows)	314		
2. Disposal of intangible assets, property, plant, equipment and biologi- cal assets	315		9
3. Other financial investments (net inflows)	316		
4. Interest received from investments activities	317		
5. Dividends received	318		
II Cash outflow from investment activities (1-3)	319	1,145,440	958,915
1. Acquisition of shares and stakes (net outflows)	320		
<ol><li>Acquisition of intangible assets, property, plant, equipment and biological assets</li></ol>	321	1,145,440	958,915
3. Other financial investments (net outflow)	322		
III Net cash inflow from investment activities (I - II)	323		
IV Net cash outflow from investment activities (II - I)	324	1,145,440	958,906
C. CASH FLOWS FROM FINANCING ACTIVITIES			
I Cash inflows from investment activities (1-3)	325	476,978	50,703
1. Initial capital increase	326		
2. Long term and short term loans (net inflows)	327	476,978	50,703
3. Other long term and short term liabilities	328		
II Cash outflow from financing activities (1-4)	329	654,109	413,770
1. Repurchased own shares and stakes	330		
2. Long term and short term loans and other liabilities (net outflows)	331	654,109	413,770
3. Financial leasing	332		
4. Dividends paid	333		

ITEM	100	AMOUNT	
II EM	AOP	2012	2011
III Net cash inflow from financing activities (I - II)	334		
IV Net cash outflow from financing activities (II - I)	335	177,131	363,067
D. TOTAL CASH INFLOW (301+313+325)	336	9,230,736	8,811,641
E. TOTAL CASH OUTFLOW (305+319+329)	337	9,128,581	8,027,614
F. NET CASH INFLOW (336-337)	338	102,155	784,027
G. NET CASH OUTFLOW (337-336)	339		
H. OPENING CASH BALANCE OF THE ACCOUNTING PERIOD	340	1,805,027	907,720
I. POSITIVE FOREIGN EXCHANGE DIFFERENCES FROM TRANSLATION OF CASH	341	230,851	428,989
J. NEGATIVE FOREIGN EXCHANGE DIFFERENCE FROM TRANSLATION OF CASH	342	213,812	315,709
J. CLOSING CASH BALANCE OF THE ACCOUNTING PERIOD (338 - 339 + 340 +341 - 342)	343	1,924,221	1,805,027

#### **15.1 Notes to Financial Statements**

#### **15.1.1 Basis for Preparation of Financial Statements**

The preparation of SMATSA IIc's financial statements for the accounting period ending on 31st December 2012, was carried out, in all materially significant respects, in accordance with the Accounting and Auditing Law ("The Official Gazette of the Republic of Serbia", No. 46/2006 and 111/2009) which implies using International Accounting Standards (IAS), as well as International Financial Reporting Standards (IFRS), and in accordance with the regulations issued by the Ministry of Finance of the Republic of Serbia. Taking in consideration these two regulations, the hereto financial statements deviate from the IFRS in the following regard:

- The "off-balance sheet equity and liabilities" are shown in the balance sheet form. As per the IFRS definition, the hereto items represent neither equity nor liabilities.
- SMATSA IIc has prepared these financial statements in the form prescribed by the Ministry of Finance being not in compliance with the IAS -1 requirements "Financial Statements Layout".
- Previous years' errors are not reflected on the financial statements for 2011, but have been recorded in groups 59 and 69 in the financial statements for 2012.

The financial statements are presented in Dinars (RSD), which is SMATSA IIc's functional and reporting currency, and the reports are given in thousands of dinars. The foreign currency transactions have been calculated in RSD using the exchange rates valid on the date of the transactions or subsequent revaluation of the items. Foreign exchange gains and losses resulting from the settlement of such transactions and from the conversion of monetary assets and liabilities denominated in foreign currencies at end of the year are recognised in the income statement. The foreign exchange gains and losses relating to loan liabilities and cash and cash equivalents are presented in the income statement within the financial revenues item or within the financial expenses item.

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#### **15.1.2 Summary of Significant Accounting Policies**

#### **Intangible Assets**

Intangible assets are non-monetary assets without physical substance, the future benefits of which are expected to flow to the entity (in a period longer than one year).

An intangible asset is recognised and is subject to amortisation if the asset meets the recognition criteria prescribed by IAS 38 (Intangible Assets), has a useful life that exceeds the period of one year, and the individual purchase price, when acquired, is higher than the average gross income per employee in the Republic of Serbia, according to the latest data made available by the Statistical Office of the Republic of Serbia. An intangible asset is initially measured (recognised) at cost value or cost price. After the initial recognition, an intangible asset is measured at cost less any accumulated depreciation.

Intangible assets subject to amortisation are amortised using the straight-line method over the course of five years, except for assets whose life is determined by a contract, in which case they are written off within the terms specified in the contract. The amortisation of an intangible asset is calculated as of the beginning of the month following the month that the intangible asset was put into use. The basis of the amortisation calculation is the cost value less the residual value with the written-down value for accumulated amortisation and total loss due to impairment.

Intangible assets' additional charges, after their purchase or life-end, increase the intangible asset's value if the asset meets the recognition criteria for fixed assets, i.e. has a useful life that exceeds the period of one year and if the additional charges value is higher than the average gross income per employee in the Republic of Serbia, according to the latest data made available by the Statistical Office of the Republic of Serbia. The purchase price is adjusted according to the additional charges increasing the value of the intangible asset. The base amortisation rates pertaining to individual intangible assets are the following:

Table 10: Base Amortisation Rates for Intangible Assets

ltem	Amortisation rates
Licences and application programmes	20 - 33.33 %
Other intangible assets	20 - 33.33 %

#### Property, Plant and Equipment

A tangible asset is recognised as property, plant and equipment and is subject to depreciation if it meets the recognised criteria prescribed by the IAS 16 (Property, Plant and Equipment), has a useful life that exceeds the period of one year, and the individual purchase price when acquired is higher than the average gross income per employee in the Republic of Serbia, according to the latest data made available by the Statistical Office of the Republic of Serbia.

Property, plant and equipment are depreciated using the straight-line method, as of the date of the asset being made available for use. The base amortisation rates pertaining to individual property, plant and equipment are given in the following table:

Table 11: Base Amortisation Rates for Property, Plant and Equipment

ltem	Amortisation rates
Buildings	2 - 20 %
Equipment	6.67 – 50 %
Vehicles	12 – 50 %
Computer equipment	16.67 – 50 %
Furniture	10 – 50 %
Other equipment	8.33 – 50 %
Investments in other entity's equipment	20 %

Investments in other entity's assets are depreciated based on their estimated utilisation lives. Property, plant and equipment are not accounted into the balance sheet after their alienation or when the asset is permanently withdrawn from use and when no further economic benefit is expected from its alienation.

#### **Tools and Accessories**

It is mandatory that tools and accessories with utilisation lives shorter than one year, are accounted for as current assets (as inventories), regardless of their cost value. These assets are not depreciated, but their value is transferred to expenses when they are put into use.

#### **Spare Parts**

Spare parts are recognised as fixed assets if their utilisation life exceeds the period of one year, and their individual purchase price, when acquired, is higher than the average gross income per employee in the Republic of Serbia, according to the latest data made available by the Statistical Office of the Republic of Serbia. Such spare parts, upon being installed, increase the book value of the assets they have been installed in. Spare parts, which do not satisfy the conditions from Paragraph 1 of this Article, upon being installed, shall be given as an operating cost.

#### Inventories

Inventories are accounted according to IAS 2 (Inventories). Inventories are assets in the form of materials or supplies to be consumed in the production process, or in the course of rendering services. Inventories include raw materials and consumables, which shall be consumed in the production process, or in the course of rendering services. Materials purchased from suppliers are measured by the lower of the two – either purchase cost value or cost price of inventories comprises all costs of a purchase, and other costs incurred in bringing the inventories to their present location and condition.

#### **Short-term Receivables and Investments**

Short-term receivables comprise domestic and foreign trade receivables for the sale of goods and services rendered. Short-term investments comprise loans, securities and other short-term investments having the date of maturity or sale as one year from the balance sheet date. Short-term accounts receivable are measured by their original invoice value. If the invoice value is denominated in a foreign currency, the value is calculated into the statement currency at the average exchange rate on the date of the transaction. Changes in the exchange rate from the transaction date to the receivables collection date are presented as exchange rate gains and losses and credited to revenues, or charged against expenses.

#### **Cash and Cash Equivalents**

Cash and cash equivalents comprise a part of the current (operating) assets of a legal entity, which are measured by nominal, i.e. fair value, in accordance with the IAS 39 (Financial Instruments: Recognition and Measurement) and other relevant standards, the IAS 32 (Financial Instruments Presentation) and the IAS 7 (Cash Flow Statements).Cash and cash equivalents comprise: cash in hand, demand deposits, other short-term highly liquid investments with an original maturity period of up to three months, or shorter (cheques and bills received for collection, current investments in securities) and bank overdrafts. In the balance sheet, bank overdrafts are included in borrowing liabilities, within current liabilities.

#### **Initial Capital**

Initial capital is the initial investment of the SMATSA IIc founders. The founders of SMATSA IIc are the Republic of Serbia (92%) and Montenegro (8%). Firstly, initial capital is disclosed in the amount of initial investment in the SMATSA IIc (i.e. it consists of paid-in capital and issued unpaid capital). Changes to initial capital are performed solely in accordance with the prescribed rules of the Law on Business Associations, and all these initial capital changes are registered in the relevant Register. Although the initial capital value is disclosed in the Register in Euros, the initial capital value disclosed in Dinars does not vary as per Euro exchange rate changes.

#### **Statutory Reserves**

SMATSA IIc has a mandatory provision formed from the retained earnings until the hereto provision reaches at least 10 percent of the initial capital, as governed by SMATSA IIc's Articles of Association.

#### **Revaluation Reserves**

Revaluation reserves comprise the positive effects of changes in the fair value of the property, plant, equipment, intangible assets and other financial instruments.

#### **Retained Earnings**

Retained earnings are recorded as the previous years' retained earnings and current year's retained earnings.

#### **Provisions**

LLong-term provisions comprise warranty provisions, provisions for retained caution money and deposits, provisions for company restructuring, provisions for employee benefits, IAS 19 (Employee Benefits), and other long-term provisions for the covering of liabilities (legal or actual), that have arisen as a result of past events, which are likely to cause an outflow of economic benefit resources, all for the purpose of their settlement, and which may be reliably measured (e.g. ongoing litigations), as well as provisions for issued guarantees, and other forms of surety.

#### Liabilities

A liability is any obligation which is a contractual obligation:

- Transfer of cash or any other financial asset to another company, or
- Exchange of financial instruments with another company under potentially unfavourable conditions.

#### **Deferred Income Tax**

Tax expenses for the period comprise current and deferred taxes. The tax is recognised in the income statement, except for the value pertaining to the items directly recognised in the equity. In that case, the tax is recognised in the equity as well.

Current income tax is calculated on the date of the income statement based on the valid statutory tax regulation of the Republic of Serbia where SMATSA LIc operates and generates a taxable income. Deferred tax is calculated in the full amount using the liability method for temporary differences arising between the assets and liabilities tax basis and the book value entered in financial statements. However, if deferred income tax, provided it has not been accounted for, arises from the initial recognition of an asset or liability in a transaction other than a business combination, which, at the time of the transaction, affects neither the accounting nor the taxable profit or loss, then the deferred tax is not accounted for.

#### **Revenues and Expenses**

Revenues comprise revenues from the ordinary course of SMATSA IIc's activities, and gains. Revenues from the ordinary course of activities are revenues gained from rendering services in air traffic, revenues from subsidies, grants, compensations and recovery of duties based on the sale of services, and other revenues calculated in the accounting document, irrespective of their payment time.

Gains represent other items qualifying as revenues, and may arise, though not necessarily, from the ordinary course of SMATSA IIc's activities. Gains represent an increase in economic benefit, and as such are no different in nature from revenues. Gains include gains on disposal of long-term assets, unrealised gains; e.g. those resulting from an increase in the book value of long-term assets. Gains are recognised on a net basis, after being reduced for the respective expenses.

Expenses comprise costs arising from the ordinary course of SMATSA IIc's activities, and losses. Costs arising from the ordinary course of SMATSA IIc's activities comprise expenses of direct materials and goods, and other operating expenses, irrespective of the payment date.

Losses represent other items gualifying as expenses, and may arise, though not necessarily, from the ordinary course of SMATSA IIc's activities. Losses represent reduction in economic benefits, and as such are no different in nature from other expenses.

#### **Interest and Other Borrowing Costs**

The interest and other borrowing costs of SMATSA IIc are accounted for as per the basic procedure in accordance with the IAS 23 (Borrowing Costs).

#### **Subsequent Errors**

Subsequent material errors are corrected through the account of retained earnings from previous years, that is, through the retained losses from previous years, in the manner established by the IAS 8 (Accounting Policies, Changes in Accounting Estimates and Errors). A material error is an error which individually, or cumulatively with other errors, exceeds three percent of total revenues. Subsequent errors that are not material are restated for correction against expenses, or, in favour of revenues in the period when identified.




## INDEPENDENT AUDITOR'S REPORT

## TO THE SUPERVISORY BOARD AND THE FOUNDERS OF SERBIA AND MONTENEGRO AIR TRAFFIC SERVICES SMATSA LLC BELGRADE

We have audited the accompanying financial statements of SERBIA AND MONTENEGRO AIR TRAFFIC SERVICES SMATSA LLC Belgrade (hereinafter: the "Company") which comprise the balance sheet as at December 31, 2012 and the related income statement, statement of changes in capital and cash flow statement for the year then ended, and notes to the financial statements.

## Management's Responsibility for the Financial Statements

The Management of the Company is responsible for the preparation and the relevant disclosure of these financial statements in accordance with International Financial Reporting Standards, as well as for those internal controls determined by the Management as necessary for the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

## Auditor's Responsibility

Our responsibility is to express an opinion on the subject financial statements based on our audit. We conducted our audit in accordance with the International Standards on Auditing and the Law on Accounting and Auditing of the Republic of Serbia. Those standards require that we comply with ethical requirements and that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. Making those risk assessments, the auditor considers internal controls relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the overall presentation of the financial statements.







ACS	Area Control Surveillance
AFTN	Aeronautical Fixed Telecommunication Network
AIP	Aeronautical Information Publication
AIS	Aeronautical Information Services
AMHS	Aeronautical Message Handling System
AMO	Aerodrome Meteorological Offices
ANS	Air Navigation Services
ANSP	Air Navigation Service Provider
ARTAS	ATM Surveillance Tracker and Server
ATCC	Air Traffic Control Centre
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
ATPL	Airline Transport Pilot License
AWS	Automatic Weather System
BO	Board of Directors
CANSO	Civil Air Navigation Services Organization
CDA	Continuous Decision Approach
CDO	Continuous Descent Operations
CNS	Communication, Navigation and Surveillance
CPL	Commercial Pilot License
CRCO	Central Route Charges Office
DME	Distance Measuring Equipment
DPS	Data Processing System
DVRPS	Digital Voice Recording and Playback System
EAD	European AIS Database
EANPG	European Air Navigation Planning Group
EASA	European Aviation Safety Agency
ECAC	European Civil Aviation Conference
Eurocontrol	European Organization for the Safety of Air Navigation
FAA	Federal Aviation Administration
FAF	Final Approach Fix
FAMUS	Future ATM Modernization and Upgrade System
FI	Flight Instructor
FIR	Flight Information Region
FL	Flight Level
IACA	International Air Carrier Association

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ICAO	International Civil Aviation Organization
ICT	Information and Communications Technology
IF	Intermediate Approach Fix
IFR	Instrument Flight Rules
ILS	Instrument Landing System
ISO	International Organization for Standardization
LOA	Letter of Agreement
LSSIP	Local Single Sky Implementation Plan
MET	Meteorology or Meteorological
MSSR	Monopulse Secondary Surveillance System
MWO	Meteorological Watch Office
NDB	Non Directional Radio Beacon
OLDI	On-Line Data Interchange
PANS OPS	Procedures for Air Navigation Services
PAPI	Precision Approach Path Indicator
P-RNAV	Precision Area Navigation
PSR	Primary Surveillance Radar
SES	Single European Sky
SMATSA	Serbia and Montenegro Air Traffic Services SMATSA IIc
SGS	SociétéGénérale de Surveillance
SSR	Secondary Surveillance Radar
TRS	Time Reference Signal
UHF	Ultra High Frequency
UIR	Upper Information Region
UPS	Uninterruptible Power Supply
VCS	Voice Communication System
VFR	Visual Flight Rules
VHF	Very High Frequency
VOR	VHF Omnidirectional Radio Range
ADC	Aerodrome Control
CAA	Civil Aviation Agency of Montenegro
AMC	Aeronautical Meteorological Centre
CAD	Civil Aviation Directorate of the Republic of Serbia
NAV	Aids Ground Navigational Aids
RWY	Runway
ТМС	Terminal Control





