

SERBIA AND MONTENEGRO AIR TRAFFIC SERVICES SMATSA LLC BELGRADE

BUSINESS REPORT FOR 2022





BUSINESS REPORT FOR 2022

CONTENTS

| 1 | Foreword by the CEO | 7 |
|-----|---|----|
| 2 | About Serbia and Montenegro Air Traffic Services | 10 |
| 2.1 | Organization Profile | 10 |
| 2.2 | ATM / ANS Services and Functions | 10 |
| 2.3 | Additional Services | 11 |
| 3 | Overview of 2022 In Figures | 13 |
| 3.1 | Traffic Data in SMATSA IIc Airspace Jurisdiction | 13 |
| 3.2 | Employees Structure in 2022 | 20 |
| 4 | Important Business Results in 2022 | 22 |
| 4.1 | Improvement of Air Navigation Services Management | 22 |
| | 4.1.1 Improvements in the Field of ATM | 23 |
| | 4.1.2 Improvement of Equipment, Systems and Infrastructure | 25 |
| | 4.1.3 Improvement of AIS Services | 26 |
| | 4.1.4 Improvement of MET Services | 28 |
| 4.2 | Improvement of Cooperation with Relevant Organizations, Regulatory Bodies, and State Authorities | 29 |
| 4.3 | Development of Competitive Commercial Services | 29 |
| | 4.3.1 Airborne GRNS Calibration | 30 |
| | 4.3.2 ANS Personnel Training Centre | 31 |
| 4.4 | Improvement of Corporate Social Responsibility and Environmental Protection | 34 |
| 4.5 | Improvement of the Safety Management System | 35 |
| 4.6 | Improvement of the Organizational Performance and Resource Management System | 35 |
| 4.7 | Development and Improvement of Human Potential | 36 |
| 4.8 | Business Performance Indicators | 37 |
| | 4.8.1 Operational Compliance with SES Performance Scheme | 37 |
| | 4.8.2 Indicators of the Quality of Services Provided | 48 |
| | 4.8.3 Additional Performance Indicators | 50 |



| 5 | Information Technology | 53 |
|------|--|----|
| 6 | Consultations with Service Users | 56 |
| 6.1 | Air Traffic Management – ATM | 56 |
| 6.2 | Aeronautical Information Services – AIS | 57 |
| 6.3 | Aeronautical Meteorological Services - MET | 58 |
| 6.4 | Airborne GRNS Calibration | 58 |
| 7 | Financial Statements | 61 |
| 7.1 | Income Statement | 61 |
| | 7.1.1 Business Revenue | 62 |
| | 7.1.2 Business and Other Expenses | 63 |
| 7.2 | Balance Sheet | 65 |
| 7.3 | Cash Flow Report | 68 |
| 8 | Non-Financial Reporting | 72 |
| 8.1 | Policies Applied within SMATSA IIc | 74 |
| | 8.1.1 Established Policies within SMATSA IIc | 74 |
| | 8.1.2 Human Resources | 75 |
| | 8.1.3 Risk Management | 75 |
| | 8.1.4 Environmental Protection | 76 |
| 9 | Marks and abbreviations | 78 |
| 10 | Table and Figure Index | 84 |
| 10.1 | Table and Figure Index | 84 |
| 10.2 | Image index | 85 |
| 11 | Appendices | 86 |
| 11.1 | Appendix 1 – Organizational structure of SMATSA IIc | 86 |
| 11.2 | Appendix 2 – Decision of the EUROCONTROL Enlarged Committee no. 21/170 of 25.11.2021. | 87 |







Foreword by the CEO

I use this opportunity to confirm our belief, stated in the final part of the Business Report for 2021, that 2022 will bring better results and much more optimism.

For *SMATSA* llc, the year 2022 will be remembered as the year of full recovery of air traffic, after *COVID-19* virus pandemic. Recovery of the air traffic as well as additional traffic rerouting from unavailable zones, due to war actions in Ukraine, resulted with the record of 775 000 *IFR* flights in the airspace of *SMATSA* llc jurisdiction. Referring air traffic control services provision, summer season 2022 was extremely demanding, especially burdened with a lot of days with bad weather conditions, that have not been recorded until now. In spite of the afore mentioned, the recorded volume of the traffic confirms that the users consider *SMATSA* llc as reliable and preferable services provider.

We achieved excellent financial results, marked in high level of business incomes and net financial results. The measures taken to preserve the company's financial stability and streamline operations, applied in the previous years as the answer to negative financial movements during pandemic *COVID-19*, have brought results. The net Company's debt has been decreased and at the same time the level of the investments continues to follow operational needs of the Company.

Realization of SUSAN Program modernization has been continued.

At the end of 2022 we started with the air traffic control services provision from the new Control Tower at the Belgrade Airport Nikola Tesla. The simulator and test system of the main flight data processing system *FAMUS TopSky-ATC*, have been put in operation in the Annex of the Air Traffic Control Centre Beograd.





The project of the upgrade of the *FAMUS TopSky-ATC* (*Step 2*) software system was completed and new software tools for air traffic control services provision were put in operation. Activities on the construction of the Besna kobila radar station have been continued. The project of SMATSA IP communication network establishment is in its final phase. The Project and accompanying documents for other current projects, planned within SUSAN Program, have been completed, so that we expect opening of the procurement procedures in the next period.

In the second half of the 2022, we establish foundation for the new, ten years cycle of *SMATSA* IIc strategic planning and adaptation to the circumstances, which are in the next years envisaged by new *SES 2+* regulation, already is in progress.

In the course of 2022, coordination and preparations for the enlargement of the free route airspace planning project were intensified (*Southeast Common Sky Ini-tiative Free Route Airspace – SECSI FRA*) by integration with Italian airspace of free route airspace planning (*FRA IT*). The realization of the project will be finished in 2024.

In the course of the last year our resources were significantly engaged on the activities referring concession at the Airport Nikola Tesla in Belgrade, especially on the activities meant to enable new runway operation. Procedures for instrument flying for new runway had been developed, meteorological and navigation equipment at the airport had been upgraded, CNS infrastructure has been adapted to the new circumstances.

SMATSA IIc recognizes human potential as the most important resource therefore remains devoted to training of the air traffic controllers by conducting dual study model, together with Belgrade Aviation Academy, keeping the option of study for aviation-operational personnel in its own Training Centre in compliance with requirements.

SMATSA IIc experts had successful cooperation with competent state bodies referring development of the new regulations, and through regular audits of the supervisory bodies of the Republic of Serbia and the State of Montenegro, high level of compliance with regulations, based on EU directives, had been confirmed.

I would like to thank all employees, management and managing bodies, without whose engagement we would not be able to accomplish these results.

Predrag Jovanovic CEO, Serbia and Montenegro Air Traffic Services SMATSA IIc Belgrade



About Serbia and Montenegro Air Traffic Services

2.1 Organization Profile

The Serbia and Montenegro Air Traffic Services SMATSA IIc Belgrade provides ATM / ANS services and functions in the airspace of its jurisdiction and performs other related activities, directly and indirectly in support of providing these services and functions.

The founders of SMATSA IIc are the Governments of the Republic of Serbia and the State of Montenegro.

After the conclusion of the Agreement on cooperation in the field of air traffic between the Republic of Serbia and the State of Montenegro, in 2012, the agreement signed by both governments confirmed the continuity of the existence of a joint service provider in air navigation – SMATSA IIc.

SMATSA IIc provides services and conducts all activities in full compliance with national and international regulations and international agreements. In addition, in compliance with its jurisdiction and authorities, SMATSA IIc keeps interest of its founders in relevant international aviation organizations and actively participates in the work of aviation forums and associations.

2.2 ATM / ANS Services and Functions

The main activity of SMATSA llc is the provision of ATM / ANS services and functions which include the following:

• Air Navigation Services (ANS):

- Air Traffic Services (ATS);
- Aeronautical Meteorological Services (AMS);
- Aeronautical Information Services (AIS);
- Communication, Navigation, and Surveillance (CNS);
- Air Traffic Management (ATM):
 - Air Traffic Services (ATS);
 - Airspace Management (ASM) function;
 - Air Traffic Flow Management (ATFM) function.

 Flight Procedure Design (FPD) services.

Area of jurisdiction of SMATSA IIc includes the airspace above:

- 1. Republic of Serbia;
- 2. State of Montenegro;
- 3. International waters in the Adriatic Sea and
- 4. Bosnia and Herzegovina above the narrow strip in the immediate vicinity of the border with the Republic of Serbia and State of Montenegro.





Figure 1. The territory over which SMATSA IIc provides air navigation services

2.3 Additional Services

In addition to ATM / ANS services and functions, SMATSA llc also provides the following services:

- 1. Air Navigation Service Personnel training (TRE), including ATCO, CNS and MET training;
- 2. Airborne GRNS and system calibration (CAL) services, and
- 3. Ensuring the continuous airworthiness of aircraft (CAMO) and aircraft maintenance (MO).







Overview of 2022 In Figures

In the airspace of the SMATSA IIc jurisdiction, in 2022, around 770 000 IFR flights were realized, which is an increase of 64% compared to 2021 (an increase of 2% compared to 2019, as a last reference year before the pandemic Covid-19). Republic of Serbia and State of Montenegro are the rare states in Europe in which airspace the recovery of the air traffic has been recorded in 2022, i.e., an increase compared to period before the pandemic Covid-19. Conflict in Ukraine i.e., closing of Ukraine's airspace and parts of Ukraine's neighbouring states' airspaces, as well as rerouting of the traffic towards the airspace of the region to which the airspace under SMATSA IIc jurisdiction belongs, have the influence as well, on the increase of the number of the flights in the airspace of the SMATSA IIc jurisdiction. In the summer season 2022, peak day with the biggest number of IFR flights (3 400) is recorded, and during the peak hour in the season, 241 IFR flights were realized.

3.1 Traffic Data in SMATSA IIc Airspace Jurisdiction



Figure 2. Total number of IFR flights in the period from 2013 until 2022





Figure 3. Number of IFR overflights and take-offs / landings in the period from 2013 to 2022







Distribution of IFR flights in 2022



Figure 5.

Peak day and peak hour in the period from 2013 until 2022



Figure 6. Breakdown of respective aircraft types shares in 2022





Number of IFR take-offs and landings by airports in the period from 2013 to 2022



Figure 8. Traffic distribution by airports in 2022





Figure 9.

Number of IFR flights in the airspace under SMATSA IIc jurisdiction per country of takeoff / landing in 2021 and 2022¹







Figure 10. Number of chargeable service units in the period from 2013 to 2022



Figure 11.

Average flight length and average MTOW² in FIR Belgrade in the period from 2017 to 2022

² Maximum take-off weight





Figure 12. Global Unit Rate in 2022

19



3.2 Employees Structure in 2022

There were no significant changes of the SMATSA IIc employees structure compared to the previous years.

The following figures show the structure of employees at the end of 2022 according to gender, qualification groups and age structure.



20





Important Business Results in 2022

4.1 Improvement of Air Navigation Services Management

The implementation of planned activities in the key areas of air traffic control – ATM, CNS, MET and AIS and constant investment in the improvement of the system for providing services in air navigation, made it possible to maintain the safety and efficiency of air traffic services provision at the highest level. In the course of 2022 SMATSA IIc continued to implement activities aimed at improving the quality of services in air navigation and in order to adapt to the circumstances which will, in the following years, influence on the operation of the air navigation services providers in the European airspace (SES 2+ regulation in preparation). In the second half of 2022, foundation for new ten years cycle of SMATSA IIc strategic planning was set and negotiation with ATM system manufacturer was initiated, referring the transition to new business model, which implementation is planned starting from 2028.





4.1.1 Improvements in the Field of ATM

In 2022, one of the most important projects was finished within Modernization Project SUSAN – construction of the Air Traffic Control Centre annex with the new AATC Belgrade tower at the Airport Nikola Tesla. Provision of air traffic control services from the new control tower at the Airport Nikola Tesla Belgrade was established in Decembre, 2022.

At the end of 2022 the activities for upgrade of TopSky-ATC system (Step 2) have also been successfully finished. Software upgrade was done by improvement of users flying functionalities, data link function, tracks prediction, as well as adding AMAN functionality and tools for analysis of Safety Nets parameters and TCT functionality (DART tool). Implementation of these functionalities enables TopSky – ATC system for data processing to be in compliance with requirements and planned terms defined in European Commission Regulations EC 716/2014, ATM Master Plan and SESAR DP 2015. With this upgraded software, capacity of air traffic control services provision is significantly increased, meaning that we have more aircraft per hour also enabling SMATSA llc to accept the traffic in the situations when adjacent air traffic controls in the region are not capable to handle that traffic.

In order to upgrade area control centre capacity a new sectorization of ATCC Beograd has been prepared in the course of 2022. After conducting various scenarios simulations, a solution, which operational application is planned for April 2023, was chosen. In compliance with chosen application date, activities referring amendment of the documentation, training and adaption of technical equipment and systems, have been conducted, in order to enable new model application.

In Decembre 2022, the tools for support of the head of the air traffic control shift during the selection of an adequate sector configuration, was put in operation, an upgrade which creates the conditions for covering greater volume of traffic without generating additional delays.

Within the upgrade of civil-military coordination, as well as data exchange, installation of LARA system has been successfully completed, which will be operative at the beginning of the next year.

In cooperation with the representatives of helicopter units of Serbian Arm Forces and General Police Directorate of the Ministry of the Interior, an initiative has been created to introduce PBN helicopter procedures in RS, which comprises designing and applying of: RNP APCH, PinS, RNP 0.3 LLR and STAR/SID procedures. The PBN transition plan for the Republic of Serbia and the PBN transition plan for Montenegro was upgraded.



SMATSA llc experts conducted overall development of the procedures for new inserted runway (BCIR) at Belgrade Airport and adaptation concept for taking off and landing operations at two parallel taxiways. A complete PBN of conventional procedures has also been developed, which is necessary for continuous operations at two runways including optimization and racialization of required procedures, in the manner that will be applicable in the future too, after moving operations to the main runway 12L/30R.

On 8 June 2022, SMATSA IIc was the host to its partners in Free Route Airspace planning (FRA, Free Route Airspace) program, within Southeast Europe Common Sky Initiative (SECSI) – Austro Control (Austria), Slovenia Control (Slovenia), Croatian Air Traffic Control (Croatia), AlbControl (Albania) and M-NAV (Republic of North Macedonia), at which the guidelines for further expansion of free route airspace planning across borders, including airspace of Italy and Hungary / Romania / Bulgaria and further to the south, were established.

Partners of SECSI initiative confirmed their unity and decisiveness for constant improvement of flying options planning for their users. Planning of shorter distances for flying reduces fuel consumption, affecting the reduction of operating costs as well as lower emission of CO. At the same time this contributes to very ambitious European goals to eliminate poisoned gasses until 2050. SECSI partners continue to mutually find the solutions for challenges such as complicated traffic flows in order to maintain safety at high level, in compliance with safety indicators defined in national and European regulations.



Figure 16. SECSI FRA partners at meeting in Belgrade



4.1.2 Improvement of Equipment, Systems and Infrastructure

One of the main tasks of SMATSA IIc is implementation of new technologies in compliance with Single European Sky requirements, implying constant investment in equipment, systems and infrastructure, as well as qualified personnel necessary for realization of these tasks.

The first phase of procurement and implementation of radar system within the project of terminal radar installation for TMA Beograd needs, has been continued during the year and included technical documentation development and compliance and harmonisation with the requirements.

Within the project of radar system (PS-R+SSR) installation at Besna Kobila site, telecommunication connecting with ADC Niš, using DWDM service was provided, also training in the factory was realized and FAT of radar system. In August 2022, Site survey of the Provider's experts was conducted in order to prepare activities for radar systems' installation, which is planned for next year.

Keeping in mind the problems which arose during development of technical documentation for construction of Vrsuta radar station facility, as well as mutual termination of the Contract on long term assets lease on Vrsuta site, the location of the radar system installation was changed, which was initially planned for this location. Based on conducted analysis it was planned that subject radar system will be installed at Koševac site.

At the end of the year Certificate on Final Acceptance of "SMATSA IIC IP Communication Network" project was signed, meaning the formal completion of the project. Migration of all operational services to subject infrastructure, whose architecture enables that, is expected in the course of the next year.

As the result of the plans for the Airport Nikola Tesla (ANT) development as well as SMATSA IIc projects which are closely connected, during 2022, SMATSA IIc and the Concessionaire of the airport conducted permanent coordination of activities in order to achieve compliance referring various questions of interests:

- implementation of new systems and the construction of new facilities and infrastructure,
- protection or relocation of existing infrastructure and
- design of procedures during the execution of works at Airport Nikola Tesla.

Due to construction of new inserted runway, works concerning relocation of infrastructure around existing runway were completed as well as navigation and meteorological systems installation and testing. Additionally, in the course of 2022 transition to the new constructed meteorological station facility was finished.





4.1.3 Improvement of AIS Services



Aeronautical Information Services (AIS) provide the flow of aeronautical information which are necessary for the safe, regular and efficient performance of international and domestic air traffic. Aeronautical data and information are made available to all users for operational usage.

Aeronautical information processes are aligned with international standards and recommended practices contained in the common requirements of the Single European Sky.

In mid-April of the last year, on-line EAD WFM Operations (WFM-OPS) training was held and after that in the middle of the May, in Madrid, AICM / AIXM 5.1 Basic training was also held. Both trainings were organized by GroupEAD (on behalf of EUROCONTROL) and they are designed for AIS / AIM employees. Acquired knowledge from these trainings are prerequisite for continuing on job training on new Static and Dynamic Data (SDD) base. It is planned that participants use acquired knowledge during the transition from existing static data base within EAD – Static Data Operations (SDO) to SDD one and for the operation on new system based on usage of AIXM 5.1 model for aviation data exchange.



On 25 May, in ATCC Belgrade, a meeting was held, referring question of unresolved boundary between Flight Information Region (FIR) Belgrade and Zagreb, as well as SMATSA llc proposal to consider resolving of this question by defining temporary north border between these two FIRs. Representatives of the following took part: Ministry of Defence, Serbian Armed Forces (SAF), (Serbian General Staff, as well as AF and AD Command), MFA (Group for boundaries), MCTI, CAD and SMATSA llc. The meeting was initiated based on the agreement achieved on the meeting held on 31 March, 2022. In the Ministry of Foreign Affairs, in order to discuss the problem of obtaining permission for overflight of state borders for aircraft turn during AFS of the adjacent region in the area of Danube River, at the state border with Croatia.

In mid-October, 2022, in Frankfurt, Germany, two employees from NOTAM Department, attended *International NOTAM Operation Data Provider training* (NO DP) as part of continuation training. GroupEAD and Frequentis AD, provided the training together, since they are licensed to provide training by EUROCONTROL. The participants were introduced to EAD INO DP application capabilities, which is envisaged for processing and publishing of dynamic AIS data – NOTAM.

Certification and Monitoring Training referring aeronautical charts was held from 2nd to 4th November in the organization of EASA, in CAD premisses. The training contained using of ICAO Annex 4 and 15 standards, as well as ICAO Doc 8697 when developing charts and implementing EU regulation 373/2017 and 469/2020.

In the period from 14 to 17 Novembre, the International NOTAM Bureau participated in the exercise which included the simulation of volcanic activity with the eruption of a volcano in Canarias Islands and the contamination of the airspace over most of Europe with volcanic ash – VOLCEX22. The exercise was conducted in the airspace of the Republic of Serbia, Montenegro, as well as in the airspace above the Adriatic Sea outside the territorial waters of Montenegro up to the limits established by international agreements, and it was successfully performed.

At the end of the year, in cooperation with IT sector, the upgrade of EAD system to Release 15 was successfully done. By this upgrade, additional improvement of EAD service is achieved, concerning further addition of missing content in eAIP, by searching documents and alerts of occurred changes. The change is successfully implemented and classified as routine one.

In the second half of 2022, meetings with Belgrade Airport operator, referring implementation of new runway, were held on weekly bases. The representatives of Airport Nikola Tesla Belgrade, Air Serbia and Civil Aviation Directorate were also present. The subject of these meetings was mutual coordination and submission of necessary data for further processing and entering into data base until the end of the year, in order that data would be duly published and usage of new runway and accompanying taxiways enabled.



4.1.4 Improvement of MET Services

In order to maintain a high level of safety, regularity and expediency of air navigation, SMATSA IIc provides aviation meteorological services respecting both national and international standards and regulations.

In the course of 2022, MET services Department participated in Cross Border Convection Forecast Project, i.e., development of harmonised forecast convention EUMETNET CBCF for EUROCONTROL Network Manager's needs as well as for the needs of Area Control Centre SMATSA IIc. The project included 22 providers of MET services. The forecast was issued daily in the season of thunderstorm weather, for the current and the following day.

In order to follow meteorology technology and equipment development, MET representatives visited international fair of meteorological equipment, Meteorological World Expo. The fair took place in Paris, in which around 200 companies participated. During the stay, the information referring new products and technological achievements in this field were gathered from the manufacturers of the meteorological equipment and software.

At the end of the last year, the contract with the manufacturer of IBL software for the purchase of two modules Volumetric 3D Radar Processing & Vertical Profiler Module license and OPMET monitoring, as well as one test client working station, was successfully concluded and performed. With this investment, application software for weather forecast stations with hardware (IBL system) was upgraded.

In the course of 2022, the function METAR AUTO was successfully implemented at Tivat airport.







4.2 Improvement of Cooperation with Relevant Organizations, Regulatory Bodies, and State Authorities

SMATSA IIc continuously carries out activities aimed at the implementation of policies, appropriate regulations and technological solutions important for the business. That is why SMATSA IIc has been steadily working on improvement of partnership relations and strengthening of the cooperation with relevant organizations and service users.

4.3 Development of Competitive Commercial Services

The development of commercial services within SMATSA IIc, during 2022 was devoted to providing calibration services for the needs of users from the region and beyond.





4.3.1 Airborne GRNS Calibration

SMATSA llc has all the necessary resources, in the form of professional staff and modern equipment, which enable the provision of airborne GRNS calibration, checking of flight procedures, as well as testing services related to the selection of a location for the installation of a new GRNS. For this purpose, a modern Hawker Beechcraft King Air 350 aircraft with built-in calibration equipment (AD-AFIS-260) is used, which SMATSA llc uses for its own needs, but also provides services to external users.

Services are provided in accordance with the requirements and recommendations defined in the documents of the International Civil Aviation Organization (ICAO) - Annex 10, Annex 14 and Doc 8071.

In 2022, regular and non-scheduled calibrations and validations of aerial procedures were carried out based on concluded contracts.

The annual calibration plan by means was 100% achieved. A total of 262 calibrations were carried out, of which 255 calibrations according to the annual plan and 7 non-scheduled calibrations. Out of the total number of calibrations (262), 123 were realized according to contracts with external users.



4.3.2 ANS Personnel Training Centre

ANS Personnel Training Centre is an authorized centre for the education and training of air traffic controllers, CNS and MET personnel. Training programs are aligned with ESARR requirements, national and international regulations, as well as with ICAO standards. ANS Personnel Training Centre (further on TC), in addition to training for its own needs, also provides training services to external users, both organizations and individuals.

The engagement of the theoretical training instructors from TC in lectures within study program of basic applied studies – air traffic control at College of Applied Studies Aviation Academy (further on AA) leads to important increase of load on TC training staff.

The main reason for this is the change of the dynamic of training that TC applied until now. With relatively small number of instructors, TC managed to fulfil all training tasks bearing in mind the fact that the lectures took place in the TC so it was possible to engage same instructor in more than one training (on daily / weekly level).

However, the change of the dynamic of training, which is influenced by study system in AA (as per fixed terms) brought fixed schedule of instructor's engagement from TC on daily (weekly) bases, due to TC's instructors going to lectures in AA, and this was a huge challenge for TC operations during 2022.

In the course of 2022 in ANS Personnel Training Centre more than 100 trainings were conducted, with more than 630 trainees, to whom TC provided relevant service. Compared to 2021, more than 12% training was conducted in TC, with 8.1% higher number of trainees and the assumption is that this number will constantly increase.

The most important trainings for own needs, realized in 2022 in accordance with the Plan for conducting trainings at the ANS Personnel Training Centre, are shown in the following table.



| Table 1. Realization of trainings within the ANS Personnel Training Centre in 2022 | | | | | |
|---|-----------------------------------|-----------------------|--|--|--|
| Name of training | Number of training sessions | Number of trainees | Degree of realiza- tion and details | | |
| Initial Training Basic+Rating Training Training for new/additional Rating | 5 | 62 | 100% of issued Certificates / Confirmations: 77.5% (31 out of max 40) | | |
| Continuation Training | 33 | 168 | 100% | | |
| | | | 100% | | |
| Development Training, Development Training Refresher | 10 | 69 | of issued Certificates / Confirmations: 100% | | |
| | | | (69 out of 69) | | |
| Unit Training | 4 | 20 | 100% | | |
| CNS Staff Training | 3 | 18 | 100% | | |
| MET Staff Training | 5 | 8 | 100% | | |
| Other trainings PVL training for work in the Department for KZA VP; | | | | | |
| AVE for 49 ATCOs class – Group III; Preparation and assessment | 43 | 294 | 100% of issued Certificates / Confirmations: 100% (8 out of max 8) | | |
| by TEA test; • Candidates testing by English language placement test. | | | | | |
| Total | 103 | 639 | 100% of issued Certificates / Confirmations: 92.3% (108 out of max 117) | | |

......



4.3.2.1. Training in Air Traffic Control Operational Units

| Table 2. Training in air traffic control operational units in 2022 | | | | |
|---|--|--|--|--|
| Name of training | Degree of realization and explanation | | | |
| Training to obtain ACS LYBA rating (ATCC Belgrade) | Planned for 10 candidates, conducted – 9, successfully completed – 9. Percentage of success 100%. Transitional training phase (49 class – group III – ACS) Planned for 12 candidates, conducted – 12, successfully completed – 12. Percentage of success 100%. | | | |
| Training to obtain APS-TCL LYBA rating (TMC Belgrade) | Planned for 4 candidates, conducted – 4, successfully completed – 4. Percentage of success 100%. Retraining, planned for 1 ATCO, conducted – 1, suc- cessfully completed – 1. Percentage of success 100%. | | | |
| Training for ADI–GMC/AIR rating (AATC Belgrade) | Planned for 6 candidates, conducted – 6, successfully completed – 3. Percentage of success 50%. | | | |
| Training to obtain ADI–TWR and APP LYKR rating (ADC Kraljevo) | Planned for 5 candidates, conducted – 5, successfully completed – 5. Percentage of success 100%. | | | |
| Training to obtain ADI–TWR LYPG rating (ADC Podgorica) | Planned for 4 candidates, conducted – 4, successfully completed – 4. Percentage of success 100%. | | | |

During the year, meetings with Aviation Academy representatives were held and activities referring studding modules were discussed as well as enrolment of the new class for obtaining air traffic control officer license, according to the new, dual system of studying and activities connected with acceptance of air traffic control officers' passed exams, who are studding and working at the same time.



4.4 Improvement of Corporate Social Responsibility and Environmental Protection

In the course of 2022 recertification of supervision check of the quality management system (QMS) and environmental management system (EMS) was carried out by the team of auditors of the certification house Societe Generale de Surveillance (SGS) from Belgrade. The check was done at the following locations: SMATSA Training Centre (QMS and EMS (system part), ATCO and VTO), ATCC Beograd (ATS, ASM, ATFM, FPD and CNS), SMATSA IIc headquarters (PAR, NAB, LGS and HUM), ADC Batajnica (ATS, CNS, AIS and EMS) and at storage in Krnješevac (EMS). Upon successful audit, the conformity with ISO 9001:2015 and ISO 14001:2015 standards was confirmed and new versions of the certificates were issued.

The year 2022 was marked by several significant activities related to environmental protection.

In 2022, SMATSA llc generated 33.18 tons of waste, of which 27.7 tons were hazardous. SMATSA llc waste management could be considered as one that almost reach level of Zero waste which is given for reuse. The waste generated at the locations in Serbia and Montenegro through authorised operators is directly given to the operators for reuse, that is recycling. An amount of 22.25 tons of waste is given to the operators for depositing and then their task is to transfer the waste for recycling. The amount of the waste that is deposited is 52 kg tons of waste i.e., 0.15% of the total generated waste amount.

According to the information from the meeting of Advisory Committee for Environmental Protection and Social Issues (ESAC) whose members are the representatives of Belgrade Airport, concessioner Airport Nikola Tesla Belgrade, SMATSA IIc, Air Serbia, Ministry of Labour, Employment, Veteran and Social Policy, Ministry of Finance, Civil Aviation Directorate, Surčin Municipality, in the field of noise protection on the Belgrade airport complex in 2022. The following topics were considered:

- The question of the development of the bylaws draft, which will define roles and responsibilities of the main, concerned parties ("Air Serbia", SMATSA IIC, CAD, BA) in the domain of noise protection at the airport and adjacent populated places with particular consideration of the complaints processing, submitted by interested public;
- Data gathering in cooperation with other subjects dealing with environmental protection, data which are necessary for development of Strategic Noise Map for Belgrade Airport until 2024.

Referring non-ionizing radiation effect on environment, emitting from equipment and systems in SMATSA IIc possession at the locations in Montenegro, in the course of 2022, the measurements of the radiation emission have been completed and all necessary measures have been taken to protect professionally exposed persons and environment. Measurements' procedures of non-ionizing radiation from equipment and systems at the location in Serbia, have also been regularly conducted as well as measures for environment protection.



4.5 Improvement of the Safety Management System

In September 2022, as per EU No 2017/373 requirements, SMATSA llc experts took part at the training referring development of Assessment of Changes to the Functional System SAF-CHG-AC-1.

4.6 Improvement of the Organizational Performance and Resource Management System

In 2022, public procurement and the beginning of the project of Digital transformation and development of financial operation system with business processes optimization, have been successfully conducted.

The Project of ERP business solution implementation was given to the domestic company M&I Systems Group from Novi Sad and its aim is whole business digitalization through information system implementation and improvement of business processes from operating to management ones.

Additional value for SMATSA IIc from ERP business solution implementation:

- Implementation of standardization in working process;
- Decrease of mistakes in work;
- Increase of business operation quality at higher level with significantly faster and easier management and monitoring of company's working processes;
- Business process automation through easier usage and understanding of working process.

In order to cover all business processes in stated companies, the following modules (processes) of ERP system are the subject of implementation:

- Accounting and finance;
- Contracts execution and monitoring;
- Invoicing services (Commercial affairs keeping records and management);
- Passive assets management (Including material accounting and passive assets and spare parts storage);
- Finance planning;
- Human resources management;
- Salaries calculation, treasury and business trips records.







In the course of 2022, first two phases of the project for preparation, analysis and design of new ERP system, have been completed, while the completion of the project is planned for next year.

Also in November 2022, a project of "Optimization of central information system for Business Process Management (BPM)" has been initiated. The goal of the project is to establish common business processes data base which will be the foundation for integral and balanced usage of new finance system operation (ERP).

In addition, a lot of effort was put into creating a software solution for planning and monitoring of business operation realization, whose final implementation and commissioning is expected in 2023.

4.7 Development and Improvement of Human Potential

According to the established requirements of the operational units, in the course of 2022, the process of the selection of the candidates' trainees for obtaining license of air traffic control officers and appropriate ratings, (APP Kraljevo and APP Vršac), has been successfully finished. The open competition was conducted in cooperation with College of Applied Studies Aviation Academy, "Aviation Academy", as per Contract on dual model education and business-technical cooperation.

Also, the process of the selection of the candidates – trainees for obtaining license of air traffic control officers and appropriate ratings (APP Podgorica, APP Tivat) and the process of the selection of the candidates – trainees for obtaining license of air traffic control of-


ficers and appropriate ratings (ADI/TWR and APP Kraljevo, ADI / TWR and APP Vršac) have also been successfully finished.

Also, several processes of external regrouting and selection have been conducted for the needs of CNS Sector, ATM, MET and AlS Sector – MET Department and several internal open competitions for TMC Sector.

In the course of 2022, the employees of HUM.10 Department were engaged within study program of basic applied studies – Air Traffic Control at College of Applied Studies Aviation Academy, "Aviation Academy", and trainings conducted in ANS Personnel Training Centre.

Due to significant engagement of the employees of HUM.10 Department in the regrouting, selection and training processes conducted in 2022, all activities referring establishment of employee's career development directions, as well as system for increasing level of employee's satisfaction, have been postponed for 2023 and 2024.

4.8 Business Performance Indicators

4.8.1 Operational Compliance with SES Performance Scheme

4.8.1.1 Safety

The status of the air navigation service provider's safety management system is based on the monitoring of safety indicators (SMS indicators) defined within the Performance Scheme, which is used to evaluate:

- 1. Efficiency of safety management system;
- 2. Level of usage of RAT methodology and
- 3. The level of application of the culture of equity and trust (Just Culture).

Given that the regulation related to the SES Performance Scheme is not yet binding for the Republic of Serbia and Montenegro, the SMS indicators are monitored in order to prepare for the implementation of the regulation into the legal system, which is expected in the coming period.

The level of safety in the SMATSA IIc system is based on the assessment and monitoring of safety indicators, established in different parts of the system, in accordance with the acceptable level of safety defined by the Civil Aviation Directorate of the Republic of Serbia and the Civil Aviation Agency of Montenegro. The values of safety indicators for 2022 are presented in the following tables.



| Table 3. Targeted and accomplished values of SMS indicators at the request of CAD for 2022 | | | | | |
|--|---|---|--|--|--|
| A | group of SMS indicators | Accomplished safety level | | | |
| I.1. | SMS Effectiveness | Management of safety policy and safety objectives; C Management of safety risks; C Safety guarantees; no measurements Improvement of safety; C Just culture; B Signed summary report for the 2022 SoE in SMS Measurement - 01.01.2023. | | | |
| 1.2. | Application of RAT Method- ology | Infringement of safe aircraft separation: RAT C4; ET-AYW/ASL71Y 08.01.2022. RAT B4; WUK1949 11.03.2022. RAT B4; EZS95PH/THY52AY 14.03.2022. RAT A2; VV/YU-BSC 19.04.2022. RAT E4; ASL87B/ASL78U 17.07.2022. RAT C4; AUA796/CXI96XJ 21.07.2022. CNS RAT C4; TopSky-ATC FDP functionality 01.06.2022. | | | |
| 1.3. | Application of Just Culture (Safety Culture) | B Signed summary report for the 2022 SoE in SMS Measurement – 01.01.2023. | | | |
| | | | | | |



| gro | up of ATM impact event severity indi- cators at the SMATSA level | Accomplished and Acceptable safety level |
|--|--|---|
| 1-4 | No. of ATM caused Accidents in FIR Belgrade | Zero (0) ATM-influenced accidents |
| | • | an acceptable value is 0.0017 |
| No. of ATM caused Serious Incidents in | | One (1) serious ATM-influenced accident |
| 1-5 | FIR Belgrade | an acceptable value is 1 Alarm 1 |
| | No. of ATM assured Major Incidents in | One (1) serious ATM-influenced accident |
| I-6 | FIR Belgrade | an acceptable value is 15 Alarm 11 |
| | | Two (2) serious ATM-influenced accident |
| I-7 | Incidents in FIR Belgrade | an acceptable value is 17 Alarm 13 |
| A gro | up of <i>ATM</i> Indicators for monitoring a certain type of event | Accomplished and Acceptable safety level |
| 1.0 | No. of ATM caused RWY / TWY | (1 RWY) (0 TWY) |
| 1-0 | Incursion | 5 |
| | | |
| | | (0) |
| 1-9 | No. of ATM caused RWY Excursion | (0) 5 |
| I-9 | No. of ATM caused RWY Excursion No. of ATM caused Separation | (0) 5 |
| I-9 I-10 | No. of ATM caused RWY Excursion No. of ATM caused Separation Minima Infringement and Inadequate separation <i>caused</i> in the area of inrividuation of ATOO Balanced | (0) 5 (3) |
| I-9 I-10 | No. of ATM caused RWY Excursion No. of ATM caused Separation Minima Infringement and Inadequate separation <i>caused</i> in the area of jurisdiction of ATCC Belgrade (ACC+TER) | (0) 5 (3) 15 |
| I-9 I-10 | No. of ATM caused RWY Excursion No. of ATM caused Separation Minima Infringement and Inadequate separation <i>caused</i> in the area of jurisdiction of ATCC Belgrade (ACC+TER) No. of ATM caused Separation Minima Infringement and | (0) 5 (3) 15 (0) |
| I-9 I-10 I-11 | No. of ATM caused RWY Excursion No. of ATM caused Separation Minima Infringement and Inadequate separation <i>caused</i> in the area of jurisdiction of ATCC Belgrade (ACC+TER) No. of ATM caused Separation Minima Infringement and Inadequate separation, in the area of responsibility of airport ATC | (0) 5 (3) 15 (0) 10 |
| I-9 -10 I-11 | No. of ATM caused RWY Excursion No. of ATM caused Separation Minima Infringement and Inadequate separation <i>caused</i> in the area of jurisdiction of ATCC Belgrade (ACC+TER) No. of ATM caused Separation Minima Infringement and Inadequate separation, in the area of responsibility of airport ATC | (0) 5 (3) 15 (0) 10 (0) |
| I-9 I-10 I-11 | No. of ATM caused RWY Excursion No. of ATM caused Separation Minima Infringement and Inadequate separation <i>caused</i> in the area of jurisdiction of ATCC Belgrade (ACC+TER) No. of ATM caused Separation Minima Infringement and Inadequate separation, in the area of responsibility of airport ATC No. of ATM caused Airspace infringe- ment | (0) 5 (3) 15 (0) 10 (0) 15 |
| I-9 I-10 I-11 | No. of ATM caused RWY Excursion No. of ATM caused Separation Minima Infringement and Inadequate separation <i>caused</i> in the area of jurisdiction of ATCC Belgrade (ACC+TER) No. of ATM caused Separation Minima Infringement and Inadequate separation, in the area of responsibility of airport ATC No. of ATM caused Airspace infringe- ment Other ATM caused events category <i>C</i> | (0) 5 (3) 15 (0) 10 (0) 15 (0) 15 (0) |

2.....



| | Group of CNS indicators (ATM specific events) | Accomplished and <i>Acceptable</i> security level |
|---|---|---|
| | Number of DPS failures (TopSky | 0 breakdowns per year on average |
| 1-14 | system) | <8 events (failures) per year |
| 1_15 | Total duration of outage of SSR radar | the value of the indicator is 4.89 min |
| 1-15 | stations | <500 minutes per year |
| 1-16 | Total duration of PSR radar stations | the value of the indicator is 18.45 min |
| 1-10 | outage | <2000 minutes per year |
| 1_17 | MTBO – mean time between outages | MTB0[h] = 4.378 ³ |
| 1-17 | LLZ ILS 12 (CAT III) | >4 500 hours per year |
| | MTPO mean time between outgoes | MTB0[h] = / |
| I-18 <i>MTBO –</i> mean time between outages <i>LLZ ILSa 30 (CAT I)</i> | | >1 500 hours per year |
| I-19 | The number of losses or degradation of one or more operating frequencies | on average 3.33 service interruptions on an an- nual basis |
| | | <50 events per year |
| Gro | up ASM-ATFCM capacity indicators | Accomplished and Acceptable security level |
| | FUA – Utilization percentage of re- quested airspace allocations (Per- | 82.25% |
| 1-20 | centage of used requests for airspace allocation as compared to their total number) | Values are not prescribed, but the trend is mon- itored |
| | | 0.94199 ⁴ minutes per IFR Movement |
| I-21 | Average Delay per IFR Movement in FIR Belgrade generated by ATM | <0.1 minutes / IFR Movement |

⁴ The reason for this is very unfavorable weather conditions and increase of traffic demands high above STATFOR HIGH forecast, probably due to conflict in Ukraine.

40

³ In the course of 2022, there were two non-typical failures, caused probably by insects (bees) which entered in the antenna and caused inappropriate signal integral monitoring that is why the monitoring system shut down the device. The monitoring antenna in front of antenna system did not detect the change in the signal. Although the system was shut down due to inappropriate monitoring this is still defined as equipment failure. New antennas for LOC will have, so called tropical kit, which will prevent entrance of the insects and reptiles in antenna.



| Table 5. Acceptable and Accomplished safety (process) indicators for the year 2022 as requested by CAA | | | | |
|--|--|--|---|--|
| Events with direct ATM impact (Group of ATM Indicators) | | Accomplished | fulfilled/not fulfilled acceptable safety level | |
| SI.1 | No. of ATM caused Accidents | Zero (0) accidents <i>ATM caused</i> | 0.0029 | |
| SI.2 | No. of ATM caused Serious Incidents | Zero (0) ATM caused Serious Incidents | 2 Alarm 2 | |
| SI.3 | No. of ATM caused Major Incidents | Zero (0) ATM caused Major Incidents | 24 Alarm 18 | |
| | | | | |
| | ATM specific events (Group of CNS indicators) | Accomplished | fulfilled/not fulfilled acceptable safety level | |
| SI.4 | ATM specific events (Group of CNS indicators) Number of losses or degradation of one or more operating frequencies (ground-to-air) | Accomplished 3 service losses on an annual basis | fulfilled/not fulfilled acceptable safety level | |
| SI.4 SI.5 | ATM specific events (Group of CNS indicators) Number of losses or degradation of one or more operating frequencies (ground-to-air) Availability of the monitoring function of the operation of SSR radar stations | Accomplished 3 service losses on an annual basis Koviona – without interruption Murtenica – 57 minutes Koševac – without interruption Srpska Gora – without interruption | fulfilled/not fulfilled acceptable safety level FULFILLED | |
| SI.4 SI.5 SI.5 | ATM specific events (Group of CNS indicators) Number of losses or degradation of one or more operating frequencies (ground-to-air) Availability of the monitoring function of the operation of SSR radar stations Availability of the monitoring function of PSR radar stations | Accomplished 3 service losses on an annual basis Koviona - without interruption Murtenica - 57 minutes Koševac - without interruption Srpska Gora - without interruption Koviona without interruption Murtenica - disconnected Srpska Gora - without interrup- tion | fulfilled/not fulfilled acceptable safety level FULFILLED FULFILLED FULFILLED | |



| SI.7 Availability of navigation function LOC TIV there was no failure - MTBO[h] = / FULFILLER SI.8 Availability of energy systems There was no complete interruption of the power supply to operating devices (Availability 100%) FULFILLER SI.8 Availability of energy systems Laser jamming - 25 Drone distraction - 2 MONITORE SI.9 Endangering the safety (security) of the ATM system Unruly passengers in aircraft - 4 Attempt of facility forceful en- trance - 3 MONITORE | SI.7 | Availability of navigation function LOC 36 <i>(CAT I)</i> on LYPG | there was no failure – MTBO[h] = / | FULFILLED |
|---|------|--|--|-----------|
| SI.8Availability of energy systemsThere was no complete interruption of the power supply to operating devices (Availability 100%)FULFILLERSI.8Availability of energy systemsLaser jamming - 25 Drone distraction - 2Image: Complete Drone distraction - 2SI.9Endangering the safety (security) of the ATM systemUnruly passengers in aircraft - 4 Attempt of facility forceful en- trance - 3MONITORE | SI.7 | Availability of navigation function LOC TIV | there was no failure – MTBO[h] = / | FULFILLED |
| Laser jamming – 25 Laser jamming – 25 Drone distraction – 2 Unruly passengers in aircraft – 4 Attempt of facility forceful en- trance – 3 | SI.8 | Availability of energy systems | There was no complete interruption of the power supply to operating devices (Availability 100%) | FULFILLED |
| (at site ADC Podgorica Locator "GO"/outmarker "OM", village Gostilj – Podgorica on 8.05.2022., 03.06.2022. and 09.06.2022.) | SI.9 | Endangering the safety (security) of the ATM system | Laser jamming – 25 Drone distraction – 2 Unruly passengers in aircraft – 4 Attempt of facility forceful en- trance – 3 (at site ADC Podgorica Locator "GO"/outmarker "OM", village Gostilj – Podgorica on 8.05.2022., 03.06.2022. and 09.06.2022.) | MONITORED |



| Table 6. Acceptable and Accom reque | plished values of risk in ested by CAA for 2022 | dicators of | operations as |
|--|--|------------------|-----------------------|
| Risk | SPI | Current value | Unacceptable value |
| Total Performance - implies a group of indicators that represents the monitoring of the number of accidents and serious incidents with and without the impact of ATM GA – General Aviation CAT – Commercial Air Transport | CAT Fatal Accidents | 0 | >0 |
| | GA Fatal Accidents | 0 | >0 |
| | Para Fatal Accidents | 0 | >0 |
| | CAT Serious Incidents | 0 | >0 |
| | CAT Ground Accidents | 0 | >0 |
| | Un-stabilized approach | 25 | 1 |
| Runway Excursion – | Rejected take off | 0 | 3+ |
| it implies a set of indicators that, as leaders, can lead to the RE event. The above indicators | Deep landing events | 0 | 3+ |
| are monitored primarily due to the specificity of LYTV, the absence of RESA, local weather con- ditions and the like. | Other abnormal runway contact | 0 | 3+ |
| | Adverse weather in approach causing MA | 0 | 1 |
| | Relevant tech: Landing gear / trust reversers / flaps malfunction / brakes | 1 | 3+ |
| | (E)GPWS warning | | |
| | Terrain warning | 0 | |
| | Glide Slope deviation | 0 | 3+ |
| CFIT | Incorrect altimeter settings | 0 | 3+ |
| Control Flight into Terrain | Position/navigation errors | 0 | 3+ |
| | Map / charts / FMS errors | 0 | 3+ |
| | Relevant Tech: e.g., RADALT | 0 | 3+ |
| | Below MSA | 0 | 3+ |
| | Level bust | 0 | 3+ |
| | ACAS/TCAS warning | 0 | |
| MAC Midair Collision | Airspace infringement | | 1 |
| | (Hi Risk) Loss of Separation | 0 | 3+ |

| requested by CAA for 2022 | | | | | |
|---|---|-----------------------|-----------------------|--|--|
| Risk | SPI | Current value | Unacceptable value | | |
| | Overspeed or low speed event | 0 | 1 | | |
| | Turbulence, wake vortex, wind shear, thunderstorm, lightning strike | 0 | Ť | | |
| | Icing, anti-icing | 0 | 3+ | | |
| | Weight and balance errors | 0 | 3+ | | |
| LOC-I Loss of Control - In flight | Flight control system fail- ures | 0 | 3+ | | |
| | Abnormal state of aircraft (attitude, bank, pitch, configuration) | 0 | 3+ | | |
| | Relevant tech: e.g. FCS, technical occurrences | 16 | 3+ | | |
| | Loading errors | 0 | 3+ | | |
| | <i>Bird strike</i> – crash/hit of birds and aircraft | 72 | 1 | | |
| Runway Incursion | Animals on rwy | 10 | 1 | | |
| | Aircraft on rwy | 0 | 3+ | | |
| | Vehicle/person on rwy | 0 | 3+ | | |
| Aircraft Unsafe Environment – | Fire or smoke in the aircraft | 0 | 3+ | | |
| caused by the occurrence of fire and smoke on the aircraft and decompression. | Decompression | 0 | 3+ | | |
| External Interference – | Lasers | 25 | 3+ | | |
| It implies indicators that are monitored in the area of drone operations, laser jamming and the security of information and communication | Drones | 2 | 3+ | | |
| systems. | Cyber security | 0 | 3+ | | |
| ATM technical – It implies events related to failure of technical air traffic control systems. | Occurrences related to CNS | 9 ⁵ | 1 | | |
| GA – General Aviation indicators that are monitored separately from the first set of indicators | Accidents (non-fatal) | 0 | Ť | | |
| Paraglider – indicators that are monitored separately from the first set of indicators | Accidents (non-fatal) | 0 | 1 | | |

compliched volues of risk indicators of an Table 6 A atable a and the

⁵ 2 – TopSky-ATC part in ATI – failure on transmitting;

1 - TAZ NDB ATI fuse;

1 - TopSky-ATC parts in APG and ATI - MFS application on FDP server in ATCC Belgrade;

1 - 118.2MHz APG - connector;

2 - LOC Tivat ATI - Aircraft pilot reports, device in required performances;

1 – TopSky-ATC part in APG – failure at transmitting network in Belgrade and

1 - TopSky-ATC part in APG and other systems and functions - system for continuous energy supply failure.



4.8.1.2 Cost Efficiency

The unit rate for the route charging zone "Serbia-Montenegro-KFOR" for the year 2022 was approved and adopted at the EUROCONTROL's Enlarged Committee session, held in November 2021. By the EUROCONTROL's Enlarged Committee Decision, No 21/170 of 25 November 2021 (Appendix 2), amount of the route charges unit rate at EUR 42.21 (*National Unit Rate*) i.e. EUR 42.43 (*Global Unit Rate*) was determined, which includes the EURO-CONTROL administrative fee.

As last years, in 2022 there was no deviation in the value of the monthly adjusted unit rate, both for the "Serbia-Montenegro-KFOR" charging zone (EUR 42.21), and for the value of the unit rate, which belonged exclusively to SMATSA IIc (34.77 EUR). This is primarily a consequence of the minimal oscillation in the movement of the RSD exchange rate in relation to the EUR in the last year.

4.8.1.3 Capacity

The capacity indicator evaluates the efficiency of service provision in the area of jurisdiction of the service provider in air navigation. Efficiency is evaluated based on the average delay time per IFR flight in FIR Belgrade generated by ATM. The indicator includes all IFR flights in FIR Belgrade, for which the delay generated by the operation of the air navigation service provider is determined. The value of the indicator is calculated from the data on the delay and the total number of flights. The indicator is expressed as an absolute value and is monitored on an annual basis.

Capacity indicators and their acceptable values were defined by the Aviation Authorities of the Republic of Serbia at the national level in the document of the Civil Aviation Directorate of the Republic of Serbia, "Air navigation in the Republic of Serbia, safety and capacity indicators and acceptable safety levels from 2020 until 2025".

The acceptable and accomplished value of the capacity indicator for 2022 is listed in the following table.

| Table 7. Values of capacity indicators in 2022 ⁶ | | | | | |
|---|----------------------------|-----------------------------|--|--|--|
| Capacity indicator | Acceptable value | Accomplished value | | | |
| Average delay time per IFR flight in FIR Belgrade generated by ATM | <0.1 minute/ IFR flight | 0.92 minutes/ IFR flight | | | |

⁶ Data source: European ANS Performance Data Portal (http://ansperformance.eu/).





Figure 17.

Average delay time per IFR flight in FIR Belgrade generated by ATM in the period from 2015 through 2022

The largest number of the traffic regulations in the SMATSA IIc airspace jurisdiction, in 2022, was introduced due to bad weather conditions, which generated 60% of delays. Beside bad weather conditions, one of the reasons for introduction of the air traffic regulation is the increase of traffic demand above forecasted, for which SMATSA IIc had defined its resources.

The reasons for unplanned reschedule of traffic flows and increase of traffic volume was conflict in Ukraine. Airspace of Ukraine was closed, parts of Poland and Moldavia airspace as well and there were mutual restrictions between EU and Russia. The stated reasons brought termination of the traffic flows from Russia to Ukraine towards southwest and increase of the traffic which is avoiding the airspace of Russia on southeast axe, to which the airspace under SMATSA IIc jurisdiction belongs.

Faced with the same problems, Hungarian service provider also introduced traffic regulation that also shift the traffic further to the south into Serbian airspace.

4.8.1.4 Environmental Protection

The assessment of the level of environmental protection is based on the average efficiency of the horizontal flight, indicator recognized in the regulations concerning the Performance Scheme under the Single European Sky Regulation The achieved values of the aforementioned indicators are monitored based on EUROCONTROL – Performance Review Unit (PRU) data.



The target values of the indicators are defined as follows:

 Indicator of deviation of the actual trajectory flight in relation to the long-circuit route (KEA – Key performance Environment indicator based on Actual trajectory). The average horizontal flight efficiency represents a deviation of the actual trajectory flight path of 2,6% in relation to the long-circuit route.



Figure 18. KEA – indicator of deviation of actual trajectory flight in relation to the path along the long-circuit route in Serbia and Montenegro in 2022⁷

2. Indicator of deviation of the path in the last filed flight plan in relation to the long-circuit route (KEP – *Key performance Environment indicator based on last filed flight plan*). The average horizontal flight efficiency represents a deviation of the last submitted flight path of 4.1% in relation to the long-circuit route.



Figure 19. KEP – indicator of deviation of the path in the last submitted flight plan in relation to the path along the long-circuit route in Serbia and Montenegro in 2022⁸

⁷ Data source: European ANS Performance Data Portal (http://ansperformance.eu/).

⁸ Data source: European ANS Performance Data Portal (http://ansperformance.eu/).

4.8.2 Indicators of the Quality of Services Provided

The analysis of the quality objectives of SMATSA IIc is carried out on an annual basis. The results of the analysis of the fulfilment of the quality objectives for 2022 are presented at the meeting of the Management Systems Committee (QMS).

| Table 8. Analysis of the fulfilment of quality objectives for the year 2022 | | | | | | | |
|---|---|--|----------|--|--|--|--|
| Service | Target | Planned | Realized | Details | | | |
| | Average delay per IFR flight generated by SMATSA IIc on an annual basis | Less than 0.0475 minutes | No | According to the source of the EURO- CONTROL NMOC data base in 2022, the average delay per one IFR flight, gen- erated by SMATSA IIc was 0.94199 min- utes. The reasons for these are very unfavourable weather conditions and increase of traffic demand, high above STATFOR HIGH forecast, as well as due to conflicts in Ukraine. The increase of traffic above the level from 2019 was not expected. | | | |
| АТМ | The percentage of aircraft that take off from the airspace of the SMATSA IIc jurisdiction, within the time tolerance of the issued slot | Greater than 83% | Yes | According to the source of the EURO- CONTROL NMOC data base, in 2022 the value of 89.22% of aircraft, that took off from the airspace of the SMATSA llc jurisdiction, within the time tolerance of the issued slot, was achieved, on an annual basis. | | | |
| | The number of seri- ous incidents, which were determined by analysis to have been caused by ATM | Less than 3 (for Serbia) | Yes | As per event database maintained in SAF.00 for the year 2022, it was foun that a total of 757 events were report ed, out of which 15 required further analysis by the SAF 00. department. the same period, one aircraft accider was recorded without the influence of ATM. Six (6) serious incidents occurre in 2022, out of which 1 with the influ- ence of ATM. | | | |
| | | Less than 2 (for Monte- negro) | Yes | | | | |
| CNS | System availability of technical devices and systems with- in the jurisdiction of SMATSA IIc that directly affect the provision of services | A(t) = 99.9%° | Yes | Despite the mentioned exceptions in the deviation from the desired val- ues of system availability for systems under the jurisdiction of SMATSA IIc, and due to the applied individual and group redundancy of CNS devices and systems, during the year 2022, it can be considered that for all devices, sys- tems and services that directly impact the provision of services, the goal of quality in the CNS domain was met. | | | |

48

⁹ Apart from Ponikve location for AFIS Užice needs, where the availability of the technical equipment and systems which are used for provision of AFIS services is 75%.



| Tal | Table 8. Analysis of the fulfilment of quality objectives for the year 2022 | | | | | | |
|---------|---|------------------------|----------|--|--|--|--|
| Service | Target | Planned | Realized | Details | | | |
| | Airport Forecast Ac- curacy (TAF) within desired accuracy as per ICAO Annex 3, Attachment B) | Greater than 80% | Yes | The results of the analysis of the realization of forecasts for the airport (TAF): for LYBT 93.8%, for LYBE 94.3%, for LYVR 91.4%, for LYKV 92.8%, for LYNI 94.7%, for LYPG 96.6%, for LYTV 94.4%, that is, on average for all airports 94.0% which achieved the desired operational accuracy given in ICAO Annex 3, Attachment B. | | | |
| МЕТ | The percentage of successfully trained candidates out of all trainees. | 100% | Yes | All candidates had successfully fin- ished planned trainings. | | | |
| | The percentage of duly submitted MET information in NOC Belgrade, within desirable time of submission of MET information (as per EUR DOC 018, Appendix F) | Greater than 95% | Yes | For all airports, during 2022, quality goal was achieved, as per EUR DOC 018, Appendix F. The average for all airports is METAR (99.58%) and TAF (98.71%). | | | |
| AIS | Data Quality As- sessment (Q) | Greater than 0.8 | Yes | Quality assessment was conducted on a sample of 100 data. The average grade for this sample is 0.993. | | | |
| FDP | Number of published NOTAMs for correction of noticed mistakes on published IFP, caused by FPD staff, in relation to total number of published IFP | Less than 0.0281 | Yes | In 2022 there were no published. NO- TAMs for correction of noticed mis- takes on published IFP, caused by FPD staff. | | | |



| Table 8. Analysis of the fulfilment of quality objectives for the year 2022 | | | | | | |
|---|--|---------|----------|--|--|--|
| Service | Target | Planned | Realized | Details | | |
| | The realization of the number of hours of theoretical teaching for the current year for each enrolled group of candidates in the ANS Personnel Training Centre | 100% | Yes | Theoretical training classes have been implemented in accordance with the appropriate Training Decisions. | | |
| TRE | The realization of the number of hours of practical teaching for the current year for, each enrolled group of candidates in the ANS Personnel Training Centre | 100% | Yes | Practical training classes have been implemented in accordance with the appropriate Training Decisions. | | |
| | The ratio of the issued certificates / confirmations of completed training with the number of the trainees, for each started group of candidates in the ANS Personnel Training Centre | 100% | No | In the course of 2022, a total of 108 certificates, confirmations was issued for 117 trainees, for whom the issuance of the certificates / confirmations was planned, in compliance with document TRE.PROC.011 (Issuance of the certificates, confirmations in the ANS Personnel Training Centre). The percentage of realization is 92.3%. | | |
| CAL | Implementation of the annual calibra- tion plan | 100% | Yes | The annual calibration plan by aids in 2022 was achieved 100%. A total of 262 calibrations were carried out, of which 255 calibrations according to the annual plan and 7 additional calibrations. Out of the total number of calibrations, 123 were realized according to contracts with external users. | | |

4.8.3 Additional Performance Indicators

In addition to performance indicators included in European and national regulations, i.e., quality objectives, SMATSA llc monitors the success of certain business areas based on internally determined business indicators. The values of additional indicators in relation to the set goals are shown in the following table.



| Table 9. Additional performance indicators in 2022 | | | | | |
|---|--------------------------|---|--|--|--|
| Indicators | Target value for 2022 | Accomplished | | | |
| STO 01 – Improvement of ANS management | 1990 - 5 | | | | |
| Number of overloads reported by air traffic controllers | < 20 per year | 0 | | | |
| Observance of slots at Belgrade Airport (LYBE) | > 83% | 85.8% | | | |
| Observance slots at Tivat Airport (LYTV) | > 83% | 98.3% | | | |
| Observance of slots at Podgorica Airport (LYPG) | > 83% | 98.2% | | | |
| Observance of slots at Niš Airport (LYNI) | > 83% | 98.3% | | | |
| AIS data quality assessment | > 0.80 | 0.993 | | | |
| Number of complaints from users of AIS ser- vices | < 9.90 per year | 0.11 | | | |
| STO 03 – Development of competitive comme | ercial services | | | | |
| Number of projects linked to SESAR | >1 | 100% | | | |
| Number of meetings held per year with air traffic control representatives in the area | >2 | >2 | | | |
| STO 06 – Upgrade of the organizational perfo | ormance and resource | management system | | | |
| Realization of the procurement / investments plan | > 80% | 45.32% | | | |
| STO 07 – Improvement and development of h | uman potential | | | | |
| Average number of days per year per employ- ee spent at conferences or creative work- shops Average number of days per year spent on training for operational jobs (given per person) | > 1.5 | Due to restrictions imposed referring planning of the business trips and sending to trainings in 2022, which are the consequence of the economic effects of pandemic COVID-19, it is not possible to give adequate data relating aforementioned indicators. | | | |





Information Technology

Within the framework of information technologies, a large number of activities were implemented in 2022, including design, development, upgrade and maintenance of application solution which contributed to process automation, data and corporate network protection, and simplification of daily activities and jobs.

At the beginning of the year the application for viewing and entering frequencies has been upgraded to display the frequencies of active sectors of adjacent air traffic controls at the controller positions of the TopSky-ATC system. A new page with domestic sector configuration and relevant phases has been added and the frequency entry process, at the FDA position, has been automated. The frequencies of adjacent FIRs and active sector's configuration are shown on 1Kx1K displays by X11 protocol, while change of frequencies and configuration option are done at the working station of FDA operator.

SMATSA IIc has developed in-house solution – Application for input and review of operational documents – Document Viewer, which air traffic controllers use daily in every day work. The documents are shown on 1Kx1K displays by X11 protocol, while upgrade of existing ones and input of the new ones is done by special application containing relevant user's interface.

The in-house developed application "Business Planning of SMATSA IIc" was improved, during the year, by shared services for capital amortization and costs calculation, not only for assets in use but also for the assets which implementation is in progress.

During the year, employees actively participated in the following team's work:

- Team for implementation and development of Application: "Planning and Monitoring of Business Process Realization ";
- Team for implementation of the Project:" Central Information System Optimization for Business Process Management – BPM";
- Team for Information Infrastructure within the Project "Digital Transformation and Development of Financial Business Operation with Business Processes Optimization";
- Team for implementation of the Complexity Tool.



Regarding network and system services within SMATSA IIc, the following most important activities were carried out during the year:

- Upgrade and replacement of obsolete network equipment on EAD, METEO, and Admin network and their connecting to SMATSA IP network;
- Upgrade of the messaging system for data exchange between CADAS and the EAD system (EAD BFBox);
- Improvement of the connection with RHSS for METEO data transmission;
- Modernization of SMATSA data centre software to the latest version of PC virtualization management software and container;
- Migration from VDI computers which used operating system Windows 7 to operating system Windows 11;
- Establishing of backup system for all users' PCs at ATCC and ACC locations;
- Implementation and upgrade of existing tools for cyber security operation centre (SOC);
- Implementation of the solution for user's remote support provision;
- Transfer and installation of the new equipment for wireless data transition into new tower and annex to the building;
- Implementation of the EUROCONTROL LARA system, Airspace Management and Support System in FIR Belgrade.







Consultations with Service Users

6.1 Air Traffic Management – ATM



In the first half of 2022 further recovery of air traffic, from the consequences of the pandemic, was noticed, with no expectation that traffic will reach the level from 2019. However, with summer season flight schedule, the number of aircraft operations, at southeast axis of European traffic, began to rise rapidly, so that it was evident, even during the beginning of the summer that the total number of aircraft operations will exceed those in 2019. Somehow this changed demand left all participants, in the certain measure, unready (airports' operators, air carriers, ANSP). Together with very frequent bad weather conditions, this situation led to increased number of generated delays far above expected. Although there were no formal Service Users' reports (IATA, A4E, AIRE) referring last summer season, EUROCONTROL still prepared an analysis of the summer season where information concerning delays, without usual stressing of generators, were presented, with the constatation that the whole situation was influenced with several factors which could not be fully foreseen.



During 2022, information exchange, with aviation companies who are direct users and with organizations who are conducting redistribution of aviation data (Jeppesen, NAVBLUE, Lido) has been done.

Regular consultation process was carried out with users referring instrumental flying procedures.

6.2 Aeronautical Information Services – AIS

The analysis of the user satisfaction survey was carried out on the basis of quarterly reports on the quality of data from SDO, PAMS and INO applications of the European AIS Data Base (EAD), user complaints and on the basis of the User Satisfaction Questionnaire – AIS.FORM.122.

The trend of errors in EAD applications was analysed for the period from the last quarter of 2021 to the third quarter of 2022. The analysis of published NOTAMs made quarterly by EAD, in the period October 2021 – September 2022, included 573 NOTAMs. Eight (8) errors were found, which is 0.67 errors per month. The cause of these errors is human error or disagreement with local practice, not inadequate procedures.

In accordance with the published method of contact, in the event of observed errors or omissions (GEN 0.1, point 4) in aviation publications, the Aviation Information Service collected, analysed and handled complaints in accordance with AIS.PROC.012 – Complaints Handling.

In the course of 2022, two complaints were received in connection with the provision of aviation information services and all objections have been resolved. According to the seriousness of the complaint one was rated as important one and the other as less important. Both complaints had low effect on safety.

The analysis of complaints did not establish the existence of any systematic problem or the occurrence of complaints with a higher frequency. By analysing the submitted User Satisfaction Questionnaires for 2022, it was concluded that the users rated the provision of aviation information services with an excellent rating.

Twelve (12) completed User Satisfaction Questionnaires were received. The number of Questionnaires rated excellent is 9. Two (2) Questionnaires were rated very good, and 1 Questionnaire was rated good.





6.3 Aeronautical Meteorological Services - MET

During 2022, no users' comments and complaints were received regarding the provision of MET services via regular mail.

By inspecting the submitted copies of the completed forms of the Book of Impressions of Aviation Users for the year 2022, in accordance with QM.PROC.007, it was observed that all expressed user's comments reflected user satisfaction with the provided MET services. Also, the cooperation with the meteorological staff was evaluated by the users as excellent.

In December 2022, a regular consultation process was conducted with other users of services from the MET domain (sports and amateur flying, commercial aviation, legal and natural persons, military, police, etc.), by sending an email to interested parties with a link to the web form Questionnaire on the quality of MET services. Only one user filled out the questionnaire, with content of an affirmative nature, so there was no need for detailed analysis and taking measures to improve MET services.

6.4 Airborne GRNS Calibration

The survey included 4 respondents from foreign contractors of airborne GRNS calibration services. The questions were answered by respondents who are directly responsible for the state of correctness and operation quality of all GRNS and also respondents responsible for ble for coordination in the implementation of airborne calibration.

The average quality rating of aerial calibration services is 4.95.

All planned activities in 2022 were realized in full.

The annual analysis of the results of the survey is presented in the following table.



| Table 10. Results of the survey on the satisfaction of users of airborne GRNS calibration services in 2022 | | | | |
|--|----------------|--|--|--|
| Activity | Average rating | | | |
| The degree of coordination of activities before, during and after the GRNS calibration | 5.0 | | | |
| Quality of crew communication with the technical staff on the ground during the calibration of GRNS | 5.0 | | | |
| Quality, completeness, and timeliness of reports on conducted calibra- tion of GRNS | 5.0 | | | |
| Alignment of planned and realized activities | 4.75 | | | |
| Response to additional requests | 5.0 | | | |
| AVERAGE RATING | 4.95 | | | |

Based on the numerical ratings given in the table and the separate comments of the respondents, it can be concluded that the Calibration Service has performed airborne calibration services for the foreign client in a professional and quality fashion.







Financial Statements

7.1 Income Statement

| Table 11. Income statement for the period from 1 January – 31 December 2022 (in 000 RSD) | | | | | | |
|--|---------------------|--------------|---------------------|---------------------------------------|---|--|
| Elements (in 000 RSD) | 2021 Realization | 2022 Plan | 2022 Realization | 2022 Realization / 2022 Plan | 2022 Realization / 2021 Realization | |
| Operating income | 7 548 612 | 10 317 542 | 12 359 935 | 19.8 % | 63.7% | |
| Income from sale | 7 335 480 | 10 185 958 | 12 231 772 | 20.1% | 66.7% | |
| Domestic market | 409 192 | 482 530 | 598 508 | 24.0% | 46.3% | |
| Foreign market | 6 926 288 | 9 703 427 | 11 633 264 | 19.9% | 68.0% | |
| Other operating income | 213 132 | 131 584 | 128 163 | -2.6% | -39.9% | |
| Operating expenditures | 8 672 757 | 10 060 413 | 10 101 650 | 0.4% | 16.5% | |
| Costs of material Fuel and energy | 188 645 | 204 777 | 227 093 | 10.9% | 20.4% | |
| Wages, wage compensa- tions and other personal expenditures | 5 221 370 | 6 400 000 | 6 659 178 | 4.0% | 27.5% | |
| Manufacturing services | 860 373 | 1 056 960 | 805 296 | -23.8% | -6.4% | |
| Depreciation | 1 508 991 | 1 466 267 | 1 525 637 | 4.0% | 1.1% | |
| Long-term provisions | 164 528 | 90 000 | 100 298 | 11.4% | -39.0% | |
| Intangible costs | 717 209 | 842 409 | 784 148 | -6.9% | 9.3% | |
| Expenses from adjustment of property value | 11 641 | - | - | - | - | |
| Operating result | -1 124 145 | 257 129 | 2 258 285 | 778.3% | - | |
| EBITDA | 384 846 | 1723 396 | 3 783 922 | 119.6% | 883.2% | |
| EBITDA% | 5.10% | 16.70% | 30.61% | - | - | |
| Financial revenues | 10 482 | 1840 | 80 937 | 4 298.8% | 672.2% | |
| Financial expenditures | 183 395 | 198 802 | 327 649 | 64.8% | 78.7% | |



| Other revenues | 114 607 | 37 920 | 45 644 | 20.4% | -60.2% |
|---|------------|---------|-----------|----------|--------|
| Other expenditures | 241 246 | 45 000 | 327 905 | 628.7% | 35.9% |
| Net gain / Loss from regular operation before tax | -1 423 697 | 53 086 | 1 729 312 | 3 157.5% | - |
| Net gain / loss of discontinued operation | -22 893 | -11 000 | -56 806 | - | - |
| Tax expenditure / revenue | 134 192 | -6 313 | -355 001 | - | - |
| Net result | -1 312 398 | 35 773 | 1 317 505 | 3 582.9% | - |

7.1.1 Business Revenue

Business revenues which SMATSA IIc generated in 2022 are even for 63.7% higher compared to the 2021, while at the same time they are 19.8% higher compared to the planned value. This result is primarily a consequence of the significant recovery of air traffic in 2022, i.e., the increase in income from route and terminal charges, which also led to an increase in business revenue.

Revenue from route charges:

According to Central Routes Charging Office – CRCO data, in 2022 a total of 780 000 flights were invoiced, which is an increase of 65% compared to 2021, when 474 000 flights were invoiced. The number of chargeable service units in 2022 in the charging zone Serbia/Montenegro/KFOR was 2 657 203, which is 70% more than in 2021 when 1 555 559 chargeable service units were realized. The reason for the greater increase in service units than the number of flights in 2022 is the increase in average flight length per flight in 2022. The unit rate in 2022, for the Serbia/Montenegro/KFOR charging zone amounted to 42.21 euros (*National Unit Rate*), compared to 41.45 euros in 2021 (an increase of 2%). Based on the realized number of flights, service units, unit rates and revenue distribution key among the entities participating in the cost base, in 2022 and CRCO data for SMATSA llc, 92 441 937 euros of revenue from unit rates were invoiced for SMATSA llc, or 71% more than in 2021.

Income from terminal charges:

In 2022, 43 315 departures were invoiced in the terminal, which represents an increase of 28% compared to 2021, when 33 773 departures were invoiced. So, 43% of invoiced revenue was realized from domestic airlines, while 57% from foreign airlines. Based on the realized traffic in the terminal, in 2022, total of 11 712 799.07 euros were invoiced, or 38% more than in 2021 (8 432 464.20 euros). At the same time, the realized traffic in the terminal was 14% higher than planned.

Other operating income:

This income group includes income from calibration, training of aviation personnel, realized funds from EU funds, as well as the provision of radar data and radio communication services.



This group of income is at the planned value level but significantly smaller than in 2021, due to the sale of the SMATSA Aviation Academy in Vršac, considering the fact that there was no income from the provision of pilot training and aircraft maintenance services in 2022.

7.1.2 Business and Other Expenses

Material, fuel and energy costs:

The realization of material, fuel and energy costs is 20.4% higher compared to 2021, i.e., 10.9% higher than in the Financial Plan due to higher price and consumption of fuel and electricity.

Salary costs:

The realization of salary costs, fringe benefits and other personal expenses is for 4% higher, compared to the value from the Financial Plan for 2022.

An increase of the mentioned category of 27.5% in 2022, compared to the previous year, is mostly due to the fact that in the first 9 months of 2021, a Decision was in effect, according to which the gross value of the points on the basis of which employees' wages are calculated was reduced by 20%. This gross value was returned to the previous value starting from October 2021 and it was used during 2022 as well.

In addition, in 2022, SMATSA IIc concluded new Collective Agreement with relevant Unions (OU/DIR – 335/1, dated 18th June 2022), which provisions also influence on realization level of salary costs, fringe benefits and other personal expenses.

Costs of Production Services:

The costs of production services are for 6.4% lower compared to 2021, while on the other hand they are 23.8% lower compared to the planned value. Fixed costs, such as system and equipment maintenance costs, make the majority of expenditures in this position. The reduction in the cost of production services is the result of the later conclusion of the contract, compared to the planned date, that is, a smaller financial allocation per this basis compared to the plan. In addition, in the course of 2021, there was a change in the contract related to the lease of land in Niš regarding the reduction of the originally contracted amount and the payment schedule, which was prolonged and extended until August 2022.

Depreciation costs:

Realization of depreciation costs is 4% higher than the planned value, but at the same time it is almost at the same level compared to 2021, primarily due to the application of the International Financial Reporting Standard 16 (IFRS 16), as well as changes related to the valuation of assets. Starting from 2021, the Company is obliged to apply the accounting standard IFRS 16, which, among other things, recognizes part of the costs of long-term leases through depreciation costs.



Provisions costs:

In 2022, an assessment of provisions was made on 31.12.2022. based on severance pay (89 714 thousand dinars), jubilee awards (6 044 thousand dinars) and costs of court disputes (4 540 thousand dinars). Also, the previously calculated long-term provisions for jubilee awards, in the amount of 27 300 thousand dinars were cancelled. As an effect of the actuarial calculation, an actuarial gain in the amount of RSD 187 703 thousand was recorded.

Intangible costs:

Intangible costs, which basically refer to property insurance, motor vehicle insurance, general liability insurance from the activity, employee insurance, hygiene costs in facilities, representation costs and allocations for contribution to Eurocontrol, are for 7% lower than the value in the Financial Plan for the year 2022, while it is slightly more than 9.3% above the results from 2021. The reasons for slightly higher costs in this position in 2022 are primarily the result of a reduced amount based on the Eurocontrol contribution in 2021.

Other expenses:

In the position "Other expenses", an amount of 24 751 thousand dinars was recorded, which mostly includes: direct write-off of receivables in the amount of 16 211 thousand dinars, losses based on the sale of assets in the amount of 5 564 thousand dinars, costs of disputes in the amount of 828 thousand dinars.

Discontinuing Business Loss:

In this position of the Income Statement, a negative net effect (higher expenses than income) was recorded on the result based on the losses of the business operation that was discontinued, changes in accounting policies and corrections of errors from earlier years, in the amount of 56 806 thousand dinars based on the subsequently received documentation from earlier years. The amount of 8 454 thousand dinars was recorded on the income position from previous years, and the amount of 65 260 thousand dinars was recorded on the expenditure position from previous years.

Net result:

The net result was positive and amounted to 1 317 505 thousand dinars as a result of significant recovery of the traffic in 2022. In the Financial Plan for 2022, a profit of 35 773 thousand dinars was planned. The significant increase of net profit is primarily due to the better realization of business revenues, which are 63.7% higher than the planned value.



7.2 Balance Sheet

| Table 12. Balance Sheet on 31 December 2022 (in 000 RSD) | | | | | | |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|--|
| ASSETS (in '000 RSD) | 2018 Realization | 2019 Realization | 2020 Realization | 2021 Realization | 2022 Realization | |
| Fixed assets | 14 967 560 | 15 850 968 | 16 959 726 | 19 942 084 | 18 741 011 | |
| Intangible investment | 90 966 | 112 868 | 84 545 | 66 544 | 226 926 | |
| Buildings, plants and equipment | 14 876 594 | 15 738 100 | 16 875 181 | 18 753 986 | 17 618 170 | |
| Long-term financial investments | - | - | - | - | - | |
| Long-term claims | - | - | - | 1 121 554 | 895 915 | |
| Working assets | 3 108,257 | 3 369 062 | 2 747 661 | 4 840 216 | 5 334 089 | |
| Stocks | 177 095 | 156 878 | 114 850 | 73 711 | 72 295 | |
| Claims based on sale | 1 362 005 | 1 659 235 | 1208 021 | 1 619 367 | 1909 067 | |
| Other claims | 14 962 | 219 234 | 117 452 | 66 915 | 133 911 | |
| Short-term financial investment | - | - | - | - | - | |
| Cash equivalents and cash | 1 427 318 | 1 169 259 | 1 157 483 | 2 939 824 | 3 063 199 | |
| Short-term Prepay- ments and deferred expenses | 126 877 | 164 456 | 149 855 | 140 399 | 155 617 | |
| Total assets | 18 075 817 | 19 220 030 | 19 707 387 | 24 782 300 | 24 075 100 | |
| Off-balance sheet assets | 837 082 | 878 755 | 2 206 026 | 1 828 281 | 1 139 208 | |

| LIABILITIES (in 000 RSD) | 2018 Realization | 2019 Realization | 2020 Realization | 2021 Realization | 2022 Realization |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Capital | 14 148 874 | 14 258 882 | 9 899 696 | 8 740 197 | 10 253 173 |
| Original capital | 1873820 | 1873820 | 1873820 | 1873820 | 1873820 |
| Reserves | 507 044 | 507 044 | 507 044 | 507 044 | 507 044 |
| Revaluation reserves | 3 418 341 | 3 385 720 | 3 346 892 | 3 384 475 | 3 425 576 |
| Retained profit | 8 408 630 | 8 548 244 | 4 171 940 | 3 056 052 | 4 446 733 |
| Non-realized gains/ losses | -58 961 | -55 946 | | -81 194 | - |
| Long-term provisions and liabilities | 2 207 996 | 2 901 531 | 6 822 850 | 12 388 157 | 9 243 367 |
| Long-term provisions | 916 198 | 935 665 | 789 563 | 913 452 | 695 192 |
| Long-term liabilities | 1 291 798 | 1965 866 | 6 033 287 | 11 474 705 | 8 548 175 |
| Deferred tax liabilities | 589 101 | 588 749 | 566 238 | 435 487 | 505 390 |
| Short-term liabilities | 1 129 846 | 1 470 868 | 2 418 603 | 3 218 459 | 4 073 170 |
| Short-term financial liabilities | 430 982 | 204 739 | 39 684 | 1581783 | 2 460 485 |
| Received advances | 141 051 | 136 040 | 118 777 | 20 566 | 14 634 |
| Liabilities from oper- ation | 502 897 | 592 253 | 1 138 348 | 753 631 | 659 943 |
| Other short-term liabilities | 49 946 | 506 979 | 1 093 010 | 836 094 | 915 124 |
| Short-term Accrued liabilities | 4 970 | 30 857 | 28 784 | 26 385 | 22 984 |
| Total liabilities | 18 075 817 | 19 220 030 | 19 707 387 | 24 782 300 | 24 075 100 |
| Off-balance sheet liabilities | 837 082 | 974 419 | 2 206 026 | 1828 281 | 1139 208 |



Fixed assets on 31.12.2022. amounts to 18 741 011 thousand dinars, which is around 6% less than the previous year. This is largely the result of completion of the lease on Vrsuta location, which was in previous year considered in compliance with IFRS 16 standard and activation of the investments in 2022, and thus this position is decreased for the investments which are not in preparation any more. In the position of long-term receivables, the amount of 895 915 thousand dinars was recorded, which refers to the claim of SMATSA llc based on the sale of the SMATSA Aviation Academy.

Receivables based on sales on 31.12.2022. amounts to 1909 067 thousand dinars and participate in 35.8% in the total working asset's structure.

Cash at the end of period amounted to 3 063 199 thousand dinars (about 26 million EUR) and mostly due to traffic increase and there for incomes from main operations.

In terms of long-term liabilities, on 31.12.2022, SMATSA llc records an amount of 8 548 175 thousand dinars (about EUR 72.4 million) based on long-term loans from EIB and EBRD, as well as liquidity loans, which SMATSA llc was forced to obtain in order to preserve liquidity and continue to regularly settle its obligations to suppliers during pandemic period. Within this position the liabilities amount, referring long term lease is calculated, which is calculated according to accounting standard IFRS 16.

In the position of short-term financial obligations, an amount of 2 460 485 thousand dinars (about 20.9 million EUR) was recorded, which refers to the repayment of leases and loans liabilities due up to one year.

The total capital was significantly increased at the end of 2022 compared to the previous year, due to recording a net profit of 1 317 505 thousand dinars.

'AitSERBIA

NU-APL

7.3 Cash Flow Report

| Table 13. Report on cash flows in the period from 1 January – 31 December 2022 (in 000 RSD) | | | | | |
|--|------|-----------------|------------------|--|--|
| | | Amount | | | |
| Item | | Current year | Previous year | | |
| A. CASH FLOWS FROM BUSINESS ACTIVITIES | | | | | |
| I. Cash inflows from business activities (1 to 4) | 3001 | 12 086 095 | 7 537 796 | | |
| 1. Sales and received advances in the country | 3002 | 540 069 | 383 282 | | |
| 2. Sales and advances received abroad | 3003 | 11 137 946 | 6 640 104 | | |
| 3. Received interest from business activities | 3004 | 9 157 | 1642 | | |
| 4. Other inflows from regular operations | 3005 | 398 923 | 512 768 | | |
| II. Cash outflows from business activities (1 to 8) | 3006 | 9 197 751 | 7 778 145 | | |
| 1. Payments to suppliers and advances made in the coun- try | 3007 | 1 185 843 | 960 632 | | |
| 2. Payments to suppliers and advances made abroad | 3008 | 925 955 | 972 864 | | |
| 3. Salaries, fringe benefits and other personal expenses | 3009 | 6 948 099 | 5 709 786 | | |
| 4. Interest paid in the country | | 73 514 | 68 464 | | |
| 5. Interest paid abroad | 3011 | 64 340 | 47 716 | | |
| 6. Income tax | 3012 | | 18 683 | | |
| 7. Outflows based on other public revenues | 3013 | | | | |
| 8. Other outflows from business activities | 3014 | | | | |
| III. Net cash inflow from business activities (I-II) | 3015 | 2 888 344 | | | |
| IV. Net cash outflow from business activities (II-I) | 3016 | | 240 349 | | |
| B. CASH FLOWS FROM INVESTMENT ACTIVITIES | 7047 | | | | |
| I. Cash inflows from investment activities (1 to 5) | 301/ | - | - | | |
| 1. Sale of shares and stakes | 3018 | | | | |
| 2. Sale of intangible assets, buildings, plants, equipment and biological assets | 3019 | | | | |
| 3. Other financial placements | 3020 | | | | |
| 4. Interest received from investment activities | 3021 | | | | |
| 5. Dividends received | 3022 | | | | |
| II. Cash outflows from investment activities (1 to 3) | 3023 | 1 211 399 | 2 287 289 | | |
| 1. Purchase of shares and stakes | 3024 | | | | |



| Table 13. Report on cash flows in the period from 1 January – 31 December 2022 (in 000 RSD) | | | | | |
|--|------|-----------------|------------------|--|--|
| Item | | Amount | | | |
| | | Current year | Previous year | | |
| 2. Purchase of intangible assets, buildings, plants, equip- ment and biological agents | 3025 | 1 211 399 | 2 287 289 | | |
| 3. Other financial placements | 3026 | | | | |
| III. Net cash inflow from investment activities (I-II) | 3027 | | | | |
| IV. Net cash outflow from investment activities (II-I) | 3028 | 1 211 399 | 2 287 289 | | |
| V. CASH FLOWS FROM FINANCING ACTIVITIES | 7020 | 76 071 | 4 4 7 7 400 | | |
| I. Cash inflows from financing activities (1 to 7) | 3029 | 70 031 | 4 433 177 | | |
| 1. Increase of the original capital | 3030 | | | | |
| 2. Long-term loans in the country | 3031 | | 1003000 | | |
| 3. Long-term loans abroad | 3032 | 76 031 | 3 430 199 | | |
| 4. Short-term loans in the country | 3033 | | | | |
| 5. Short-term loans abroad | 3034 | | | | |
| 6. Other long-term liabilities | 3035 | | | | |
| 7. Other short-term liabilities | 3036 | | | | |
| II. Cash outflows from financing activities (1 to 8) | | 1629 064 | 123 369 | | |
| 1. Redemption of own shares and stakes | 3038 | | | | |
| 2. Long-term loans in the country | 3039 | 772 104 | | | |
| 3. Long-term loans abroad | 3040 | 402 585 | 79 969 | | |
| 4. Short-term loans in the country | 3041 | | | | |
| 5. Short-term loans abroad | 3042 | | | | |
| 6. Other liabilities | 3043 | 454 375 | 43 400 | | |
| 7. Financial leasing | 3044 | | | | |
| 8. Dividends paid | 3045 | | | | |
| III. Net cash inflow from financing activities (I-II) | 3046 | | 4 309 830 | | |
| IV. Net cash outflow from financing activities (II-I) | 3047 | 1553033 | | | |
| G. TOTAL CASH INFLOW (3001 + 3017 + 3029) | 3048 | 12 162 126 | 11 970 995 | | |
| D. TOTAL CASH OUTFLOW (3006 + 3023 + 3037) | 3049 | 12 038 214 | 10 188 803 | | |
| Ð. NET CASH INFLOW (3048 - 3049) ≥ 0 | 3050 | 123 912 | 1 782 192 | | |
| E. NET CASH OUTFLOW (3049 - 3048) ≥ 0 | 3051 | | | | |
| Ž. CASH AT THE BEGINNING OF ACCOUNTING PERIOD | 3052 | 2 939 824 | 1 157 483 | | |
| Z. POSITIVE EXCHANGE RATE DIFFERENTIALS BASED ON CASH CONVERSION | 3053 | 1750 | 282 | | |



| Table 13. Report on cash flows in the period from 1 January – 31 December 2022 (in 000 RSD) | | | | |
|--|------|-----------------|------------------|--|
| | | Amoun | | |
| Item | AOP | Current year | Previous year | |
| I. NEGATIVE EXCHANGE RATE DIFFERENTIALS BASED ON CASH CONVERSION | 3054 | 2 287 | 133 | |
| J. CASH AT THE END OF ACCOUNTING PERIOD | 7055 | | | |
| (3050 - 3051 + 3052 + 3053 - 3054) | 3055 | 3 063 199 | 2 939 824 | |

Regarding cash flows from operating (business) activities in 2022, SMATSA IIc, for the first time in 2020, i.e., from the outbreak of pandemic caused by virus COVID-19, generated surplus in the amount of 2 888 344 thousand dinars.

SMATSA IIc withdrew the funds from EBRD loan in the amount of 76 031 thousand dinars, which were used for continuation of investment activities. Due to stabilization of business operations in 2022, there was no need for taking additional loans and at the same time for the repayment of the loans, taken in previous years, the amount of 1 174 689 thousand dinars was spent, out of which 772 104 thousand dinars for loans in country, i.e., 402 585 thousand dinars for loans from abroad.

In 2022, SMATSA IIc continue with investment activities, so that the net outflow of funds from investment activities amounted to 1 211 399 thousand dinars. Cash at the end of period was 3 063 199 thousand dinars.





Non-Financial Reporting

Drawn on European comparative practice, non-financial reporting was introduced into domestic legislation with the adoption of amendments to the Accounting Act.

Referring this, non-financial reporting should contain "necessary information for understanding development, business results and status of legal person, as well as of the results of their activities, concerning, at minimum, environment protection, social and staff issues, obedience of human rights, fight against corruption and issues referring bribe".

Based on the Law on Companies of the Republic of Serbia ("Official Gazette of the RS", No. 36/11, No. 99/11, No. 83/14, No. 5/15, No. 44/18 and No. 95/18), and the Law on Companies of Montenegro ("Official Gazette of the Republic of Montenegro", No. 6/02, and "Official Gazette of Montenegro", No. 17/07, No. 80/08, 40/10, No. 36/11), the Air Transport Law of the Republic of Serbia ("Official Gazette of RS", No. 73/10, No. 57/11, No. 93/12, No. 45/15 and No. 83/18), the Law on Air Traffic of Montenegro ("Official Gazette of Montenegro", No. 66/08 and No. 30/17), of the Agreement on cooperation in the field of air transport, the Government of the Republic of Serbia and the Government of Montenegro concluded the Continuity Agreement. This contract confirms the continuity of the existence of a joint service provider in air navigation - Serbia and Montenegro Air Traffic Services SMATSA IIc Belgrade, with the aim of performing activities in accordance with the regulations on air transport in the founding countries, international agreements, international standards and recommended practice.

SMATSA IIc's operations are fully aligned with national and international regulations, international agreements and the European Air Traffic Management System. On the basis of the International Convention on Cooperation in the Field of Air Navigation Safety ("Official Gazette of SCG" - International Contracts, No. 18/04, 19/04 and 04/05), and in accordance with the Multilateral Agreement on Unit Rates ("Official Gazette of SCG "-International Contracts, number 04/05), the Republic of Serbia and the State of Montenegro, since July 1, 2007, have been integrated into the system of unit rates of the European Organisation for the Safety of Air Navigation (hereinafter: EUROCONTROL), which is applied by 40 member states.

For the use of air navigation services in the airspace of the Republic of Serbia and the airspace of Montenegro in Fight Information Region Belgrade (FIR/UIR Belgrade), i.e., the charging zone Serbia/Montenegro/KFOR, SMATSA IIc earns income from route charges.


The unique system applied by 40 member states of EUROCONTROL, according to which business model of SMATSA is defined, implies the establishment of cost bases on the basis of which, on an annual level, planned and realized route revenues and expenses are determined. All member states have committed themselves to the consistent application of generally accepted principles for determining the cost base for route charges and calculating the amount of unit rates. In this regard, the revenues generated from route charges are used to cover route expenses, i.e., only route costs can be financed from route charges (costs incurred in connection with the provision of air navigation services and the functioning of the system, as well as the costs of EUROCONTROL).

Unit Rate is calculated based on approved, acceptable route costs and air traffic fore-cast.

Given that the route costs are the basis for determining the amount of the unit rate, they must be properly presented and agreed with the representatives of the service users in air navigation (consultation process with the representatives of the service users). In this regard, the Company submits a proposal for the cost basis for the following year (together with all other entities in the common charging zone), which is considered and finally approved at the November session of the EUROCONTROL Enlarged Committee for Route Charges. At the proposal of the EUROCONTROL Enlarged Committee and the Provisional Council, the decision on determining the level of the unit rates for all member countries is made by the EUROCONTROL Enlarged Commission.

For the use of air navigation services in the field of terminal air traffic control (for air traffic control services provided for aircraft that take off or land at airports in Serbia and Montenegro), aircraft users also pay a terminal charge. The calculation and invoicing of terminal charges from September 2019 is carried out in accordance with the Decision of the Government of the Republic of Serbia, 05 number: 343-7454/2019-1 of July 25, 2019 and based on the amendment of the document "Rulebook on criteria for calculation and determination of the level of charges for the provision of services in air navigation" ("Official Gazette of the Republic of Serbia", No. 55/19 of August 2, 2019), i.e. in accordance with the Decision of the Government of Montenegro on the method of calculating terminal charges for the use of services in air navigation ("Official Gazette of Montenegro", number 53/19 of September 16, 2019).

In order to handle increased volume of traffic, and after termination of pandemic and change in traffic flows due to conflict in Ukraine, SMATSA IIc continues to invest in new technologies, systems, equipment and infrastructure in 2022, with the aim of maintaining safety, expeditiousness, efficiency, increasing capacity, productivity and continuous compliance with regulatory requirements.





8.1 Policies Applied within SMATSA IIc

With regard to Article 37 of the Law on Accounting and the introduction of Non-Financial Reporting, and based on paragraph 3, sections 2 and 3, below it is shown how SMATSA Ilc operates in relation to 4 key business segments and what policies it applies in relation to those questions.

8.1.1 Established Policies within SMATSA IIc

The main goal of SMATSA IIc, which derives from the document Management System Policy (MS.POL.001), is to maintain the current level of air traffic safety, i.e., to reduce its impact in an event, serious incident or accident to the lowest possible extent in the airspace under SMATSA IIc jurisdiction, as low as reasonably practicable.

Based on the collected and available data on events in 2022, at the meeting of the Committee for Management Systems – Safety domain, it was concluded that SMATSA IIc operates within the defined acceptable level of safety.

The Safety Policy, together with the Just Culture Policy, Quality Policy, Security Policy and Environmental Protection and Sustainable Development Policy, together with the principles of occupational safety and health and risk management, is integrated into one document, MS.POL.001 – Management System Policy. In this way, it is possible to provide insight/use of all policies of the management system through access to one document.

The integration of all policies into one document was carried out in accordance with the requirements of regulations (EU) 2017/373 and 2015/340.

Document MS.POL.001, Management System Policy, was posted internally on the SMATSA portal (under the MS domain) and publicly published on the website of SMATSA IIc, making it available not only to employees of SMATSA IIc but also to the general public.



In the course of 2022, Employment and Training Policy of the personnel came into effect (HUM.POL.002), where main principles of employment, personnels' training who are performing operational jobs and personnel who are providing supporting services to SMATSA Ilc services provision, have been defined. In accordance with the Law on Personal Data Protection of the Republic of Serbia, SMATSA Ilc appointed a Person for Personal Data Protection in 2020 and issued documents defining and describing the processes of personal data protection (ZPOL.POL.001 – Personal Data Protection Policy). Pursuant to the provisions of the Law on Personal Data Protection of the Republic of Serbia, the Personal Data Protection Authority operates independently and is not part of the Department for Human Resources Development, Legal and General Affairs.

8.1.2 Human Resources

On 18 June 2022, a new Collective Agreement had been signed (OU/DIR – 335/1, coming into effect from 1st July), and it will last for two years.

Also, starting from September 2022, Employment and Training Policy of the personnel came into effect, where responsibilities of the heads of organizational units, in defining, planning and conducting personnel' training processes, have been defined.

Based on this Policy, starting from September 2022, document Training of the Personnel who are conducting jobs and tasks of services provision support (HUM.DOC.003), has been applied, where personnel training procedures are given in details.

In the course of 2022, all law prescribed measures against fraud and fight against corruption had been applied.

8.1.3 Risk Management

Risk management in SMATSA llc is carried out on several levels, and is detailed in the procedure RMS.PROC.001 – Risk management of business processes. As part of the internal process of strategic planning, during the preparation of planning documents according to the requirements of aviation regulations, strategic risks and threats are identified to which the most important investment projects are exposed, as events that can lead to failure to fulfil the set business goals.

Strategic planning, management and decision-making is provided through the strategic document (PAR.STG.001) and Strategic Risks PAR.PLN.001 – overview of risks that occur during the planning and implementation of capital investments (investment projects or investments of capital character).

Operational risks at the management system level are also considered, i.e., adverse events in the fields of safety, security, quality and compliance, environment and occupational safety and health.

Regarding business threats, in order to identify dangers that can lead to interruptions or major disruptions in the provision of services, a register of business risks has been created and maintained, which includes identified regulatory, financial, reputational, IT, operational, as well as human resources management risks. According to the established meth-



odology, the risks were assessed and the existing control measures were reviewed, which reduce the impact of risks on the achievement of the business goals of SMATSA llc.

On a regular basis, the identified risks, their impact on the operations of SMAT-SA IIc and the effectiveness of existing control measures are considered and reviewed. Events that have a negative impact on the formation of the cost base, the realization of the financial and investment plan, as well as on current liquidity have been identified as financial risks.

In addition, events that can lead to the unavailability of competent licensed and support service personnel, interruptions in the operation of the ICT system, non-compliance of SMATSA IIc with regulatory requirements, loss of reputation, etc. are considered.

Within the process of Risk management of business processes, as well as overall risks monitoring and managing, the risks that could lead to serious danger or interruption of SMATSA IIc business processes, have been constantly identified.

In 2022, the impact of the COVID-19 pandemic on the business of SMATSA IIc, on traffic volume and on operational availability of internal human resources, has been reduced. However, there is still negative effect of pandemic on financing (extension of the investment projects realization terms, increase of the prices of equipment and materials etc). In addition, referring investment projects realization there is constant risk of insufficient human resources availability. An important impact on SMATSA IIc operation has the crisis in Ukraine and closure of the parts of Ukraine, Russian and Byelorussian's airspace. This also has effect on increase of traffic volume and possible deviation from forecasted traffic in SMATSA IIc jurisdiction, which directly influences cost base. Also, there is still risk of low investment realization but there are adequate measures for mitigating that risk. Referring potential non-compliance of the organization with the regulatory requirements, the risk is at low level, since the management system with compliance monitoring function, has been introduced.

Through the document SCM.PROC.001 Risks from the point of view of security threats are considered, i.e., adverse security events, that may affect the safe functioning of air traffic control services provision and security risks are managed.

8.1.4 Environmental Protection

Environmental indicators are given through the Management System Policy MS.POL.001, Rules of Procedure on Environmental Protection EMS.MAN.001, but they are processed in more details and through procedures EMS.PROC.001-005, and refer to:

- Greenhouse gas emissions
- Other emissions and effluents, including ozone-depleting substances, nitrogen oxides (NOx), sulphur oxides (SOx) and chemicals
- Generation of waste, including hazardous waste
- Waste reduction and recycling practices
- Use and/or production of hazardous chemicals and substances
- Energy consumption and energy efficiency.

From the perspective of European requirements related to the reduction of greenhouse gas emissions in the airport zone, goals were established within the LSSIP – for 2022 for Serbia. Objective ENV



01 Implementation of CDO operations (continuous descent operations) refers to the airport zone in approach operations. Application of this technique is expected from the end of 2023 with the implementation of PBN procedures. By applying CDO operations, fuel consumption can be reduced by approximately 51 kg per flight and noise can be reduced by up to 5 dB.

Objective ENV 03 – Implementation of CCO operations (continuous climb operations) to reduce gas emissions is currently not in use.

Waste water from other locations of SMATSA IIc in Serbia and Montenegro is discharged into sewage systems.

Substances and gases that can have an impact on the environment, and are used in air conditioning systems, are controlled within closed air conditioning systems and under regular maintenance.

Environmentally acceptable gases are used in fire extinguishing systems so that the impact on the ozone layer is reduced to an acceptable level and under control.

In 2022, SMATSA IIc generated 33,2 tons of waste, of which 27,7 were hazardous. The percentage of the amount of waste that is submitted for some form of reuse is over 90%. SMATSA IIc monitors trends in the ratio of the amount of hazardous and non-hazardous waste generated. The types of final handling of waste are also monitored, where the operators who receive the waste confirm with a certificate the method of reuse, i.e., recycling.

At SMATSA IIc, eco-diesel is stored in large quantities at several locations and in the prescribed manner, for the needs of diesel generators.

Risks from the point of view of harmful impact on the environment are clarified through procedure EMS.PROC.002, and provide an overview of the risk assessment for all aspects and impacts on the environment that originate from the activities of SMATSA IIc. Risk reduction measures are monitored through appropriate documentation that is available to everyone on the internal portal.



9 Marks and abbreviations

| AA | Aviation Academy, College of Applied Studies |
|-----------|--|
| ACC | Area Control Centre |
| ACS | Area Control Surveillance |
| ADCC | Aerodrome Control Centre |
| ADI | Aerodrome Control Instrument |
| AF ADC RS | Air Force and Air Defence Command of the Republic Serbia |
| AFIS | Aerodrome Flight Information Services |
| AICM | Aeronautical Information Conceptual Model |
| AIM | Aeronautical Information Management |
| AIP | Aeronautical Information Publication |
| AIR | Air Control |
| AIRAC | Aeronautical Information Regulation and Control |
| AIRE | Airlines International Representation in Europe |
| AIS | Aeronautical Information Services |
| AIXM | Aeronautical Information Exchange Model |
| ANS | Air Navigation Services |
| ANSP | Air Navigation Services Provider |
| ANT | Airport Nikola Tesla |
| APCH | Approach |
| APV | Approach procedure with vertical guidance |
| APP | Approach Control |
| ARTAS | ATM Surveillance Tracker and Server |
| ASM | Air Space Management |
| ASMT | Automatic safety monitoring tool |



| ATC | Air Traffic Control |
|--------|--|
| ATCC | Air Traffic Control Centre |
| ATCO | Air Traffic Controller |
| ATFM | Air Traffic Flow Management |
| ATM | Air Traffic Management |
| A4E | Airlines for Europe |
| BA | Belgrade Airport |
| BANM | Balkan Aviation Normalization Meeting |
| BSO | Basic Strategic Objective |
| CAA | Montenegro Civil Aviation Agency |
| CAD | Civil Aviation Directorate of the Republic of Serbia |
| CADAS | Comsoft Aeronautical Data Access System |
| CAL | Calibration |
| CAMO | Continuing Airworthiness Manager |
| CAT | Category |
| CCTV | Closed Circuit Television |
| CDO | Continuous descent operations |
| CIMACT | Civil Military ATM Co-ordination Tool |
| СМ | Context Management |
| CNS | Communication, Navigation and Surveillance |
| CPDLC | Controller Pilot Data Link Communications |
| DME | Distance Measuring Equipment |
| DP | Deployment Program |
| DPS | Data Processing System |
| DVOR | Doppler VOR |
| DWDM | Dense Wavelength-Division Multiplexing |
| EAD | European AIS Database |
| eAIP | Electronic AIP |



| EASA | European Aviation Safety Agency |
|-------------|--|
| EBRD | European Bank for Reconstruction and Development |
| EBITDA | Earnings before Interest, Taxes, Depreciation and Amortization |
| EGNOS | European Geostationary Navigation Overlay Service |
| EIB | European Investment Bank |
| EMS | Environmental Management System |
| ENV | Environment |
| ERP | Enterprise Resource Planning |
| ESARR | Eurocontrol Safety Regulatory Requirements |
| EU | European Union |
| EUR | Euro |
| EUROCONTROL | European Agency for the Safety of Air Navigation |
| ESAC | Environmental and Social Advisory Council |
| EVAIR | EUROCONTROL voluntary ATM incident reporting |
| FAMUS | Future ATM Modernisation and Upgrade System |
| FAT | Factory Acceptance Test |
| FDP | Flight Data Processing |
| FIR | Flight Information Region |
| FL | Flight level |
| FPD | Flight Procedure Design |
| FRA | Free Route Airspace |
| GMC | Ground Movement Control |
| GRNS | Ground Radio Navigation Systems |
| НМІ | Human-Machine Interface |
| HUM | Human Resources |
| ΙΑΤΑ | The International Air Transport Association |
| ICAO | International Civil Aviation Organization |



| IFR | Instrument Flight Rules |
|---------|---|
| IFRS | International Financial Reporting Standard |
| ILS | Instrument Landing System |
| INO | International NOTAM Operations |
| IP | Internet Protocol |
| ISO | International Organization for Standardization |
| IT | Information Technology |
| LARA | Local and sub-Regional Airspace Management Support System |
| LNAV | Lateral Navigation |
| LPV | Localizer Performance with Vertical Guidance |
| LSSIP | Local Single Sky Implementation |
| LYBE | Belgrade Airport |
| LYKV | Kraljevo Airport |
| LYNI | Nis Airport |
| LYPG | Podgorica Airport |
| LYTV | Tivat Airport |
| LYUZ | Uzice Airport |
| LYVR | Vrsac Airport |
| MCTI | Ministry of Construction, Transport and Infrastructure |
| MDRS | Ministry of Defence of the Republic of Serbia |
| MET | Aeronautical Meteorological Services |
| MFA | Ministry of Foreign Affairs |
| MIL AIP | Military Aeronautical Information Publication |
| MO | Maintenance Organization |
| мтво | Mean Time Between Outages |
| мтоw | Maximum take of weight |
| NDB | Non-Directional radio Beacon |



| NIR | Non-ionizing radiation |
|----------|---|
| NM | Network Manager |
| NMOC | Network Manager Operations Centre |
| ΝΟΤΑΜ | A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facili- ty, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations |
| NOx | Nitrogen Oxides |
| ΟJΤΙ | On the job Training Instructor |
| OPMET | Operational meteorological information in coded form |
| OU | Organizational Unit |
| PAMS | Publish AIP Management System |
| PANS-OPS | Procedures for Air Navigation Services – Aircraft Operations |
| PAR | Planning, Analysis and Reporting department |
| PBN | Performance-Based Navigation |
| PreOJT | Pre On-the-Job Training |
| PP | Power Plants |
| PSR | Primary Surveillance Radar |
| PUC | Public Utility Company |
| QMS | Quality Management System |
| RAT | Risk Analysis Tool |
| RNP | Required Navigation Performance |
| RNPAPCH | Required Navigation Performance Approach |
| RP | Reference Period |
| RNW | Runway |
| RS | Radar Station |
| SAF | Serbian Armed Forces |
| SAT | Site Acceptance Test |
| SDD | Static and Dynamic Data |
| SDO | Static Data Operations |



| SECSI FRA | South East Common Sky Initiative Free Route Airspace |
|-----------|---|
| SES | Single European Sky |
| SESAR | Single European Sky ATM Research |
| SMATSA | Serbia and Montenegro Air Traffic Services SMATSA llc |
| SMS | Safety Management System |
| SSR | Secondary Surveillance Radar |
| STAR | Standard Instrument Arrival |
| SID | Standard Instrument Departure |
| SOx | Sulphur Oxides |
| STO | Strategic Objective |
| SUR | Surveillance |
| SUSAN | SMATSA Upgrade of System for Air Navigation |
| TAF | Aerodrome Forecast |
| TAR | Terminal Area Radar |
| тсом | Telecommunications |
| тсомс | Telecommunications Centre |
| TER | Terminal and Aerodrome Control Sector |
| ТМА | Terminal Area |
| TRE | ANS Personnel Training Sector |
| TWR | Tower |
| UHF | Ultra-High Frequency |
| UPS | Uninterruptible power supply |
| VCS | Voice Communication System |
| VDF | Variable frequency drive |
| VHF | Very High Frequency |
| VOR | Very High Frequency Omni-directional Range |
| VNAV | Vertical Navigation |
| WFM | Workflow Management |



10 Table and Figure Index

10.1 Table Index

| Table 1. Realization of trainings within the ANS Personnel Training Centre in 2022 | 32 |
|---|----|
| Table 2. Training in air traffic control operational units in 2022 | 33 |
| Table 3. Targeted and accomplished values of SMS indicators at therequest of CAD for 2022 | 38 |
| Table 4. Targeted and accomplished values of safety indicatorsas requested by CAD for 2022 | 39 |
| Table 5. Acceptable and Accomplished safety (process) indicatorsfor the year 2022 as requested by CAA | 41 |
| Table 6. Acceptable and Accomplished values of risk indicatorsof operations as requested by CAA for 2022 | 43 |
| Table 7. Values of capacity indicators in 2022 | 45 |
| Table 8. Analysis of the fulfilment of quality objectives for the year 2022 | 48 |
| Table 9. Additional performance indicators in 2022 | 51 |
| Table 10. Results of the survey on the satisfaction of users ofairborne GRNS calibration services in 2022 | 59 |
| Table 11. Income statement for the period from 1 January – 31 December 2022 (in 000 RSD) | 61 |
| Table 12. Balance Sheet on 31 December 2022 (in 000 RSD) | 65 |
| Table 13. Report on cash flows in the period from 1 January – 31 December 2022 (in 000 RSD) | 68 |



10.2 Image index

| Figure 1. The territory over which SMATSA IIc provides air navigation services | 11 |
|---|----|
| Figure 2. Total number of IFR flights in the period from 2013 until 2022 | 13 |
| Figure 3. Number of IFR overflights and takeoffs/ landings in the period from 2013 to 2022 | 14 |
| Figure 4. Distribution of IFR flights in 2022 | 15 |
| Figure 5. Peak day and peak hour in the period from 2013 until 2022 | 15 |
| Figure 6. Breakdown of respective aircraft types shares in 2022 | 15 |
| Figure 7. Number of IFR take-offs and landings by airports in the period from 2013 to 2022 | 16 |
| Figure 8. Traffic distribution by airports in 2022 | 16 |
| Figure 9. Number of IFR flights in the airspace under SMATSA IIc jurisdiction per country of take-off/landing in 2021 and 2022 | 17 |
| Figure 10. Number of chargeable service units in the period from 2013 to 2022 | 18 |
| Figure 11. Average flight length and average MTOW in FIR Belgrade in the period from 2017 to 2022 | 18 |
| Figure 12. Global Unit Rate in 2022 | 19 |
| Figure 13. Structure of employees according to gender | 20 |
| Figure 14. Structure of employees according to Qualifications | 20 |
| Figure 15. Structure of employees according to age | 20 |
| Figure 16. SECSI FRA partners at meeting in Belgrade | 24 |
| Figure 17. Average delay time per IFR flight in FIR Belgrade generated by ATM in the period from 2015 through 2022 | 46 |
| Figure 18. KEA - indicator of deviation of actual trajectory flight in relation to the path along the long-circuit route in Serbia and Montenegro in 2022 | 47 |
| Figure 19. KEP - indicator of deviation of the path in the last submitted flight plan in relation to the path along the long-circuit route in Serbia and Montenegro in 2022 | 47 |

11 Appendices

11.1 Appendix 1 – Organizational structure of SMATSA IIc



86



11.2 Appendix 2 – Decision of the EUROCONTROL Enlarged Committee no. 21/170 of 25.11.2021.

EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION

EUROCONTROL

- Decisions of the enlarged Commission -

DECISION No. 21/170

relating to the determination of the unit rates for the period of application commencing 1 January 2022

THE ENLARGED COMMISSION,

Having regard to the EUROCONTROL International Convention relating to Co-operation for the Safety of Air Navigation amended at Brussels on 12 February 1981 and in particular Article 5 thereof;

Having regard to the Multilateral Agreement relating to Route Charges dated 12 February 1981, and in particular Articles 3.2(e) and 6.1(a) thereof;

On the proposal of the enlarged Committee and the Provisional Council,

HEREBY TAKES THE FOLLOWING DECISION:

Sole Article

The unit rates annexed to the present decision are approved and shall enter into force on 1 January 2022.

Done at Brussels on 25 November 2021,

Renato Brkanović Vice-President of the Commission



| ZONE | Global unit rate euro | Exchange rate applied 1 euro = | |
|------------------------|--------------------------|-----------------------------------|--------------|
| Belgium/Luxembourg * | 120,52 | -/- | |
| Germany * | 62,57 | -/- | |
| France * | 73,24 | -/- | ten on ten t |
| United Kingdom | 68,25 | 0,856859 | GBP |
| Netherlands * | 82,34 | -/- | |
| Ireland * | 29,37 | -/- | |
| Switzerland | 87,14 | 1,08551 | CHF |
| Portugal Lisboa * | 42,54 | -/- | |
| Austria * | 67,55 | -/- | |
| Spain Continental * | 49,43 | -/- | |
| Spain Canary * | 42,70 | -/- | |
| Portugal Santa Maria * | 13,61 | -/- | |
| Greece * | 28,95 | -/- | |
| Turkey | 30,77 | 10,0675 | TRY |
| Malta * | 33,14 | -/- | |
| Italy * | 75,64 | -/- | |
| Cyprus * | 28,94 | -/- | |
| Hungary | 45,45 | 352,198 | HUF |
| Norway | 53,83 | 10,1910 | NOK |
| Denmark | 63,96 | 7,43447 | DKK |
| Slovenia * | 61,33 | -/- | |
| Romania | 48,49 | 4,94475 | RON |
| Czech Republic | 62,02 | 25,3744 | CZK |
| Sweden | 69,18 | 10,1650 | SEK |
| Slovak Republic * | 68,75 | -/- | |
| Croatia | 50,78 | 7,49002 | HRK |
| Bulgaria | 35,90 | 1,95397 | BGN |
| North Macedonia | 54,03 | 61,3086 | MKD |
| Moldova | 74,40 | 20,6186 | MDL |
| Finland * | 44,15 | -/- | |
| Albania | 56,03 | 121,244 | ALL |
| Bosnia and Herzegovina | 40,19 | 1,95537 | BAM |
| Serbia/Montenegro/KFOR | 42,43 | 117,490 | RSD |
| Lithuania * | 44,18 | -/- | LTL |
| Poland | 47,08 | 4,56584 | PLN |
| Armenia | 47,34 | 575,445 | AMD |
| Latvia * | 31,92 | -/- | |
| Georgia | 46,46 | 3,63405 | GEL |
| Estonia * | 32,99 | -/- | |
| Ukraine | 59,93 | 31,4962 | UAH |
| Ukraine South | 23,63 | 31,4962 | UAH |

Unit rates applicable from 1 January 2022

*: State participating in the EMU.



Name of organization: Serbia and Montenegro Air Traffic Services SMATSA LLC, Belgrade Head office: Trg Nikole Pašića 10, 11000 Belgrade Republic of Serbia, P.B. 640 Identification number: 17520407 TAX ID: 103170161 Phone: +381 11 3218 123 Fax: +381 11 3240 456 Email: kl@smatsa.rs Internet address: www.smatsa.rs

> Photography: Igor Salinger



