

smatsa

SERBIA AND MONTENEGRO AIR TRAFFIC SERVICES SMATSA LLC BELGRADE

ANNUAL REPORT for 2023





ANNUAL REPORT for 2023



1	Foreword by the CEO	7
2	About Serbia and Montenegro Air Traffic Services	11
2.1	Organization Profile	11
2.2	ATM/ANS Services and Functions	11
2.3	Additional Services	12
3	Overview of 2023 In Figures	14
3.1	Traffic data in SMATSA airspace jurisdiction	14
4	Important Business Results in 2023	22
4.1	Improvement of Air Navigation Services Management	22
	4.1.1 Improvements in the field of ATM and FPD	23
	4.1.2 Improvement of equipment, system, and infrastructure	24
	4.1.3 Improvement of AIS services	25
	4.1.4 Improvement of MET services	27
4.2	Improvement of Cooperation with Relevant Organizations, Regulatory Bodies, and State Authorities	
4.3	Development of Competitive Commercial Services	28
	4.3.1 Airborne GRNS Calibration	28
	4.3.2 ANS Personnel Training Center	29
4.4	Improvement of Corporate Social Responsibility and Environmental Protection	32
4.5	Improvement of the Safety Management System	33
4.6	Improving the Organizational Performance and Resource Management System	34
4.7	Developing and Improving Human Potential	35
4.8	Business Performance Indicators	36
	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	51

5 Information Technology

53

6 6.1	Consultations with Service Users Air Traffic Management – ATM	55 55
6.2	Aeronautical Information Services – AIS	56
6.3	Aeronautical Meteorological Services – MET	57
6.4	Airborne GRNS Calibration	58
7 7.1 7.2	Financial StatementsIncome Statement7.1.1Business revenues7.1.2Business and other expensesBalance Sheet	60 60 61 61 63
7.3	Cash Flow Report	66
8 8.1	Non-financial ReportingPolicies applied within SMATSA8.1.1Established policies within SMATSA8.1.2Human resources8.1.3Risk management8.1.4Environmental protection	70 72 72 74 79 81
9	Marks and Abbreviations	84
10 10.1 10.2	Table and Figure Index Table index Figure index	90 90 91
11 11.1 11.2	Appendices Appendix 1 – Organizational Structure of SMATSA Appendix 2 – Decision of the EUROCONTROL Enlarged Committee No 22/173 of Nov. 24, 2022	92 92 93







Foreword by the CEO

In 2023 we marked the 20th jubilee since the establishing of SMATSA IIc. This has been the year with the largest volume of traffic ever recorded in this area, a year of excellent financial results, a year of activities on implementing the infrastructure projects, and a year of setting strategic goals for the next ten-year period.

At the end of 2023 there were 891,000 IFR flights in the SMATSA airspace jurisdiction, which is an increase of 16% compared to 2022. The number of overflights increased by 14%, while the number of take-offs and landings at airports serviced by SMATSA increased by 25%.

Providing air traffic control services, especially during the summer season, was demanding and operationally challenging, especially during a large number of days with bad weather conditions. Before the start of the summer season in 2023, the airspace sectorization of the Belgrade Air Traffic Control Center was improved, air traffic control officers received new tools for air traffic management, and after the training was completed, 23 new air traffic controllers were included in the operational work. For air traffic control at Belgrade Nikola Tesla Airport, a special challenge was the transition of operations from the main runway to the newly inserted one, as well as frequent changes in the layout of the available maneuvering areas due to concession works.





Indicators of the level of safety and efficiency of services provided by SMATSA, as well as business quality indicators are within the limits of the set goals, which is achieving for SMATSA a business ranking of a reliable and desirable service provider for users.

The past year was remarkably successful in the financial sense as well. Record business revenues were achieved, followed by a high level of net financial results. This enabled a significant improvement in the standard of living for all employees. The realization of investments was at a distinctly high level, so that investments follow the operational needs of the company.

The SUSAN Modernization Program continued. At the same time, other investment projects were initiated and SMATSA was ushered in the phase of preparation for the kind of business environment that is expected in the Pan-European area in the next multi-year period.

The project of improving the functionality of the *TopSky-ATC* ATM system was implemented (*Step 3*). Since December 2023, SMATSA has been using software tools that, in addition to warning about conflicting traffic, provide the air traffic controller with information useful for making a quick decision when solving conflicting situations in real time. This is one of the prerequisites for safely increasing the capacity imposed by the increase in traffic that we face every day.

SMATSA IP communication and SMATSA IP radio-relay networks were established.

Activities on the implementation of radar systems at the Besna Kobila site and at the Nikola Tesla Airport have been completed.



In the course of 2023, the preparatory activities and coordination for the project to expand the free route airspace (Southeast Common Sky Initiative Free Route Airspace – SECSI FRA) were completed by merging with the Italian Free Route Airspace (FRA IT). The realization of the project is planned for the first months of 2024.

In the latter half of the year, preparations were made for the implementation of Controller Pilot Data Link Communications – CPDLC, as an additional means of communication between air traffic controllers and aircraft crews. Operational use of the CP-DLC is planned as of February 2024.

In October 2023, the Supervisory Board of SMATSA adopted a new Business Strategy of SMATSA. The new Business Strategy redefined the Mission and Vision of SMAT-SA, laid down guidelines for strategic action and the basis for determining specific business goals and their realization. It is about the new ten-year strategic planning cycle of SMATSA and adaptation to the circumstances foreseen in the coming years by the new *SES 2+* regulation that is being prepared.

SMATSA recognizes human potential as the most important resource. Hence, it continues to devote special attention to the selection and professional training of air traffic controllers, as well as increasing the attractiveness of SMATSA as a desirable employer for all professional profiles that are needed at SMATSA. Cooperation with the Belgrade Aviation Academy continued, while maintaining the option of training aviation operational personnel in our own Training Center, as needed. SMATSA expert teams have successfully cooperated with competent state bodies on matters of adopting new regulations and participating in projects of national importance. Regular audits of the supervisory bodies of the Republic of Serbia and the state of Montenegro have confirmed high level of compliance with regulations based on EU directives.

A high degree of corporate cooperation was realized with other providers across the region, as well as with international aviation organizations and associations.

I would like to thank all the employees, the management, and the governing bodies, without whose engagement it would not have been possible to achieve these results.

Predrag Jovanović

CEO, Serbia and Montenegro Air Traffic Services SMATSA IIc Belgrade

9



About Serbia and Montenegro Air Traffic Services

2.1 Organization Profile

Serbia and Montenegro Air Traffic Services SMATSA IIc Belgrade (hereinafter: SMATSA) 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 are the Government of the Republic of Serbia and the Government 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.

SMATSA provides services and performs its activities in compliance with national and international regulations and international agreements. In accordance with its competence and powers, SMATSA represents the interests 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 is the provision of ATM/ANS services and functions, which include the following:

- Air Traffic Management (ATM)
 - Air Traffic Services (ATS)
 - Airspace Management (ASM) service and
 - Air Traffic Flow Management (ATFM) service
- Instrument Flight Procedure Design (FPD) services;
- Aeronautical Meteorological Services (MET);
- Aeronautical Information Services (AIS); and
- Communication, Navigation, and Surveillance (CNS).

Area of jurisdiction of SMATSA includes the airspace above:

- Republic of Serbia;
- Montenegro;
- International waters in the Adriatic Sea; and
- 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 provides air navigation services

2.3 Additional services

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

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







Overview of 2023 in Figures

Following the start of traffic recovery after the pandemic, during 2022, the trend of a marked increase in the number of flights in SMATSA airspace jurisdiction continued in 2023, when the highest number of flights ever was realized, around 891,000, or 16% more than the previous year. In July and August, the average daily number of flights was around 3,400, while July 29, 2023, was the peak day with 3,694 flights and the peak hour with 272 flights.

The increase in the number of flights in the area of jurisdiction of SMATSA was influenced by the global increase in demand for travel, the geopolitical situation that arose after the outbreak of the conflict in Ukraine, which led to the redirection of traffic flows (Figure 1), as well as the implementation of Free Route Airspace (FRA) in the surrounding area. This trend will continue to a certain extent in the coming period.



3.1 Traffic data in SMATSA airspace jurisdiction

Figure 2. Total number of IFR flights in the period from 2014 through 2023





Figure 3. Number of IFR overflights and take-offs / landings in the period from 2014 through 2023



Figure 4. Distribution of IFR flights in 2023







Figure 5. Peak day and peak hour in the period from 2014 through 2023



Figure 6. Breakdown of respective aircraft types shares in 2023





Figure 7.

Number of IFR take-offs and landings by airports in the period from 2014 through 2023



Figure 8. Distribution of operations by airports in 2023





Figure 9.

Number of IFR flights in the airspace under SMATSA jurisdiction per country of take-off / landing in 2022 and 2023¹





Figure 10. Number of chargeable service units in the period from 2014 through 2023



Figure 11. Average distance per flight and average MTOW² in FIR Belgrade in the period from 2017 through 2023

² Maximum take-off weight





Figure 12. Global Unit Rate in 2023





Important Business Results in 2023

4.1 Improvement of Air Navigation Services Management

Same as in the previous years, a high level of safety and acceptable efficiency of service provision was maintained in 2023 thanks to the successful implementation of planned activities in key services and functions of SMATSA, and above all in ATM, CNS, FPD, MET, and AIS, as well as constant investment in the improvement of the system for providing air navigation services. Significant activities have been undertaken in order to improve the quality of air navigation services.



4.1.1 Improvements in the field of ATM and FPD

In 2023, for the first time in the Republic of Serbia, the design and implementation of PBN procedures for instrument flying was carried out at Užice / Ponikve airport (LYUZ), which is an uncontrolled airport with non-instrumental runways. In particular, the implementation of procedures for instrument flight was carried out with the help of aircraft performance based navigation (PBN). Likewise, for the first time in the Republic of Serbia, the design and implementation of PBN procedures for instrument flying was carried out at the Batajnica military airport (LYBT), which has two runways. Also, at Tivat airport (LYTV), for runway 32, a PBN approach procedure to LNAV minimum was developed for the first time, within the RNP APCH navigation specification.

In order to improve the capacity of Area Control Center, in 2022 activities were carried out to change the vertical and lateral boundaries of the ACC Belgrade sector, and they were completed in March 2023. The new organization successfully entered into force on April 20, 2023. In addition, activities regarding the introduction of CPDLC functionality in ACC Belgrade were carried out throughout 2023 and were successfully implemented. The new functionality will be put into operation in 2024.

As part of the improvement of civil-military coordination and data exchange, the installation of the LARA system was successfully completed in 2022, while the system was put into operation in January 2023.

Bearing in mind that in 2022 the guidelines for the further expansion of cross-border areas of Free Route Airspace were established, in 2023 activities were carried out regarding the development of a security argumentation for the expansion of the area of cross-border Free Route Airspace with Italy. The project to enable the cross-border Free Route Airspace between SECSI FRA and FRAIT had been implemented throughout 2023. In accordance with regulatory requirements, the safety argumentation will be completed right before the implementation of the project on March 21, 2024.



In accordance with the requirements of the Single European Sky for harmonizing air traffic operations and control systems in order to improve safety, efficiency and reduce delays in air traffic, one of the main tasks of SMATSA has been to implement new technologies, continuously invest in equipment, systems, and infrastructure, but also in the professional staff needed for the realization of these tasks.

The most important activity was realized in mid-2023, when SMATSA fulfilled all the conditions in the domain of air navigation service provider that were necessary for the start of operational use of the inserted runway at Nikola Tesla Airport in Belgrade, all in accordance with the contractual obligations with the concessionaire and grantor of the Nikola Tesla Airport.

As part of the terminal radar installation project for the needs of TMA Belgrade, the construction of the facility and supply infrastructure for the needs of the Terminal Area Radar (TAR Belgrade) was completed and the technical inspection of the facility began. It is expected that the preparation of the Report on the completed technical inspection of the facility with the proposal for issuing the Exploitation Permit will be completed in the first half of 2024. Also, a radar system (PSR and SSR) was acquired and installed, which was put into trial operation.

In the course of 2023, a revision of the investment documentation was carried out in order to prepare for the new procurement and the implementation of NDB devices in a reduced scale.

As part of the VHF/UHF radio network improvement project, activities were initiated for the provision of urban planning conditions for the construction of TCC at the Maljen location and TCC at the Radan location.

The second phase of the IP radio-relay network implementation project was completed, so the radio-relay link RS Besna kobila – RS Kopaonik was put into operation at the end of 2023.

The final acceptance of the CCTV system for the needs of the new ADC Belgrade tower was implemented and the system was put into operation

Construction works related to telecommunication and power infrastructure necessary for connecting SMATSA facilities in the area of Nikola Tesla Airport have been completed.

As part of the project to introduce CM (Context Management) and CPDLC (Controller-Pilot Data Link Communication) applications into operational use, during 2023, tests of connection to the network of telecom providers SITA and ARINC were successfully carried out for the purpose of introducing CM (Context Management) and CPDLC (Controller Pilot Data Link) services and the observation period of the service has begun, which is prerequisite for the start of operational use. Interoperability tests with EU-ROCONTROL Innovation Hub Bretigny (EIH) were also successfully carried out.





4.1.3 Improvement of AIS services



The supplying of aeronautical information necessary for the safe, regular, and expedited air navigation is provided via Aeronautical Information Services (AIS) in order to meet the need for uniformity and consistency in the provision of aeronautical information / data required for operational use by international civil aviation.

The aeronautical information processes are in line with international standards and recommended practices contained in the common requirements of the Single European Sky.

During 2023, activities were started to implement the requirements introduced by regulation (EU) 2020/469 – amendments to the joint requirements of ATM/ANS and requirements for AIS in cooperation with CAD/CAA.

CAD and CAA rulebooks, which transpose regulation 2020/469, enter into force on January 25, 2024.

In the course of 2023, the EAD system was successfully upgraded, first to Release 15.1 (June 20, 2023), and then upgraded to Release 15.2 on November 27, 2023. EAD Release 15.1, which included 24 changes to CHM-tool, which had an impact on the following subsystems: AIMSL, CHP, INO DP, SDO and WFM to improve EAD, while EAD Release 15.2 included changes on





the following subsystems: BS, INO DP, INO DU, PAMS, GT, CS, ESI, AIMSL, MHS, SDO, WFM, CHP, AIP Production. The improvement of the EAD system required software and hardware preparation of the system, which was carried out in cooperation with the IT Sector. The changes were implemented successfully and classified as routine.

From November 28 to 29, 2023, a workshop on the implementation of the Part-AIS part of the European Commission Regulation No. 2020/469 was held in the premises of the Civil Aviation Directorate within the framework of the EUROCONTROL *Support to States* program. In addition to the technical and operational requirements related to the provision of AIS services, the workshop also discussed the delivery and publication of data, instrument flight procedures on aeronautical charts, as well as quality requirements and requirements regarding the implementation of support safety assessments when introducing changes in functional system.

Throughout the year, employees from this service participated in several international gatherings such as the Aeronautical Information Management Group (AIMG-06) or the AIRI SG meeting organized by international bodies such as EUROCONTROL and ICAO.

4.1.4 Improvement of MET services

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

In the course of 2023, the EUMETNET CBCF or the harmonized convection forecast was prepared, which is necessary for both the EUROCONTROL Network Manager and the SMATSA Area Control Center. The forecast was made daily for the current day and one day in advance, and then it was delivered to the head of the shift of the SMATSA Area Control Center.

The SAWAS system, which was upgraded to service two runways at Belgrade Airport, was put into use last year. In addition, the IBL and SAWAS systems were linked to enable the display of meteorological information in the SAWAS system. This created the conditions for the start of the development of TAF, AD WRNG, ARS, AIRMET, and SIGMET in the IBL system. Upon monitoring the operation of this system, the conclusion was drawn that the reliability of the IBL system is at a satisfactory level, which created the prerequisites for withdrawing the MESSIR system from use.

During 2023, SMATSA representatives also participated in several international gatherings, such as the meetings of the Meteorological Task Force within the ICAO European Air Navigation Planning Group (EANPG) and were present at the global event Meteorological World Expo, where about 200 companies dealing with research, technology development, and manufacturing of equipment in the field of meteorology traditionally participate.



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

SMATSA continuously implements activities aimed at improving partnerships and strengthening cooperation with relevant organizations and service users, which implies the implementation of policies, appropriate regulations, and technological solutions of importance for the business.

SMATSA signed a contract with Eurocontrol for the use of the CARMA application (Compliance and Resource Management Application / Compliance and Regulation Management Application). This application also defines a module for compliance monitoring, which can be applied to all organizational units in SMATSA. In the coming years, there will be harmonization of data within SMATSA as well as cooperation with CAD / CAA on this matter.

4.3 Development of Competitive Commercial Services

The implementation of commercial services within SMATSA during 2023 was aimed at providing calibration services to users from the region and beyond.

4.3.1 Airborne GRNS calibration

SMATSA has all the necessary resources, in the form of professional staff and modern equipment, which enable the provision of airborne Ground-based Radio Navigation Systems (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 aircraft is used, Hawker Beechcraft King Air 350 with built-in calibration equipment (AD-AFIS-260), which SMATSA 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.

111111111111





In 2023, regular and extraordinary calibrations and validations of aerial procedures were carried out based on concluded contracts.

The annual calibration plan by means was 107% achieved. A total of 241 calibrations for 2023 were carried out, of which 225 calibrations according to the annual plan and 26 extraordinary calibrations. Out of the total number of calibrations, 110 were realized according to contracts with external users.

4.3.2 ANS Staff Training Center

ANS Staff Training Center is an authorized center for the education and training of air traffic controllers, CNS staff, and MET staff. Training programs are aligned with ESARR requirements, national and international regulations, as well as ICAO standards.

ANS Staff Training Center, in addition to training for its own needs, also provides training services to external users, both organizations and individuals.

The most important trainings for own needs, realized in 2023, in accordance with the Plan for conducting trainings at the ANS Staff Training Center, are shown in the following table.



Name of training	Degree of realization and details
INITIAL TRAINING BASIC+RATING TRAINING TRAINING FOR NEW/ADDITIONAL RATING	Trainings implemented: 100% Percentage of issued Diplomas / Certifi- cates / Credentials: 86.4% (19 of max 22) Conducted: 2 trainings with 21 trainees
CONTINUATION TRAINING	Trainings implemented: 100% Conducted: 28 trainings with 89 trainees
REF AVE	Trainings implemented: 100% Conducted: 10 trainings with 34 trainees
DEVELOPMENT TRAINING DEVELOPMENT TRAINING REFRESHER	Trainings implemented: 100% Percentage of issued Diplomas / Certifi- cates / Credentials: 86.4% (19 of max 22) Conducted: 11 trainings with 78 trainees
UNIT TRAINING	Trainings implemented: 100% Conducted: 3 trainings with 15 trainees
CNS STAFF TRAINING	Обуке су реализоване: 100% Спроведено: 5 обуке са 26 полазника
MET STAFF TRAINING	Trainings implemented: 100% Conducted: 5 trainings with 26 trainees
 OTHER TRAININGS PVL training for work in the Department for KZA VP Training for pseudo-pilot Training for Associate for ARO Niš AVE for 50th ATCO Class Internship for two 2nd grade classes of the Aviation Academy High School Internship for 3 students of the final year of the Aviation Dpt, Faculty of Transport and Traffic Engineering in Belgrade Preparation and evaluation by TEA test Candidates testing by English language placement test 	Trainings implemented: 100% Conducted: 32 trainings with 172 trainees
TOTAL	Trainings implemented: 100% Conducted: 95 trainings with 443 train- ees Percentage of issued Diplomas / Certifi- cates / Credentials: 97% (97 of max 100)

Table 1. Realization of trainings within the ANS Staff Training Center in 2023



4.3.2.1 Training in air traffic control operational units

In addition to the trainings that were carried out at the ANS Staff Training Center, during 2023, trainings were also conducted in operational units, as presented in the table.

Name of training	Degree of realization and details
Training to obtain ACS LYBA rating (ACC Belgrade)	 Preparatory phase of training: Planned for 12 air traffic controllers, implemented – 12, successfully completed – 10. Percentage of success 83,3%. On-the-job training (OJT): Planned for 11 air traffic controllers, implemented – 11, successfully completed – 9. Percentage of success 81.8%.
Training to obtain ADI-GMC/AIR LYBE rating (ADC Belgrade)	 Preparatory phase of training: Planned for 9 air traffic controllers, implemented – 9, successfully completed – 7. Percentage of success 77.7%. On-the-job training (OJT): Planned for 5 air traffic controllers, implemented – 5, successfully completed – 2. Percentage of success 40%.
Training to obtain APP LYVR rating	Diamand for 1 circumfin controller
(ADC Vršac)	implemented – 1, successfully completed – 1. Percentage of success 100%.
Training to obtain ADI/TWR and APP LYBT rational terms of the second sec	ng
(ADC Batajnica)	Planned for 3 air traffic controllers, implemented – 3. Training in progress.
Training to obtain ADI/TWR and APP Niš ratin (ADC Niš)	g Planned for 6 air traffic controllers, implemented – 6, successfully completed – 5. Percentage of success 83.33%.
Training to obtain APS-TCL LYPG rating (ADC Podgorica)	Planned for 3 air traffic controllers, implemented – 3, successfully completed – 3. Percentage of success 100%.

Table 2. Trainings in air traffic control operational units in 2023

4.4 Improvement of corporate social responsibility and environmental protection

In June 2023, an integrated supervision check of the QMS and EMS systems was carried out by the certification house Societe Generale de Surveillance (SGS) Belgrade IIc in order to maintain the validity of the issued ISO 9001:2015 (QMS) and ISO 14001:2015 (EMS) certificates. The QMS check refers to the maintenance of the established Quality Management System in SMATSA, and does not refer to social responsibility, while the EMS I standard 14001 refers to social responsibility and the preservation of the social environment.

The check was carried out at the following locations:

- Annex ACC Belgrade: QMS, EMS (system requirements);
- ADC Niš: ATM, CNS, MET, AIS, and EMS, and
- ADC Kraljevo: ATM, CNS, AIS, and EMS.

Based on a successful check, the validity of the ISO 9001:2015 – Quality Management System certificate was confirmed.

Also, one of the important issues that was discussed related to raising the level of social responsibility referred to the cooperation of stakeholders in connection with the monitoring and reduction of noise at Belgrade Airport (BA). The main part of the work was based on the expansion of cooperation with Belgrade Airport as regards the establishment of balanced noise management and participation in the development of a strategic noise map and action plans for noise reduction at BA.

As part of the Strategic Noise Map for Belgrade Airport, the noise indicators determined for the city of Belgrade within the acoustic zoning of the city will be used. The strategic noise map will aim to show the areas that exceed the limit values of the noise indicator for certain acoustic zones.

SMATSA contributes to the creation of a strategic noise map by sending radar and MET data to BA. Continuation of further activities will lead to noise reduction through the development of appropriate action plans.

In order to find the possibility of improving procedures for reducing the noise caused by aircraft operations with BA, a working group was formed for expert analysis of operational procedures. Members of the working group are representatives of the Ministry of Construction, Transport and Infrastructure (MCTI), Air Serbia, SMATSA, Civil Aviation Directorate (CAD), and Belgrade Airport (BA).

Legal work on the issue of environmental protection during 2023 related to the measurement of non-ionizing radiation, the cleaning of underground eco-diesel tanks, and the recycling of waste.

In accordance with the requirements of the competent authorities for the city of Belgrade, the first measurements of the level of low-frequency non-ionizing radiation and noise in the vicinity of transformer stations were made. The measured values showed compliance with legal requirements.

In order to protect the soil and groundwater, the existing underground storage tanks for ecodiesel were cleaned and tested. At one of the locations, a special balloon was installed as a replacement for the double mantle.

Waste management in SMATSA can be considered to have almost reached the zero level of waste that is sent to landfill (Zero waste). Waste generated at locations in Serbia and Montenegro through authorized operators is handed directly to operators for reuse and/or recycling. The amount of 28,841 tons of waste is handed to storage operators who are tasked with forwarding the waste to recycling. The amount of waste that is deposited is 57 kg or 0.12% of the total generated amount of waste.

The Advisory Board for Environmental Protection and Social Affairs ESAC with its activities with stakeholders, had two regular meetings during 2023. The members of the Advisory Board are representatives of Belgrade Airport, the concessionaire of Airport Nikola Tesla Belgrade, Air Serbia, SMATSA, the Ministry of Environmental Protection, the Ministry of Finance, the Ministry of Labor, Employment, Veterans and Social Affairs, the Civil Aviation Directorate, and the Municipality of Surčin.

4.5 Improvement of security management system

In the latter half of 2023, efforts were directed at filling out the questionnaire for the purpose of creating the document "EUROCONTROL/CANSO Standard of Excellence in Safety Management Systems – 2023 Measurement" (SoE). This document helps air navigation service providers to build, implement and improve their safety management systems (SMS) according to the size and operational complexity of the organization, maintaining industry best practices and meeting international standards. The SoE is also compliant with ICAO Annex 19 and relevant EU legislation. Ahead of the 2023 measurement, the SoE questionnaire was further revised taking into account the experience and feedback from ANSP. In addition to submitting the completed questionnaire, in order to collect the necessary information and create a "realistic picture" of the security achievement of ANSP, there was a telephone conversation with a representative of EUROCONTROL/CANSO.

At the beginning of September, a course was held, organized by EUROCONTROL, titled "Assessment of Changes in the ATM/ANS Part 1". The course covered the following topics:

- Security assessment of changes in the ATM/ANS functional system;
- Assessment of the security support of changes in the ATM/ANS functional system;
- Interactions between security assessments and security support assessments;
- Multi-stakeholder change and the overarching argument.

In mid-October, a training was held relative to the investigation of the event, during which the participants were introduced to the importance of the process, the techniques/ways of conducting an event investigation procedure, and the elements of the event investigation procedure. The training was conducted by lecturers from EUROCONTROL.

4.6 Improving the organizational performance and resource management system

During 2023, activities continued relative to the project of Digital transformation and development of a financial business system with optimization of business processes, which includes the introduction of an ERP business solution, as support for work processes in the domains of accounting and finance, records and monitoring of contract implementation, services invoicing, management of fixed assets, financial planning, human resource management and payroll.

The implementation of an integrated ERP business system aims to digitize the entire financial business and introduce the improvement across the business processes from operational activities to management. The benefit of working in such an integrated system should be to enable the introduction of standardization in the work processes, the reduction of errors in work, automation of business processes, and thus help improve the business quality.

In the course of 2023, the remaining phases of the project were completed and the ERP business system was put into operation.

In order to ensure optimal conditions for the operation of the new financial business system (ERP) in 2023, the project "Optimization of the central information process for the BPM – Business Process Management" was completed successfully, creating an initial model of a unique database of business processes as a basis for further use the ERP system.

In addition, an improved version of the application for business planning and implementation monitoring was put into operation, which established a centralized collection of the needs of professional services, their analysis and approval. The integration of this system with the procurement planning application and the ERP business system ensures the automatic exchange of planning data and their processing for the purposes of determining the procurement plan and creating planning documents of SMATSA.

AirSERBIA

4.7 Developing and improving human potential

In the period from March to June 2023, the selection process of candidates, trainees for air traffic controller licenses and corresponding authorizations (ADI GMC AIR Belgrade, ADI Vršac) was successfully carried out, according to the needs of organizational units.

The call for candidates was conducted in cooperation with the College of Applied Studies "Aviation Academy", based on the Agreement on the Dual Model of Education and Business and Technical Cooperation. In that process, competencies, roles, and steps in the selection process were defined. Candidates who met the formal and legal requirements of the competition were sent to the next stages of the selection procedure.

Also, the call for candidates and selection for the admission of candidates for the training to obtain the air traffic controller's license and corresponding authorizations (ACS Belgrade) was successfully conducted and implemented, as well as a series of internal calls for candidates:

- Internal call for candidates for the selection of candidates for referral to shift leader training for the needs of the Terminal and Airport Air Traffic Control Sector;
- Internal call for candidates for the selection of candidates for referral to evaluator training for the needs of the Terminal and Airport Air Traffic Control Sector.

As for external calls for candidates in 2023, the selection of candidates from the SMATSA database of potential candidates was conducted for several positions of CNS staff (engineer and technician positions) within the Communication, Navigation and Surveillance (CNS) Sector and the Terminal and Aerodrome Air Traffic Control Sector.

Admission of candidates from external sources for professional development/training was also carried out as needed for:

- meteorological technicians at ADC Tivat;
- weather forecaster at ADC Podgorica; and
- weather forecasters at ADC Belgrade.

During 2023, a working group was formed with the task of drafting the Employment and Training Policy, a document that will describe the process of planning and implementing the training for personnel who perform duties and tasks in support of the provision of air navigation services.

In the period January–December 2023, SMATSA conducted courses for shift leaders, continuous training for air traffic controllers in various organizational units, refresher courses, OJT training, as well as participated in the work of various commissions and working groups with the aim of smooth professional development and training of employees in SMATSA.

The employees of SMATSA were additionally engaged in conducting classes at the College of Applied Studies "Aviation Academy" within the study program of basic vocational studies – Flight control.





4.8 Business performance indicators

The foundations of the SES Performance Scheme were laid in 2004 in the European Commission Regulations 549/2004 (Article 11) and 550/2004 (Articles 14–16). The SES Performance Scheme implies a reference period of three to five years. The first reference period lasted for three years from 2012 through 2014, the second period lasted from 2015 through 2019, with the third was planned from 2020 to 2024, while the fourth period will begin in 2025 and last until 2029. The monitoring of the success of air navigation service providers is carried out through indicators within 4 key areas: safety, capacity, cost efficiency and environmental protection.

The European Commission regulations and decisions related to the reference periods of the SES Performance Scheme have not been transposed into domestic legislation, which means that SMATSA is not obliged to report on them. Nevertheless, considering the activities related to the possible future integration of the ECAA partners, SMATSA states in the Business Plan its target values referring to the four key areas of the SES Performance Scheme and reports in this regard, to the extent possible, and in accordance with national legal obligations.

In addition to business performance indicators defined through the SES Performance Scheme, SMATSA also monitors business performance based on internal performance indicators – indicators by strategic areas, as well as on the basis of quality indicators of the services provided.
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 monitoring the safety indicators (SMS indicators) defined within the SES Performance Scheme, which is used to evaluate;

- 1. Efficiency of the safety management system;
- 2. Level of use of the RAT methodology and
- 3. Level of implementation of the culture of equity and trust (Just Culture).

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

The level of security in the SMATSA system is based on the assessment and monitoring of security indicators established in different parts of the system, in accordance with the acceptable level of security defined by the Civil Aviation Directorate of the Republic of Serbia and the Civil Aviation Agency of Montenegro. The values of safety indicators for 2023 are presented in the following tables.





Table 3. Target and accomplished values of SMS indicators required by CAD for 2023

A group of SMS indicators		Accomplished safety level
l.1.	SMS Effectiveness	 Management of safety policy and safety objectives; C Management of safety risks; C Safety guarantees; wasn't measured Improvement of safety; / Safety culture. B Summary report for the 2023 SoE in SMS Measurement.
1.2.	Application of RAT Methodology	 Infringement of safe aircraft separation: RAT C4 - 1 event, RAT E5 - 4 events, RAT C5 - 6 events. CNS/
I.3.	Application of Just Culture (Safety Culture)	B Summary report for the 2023 SoE in SMS Measurement.



A grou	p of ATM impact event severity indicators at the SMATSA level	Accomplished and Acceptable safety level
1-4	ATM caused Accidents in FIR Belgrade	Zero (0) ATM-influenced accidents
		an acceptable value is 0.00255
	ATM caused Serious Incidents in FIR	Zero (0) serious ATM-influenced accidents
I-5	Belgrade	an acceptable value is 2 Alarm 1
		Zero (0) serious ATM-influenced accidents
1-6	ATM caused Major Incidents in FIR Belgrade	an acceptable value is 12 Alarm 9
		Twenty-one (21) major ATM-influenced
I-7	ATM caused Significant Incidents in FIR Belgrade	accident
		an acceptable value is 25 Alarm 19
A group of ATM Indicators for monitoring a certain type of event		Accomplished and Acceptable safety level
		Four (4 RWY) ATM-influenced events
1-8	Number of ATM caused RWY/TWY Incursion	an acceptable value is 5
		Zero (0) ATM-influenced events
1-9	Number of ATM caused RWY Excursion	an acceptable value is 5
I-10	Number of ATM caused Separation Minima Infringement and Inadequate separation in the area of jurisdiction of ACC Belgrade	Nine (9) ATM-influenced Separation Minima Infringement and Inadequate separation in the area of jurisdiction of ACC Belgrade
	(ACC+TER)	an acceptable value is 15
I-11	Number of ATM caused Separation Minima Infringement and Inadequate separation, in the area of responsibility of aerodrome ADC	One (1) ATM-influenced Separation Minima Infringement and Inadequate separation in the area of jurisdiction of aerodrome ATC
		an acceptable value is 10
I-12	Number of ATM caused Airspace infringement	One (1) ATM-influenced Airspace infringement
	Other ATM caused events category C and	Zero (0) category C events
I-13	above (such as Missed approach / go- around / Rejected T/O etc.)	an acceptable value is 25

Table 4. Target and accomplished values of safety indicators required by CAD for 2023



	A group of CNS indicators (ATM specific events)	Accomplished and Acceptable safety level
I-14	Number of DPS failures (TopSky system)	0 breakdowns per year on average <8 events (failures) per year
I-15	Total duration of outage of SSR radar stations	the value of the indicator is 8.97 min <500 minutes per year
I-16	Total duration of PSR radar stations outage	the value of the indicator is 11.49 min <2,000 minutes per year
I-17	MTBO – mean time between failures LLZ ILS-a 12L ³ (CAT III)	MTBO[h]= / >4,500 hours per year
I-18	MTBO – mean time between failures LLZ ILS-a 30R (CAT I)	MTBO[h]= / >1,500 hours per year
I-19	The number of losses or degradation of one or more operating frequencies	on average 4.66 service interruptions on an annual basis <50 events per year
A	group of ASM-ATFCM capacity indicators	Accomplished and Acceptable security level
I-20	FUA – Utilization percentage of requested airspace allocations (Percentage of used requests for airspace allocation as compared to their total number)	91.62% Values are not prescribed, but the trend is monitored.
I-21	Average Delay per IFR Average Delay per IFR Movement in FIR Belgrade generated by ATM	0.52391 минута по IFR лету <0.1 minutes / IFR Movement
- Commin		

³ LLZ ILS 12R – MTBO [h] = 2.452 Devices LOC 12R and GP 12R (used for PSS 12R/30L) are operational from 06/06/2023. Although safety indicators are not defined for LOC 12R and GP 12R, they are still calculated and displayed. Contributing to the unfavorable values for the LOC 12R is the total time the device has had to operate, which is not a full year.

	Events with direct ATM impact (Group of ATM Indicators)	Accomplished	Fulfilled / not fulfilled acceptable
			safety level
SI.1	Number of ATM caused Accidents	Zero (0) ATM caused Accidents	An accept- able value is 0.00181
SI.2	Number of ATM caused Serious Incidents	Zero (0) ATM caused Serious Incidents	An acceptable value is 1 Alarm 0
SI.3	Number of ATM caused Major Incidents	Six (6) ATM caused Major Incidents	An acceptable value is 18 Alarm 13
	ATM specific events (A group of CNS indicators)	Accomplished	Fulfilled / not fulfilled acceptable level of safety
SI.4	Number of losses or degradation of one or more operating frequencies (ground-to-air)	8 service losses on an annual basis	FULFILLED
SI.5	Availability of the monitoring function of the operation of SSR radar stations	Koviona – 12.42 minutes Murtenica – 36.54 minutes Koševac – no interruption Srpska Gora – no interruption	FULFILLED
SI.5	Availability of the monitoring function of <i>PSR</i> radar stations	Koviona – 32.39 minutes Murtenica – disconnected Srpska Gora – no interruption	FULFILLED
SI.6	Availability of data processing and distribution functions	0 failures	FULFILLED
SI.7	Availability of navigation function LOC 36 (CAT I) on LYPG	MTBO[h] = 8.757	FULFILLED

Table 5. Acceptable and Accomplished safety (process) indicators for 2023 required by CAA



	ATM specific events (A group of CNS indicators)	Accomplished	Fulfilled / not fulfilled acceptable level of safety
SI.7	Availability of navigation function LOC TIV	There was no failure – MTBO[h] = /	FULFILLED
SI.8	Availability of energy systems	There was no complete interruption of the power supply to operating devices (Availability 100%)	FULFILLED
SI.9	Endangering the safety (security) of the ATM system	2 bomb threat events; Events not ATM caused and not affecting SMATSA 28 Laser jamming events, and 3 events related to unruly passengers in the aircraft	MONITORED



Table 6. Acceptable and Accomplished values of risk indicators of operations required by CAA for 2023

	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 Fatal Accidents	0	>0
	CAT – Commercial Air Transport	CA Estal Assidants	0	.0
		GA Fatal Accidents	0	>0
		CAT Serious Incidents	0	>0
		CAT Ground Accidents	0	>0
	Runway Excursion -	Unstabilized approach	15	1
	implies a set of indicators that, as leaders,	Rejected take off	0	3+
	are monitored primarily due to the specificity	Deep landing events	0	3+
	of LYTV, the absence of RESA, local weather	Other abnormal runway contact	0	3+
		Adverse weather in approach causing MA	68	1
		Relevant tech: Landing gear / trust reversers / flaps malfunction / brakes	1	3+
		(E)GPWS warning Terrain warning	0	1
		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+
	MAC	ACAS / TCAS warning	0	1
	Midair Collision	Airspace infringement	0	1
		(Hi Risk) Loss of Separatio	0	3+
		Overspeed or low speed event	0	1
		Turbulence, wake vortex, wind shear, thunderstorm, lightning strike	0	1
		Icing, anti-icing	0	3+
	LOC-I	Weight and balance errors	0	3+
	Loss of Control – In flight	Flight control system failures	0	3+
		Abnormal state of aircraft (attitude, bank, pitch, configuration)	0	3+
		Relevant tech: eg FCS, technical occurrences	26	3+
		Loading errors	0	3+

Risk	SPI	Current value	Unacceptable value
	Birdstrike – судар / удар птица и ваздухоплова	86	1
Runway Incursion	Animals on rwy	6	1
	Aircraft on rwy	1	3+
	Vehicle / person on rwy	0	3+
Aircraft Unsafe Environment – implies indicators that monitor events caused	Fire or smoke in the aircraft	0	3+
by the occurrence of fire and smoke on the aircraft and decompression.	Decompression	0	3+
External Interference –	Lasers	28	3+
implies indicators that are monitored in the area of drone operations, laser jamming and the security of information and communication	Drones	0	3+
systems.	Cyber security	0	3+
ATM technical – implies events related to failure of technical air traffic control systems.	Occurrences related to CNS	54	1
GA – General Aviation indicators that are monitored separately from the first set of indicators	Accidents (non fatal)	0	1
Paraglider – indicators that are monitored separately from the first set of indicators	Accidents (non fatal)	0	1

Table 6. Acceptable and Accomplished values of risk indicators of operations required by CAA for 2023

4.8.1.2 Cost efficiency

The unit rate for the charging zone "Serbia–Montenegro–KFOR" for the year 2023 was approved and adopted at the EUROCONTROL's Enlarged Committee session held in November 2022. The EUROCONTROL's Enlarged Committee Decision No 22/173 of 24 November 2022 (Appendix 2), determined the amount of the unit rate at EUR 39.37 (*National Unit Rate*) and EUR 39.46 (*Global Unit Rate*), which includes the EUROCONTROL administrative fee.

Like the previous year, in 2023 there was no deviation in the value of the monthly adjusted unit rate, both for the "Serbia–Montenegro–KFOR" charging zone (EUR 39.37), and for the value of the unit rate, which belonged exclusively to SMATSA (33.76 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 1 - EP supply Rx Lovanja and LOC/DME ATI – a strong north wind knocked down an external switch cabinet;

^{1 -} TopSky-ATC part in ATI – interruption in the optical transmission path in the territory of Serbia due to the works of third parties;

^{1 -} LOC Tivat ATI – Aircraft pilot reports, device in required performances;

^{1 - 135.150}MHz APG – external interference and

^{1 - 118.000}MHz ATI – external interference.

4.8.1.3 Capacity

The capacity indicator measures 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 is generated by the air navigation service provision. 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.

The acceptable values for the capacity indicator are defined by the Civil Aviation Directorate of the Republic of Serbia in the document "Air navigation in the Republic of Serbia, safety and capacity indicators and acceptable safety levels from 2020 through 2025".

Information on the acceptable and accomplished values of the capacity indicator for 2023 is presented in the following table.



Table 7. Values of capacity indicators in 2023⁵

Figure 13.

Average delay time per IFR flight at FIR Belgrade generated by ATM in 2022 and 2023

⁵ Data source: European ANS Performance Data Portal (http://ansperformance.eu/).



The largest number of traffic regulations in SMATSA airspace jurisdiction in 2023 was introduced due to unfavorable weather conditions that generated over 84% of delays. Out of a total of 471,786 minutes of delay, 397,958 minutes of delay were generated due to bad weather conditions. (Figure 14.)





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 SES Performance Scheme under the Single European Sky regulation. The achieved values of the aforementioned indicators are monitored based on data of the EUROCONTROL – Performance Review Unit (PRU).

The target values of the indicators are defined in the following manner:

1. Indicator of deviation of the actual flight path in relation to the long-circuit route (KEA – *Key performance Environment indicator based on Actual trajectory*). The average efficiency of the horizontal flight is the deviation of the actual trajectory of 2.6% in relation to the long-circuit route.





Figure 15.

KEA – indicator of the deviation of the actual flight path in relation to the long-circuit route in Serbia and Montenegro in 2023⁶

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 filed flight path of 4.1% in relation to the long-circuit route.



Figure 16.

KEP – Indicator of deviation of the path in the last filed flight plan in relation to the long-circuit route in Serbia and Montenegro in 2023⁷

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

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



4.8.2 Indicators of the quality of services provided

The analysis of the SMATSA quality targets is performed on an annual basis. The results of the analysis of the quality targets fulfilment in 2023 are presented in the meeting of the Management Systems Committee (QMS).

Service	Target	Planned	Realized	Details
	Average delay per IFR flight generated by SMATSA on an annual basis	Less than 0,08 minutes	No	According to the source of the EUROCONTROL NMOC in 2023, the average delay per one IFR flight, generated by SMATSA was 0.54088 minutes. The reason for this lies in quite unfavorable weather conditions and the increase in traffic demand, still above STATFOR HIGH forecast, as well as due to conflict in Ukraine. The increase in traffic was expected, but not in these levels.
ATM	The percentage of aircraft that take off from the SMATSA area of jurisdiction within the time tolerance of the issued slot	Greater than 83%	Yes	According to the source of the EUROCONTROL NMOC, in 2023 the value of 89.06% of aircrafts, that took off from the SMATSA airspace jurisdiction, within the time tolerance of the issued slot, was achieved, on an annual basis.
	The number of serious incidents, which were determined by analysis to have been caused by ATM	Less than 3 (for Serbia)	Yes	An inspection of the event database maintained in SAF.00 for the year 2023 found that a total of 924 events
		Less than 2 (for Montenegro)	Yes	were reported, of which 25 required further analysis by the SAF.00. department. There were no serious incidents in 2023.
CNS	System availability of technical devices and systems within the SMATSA jurisdiction directly affecting the provision of services	A(t) = 99.9%	Yes	Despite the noted exceptions from the desired system availability values of the systems within the SMATSA jurisdiction, due to the application of individual and group redundancy of CNS devices and systems during 2023, it can be considered that the quality target from the CNS domain has been met for all devices, systems and servicing that directly affect the provision of the services.

Table 8. Analysis of the fulfillment of quality targets for 2023

Service	Target	Planned	Realized	Details
	Terminal Aerodrome Forecast (TAF) accuracy within the desired accuracy (as per ICAO Annex 3, Attachment B)	Greater than 80%	Yes	Results of the analysis of the Terminal Aerodrome Forecast (TAF): for LYBT 95.2%, for LYBE 95.7%, for LYVR 91.6%, for LYKV 93%, for LYNI 94.5%, for LYPG 96.1%, for LYTV 92.4%, or average for all airports 94.1%, thus achieving the desired operational accuracy provided in ICAO Annex 3, Attachment B.
МЕТ	The percentage of successfully trained candidates out of all trainees	100%	Yes	All trainees successfully completed the planned trainings, except for the initial training for the aeronautical meteorological technician, the success rate of which is 50% because one candidate decided to not take the exam after completing the training.
	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, in 2023, quality target was achieved, the percentage of delivery of MET information as per EUR DOC 018, Appendix F. The average for all airports is METAR (99.01%) and TAF (98.59%).
AIS	Data Quality Assessment (Q)	Greater than 0.81	Yes	Quality assessment was conducted on a sample of 100 data. The average grade for this sample is 0.984.
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	The value of the FPD process indicator for the year 2023 is 0.0018. In the course of 2023, only one NOTAM was issued to correct observed errors on published IFP, caused by FPD staff.

Table 8. Analysis of the fulfillment of quality targets for 2023

Service	Target	Planned	Realized	Details
	The realization of the number of lessons of theoretical teaching for the current year for each enrolled group of candidates at the ANS Staff Training Center	100%	Yes	Theoretical training lessons have been carried out in accordance with the appropriate Training Decisions.
TRE	Accomplishment of the number of hours of practical training for the current year for each enrolled group of candidates at the ANS Staff Training Center	100%	Yes	All the courses started in 2023 were completed in accordance with the approved plans and programs and the planned number of hours of practical training.
	The ratio of the issued Diplomas / Certificates / Credentials of completed training with the number of the trainees, for each enrolled group of candidates at the ANS Staff Training Centre	100%	No	In the course of 2023, a total of 19 diplomas for completed initial training – INITIAL TRAINING (out of possible 22) and 78 certificates for completed training to receive rating – DEVELOPMENT TRAINING (out of possible 78) were issued for a total of 100 trainees for whom the diploma and certificate is scheduled to be issued in accordance with document TRE.PROC.011. (Issuance of diplomas, certificates, and credentials at the ANS Staff Training Center). The percentage of realization is 97%.
CAL	Implementation of the annual calibration plan	100%	Yes	The annual calibration plan by means was 100% achieved. A total of 277 calibrations were carried out, of which 268 calibrations according to the annual plan and 9 extraordinary calibrations. Out of the total number of calibrations (277), 127 were realized according to contracts with external users.

Table 8. Analysis of the fulfillment of quality targets for 2023

4.8.3 Additional performance indicators

In addition to performance indicators included in European and domestic regulations and quality objectives, SMATSA 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.

Indicators	Target value for 2023	Accomplished
STO 01 – Improvement of ANS management		
Number of overloads reported by air traffic controllers	< 20 per year	<20
Observance of slots at Belgrade Airport (LYBE)	> 83%	86,2%
Observance slots at Tivat Airport (LYTV)	> 83%	97,9%
Observance of slots at Podgorica Airport (LYPG)	> 83%	97,7%
Observance of slots at Niš Airport (LYNI)	> 83%	96,2%
Severity of complaints from users of AIS services	< 9.89 per year	0,10
Severity of complaints from users of AIS services	< 9.89 per year	0,10

Table 9. Additional performance indicators in 2023

STO 06 - Improving the organizational performance and resource management system

Realization of the procurement / investment plan >80%

STO 07 – Improvement and development of human potential

Average number of days per year per employee spent at conferences or creative workshops	> 1.5
Average number of days per year spent on training	
for operational jobs (expressed per person)	>3

Due to restrictions imposed referring to planning of the business trips and sending to trainings, which are the consequence of the economic effects of the pandemic COVID-19, as per document PAR. DOC.003 Instructions for planning and submitting data for the preparation of planning documents, it is not possible to give adequate data relating to the aforementioned indicator.

75,98%





Information Technology

In 2023, in the field of information technology, a number of activities were performed aimed at improving existing systems, services, and applications, as well as developing new technologies. A special focus was placed on process and task automation, protection of data and corporate network, and the simplification of everyday activities and operations.

In the first half of the year, as part of the project "Digital transformation and creation of a financial business system with optimization of business processes – MIS ERP", support was provided in the process of data migration on contracts of legal entities, catalogs of legal entities, and harmonization of shared catalogs. Also, the functionality of Doculibrium DMS has been expanded, which now provides adequate support to the process of receiving, recording, distributing, certifying, approving, and to accounting records of incoming financial documents.

At midyear, an application was launched to improve the display of MET information at the air traffic controller's workplace, which enables the display of SIGMET and AIRMET in graphic form, as well as animations of radar, satellite, and electrical discharges.

The application for viewing and entering frequencies has been updated, so that information about the current configuration and the combinations available when opening and closing the sector are now available to the shift leader and the ACC supervisor at their workplace, thus reducing the workload of shift leaders and supervisors. Also, sector configurations, frequencies, and phases were updated, and new sector boundaries were introduced. During the year, lots of attention was devoted to the introduction of an integrated information system – CIP, which, among other things, involves the systemization and connection of various systems / software solutions that provide adequate support to business processes.

More significant business processes completed in this period are:

- Connection of the Flight Message application with MIS ERP in order to forward information about flights for the purpose of calculation, invoicing, and collection of terminal charges;
- Planning and monitoring the implementation of planning tasks;
- Financial planning;
- Redesign of the shared catalog exchange system;
- The entire process of incoming invoices.





Consultations with Service Users

6.1 Air traffic management – ATM



The year 2023 was marked by further recovery from the consequences of the pandemic with no expectation that traffic will reach the level from 2019. Nevertheless, traffic demand at southeast axis of European air traffic continued to grow significantly more than other flows. With very frequent occurrences of adverse weather conditions (CB), this situation led to an increase in the generated delay far beyond the expected.

Although there were no formal Service Users' reports (IATA, A4E, AIRE) referring to summer season 2023, EUROCONTROL still prepared an analysis of the summer season for the RNDSG/110 meeting. During the chair's presentation, information concerning delays was presented without the usual stressing of generators, but with the finding that the whole situation was influenced by several factors which could not be fully foreseen.

In December 2023, a regular consultation process was conducted with other users of services / functions in the field of ATM (sports and amateur flying, commercial aviation, legal and natural persons, army, police, etc.), sending emails to interested parties with a link to the questionnaire on satisfaction with provided ATM services / functions during 2023. Only one user submitted a completed questionnaire, without objections.





6.2 Aeronautical Information Service – AIS

User satisfaction survey analysis is performed 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.

The trend of errors in EAD applications was analyzed for the period from the last quarter of 2022 through the third quarter of 2023.

PAMS – Based on a random sample of 20 documents, which are checked every quarter, one error was reported in the entire reporting period. That was in the fourth quarter of 2022, which accounted for 5%, or 1 out of 20 documents reviewed.

The error related to the metadata AIRAC Flag which was not assigned to the document BIRD CONCENTRATIONS CHART for AIRPORT NIKOLA TESLA BELGRADE JSC. As the introduction of new bird concentration areas on this map was considered AIRAC information, there was a deviation because the bird concentration cannot be planned and predicted in advance and published as if it were introduced with a fixed AIRAC date.

The analysis of published NOTAM, which is made by the EAD quarterly in the period

October 2022 – September 2023, covered a random sample of 497 NOTAMs. Five (5) errors were found, which is 1.01% errors in the analyzed sample. The cause of these errors is human error or disagreement with local practice, not inadequate procedures.

Following the analysis, every three months a conversation with the agents of the NOTAM Bureau is conducted, particularly indicating the errors made, in order to avoid repeating such errors.

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 Aeronautical Information Service collects, analyzes, and handles complaints in accordance with AIS.PROC.012 – Complaint Handling.

In the course of 2023, one (1) complaint was received in connection with the provision of aeronautical information services. Complaint PRI-01-23 pertained to the fact that a new precision approach map for the new RWY 12R at Nikola Tesla Belgrade Airport was not published. The airport operator did not submit the data for the publication of the new map, although during the preparation of the amendment it was repeatedly reminded to submit the relevant data. The objection was resolved and closed, as the map was published with the first subsequent amendment after the data was submitted by the source. The objection was assessed as important, because the users expressed the need for this map.

The analysis did not determine the existence of any systemic problem or objection of a higher frequency.

The users completed 13 online User Satisfaction Questionnaires (10 Questionnaires were rated excellent, 1 Questionnaire was rated very good, 1 Questionnaire was rated good, and 1 was rated as satisfactory).

By analyzing the submitted User Satisfaction Questionnaires for the year 2023, it was concluded that the users rated the provision of aeronautical information services with an excellent rating.

6.3 Aeronautical Meteorological Service – MET

During 2023, no user comments and complaints were received regarding the provision of MET services via regular mail.

By inspecting the completed and submitted copies of filled out forms of the Book of Impressions of Aviation Users for the year 2023 from organizational units, in accordance with QM.PROC.007, point 4.3.1.1, surveying the satisfaction of users of MET services by means of a questionnaire, it was observed that all expressed user comments reflected user satisfaction with the provided MET services.

Also, the cooperation with the meteorological staff was evaluated by the users as excellent.





6.4 Airborne GRNS calibration

Table 10. Results of the User Satisfaction Survey on airborne GRNS calibration service in 2023

Activity	Average rating
Degree of coordination of activities before, during, and after the calibration of GRNS	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 calibration of GRNS	5,0
Coordination of planned and realized activities	4,75
Response to additional requests	5,0
AVERAGE RATING	4,95

Based on the numerical rating given in the table and respective comments of respondents, one may conclude 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 2023 (in 000 RSD)

Elements (in 000 RSD)	2022 Realization	2023 Realization	2023 Reali- zation / 2022 Realization
Operating income	12,359,935	14,032,742	13.5%
Income from sale	12,231,772	13,876,211	13.4%
Domestic market	598,508	823,777	37.6%
Foreign market	11,633,264	13,052,434	12.2%
Other operating income	128,163	156,531	22.1%
Operating expenditures	10,101,650	12,342,632	22.2%
Costs of material, fuel and energy	227,093	327,816	44.4%
Wages, wage compensations and other personal expenditures	6,659,178	8,143,350	22.3%
Manufacturing services	805,296	813,515	1.0%
Depreciation	1,525,637	1,816,526	19.1%
Long-term provisions	100,298	235,217	134.5%
Intangible costs	784,148	1,006,208	28.3%
Expenses from adjustment of property value	-	-	-
Operating result	2,258,285	1,690,110	-
EBITDA	3,783,922	3,506,636	-7.3%
	30.61%	24.99%	-
Financial revenues	80,937	55,599	-31.3%
Financial expenditures	327,649	281,691	-14.0%
Other revenues	45,644	116,933	156.2%
Other expenditures	327,905	103,391	-68.5%
Net gain from regular operation before tax	1,729,312	1,477,560	-
Net gain / loss of discontinue d operation	-56,806	-9,262	-
Tax expenditure / revenue	-355,001	-267,983	-
Net result	1,317,505	1,200,315	-

7.1.1 Business revenue

After the significant recovery of air traffic in 2023, the trend of traffic growth, and therefore of income from route and terminal charges, continued in 2023. This practically means that the business revenues achieved by SMATSA are 13.5% higher compared to 2022, while at the same time they are 7.9% higher compared to the planned value.

Revenue from the route charges:

According to Central Route Charges Office (CRCO) data, a total of 902,123 flights were invoiced in 2023, which is an increase of 16% compared to 2022, when 780,102 flights were invoiced. The number of chargeable service units in 2023 in the charging zone Serbia–Montenegro–KFOR was 3,054,083, which is 15% more than in 2022. The unit rate in 2023 for the Serbia–Montenegro–KFOR charging zone amounted to 39.37 euros (National Unit Rate), compared to 42.21 euros in 2022 (a decrease of -7%). According to CRCO data, based on the realized number of flights, service units, unit rate and revenue distribution model among the entities participating in the cost base, 103,177,563 euros of revenue from route charges was invoiced for SMATSA in 2023, which is 12% more than in 2022.

Income from terminal charges:

In 2023, 53,716 departures were invoiced in the terminal, which is an increase of 20% compared to 2022. The 49% of invoiced revenue was realized from domestic airlines, while 51% is from foreign airlines. Based on the realized traffic in the terminal in 2023, 15,169,096 euros was invoiced, which is 30% more than in 2022. At the same time, the realized traffic in the terminal is 24% higher than planned.

Other operating income:

This income group includes primarily the income from the provision of radar data and radio communication services, as well as income from flight calibration services.

7.1.2 Business and other expenses

Material, fuel and energy costs:

The realization of material, fuel, and energy costs is by 44% higher compared to 2022, due to higher consumption and higher price of fuel and electricity.

Salary costs:

The realization of salary costs, salary compensation, and other personal expenses amounted to 8.14 billion dinars, which is by 22% higher compared to 2022.

The increase in salary costs, salary compensation and other personal incomes was primarily due to the change in the value of the points used for calculating and paying employees' salaries. The point value was changed for the first time after 2014.



Costs of production services:

The costs of production services are almost at the same level as in 2022, while on the other hand they are 21% lower compared to the planned value for 2023, primarily due to the changed timeline of liabilities and the delayed start of contract implementation compared to the plan. Fixed costs, such as system and equipment maintenance costs, make the majority of expenditures in this position.

Depreciation costs:

The realization of depreciation costs is by 19% higher compared to the previous year, due to the activation of the new control tower at the Nikola Tesla Airport in Belgrade and the construction of the Annex of the ACC building, as well as the start of the depreciation calculation in the first month of 2023 for the upgraded software TopSky-ATC system (step 2), whose operational work began at the very end of the year, in December 2022.

Provision costs:

In 2023, an assessment of long-term provisions was made on 31 December 2023, based on severance pay (80,207 thousand dinars), jubilee awards (151,867 thousand dinars), and costs of court disputes (3,143 thousand dinars). As an effect of the actuarial calculation, an actuarial gain in the amount of RSD 106,509 thousand dinars 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. These costs are by 28% above the results from 2022. The reasons for slightly higher costs in this position in 2023 compared to the previous year are primarily the somewhat higher contribution to Eurocontrol, greater allocation for insurance costs, as well as for the costs of consulting and other intellectual services.

Other expenses:

In the item Other expenses, an amount of 103,391 thousand dinars was recorded, which mostly includes: expenditure based on adjusting the value of receivables from customers 70,542 thousand dinars, losses based on the sale of assets in the amount of 10,755 thousand dinars, and direct write-off of receivables in the amount of 2,527 thousand dinars.

Discontinuing Business Loss:

In this item of the income statement, a negative net effect (higher expenses than income) was recorded on the result based on the losses of the business that was discontinued, changes in accounting policies and corrections of errors from earlier years, in the amount of 9,262 thousand dinars. The amount of 18,821 thousand dinars was recorded on the income position from earlier years, and the amount of 28,083 thousand dinars was recorded on the expenditure position from earlier years.

Net result:

The net result was positive amounting to 1,200,315 thousand dinars. The increase in net profit compared to the planned value was primarily due to better realization of business revenues, which are almost 14% higher compared to the plan.



7.2 Balance Sheet

Assets (in 000 RSD)	2019 Realization	2020 Realization	2021 Realization	2022 Realization	2023 Realization
Fixed assets	15,850,968	16,959,726	19,942,084	18,741,011	19,034,563
Intangible investment	112,868	84,545	66,544	226,926	258,014
Buildings, plants and equipment	15,738,100	16,875,181	18,753,986	17,618,170	17,986,695
Long-term financial investments	-	-	-	-	-
Long-term claims	-	-	1,121,554	895,915	789,854
Working assets	3,369,062	2,747,661	4,840,216	5,334,089	5,125,799
Stocks	156,878	114,850	73,711	72,295	74,757
Claims based on sale	1,659,235	1,208,021	1,619,367	1,909,067	1,967,368
Other claims	219,234	117,452	66,915	133,911	175,181
Short-term financial investment		-	-	_	
Cash equivalents and cash	1,169,259	1,157,483	2,939,824	3,063,199	2,695,997
Short-term prepayments and deferred expenses	164,456	149,855	140,399	155,617	212,496
Total assets	19,220,030	19,707,387	24,782,300	24,075,100	24,160,362
Off-balance sheet assets	878,755	2,206,026	1,828,281	1,139,208	1,122,929

Table 12. Balance Sheet on 31 December 2023 (in 000 RSD)

LIABILITIES (in <000 RSD)	2019 Realization	2020 Realization	2021 Realization	2022 Realization	2023. Realization
Capital	14,258,882	9,899,696	8,740,197	10,253,173	11,153,489
Original capital	1,873,820	1,873,820	1,873,820	1,873,820	1,873,820
Reserves	507,044	507,044	507,044	507,044	507,044
Revaluation reserves	3,385,720	3,346,892	3,384,475	3,425,576	3,285,167
Retained profit	8,548,244	4,171,940	3,056,052	4,446,733	5,487,458
Non-realized gains / losses	-55,946		-81,194	-	1
Long-term provisions and liabilities	2,901,531	6,822,850	12,388,157	9,243.367	9,531,320
Long-term provisions	935,665	789,563	913,452	695,192	1,131,328
Long-term liabilities	1,965,866	6,033,287	11,474,705	8,548,175	8,399,992
Deferred tax liabilities	588,749	566,238	435,487	505,390	487,733
Short-term liabilities	1,470,868	2,418,603	3,218,459	4,073,170	2,987,820
Short-term financial liabilities	204,739	39,684	1,581,783	2,460,485	1,365,771
Received advances	136,040	118,777	20,566	14,634	15,173
Liabilities from operation	592,253	1,138,348	753,631	659,943	746,676
Other short-term liabilities	506,979	1,093,010	836,094	915,124	829,080
Short-term Accrued liabilities	30,857	28,784	26,385	22,984	31,120
Total liabilities	19,220,030	19,707,387	24,782,300	24,075,100	24,160,362
Off-balance sheet liabilities	974,419	2,206,026	1,828,281	1,139,208	1,122,929



Fixed assets on 31 December 2023 amounts to 19,034,563 thousand dinars, which is circa 2% more than the previous year. In the item of long-term receivables, the amount of 789,854 thousand dinars was recorded, which refers to the claim of SMATSA based on the sale of the SMATSA Aviation Academy.

Receivables based on sales on 31 December 2023 amount to 1,967,368 thousand dinars and participate with 38.3% in the structure of total current assets.

Due to the increase in traffic, and therefore of income from the core activity, cash at the end of the period amounted to 2,695,997 thousand dinars (about EUR 23 million).

As regards the long-term liabilities on 31 December 2023, in 2021, SMATSA records an amount of 8,399,992 thousand dinars (about EUR 71.1 million). This item refers to long-term loans from EIB and EBRD. The amount of liabilities based on long-term leases calculated in accordance with the accounting standard IFRS 16 is also included in this position.

In the item of short-term financial obligations, an amount of 1,365,771 thousand dinars (about EUR 11.5 million) was recorded, referring largely to a part of liabilities based on loans and leases (IFRS 16) due up to one year.





7.3 Cash Flow Report

Regarding cash flows from operational (business) activities in 2023, SMATSA generated a net inflow of 3,048,908 thousand dinars.

SMATSA withdrew the funds from the EBRD loan in the amount of 1,175,617 thousand dinars, which were used for continuation of investment activities. On the other hand, 2,024,932 thousand dinars were spent for the repayment of loans taken in previous years, out of which 1,663,649 thousand dinars was paid for loans in the country and 361,283 thousand dinars for loans abroad.

In 2023, SMATSA continued the investment activities, so the net outflow of cash from these activities amounted to 2,123,062 thousand dinars.

Cash at the end of period was 2,695,997 thousand dinars.

		Amount	
Item		Current year	Previous year
A. CASH FLOWS FROM BUSINESS ACTIVITIES			
I. Cash inflows from business activities (1 to 4)	3001	14,576,827	12,086,095
1. Sales and received advances in the country	3002	860,317	540,069
2. Sales and advances received abroad	3003	12,997,329	11,137,946
3. Received interest from business activities		11,572	9,157
4. Other inflows from regular operations	3005	707,609	398,923
II. Cash outflows from business activities (1 to 8)	3006	11,527,919	9,197,751
1. Payments to suppliers and advances made in the country	3007	1,747,379	1,185,843
2. Payments to suppliers and advances made abroad		1,016,929	925,955
3. Salaries, salary allowances and other personal expenses		7,943,366	6,948,099
4. Interest paid in the country	3010	41,284	73,514
5. Interest paid abroad	3011	193,220	64,340
6. Income tax	3012	585,741	
7. Outflows based on other public revenues			
8. Other outflows from business activities			
III. Net cash inflow from business activities (I-II)		3,048,908	2,888,344
IV. Net cash outflow from business activities (II-I)	3016		

Table 13. Report on cash flows in the period from 1 January – 31 December 2023 (in 000 RSD)



Table 13. Report on cash flows in the period from 1 January – 31 December 2023 (in 000 RSD)

	AOP	Amount		
Item		Current year	Previous year	
B. CASH FLOWS FROM INVESTMENT ACTIVITIES				
I. Cash inflows from investment activities (1 to 5)			-	
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	2,123,062	1,211,399	
1. Purchase of shares and stakes	3024			
2. Purchase of intangible assets, buildings, plants, equipment and biological agents	3025	2,123,062	1,211,399	
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	2,123,062	1,211,399	
C. CASH FLOWS FROM FINANCING ACTIVITIES	2000	1,175,617	76 001	
I. Cash inflows from financing activities (1 to 7)	3029		70,031	
1. Increase of the original capital	3030			
2. Long-term loans in the country	3031			
3. Long-term loans abroad	3032	1,175,617		
4. Short-term loans in the country	3033		76,031	
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)	3037	2,465,848	1,629,064	
1. Redemption of own shares and stakes	3038			
2. Long-term loans in the country	3039	1,663,649	772,104	
3. Long-term loans abroad	3040	361,283	402,585	
4. Short-term loans in the country	3041			
5. Short-term loans abroad	3042			
6. Other liabilities		440,916	454,375	
7. Financial leasing	3044			
8. Dividends paid	3045			
III. Net cash inflow from financing activities (I-II)	3046			



Item		Amount	
		Current year	Previous year
IV. Net cash outflow from financing activities (II-I)	3047	1,290,231	1,553,033
D. TOTAL CASH INFLOW (3001 + 3017 + 3029)		15,752,444	12,162,126
E. TOTAL CASH OUTFLOW (3006 + 3023 + 3037)	3049	16,116,829	12,038,214
F. NET CASH INFLOW (3048 − 3049) ≥ 0	3050		123,912
G. NET CASH OUTFLOW (3049 − 3048) ≥ 0		364,385	
H. CASH AT THE BEGINNING OF ACCOUNTING PERIOD	3052	3,063,199	2,939,824
I. POSITIVE EXCHANGE RATE DIFFERENTIALS BASED ON CASH CONVERSION	3053	96	1,750
J. NEGATIVE EXCHANGE RATE DIFFERENTIALS BASED ON CASH CONVERSION	3054	2,913	2,287
K. CASH AT THE END OF ACCOUNTING PERIOD		0 (05 007	2 0 (2 1 0 0
(3050 - 3051 + 3052 + 3053 - 3054)	3000	2,093,997	3,003,199

Table 13. Report on cash flows in the period from 1 January – 31 December 2023 (in 000 RSD)





Non-financial reporting

In accordance with the introduced European practice, non-financial reporting was integrated in domestic legislation with the adoption of amendments to the Law on Accounting.

Thereupon, non-financial reporting contains all the necessary "information for understanding of the undertaking's development, performance, position and impact of its activity, information relating to at least environmental matters, social and employee-related matters, respect for human rights, anti-corruption and bribery matters".

Based on the Law on Companies of the Republic of Serbia ("Official Gazette of the RS", No. 36/11, 99/11, 83/14, 5/15, 44/18, 95/18, 91/19, 109/21), 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, 80/08, 40/10, 36/11, and 65/20), the Air Transport Law of the Republic of Serbia ("Official Gazette of RS", No. 73/10, 57/11, 93/12, 45/15, 66/15 – another law, 83/18, 9/20, 62/23), the Law on Air Traffic of Montenegro ("Official Gazette of Montenegro", No. 66/08, 30/12, 30/17, and 82/20), 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 Ilc 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.

The SMATSA'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 Serbia & Montenegro" – International Contracts, No. 18/04, 19/04 and 04/05), and in accordance with the Multilateral Agreement on Unit Rates ("Official Gazette of Serbia & Montenegro" – 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 the European Organization for the Safety of Air Navigation (EUROCONTROL), which is applied by 40 member countries.

For the use of air navigation services in the airspace of the Republic of Serbia and the airspace of Montenegro – Belgrade in-flight information areas (FIR/UIR Belgrade), i. e. the charging zone Serbia–Montenegro–KFOR, SMATSA earns income from unit rates.

The unique system applied by 41 member countries of EUROCONTROL, which essentially defines the business model of SMATSA, 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 establishment the cost base for unit rates and calculating the amount of unit rates. In this regard, the revenues generated from unit rates are used to cover route expenses, i. e. only route costs can be financed from unit rates (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 forecast.

Given that the route costs are the basis for determining the amount of the unit rate, these 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 as of 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).

SMATSA continued to invest in new technologies, systems, equipment and infrastructure in 2023, with the aim of maintaining safety, expediency, efficiency, and increasing capacity, productivity and continuous compliance with regulatory requirements, in response to the demands of increased traffic volume.







8.1 Policies applied within SMATSA

With regard to the Law on Accounting ("Official Gazette of the RS", no. 73/19 and 44/21 – another law) and the Introduction of Non-Financial Reporting, and based on Article 37, paragraph 3, sections 2 and 3, below it is shown how SMATSA operates and what policies it applies.

8.1.1 Established policies within SMATSA

The main goal of SMATSA, 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 smallest possible extent in the airspace under the jurisdiction of SMATSA, to a practically acceptable level (As Low As Reasonably Practicable).

Based on the collected and available data on events, it may be concluded that SMATSA operated in 2023 within the defined / acceptable level of security.

In 2023, a meeting was held with representatives of CAD and CAA and it was agreed to change the way of monitoring safety indicators, i. e. defining the indicators that are monitored at the national level and those monitored by SMATSA as part of its operations. This method will be applied during the next year.

In June 2023, an integrated certification check of the QMS and EMS systems was carried out by SGS Belgrade in order to maintain the issued ISO 9001:2015 (QMS) and ISO 14001:2015 (EMS)
certificates. The check was carried out at the following locations: Annex ACC Belgrade QMS and EMS (system requirements), ADC Niš (ATM, CNS, MET, AIS, and EMS), ADC Kraljevo (ATM, CNS, AIS, and EMS), and the warehouse in Krnješevci (EMS).

During 2023, activities were intensively performed to implement the requirements introduced by regulation (EU) 2020/469 – amendments / supplements to the common requirements of ATM/ANS, and requirements for ATS, MET, AIS, FPD, preparation of amendments / supplements to internal documentation, planning and coordination of external / internal checks, preparation of data for amendment / supplement of the provider certificate, etc.

In mid-March 2023, the CAD conducted a basic check (certification check) of ATSEP personnel in SMATSA, on the basis of which it issued the Certificate of Right to Training Aviation Technical Air Traffic Control Personnel SRB/CNS-ATO-002 dated March 16, 2023.

The Safety Policy, together with the Trust Culture Policy, Quality Policy, Assurance 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.

At the meetings held in 2023, there was a need to organize periodic training of managers in the field of safety, Safety Culture and Just Culture, in order for employee representatives to be involved in the preparation of the aforementioned documents, whereby they would participate by signing in giving consent to the aforementioned documents (MS.POL.001 – Management system policy and SAF.PROC.010 – Implementation of the Just Culture.

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 publicized on the website of SMATSA, making it available not only to employees of SMATSA but also to the general public.

In the course of 2023, the Human Resources Policy (HUM.POL.001) entered into force, which sets out that the management of SMATSA continuously monitors the implementation of the Human Resources Policy with regard to all employees and demonstrates its commitment to it, provides the necessary and appropriate resources, human and financial resources for its implementation. In accordance with the previously adopted HUM.POL.002 - Personnel Employment and Training Policy, directors of organizational units are obliged to propose, plan, and if necessary, organize and implement the training process for personnel who perform duties and support tasks in the provision of air navigation services in SMATSA.

The Personal Data Protection Policy (ZPOL. POL.001) implements the provisions of the Law on Personal Data Protection of the Republic of Serbia ("Official Gazette of RS" No. 87/18). In SMATSA, the document was adopted back in 2020, where the processes of personal data protection are defined and described in detail.



8.1.2 Human Resources

Human Resources Management (HRM) represents a comprehensive and coherent approach in the process of recruiting and selecting candidates for work engagement, as well as in the process of developing employees in the company. It is a logical and organized, clear and understandable sequence of activities based on business policy, business strategy, needs and development of the company.

Taking into account that employees are the basic resource for the implementation of business activities in the company, SMATSA established a human resources management system in accordance with its development policy and strategy, and based on defined Business Plan.

The main goal of establishing a human resources management system is to ensure the optimal number of incumbents with adequate knowledge, skills, and abilities to perform their duties and tasks in a safe, efficient, consistent, and sustainable manner.

By adopting the Human Resources Policy (HUM.POL.001) in 2023, the management of SMATSA clearly expresses its commitment to the continuous development of human resources.

The commitment of SMATSA is reflected in the application of the latest approved methods in the processes of human resource management functions, which result from the systematic planning of the recruitment process of human resources, the systematization of duties and tasks, as well as protection and safety at work.

The document, which more closely defines the rights, obligations and responsibilities of the employer in the segment of occupational safety and health, in SMATSA refers to the Rulebook on Occupational Safety and Health. The methodologies used for risk management in the workplace include the identification of hazards and harms, analysis of their occurrence and assessment of the resulting consequences, risk assessment, with the proposal of measures to eliminate or reduce the level of risk, and monitoring the effect of the measures taken.

Identification of hazards and risk assessment at the workplace is carried out for all workplaces by observing, talking to employees and determining the actual situation at the workplace. Identified hazards, risk assessment and measures for safe and healthy work at the workplace are defined by the Act on Risk Assessment at Workplaces.

When it comes to the training of aviation personnel, SMATSA signed an Agreement with the Aviation Academy on a dual model of education and business-technical cooperation. Enrollment of new ATC classes for Initial Training to obtain an ATC student permit/ATC permit and corresponding authorizations of students enrolled for the needs of SMATSA is carried out in the study program (program of basic applied studies – Air traffic control) according to the dual model of education at the College of Applied Studies Aviation Academy. The appropriate airport instrument air traffic control rating for the tower (ADI/TWR) is obtained in accordance with the certificate of the ANS Personnel Training Center i. e. according to its approved and certified initial training programs and plans. In this sense, meetings and bilateral cooperation with the Aviation Academy are held continuously, on various issues related to teaching modules.

In accordance with the established practice and the signed Agreement on Business and Technical Cooperation with the Faculty of Transport and Traffic Engineering of the University of Belgrade, students of the final years (III and IV) from the Department of Air Traffic and Transport of the Faculty of Transport and Traffic Engineering of the University of Belgrade or from the Aviation academy (III and IV years of High School) come to the ANS Staff Training Center based on their request with the approval of the CEO of SMATSA.

Teaching at the Staff Training Center is based on plans and programs and teaching materials approved by the Civil Aviation Directorate of the Republic of Serbia. As part of basic training, the Center uses EU-ROCONTROL materials, which it pays for on the basis of a signed three-year contract.

When it comes to employee benefits and allowances, 2 (two) annexes to the Collective Agreement were signed during 2023 (Annex II dated September 4, 2023 and Annex III dated November 2, 2023). All provisions of the Collective Agreement and related annexes were implemented.

With regard to the health protection of employees, SMATSA, within its competences, carries out activities related to the organization and records of medical examinations of air traffic controllers and pilots and activities to monitor the abuse of psychoactive substances (PAS), in accordance with the provisions of the Air Traffic Act and the associated by-laws.

The tasks of organization and implementation of employee health promotion (general regular examinations, specialist examinations and the like) in SMATSA are carried out within the scope of additional private health insurance.

The employee structure within SMATSAs has not changed significantly compared to previous years.

The following figure shows the employee structure at the end of 2023 according to the qualification structure and licenses / credentials of personnel for the provision of air navigation services.

Figure 17. Employee qualification structure

QUALIFICATION STRUCTURE	NUMBER OF EMPLOYEES
VIII	4
VII total	347
VII + AIR TRAFFIC CONTROL SCHOOL	91
VII + license (CNS) CNS Staff	73
VII + credential (MET) MET Staff	38
VII	145
VI total	52
VI + AIR TRAFFIC CONTROL SCHOOL	27
VI + license (CNS) CNS Staff	11
VI + credential (MET) MET Staff	2
VI	12
V	3
IV total	498
IV + AIR TRAFFIC CONTROL SCHOOL	377
IV + license (CNS) CNS Staff	66
IV + credential (MET) MET Staff	43
IV	12
	3
I share a state of the state of	1
Total	908

The following figure shows the employee structure at the end of 2023 as per the number of employees by sector.

Figure 18. Structure of employees by sector

SECTORS	NUMBER OF EMPLOYEES
Sector for Air Traffic Management, meteorological services and aviation information services – AMI	77
Sector for Area Control Center Belgrade – ACC	181
Sector for terminal and airport air traffic control – TER	355
Sector for aviation technology – CNS	120
Sector for management systems – SMS	24
Information and Communication Sector – ICT	13
Aviation personnel training sector – TRE	29
Calibration service – CAL	11
Sector for investment affairs – INV	19
Sector for economic and financial affairs – FIN	31
Internal audit – IRV	0
Sector for human resources, legal and general affairs – HUM	38
Center for Strategic Development and International Cooperation – STM	2
Executive Office – EO	8
Total:	908

The following figure shows the employee structure at the end of 2023 as per the number of employees by gender.





Figure 19. Structure of employees according to gender

The following figure shows the employee structure at the end of 2023 as per age structure.



Figure 20. Age structure of employees



8.1.3 Risk management

Risk management in SMATSA 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 dangers are identified to which the most important investment projects are exposed, as events that can lead to failure to fulfill the set business goals.

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

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.

On a regular basis, the identified risks, their impact on the operations of SMATSA and the effectiveness of existing control measures are reviewed and analyzed. Events that have a negative impact on the establishment 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 licensees and support service personnel, interruptions in the operation of the ICT system, non-compliance of SMATSA 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 business processes are identified continuously.







In order to reduce the risk of non-compliance with aviation regulations, through the compliance monitoring function, the adoption of regulations at the European level is monitored, and their subsequent transposing into the national legal systems of the founding countries of SMATSA. Through the quality management system, internal application of regulations is ensured, that is, internal monitoring of compliance and application of internal procedures.

In order to further reduce the risk of the possible unavailability of adequate human resources, the processes of planning, recruitment, selection and training of personnel have been established in order to acquire and continuously maintain competences, and in order to reach international and national standards.

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 methodology, 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.

During 2023, the Register of Business Risks was updated in the domain of financial risks in the part of credit liabilities and interest rates. Also, through the preparation and updating of planning financial and investment documents, as well as through the preparation of reporting documents, the implementation of the adopted plans was monitored and, if necessary, corrective measures were taken in order to achieve the set strategic goals.

Regarding technological risks, and in order to reduce the risk of technological obsolescence, SMATSA through its development investment projects keeps pace with technological changes and new concepts, in order to remain competitive on the market. As the most significant contribution to the reduction of this type of risk, the project of improving the automatic air traffic control system stands out, involving the transition from the TopSky-ATC system to the TopSky One digital platform, as well as for the improvement of cyber security and the communication part of the TopSky-ATC system, all in cooperation with THALES LAS FRANCE SAS. During 2023, projects were also started to improve the radar coverage of the airspace under the jurisdiction of SMATSA, as well as the replacement of Distance measuring equipment (DME) devices in Serbia and Montenegro.

In the field of organization of duties and tasks, the implementation of the contract with Helios Technology Limited for the realization of strategic business goals is underway, which also includes support for the development of the new organizational structure of SMATSA. As part of the process of managing investment projects, the identification of risks is carried out, i. e. the assessment of risks that during the planning and implementation of capital investments (investment projects or investments of an capital nature), may call into question their realization (exceeding deadlines, lack / unavailability of people as key agents for all activities.

In the field of information and communication technologies, work is underway to align with the new requirements for cyber security (Implementation Regulation (EU) 2023/203 – Part IS). These activities are carried out in cooperation with Helios Technology Limited and Thales Cyber Solutions.

8.1.4 Environmental Protection

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

- Greenhouse gas emissions;
- Other emissions and effluents, including ozone-depleting substances, nitrogen oxides (NO₂), sulfur oxides (SO₂) 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.

Joint cooperation on air quality monitoring at the wider Belgrade Airport complex is based on established communication regarding air quality monitoring at the wider airport complex.

The ESAC (Environmental Protection and Social Affairs Committee) advisory board with its environmental protection activities with stakeholders had two regular meetings during 2023.

The results of the work of the ESAC board are as follows:

- 1. Forming of a working group for expert analysis of operating procedures that can lead to noise reduction at Belgrade Airport, i. e. establishment of a balanced approach to noise management.
- 2. Participation of SMATSA in the development of a strategic noise map with a special focus on action plans for noise reduction based on the established continuous noise monitoring for Belgrade Airport. Within this, the noise indicators determined for the city of Belgrade as part of the acoustic zoning of the city will be measured.



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, establishing of incoming PBN procedures that will allow the application of continuous approach CDO techniques whenever possible, monitoring and measurement of results.

Objective ENV 02 – Establishing cooperation on the basis of agreements with interested parties at the airport complex (airport, ANSP, airlines) regarding the environment, and according to the "Eurocontrol" specification of CEM management (Collaborative Environmental Management), which is planned for implementation by 1 January 2030, and includes topics:

- Reduction of noise emissions, reduction of fuel consumption and gas emissions (especially CO₂ and NO₂) in the air;
- Application of CDO/CCO operations in approach and departure procedures including PBN implementation;
- Compliance with the requirements of laws related to airports and the requirements of certified environmental management systems;
- Establishment of requirements for application / mixing of fuel from renewable sources;
- Climate change risk assessment with plans for adaptation and reduction of consequences and
- Involvement of the wider local community of representatives of competent legislative institutions.

When it comes to non-ionizing high and low-frequency radiation from devices at locations in Montenegro, SMATSA is obliged as the owner of devices emitting this type of radiation to conduct a study that will refer to high-frequency sources of electromagnetic fields.

As for this type of device at locations in Serbia, the level of low-frequency non-ionizing radiation and noise was measured in the vicinity of the new transformer stations – TS at the locations of TS "TAR" Beograd and TS Beograd Aerodrome Air Traffic Control Tower. From the point of view of the measured electric and magnetic field (EMP) values, neither TS has been declared source of special interest.

Waste management in SMATSA can be considered to have almost reached the zero level of waste that is sent to landfill (Zero waste). Waste generated at locations in Serbia and Montenegro through authorized operators is given directly to operators for reuse and/or recycling. The amount of 28,841 tons of waste is handed to storage operators who are tasked with forwarding the waste to recycling. The amount of waste that is deposited is 57 kg, or 0.12% of the total generated amount of waste.

In 2023, there was an active construction site for the construction of the facility and supply infrastructure for the needs of the "Terminal Area Radar – TAR" project. Aspects and impacts on the environment during the execution of works were defined and environmental protection measures were defined, which the contractor was obliged to implement. Documents on the movement of construction waste have been submitted.



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.

During 2023, significant changes were made to the following documents:

- Modification of procedure EMS.PROC.001 Waste management, version 6. Expansion of the waste catalog with new types and index numbers of waste;
- Amendment of the Rules of Procedure EMS.MAN.001 Rules of Procedure on Environmental Protection, version 4. The basic changes are the harmonization of subjects and areas of application to which the implemented management systems are applied, changes in the process scheme. Complementing the participation of interested parties with the activities of the Advisory Committee for Environmental Protection and Social Affairs (ESAC) at the Belgrade Airport complex;
- Amendment of the plan EMS.PLN.002 Waste management plan for SMATSA locations on the territory of the Republic of Serbia, version 5. The amendments refer to the revision of the procedure in the area of waste management for ADC Vršac. Harmonization of subjects and areas of application to which management systems are applied. Identification of two new types of waste.

When it comes to opportunities for continuous improvements in the field of environmental protection, in 2023 the focus was on the implementation of the requirements from the new "Rulebook on the types of goods for which the contracting authorities are obliged to apply environmental aspects in public procurement procedures" ("Official Gazette of the RS", No. 115/23)". The requirements of the Rulebook refer to the Contracting Authorities and obliges them to apply environmental aspects in the procedures of public procurement of goods (e. g. paper, office and computer equipment, etc.).





09 Marks and abbreviations

AA	College of Applied Studies Aviation Academy
ACC	Area Control Center
ACS	Area Control Surveillance
ADC	Aerodrome Air Traffic Control
ADI	Aerodrome Control Instrument
AD WRNG	Aerodrome Warning
AFIS	Aerodrome Flight Information Services
AFTN	Aeronautical Fixed Telecommunication Network
AIM	Aeronautical Information Management
AIP	Aeronautical Information Publication
AIR	Air Control
AIS	Aeronautical Information Services
AIRAC	Aeronautical Information Regulation And Control
AIRMET	AIRman's METeorological Information
AIXM	Aeronautical Information Exchange Model
AMHS	Aeronautical Message Handling System
ANS	Air Navigation Services
ANSP	Air Navigation Services Provider
ANT	Nikola Tesla Airport
APCH	Approach
APP	Approach Control
APV	Approach procedure with vertical guidance
ARO	Air Traffic Services Reporting Office
ARS	Special air-report
ARTAS	ATM Surveillance Tracker And Server
ASD	Air Situation Display
ASM	Air Space Management
ASMT	Automatic safety monitoring tool
ATCEUC	Air Traffic Controllers European Union Coordination
ATC	Air Traffic Control
ATFM	Air Traffic Flow Management





ATCO Air Traffic Controller	
ATO Approval Training Organization	
ATS Air Traffic Services	
ATSEP Air Traffic Safety Electronics Personnel	
AVAC Aviation Advisory Committee	
A4E Airlines for Europe	
BA Belgrade Airport	
BANM Balkan Aviation Normalization Meeting	
BHANSA Bosnia and Herzegovina Air Navigation Services Agency	
BHATM Bosnia and Herzegovina Air Traffic Management Project	
BSO Basic Strategic Objective	
CAA Montenegro Civil Aviation Agency	
C-ACC Contingency Air Traffic Control Center	
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	
CIP Central Integration Process	
CM Context Management	
CNS Communication, Navigation and Surveillance	
CNS Aviation Technical Staff	
COOPANS An international partnership between the air navigation service provide Austria, Croatia, Denmark, Ireland and Sweden	s of
CPDLC Controller Pilot Data Link Communications	
DC Direct Current	
DCT Direct (in relation to flight plan clearances and type of approach)	
DEA Direct Electronic Access	
DME Distance Measuring Equipment	
Deta Processing System	
DVOR Doppler VOR	



EAD	European AIS Database
eAIP	electronic AIP
EASA	European Aviation Safety Agency
EBITDA	Earnings before interest, taxes, depreciation and amortization
EBRD	European Bank for Reconstruction and Development
EDS	European Directory Service
EE	Electric power
EGAFOR	Electronic General Aviation Forecast
EGNOS	European Geostationary Navigation Overlay Service
EIB	European Investment Bank
EMS	Environmental Management System
ENV	Environment
EP	Electric power
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
ESSP	European Satellite Service Provider
EVAIR	EUROCONTROL voluntary ATM incident reporting
EWA	EGNOS Working Agreement
FAMUS	Future ATM Modernization and Upgrade System
FIR	Flight Information Region
FL	Flight level
FRA	Free Route Airspace
FPD	Flight Procedure Design
FSTD	Flight Simulation Training Device
GMC	Ground Movement Control
GRNS	Ground-based Radio Navigation Systems
HUM	Human Resources
ΙΑΤΑ	The International Air Transport Association
IBL	Application software for meteorological workstations with hardware from IBL manufacturer
ICAO	International Civil Aviation Organization
ICT	Information-communication technology
IFR	Instrument flight rules



IFRS	International Financial Reporting Standard
ILS	Instrument Landing System
INEA	Innovation and Networks Executive Agency
INO	International NOTAM Operations
IP	Internet Protocol
ISO	International Organization for Standardization
KZA VP	Air Control, Protection and Allocation Department
LARA	Local and sub-Regional Airspace Management Support System
LDAP	Directory Access Protocol
LNAV	Lateral Navigation
LSSIP	Local Single Sky Implementation
LYBE	Belgrade Airport
LYKV	Kraljevo Airport
LYNI	Niš Airport
LYPG	Podgorica Airport
LYTV	Tivat Airport
LYUZ	Užice Airport (Ponikve)
LYVR	Vršac Airport
MCC	Multi Crew Coordination
МСТІ	Ministry of Construction, Transport and Infrastructure
MESSIR	Application software for meteorological workstations with hardware from CORO- BOR manufacturer
MET	Aeronautical Meteorological Services
MET	Aviation Meteorological Staff
MIL AIP	Military Aeronautical Information Publication
МО	Maintenance Organization
МТВО	Mean Time Between Outages
МТОЖ	Maximum take of weight
NATO	North Atlantic Treaty Organization
NDB	NonDirectional radio Beacon
NM	Network Manager
NMOC	Network Manager Operations Centre
ΝΟΤΑΜ	A notice distributed by means of telecommunication containing information con- cerning the establishment, condition or change in any aeronautical facility, ser- vice, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations
NOx	Nitrogen oxides



OJTI	On the job Training Instructor
OPMET	Intra- and interregional operational meteorological (OPMET) data exchange
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
PPL	Private Pilot License
PreOJT	Pre-On the Job Training
PSR	Primary Surveillance Radar
PVL	Professional military personnel
QMS	Quality Management System
RAT	Risk Analysis Tool
RNP	Required navigation performance
RNPAPCH	Required navigation performance Approach
RP	Reference Period
RS	Radar station
RS AF&AC	Air Force and anti-aircraft defense of the Serbian Army
RW	Runway
SA	Serbian Army
SARP(S)	Standards and recommended practices ICAO
SAT	Site Acceptance Test
SAWAS	Serbian Airports Weather Acquisition System (Software package for acquisition, monitoring, generation, and distribution of aviation meteorological reports)
SDD	Static and Dynamic Data
SDO	Static Data Operations (within European AIS Database – EAD)
SEAFRA	South East Axis Free Route Airspace
SECSI FRA	South East Common Sky Initiative Free Route Airspace
SES	Single European Sky
SESAR	Single European Sky ATM Research
SID	Standard Instrument Departure
SIGMET	Significant Meteorological Information
SMATSA	Serbia and Montenegro Air Traffic Services SMATSA IIc
SMS	Safety Management System
SNOWTAM	A special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area



Te Mary Self The

add to bu

89

COL

AINSERBIA .

SOx	Sulfur Oxides
SSR	Secondary Surveillance Radar
STAR	Standard Instrument Arrival
STO	Strategic Objective
SUSAN	SMATSA Upgrade of System for Air Navigation
TAF	Aerodrome forecast
TAR	Terminal Area Radar
тс	Telecommunications
тсс	Telecommunications center
TEA	Test of English for Aviation
TER	Sector for terminal and aerodrome air traffic control
ТМА	Terminal Area
TRE	Aviation Staff Training Sector
тті	Theoretical training instructors
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



10 Table and Figure Index

10.1 Table Index

Table 1. Realization of trainings within the ANS staff training center in 2023	30
Table 2. Training in air traffic control operational units in 2023	31
Table 3. Target and accomplished values of SMS indicators required by CAD for 2023	38
Table 4. Target and accomplished values of safety indicators required by CAD for 2023	39
Table 5. Acceptable and accomplished safety (process) indicators for 2023 required by CAA	41
Table 6. Acceptable and accomplished values of risk indicators of operations required by CAA for 2023	43
Table 7. Values of capacity indicators in 2023	45
Table 8. Analysis of fulfillment of quality targets for 2023	48
Table 9. Additional performance indicators in 2023	51
Table 10. Results of the user satisfaction survey on airborne GRNS calibration services in 2023	58
Table 11. Income statement for the period from 1 January – 31 December 2023 (in 000 RSD)	60
Table 12. Balance sheet as of 31 December 2023 (in 000 RSD)	63
Table 13. Report on cash flows in the period from 1 January – 31 December 2023 (in 000 RSD)	66



10.2 Figure index

Figure 1. Territory over which SMATSA provides services in air navigation	12
Figure 2. Total number of IFR flights in the period from 2014 through 2023	14
Figure 3. Number of IFR overflights and takeoffs/landings in the period from 2014 through 2023	15
Figure 4. Distribution of IFR flights in 2023	15
Figure 5. Peak day and peak hour in the period from 2014 through 2023	16
Figure 6. Breakdown of respective aircraft types shares in 2023	16
Figure 7. Number of IFR take-offs and landings by airports in the period from 2014 through 2023	17
Figure 8. Distribution of operations by airport in 2023	17
Figure 9. Number of IFR flights in the SMATSA airspace jurisdiction by country of take-off/landing in 2022 and 2023	18
Figure 10. Number of chargeable service units in the period from 2014 through 2023	19
Figure 11. Average flight length and average MTOW in FIR Belgrade in the period from 2017 through 2023	19
Figure 12. Unit Rate in 2023	20
Figure 13. Average delay time per IFR flight in FIR Belgrade generated by ATM in the period from y 2020 through 2023	45
Figure 14. Reasons for the delay in FIR Belgrade in 2023	46
Figure 15. KEA – indicator of deviation of the actual flight path in relation to the long-circuit route in Serbia and Montenegro in 2023	47
Figure 16. KEP – indicator of the deviation of the path in the last filed flight plan in relation to the path along the long-circuit route in Serbia and Montenegro in 2023	47
Figure 17. Employee gualification structure	76
Figure 18. Structure of employees by sector	77
Figure 19. Structure of employees according to gender	78
Figure 20. Age structure of employees	78



11 Appendices

11.1 Appendix 1 – Organizational structure of SMATSA llc



92

11. 2 Appendix 2 – Decision of the EUROCONTROL Enlarged Committee No. 22/173 of November 24, 2022

EUROPEAN ORGANISATION FOR THE SAFETY OF AIR NAVIGATION

EUROCONTROL

- Decisions of the enlarged Commission -

DECISION No. 22/173

relating to the determination of the unit rates for the period of application commencing 1 January 2023

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 2023.

Done at Brussels on 24 November 2022,

Māris Gorodcovs President of the Commission

ZONE	Global unit rate euro	Exchange rate 1 euro	applied =
Belgium/Luxembourg *	113.21	-/-	
Germany *	73.04	-/-	
France *	73.69	-/-	
United Kingdom	86.26	0.874368	GBP
Netherlands *	92.00	-/-	
Ireland *	26.46	-/-	
Switzerland	120.24	0.963164	CHF
Portugal Lisboa *	47.39	-/-	
Austria *	66.91	-/-	
Spain Continental *	54.71	-/-	
Spain Canary *	45.97	-/-	
Portugal Santa Maria *	10.03	-/-	
Greece *	25.54	-/-	
Turkey	36.62	18.1151	TRY
Malta *	24.50	-/-	
Italy *	72.37	-/-	
Cyprus *	28.51	-/-	
Hungary	33.77	404.556	HUF
Norway	53.50	10.1648	NOK
Denmark	61.17	7.43382	DKK
Slovenia *	65.32	-/-	
Romania	46.55	4.90607	RON
Czech Republic	68.17	24.5473	CZK
Sweden	79.98	10.7784	SEK
Slovak Republic *	72.32	-/-	
Croatia	45.83	-/-	HRK
Bulgaria	36.78	1.95494	BGN
North Macedonia	49.52	61.4941	MKD
Moldova	227.54	19.1245	MDL
Finland *	43.92	-/-	· · · · · · · · · · · · · · · · · · ·
Albania	50.36	116.435	ALL
Bosnia and Herzegovina	30.78	1.95486	BAM
Serbia/Montenegro/KFOR	39.46	117.265	RSD
Lithuania *	70.82	-/-	LTL
Poland	44.38	4.74077	PLN
Armenia	49.67	402.953	AMD
Latvia *	43.39	-/-	
Georgia	32.46	2.78206	GEL
Estonia *	36.04	-/-	
Ukraine	51.64	36.4830	UAH
Ukraine South	20.30	36.4830	UAH

Unit rates applicable from 1 January 2023

*: State participating in the EMU.





Notes



Notes

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





smatsa

SERBIA AND MONTENEGRO AIR TRAFFIC SERVICES SMATSA LLC BELGRADE Et.

1.6

0

10P