danubefab

functional airspace block

STRATEGIC PROGRAMME 2019-2023

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1.0	May 2019	Released issue (2019 – 2023)	All

CONTENTS

INTRODUCTION

Background and Legal Basis

This document constitutes the DANUBE Functional Airspace Block (DANUBE FAB) Strategic Programme, covering the period 2019 to 2023, as required by the Agreement on the establishment of DANUBE Functional Airspace Block between the Republic of Bulgaria and Romania (the State Agreement).

This document is a revision of the DANUBE FAB Strategic Programme 2018-2022, developed in coordination with the project managers and domain experts involved in DANUBE FAB activities.

Purpose and Scope

The purpose of this Strategic Programme is to set out the ambitions and goals i.e. 'Strategic Objectives' of DANUBE FAB and to set out a high-level overview of how and when these objectives are to be achieved.

Stakeholders

This Strategic Programme applies to the following stakeholders:

- States authorities on transport;
- NSAs/Civil Aviation Authorities;
- Military Authorities;
- Military Regulatory Authorities, as applicable;
- Military Service Providers, as applicable;
- ANSPs.

And will have impact also on:

- Airspace users;
- Airports (in particular the airports subject to Regulation (EU) no 391/2013), and Organisations and personnel involved in the design, production and maintenance of systems and constituents for Air Traffic Management (ATM) / Air Navigation Services (ANS).

Period

In accordance with the State Agreement, this Strategic Programme covers a period of 5 years from 1st January 2019 to 31st December 2023.

Objectives

The Strategic Programme includes the establishment of short-medium term objectives, but more importantly, it develops a DANUBE FAB vision for the medium and long-term. The Strategic Programme is built upon the existing business and planning processes of stakeholders to ensure a coherent and consistent approach that does not duplicate existing processes.

Under Regulation (EU) 1035/2011[1], air navigation service providers (ASNPs) are required to maintain their own Business Plans in order to be certified. Although these plans will be unique to BULATSA and ROMATSA, they both contain common activities that fall within the FAB framework – these are contained in and elaborated in the present Strategic Programme.

[1] Starting with 2nd January 2020 Regulation (EU) 2017/373 applies.

Inputs

The inputs to the Strategic Programme are best illustrated graphically as in Figure 1. This shows the formal relationship between the State plans and the DANUBE FAB Plans together with the means of their coordinated achievement. Clear and unobstructed lines of communication are in place thus enabling coordination by the key stakeholders at FAB level.

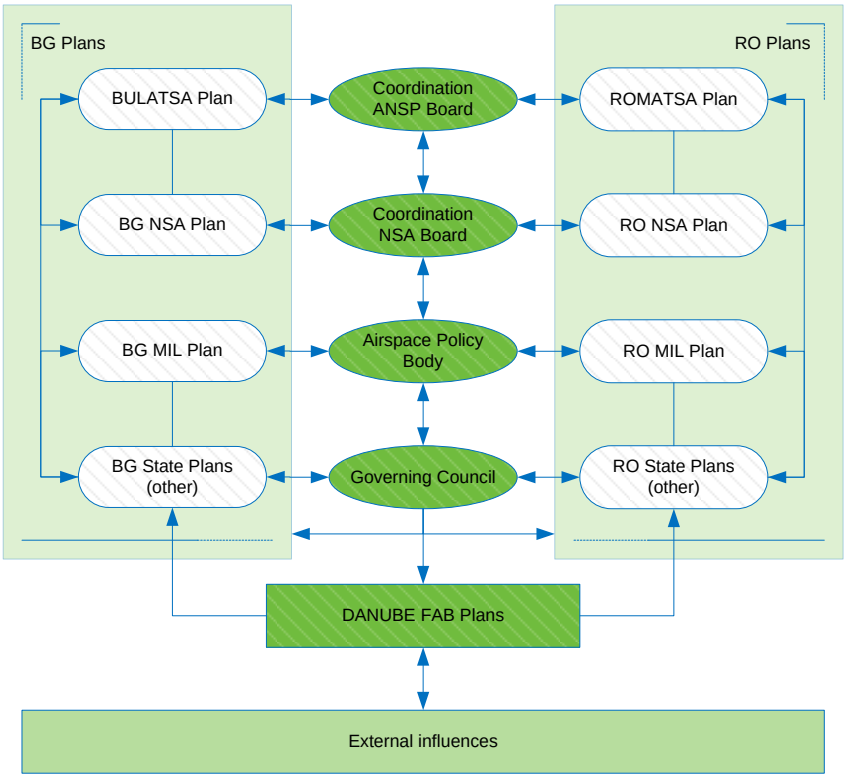

Figure 1: Formal relationships between Individual State plans and DANUBE FAB Plans

The development of DANUBE FAB plans is an ongoing process, illustrated through the evolution of the Strategic Programme and the Annual Plan. The following criteria are considered when developing DANUBE FAB plans:

- The Single European Sky (SES) requirements:
  - The FAB-related objectives shall contribute to meeting the SES requirements explicitly applicable to the FAB;
  - The FAB-related objectives may result from considering those SES requirements applicable to individual ANSPs, for which a decision of FAB approach is made within DANUBE FAB.
- The DANUBE FAB mission:
  - The FAB-related objectives shall contribute to the performance of the DANUBE FAB mission;
  - The FAB-related objectives will be transposed into individual stakeholders' objectives and taken over as such in the individual ANSPs Business Plans and other stakeholders' plans.
- FAB or non-FAB Objectives:
  - The non-FAB related objectives are considered as being defined within the individual States plans.

Publication and Confidentiality

The approved Strategic Programme is a public document that is made available on the DANUBE FAB website (www.danubefab.eu).

Aspects that are considered confidential or inappropriate for general publications have been developed separately (e.g. as Annexes that are restricted for internal stakeholder use only).

Maintenance, Modification and Monitoring

Over the period of this Strategic Programme, it is inevitable that situations will change and critical review on an annual basis will be required to ensure current applicability. The Strategic Programme and the relevant Annual Plan will be reviewed at least annually, and all appropriate updates made.

For the start of 2020 a comprehensively revised Strategic Programme will be developed; to be aligned with the new provisions stemming from the SES regulatory framework regarding the third reference period of the performance scheme (RP3). This shall take also into consideration the relevant provisions contained in Commission Implementing Regulation (EU) 2017/373 and the findings of the SES/ Single European Sky ATM Research (SESAR) Airspace Architecture study.

Internal Reporting

The implementation progress of the Strategic Programme and the Annual Plan will be monitored regularly through the Annual Report. The output of an Annual Report may be used as a basis for modifying this Strategic Programme, for example where successive Annual Reports indicate a trend that suggests a previous goal identified in the Strategic Programme is no longer achievable or desired.

External Reporting

DANUBE FAB aims to speak with a single voice to the European Commission. Correspondence is prepared and coordinated quickly to ensure maximum benefit and opportunities to meet with the Commission wherever possible in order to maintain the pro-active engagement now established.

The following mechanisms are used to ensure adequate monitoring and reporting between DANUBE FAB and the European Commission:

- A representative of the European Commission may attend Governing Council meetings with Observer Status, subject to invitation by the Co-Chairs of the Governing Council.
- When it is not possible to ensure the presence of the European Commission at a Governing Council meeting, the minutes of the meeting (or relevant extracts thereof) will be submitted to the European Commission for their information.

The monitoring/reporting on the progress at 6-montly intervals is adequate to provide assurance to the European Commission of the rate of implementation, without creating unnecessary overhead. In addition to the above the constituent DANUBE FAB Air Navigation Service Providers (ANSPs) have various reporting mechanisms, including:

- DANUBE FAB Annual reports;
- Local Single Sky Implementation (LSSIP) documents;
- Annual European Single Sky Implementation reporting;
- SESAR Interim Deployment Programme (IDP) reporting;
- SES reporting etc.

DANUBE FAB VISION AND MISSION

The DANUBE FAB vision describes where the FAB sees itself progressing in the next five years. It offers a top-down view in order to set strategic objectives and to develop the implementation plans required to realise these objectives.

Vision

'To provide the safest, most secure, efficient and environmentally friendly air-navigation services in south-eastern Europe'

DANUBE FAB strives towards a qualitative transformation of the functional air navigation systems achieving the highest safety standards, providing the highest performing infrastructure for all users in line with a seamless Single European Sky while ensuring effective environmental sustainability. The air traffic operations will be performed seamlessly, safely, swiftly and efficiently. Flights will take off and land on time, every time, without ATM related delay and there will be no fatal accidents induced by ANS. Air travel will be routine and uneventful for everyone involved. Costs will be acceptable for operators, and the impact on the environment will be minimised. States' obligations related to sovereignty and security of the nations will be performed in most efficient and effective manner.

Mission

In respect to the vision, DANUBE FAB is committed to:

- Achieving FAB-level performance targets;
- Designing and managing the FAB airspace, irrespective of national borders;
- Following the common concept of operations;
- Establishing a common training system;
- Harmonising Safety, Quality, Security and Environmental (SQSE) management systems;
- Commonly planning Communication, Navigation and Surveillance systems (CNS) development and deployment;
- Making best use of common procurement benefit;
- Implementing all other beneficial initiatives for safe, secure, efficient and environmentally friendly operations in the DANUBE FAB.

Based upon these mission statements, DANUBE FAB has established a series of strategic objectives and implementation projects which are described in the following sections.

A Vision for the Future

DANUBE FAB has been established a sound basis for cooperation and has worked hard to achieve and maintain compliance with the FAB legislation. DANUBE FAB will continue to align to the Single European Sky and SESAR requirements, simultaneously expanding its interests and focusing on an ambitious vision for the future. DANUBE FAB intends to transition from a process-oriented initiative to a business-oriented one; ensuring that the FAB will continue to deliver mutual benefit and focus on innovative ideas. In order to achieve the vision for the future, DANUBE FAB has identified the following key areas of interest to be explored:

- Active engagement in Inter-FAB cooperation activities;
- FAB expansion;
- Common approach to Air Traffic Controller (ATCO)/ Air Traffic Safety Electronics Personnel (ATSEP) training;
- Focus on business partnerships.

STAKEHOLDERS AND ORGANISATION

DANUBE FAB Stakeholders

DANUBE FAB is comprised of stakeholders from the Republic of Bulgaria and Romania as follows in this section.

Bulgarian Stakeholders

The main National Stakeholders involved in ATM/ANS in Bulgaria are the following:

- Directorate General Civil Aviation Administration (DG CAA);
- Bulgarian Air Traffic Services Authority (BULATSA);
- Military Authorities;
- Airport Operators.

Their relationships are shown in Figure 2 below.

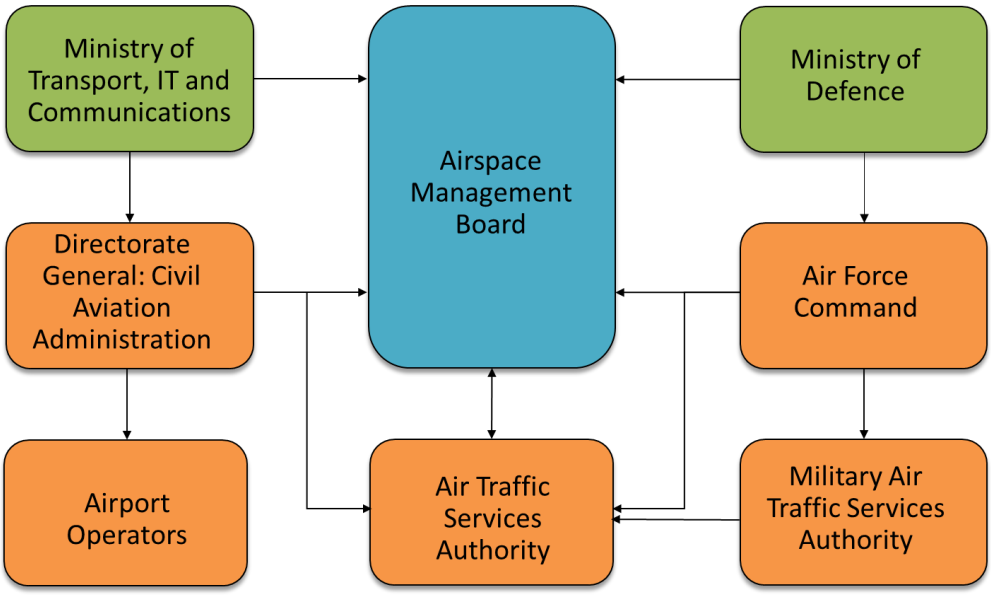

Figure 2: Bulgarian stakeholders

The Airspace Management Board is not a stakeholder itself but a strategic level body of the unified system for civil and military airspace management in Bulgaria. It comprises of stakeholders' representatives from:

- Ministry of Transportation, IT and Communications;
- Ministry of Defence/ Staff of Defence;
- Directorate of the Civil Aviation Administration;
- Air Forces Command;
- Bulgarian Air Traffic Services Authority (BULATSA);
- Military Air Traffic Management (MATM).

Romanian Stakeholders

The main national stakeholders involved in ATM/ANS in Romania are the following:

- Ministry of Transport through Air Transport Directorate;
- Investigation and Analysis Authority for Civil Aviation Safety (AIAS);
- Romanian Civil Aeronautical Authority (RCAA as NSA for all matters);
- Ministry of National Defence;
- Air Force Staff:
  - National Military Command Centre;
  - Air Operations Centre.
- Romanian Air Traffic Services Administration (ROMATSA);
- Romanian Airports;
- Airspace Users (National and International Air Carriers, other operators).

Their relationships are shown in Figure 3 below:

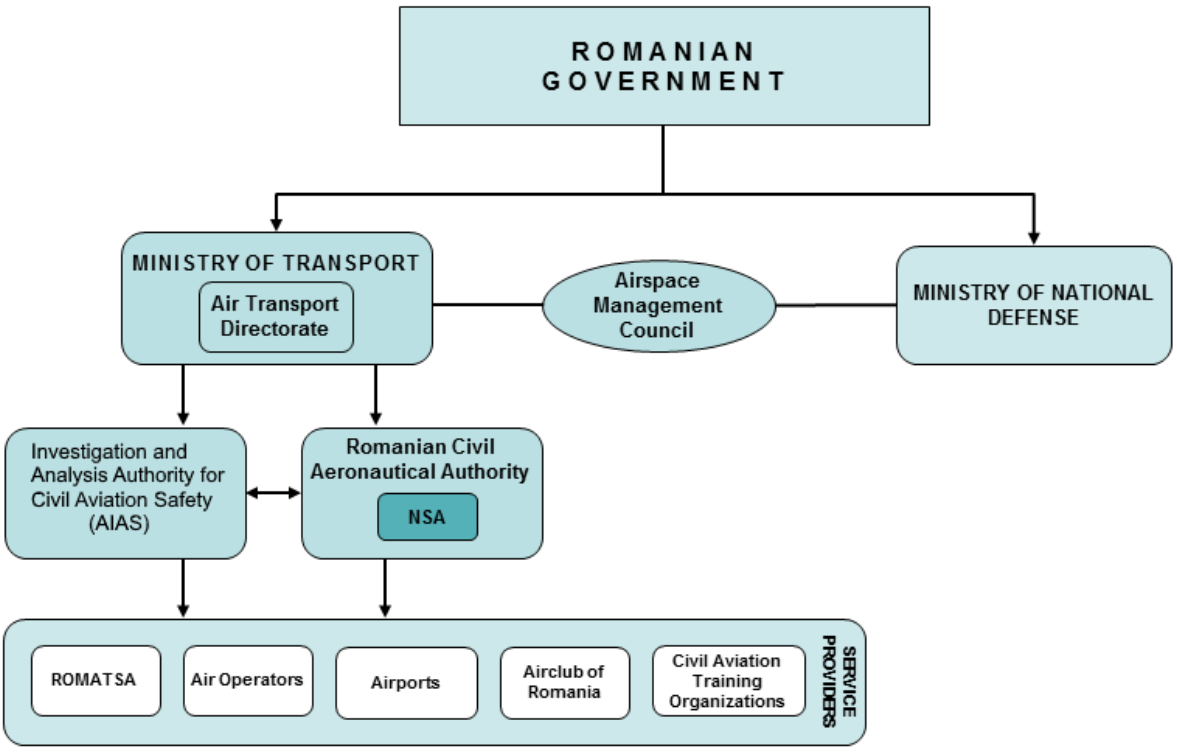

Figure 3: Romanian Stakeholders

DANUBE FAB Organisation

The DANUBE FAB State Agreement provides the overarching legal framework for the governance of the FAB. The core bodies are:

Governing Council: provides oversight and approval of key FAB documentation (annual plans, safety policy, airspace policy, performance plans etc.). It is composed of one high level representative of the State authority on transport of each Party, one representative from the authority responsible for military aviation in each Party, the Heads of both NSAs and the Heads of both ANSPs.

NSA Board: provides a formal coordination and an interface between the NSAs involved in supervisory tasks at DANUBE FAB level. It is composed of the heads of the NSAs of both States as well as by representatives nominated by them.

ANSP Board: oversees implementation of the FAB at the ANSP level via the ANSP agreement. It is composed of the ANSP Director Generals and representatives from both ANSPs. The ANSP Board is supported in the implementation of the FAB through its working arrangements, including specialised Standing Committees or other supporting bodies established in accordance with their respective Rules of Procedures.

- **Strategy and Planning Standing Committee (SAPSC):** Supports the ANSP Board for all DANUBE FAB cooperation domains and is composed of ANSP experts. It is supported by the Operations Standing Committee (OSC) which carries out work in the areas of operations, technical and training domains, and by the Safety, Quality, Environment and Security Standing Committee (SQSESC) which performs the necessary tasks in its areas of expertise.
- **Administrative Cell:** supports the SAPSC and is guided in its work by a set of overarching documents including the DANUBE FAB State Agreement and ANSP Cooperation Agreement and any other documents stemming thereof.

Airspace Policy Body: responsible for enhancing the joint civil-military coordination process and for the flexible use of airspace application within the cross-border airspace. It is composed of representatives for each Party from the: State authority on transport, State authority on defence, Military Aviation Authorities, Civil Aviation Authorities, ANSPs and from the Military air traffic service provision authorities.

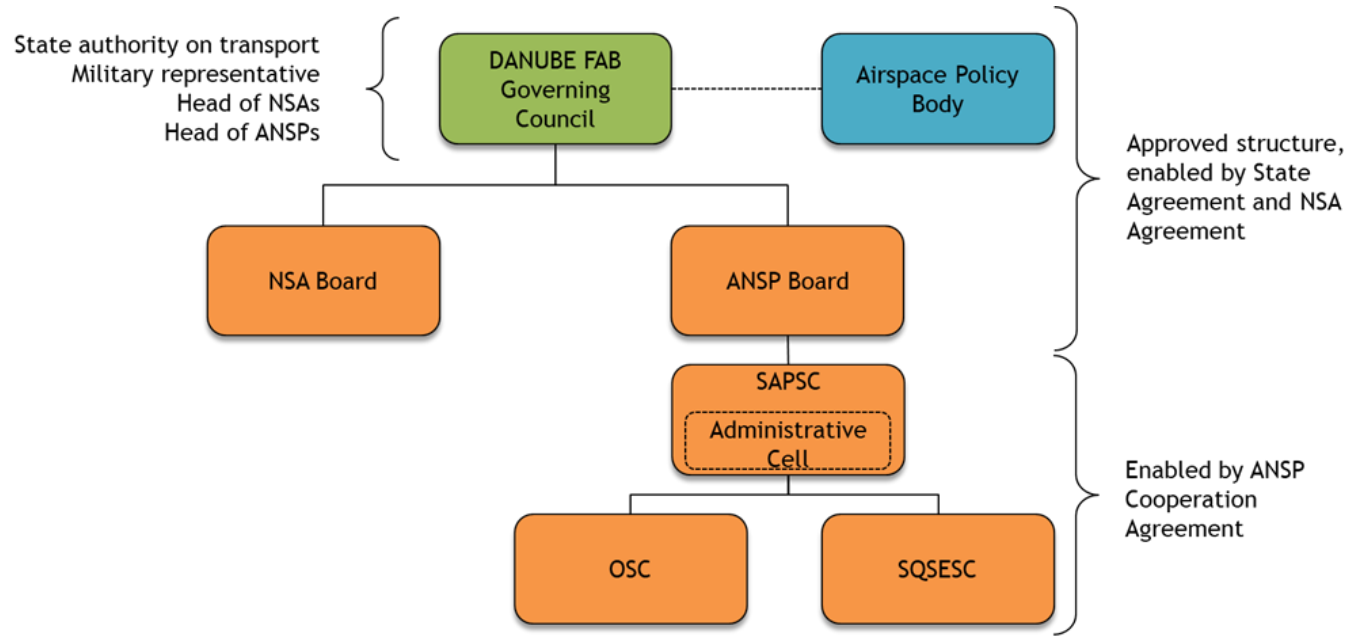

Figure 4: DANUBE FAB Governance & Working Structure

ENVIRONMENT ASSESSMENT

Before defining the strategy and objectives of the DANUBE FAB it is first worth reflecting on the current environment and drivers that impact or may have an impact on DANUBE FAB. This is necessary to ensure that the strategy is able to respond to these drivers and that DANUBE FAB is able to position itself accordingly. It also provides reassurance that DANUBE FAB considers the economic trends and how it is prepared for the future socio-economic environment that it is likely to encounter.

This market assessment uses a PESTLE analysis and a SWOT analysis to consider a number of both external and internal factors about the context in which the DANUBE FAB will operate.

Pestle Analysis

The PESTLE analysis describes the external macro-environment in which DANUBE FAB operates (PESTLE is the abbreviation for P-Political, E-Economic, S-Social, T-Technological, L-Legal and E-Environment).

There are certain questions that one needs to ask while conducting this analysis, for example:

- What are the European Commission's priorities for the FABs in the medium to long term and how can it affect the ATM/ANS industry?
- What are the economic factors?
- What is the importance of FABs to the European economy and what are their determinants?
- What are the social factors in a FAB context that may affect the SES policy?
- What technological innovations are likely to pop up and affect the ATM/ANS industry?
- What are the main changes in SES legislation that may affect FABs?
- What are the environmental concerns for the FABs?

Political factors

- Lack of consistent SES high level goals;
- Lack of EC policy options for FABs in order to reduce the airspace fragmentation and to accommodate the steadily growing traffic;
- FABs considered inefficient by the European Commission;
- Study on Functional Airspace Blocks conducted by the consortium of Integra A/S (lead), Ecorys Nederland BV, Winsland Consulting and Combitech, Final report dated 25 January 2017;
- European Court of Auditors' Special Report No. 18/2017 "Single European Sky: a changed culture but not a single sky".

Economic factors

- Slow recovery for FABs after the global economic crisis;
- Unexpected high traffic growth and high traffic volatility;
- The ATM environment, which has led to an increased need to scrutinise the costs that underpin all ATM/ANS services and activities;
- The decision-making process of performance targets is lengthy and complex.

Social factors

- Lack of a social impact assessment during the development of SES legislation;
- Social dialogue required at all levels;
- Social dimension believed to be the most important factor for improving economic performance in ATM;

- Industrial actions.

Technological factors

- European ATM Master Plan is the overarching blueprint for SESAR, including new operational concept and technologies;
- Evolution and/or renewal of ATM/ANS infrastructure;
- The slow pace of SESAR deployment;
- Differences in technological development between Member States.

Legal factors

- The evolution of the European institutional and regulatory landscape, resulting in significant duplication and overlaps;
- The Commission's intention to review the SES performance and charging schemes ahead of the third reference period (RP3) which will start in 2020;
- The re-designation of the Network Manager from 2020 onwards;
- The Commission Implementing Regulation (EU) 2017/373, which shall apply from 2 January 2020;
- Possible changes to the current legal and institutional framework following the adoption of the new EASA BR.

Environment factors

- Increased importance of ecology and it is essential in this case because it offers a unique opportunity;
- Reducing CO2 emissions;
- Seasonality: the number of flights (holidays, vacation, etc.).

SWOT Analysis

The SWOT analysis describes the present situation of and influences on DANUBE FAB (SWOT is the abbreviation for S-Strengths, W-Weaknesses, O-Opportunities, and T-Threats).

Strengths

- Capacity available in the DANUBE FAB airspace meets the present and forecasted traffic demand;
- Good performance in terms of safety of both DANUBE FAB ATM systems;
- Good quality of the provided ANS;
- Adequate infrastructure for providing ANS according to SES requirements;
- Financial stability and independence of external sources of financing;
- Competitive en-route unit rates;
- Increased traffic in the region;
- Experience gained through the establishment of Cross Border Sectors;
- Experience gained through common procurement;
- Good cooperation between internal stakeholders.

Weaknesses

- Difficulties to meet the deadlines for completion of the FAB projects, with negative impact on realisation of the annual planned costs;
- Difficulties to accurately assess the institutional changes necessary to implement change at national/ FAB level due to the frequent and major modification of EU law;
- Slow common procurement procedures due to national administrative burdens;

- Limited resources creating difficulties to achieve compliance with some requirements contained in EC/EU Regulations;
- Difficulties in covering costs for services within the terminal areas from ANS charges.

Opportunities

- Attracting new neighbouring States into the DANUBE FAB;
- Inter-FAB cooperation, at ANSPs level through cooperation agreements and between all FAB layers through the Inter-FAB cooperation platform;
- Increase of revenue in the long-term due to the attraction of additional en-route traffic resulting from the commissioning of new and optimised routes from/to Hungary, Greece, The Russian Federation and Turkey;
- Increase in the number of landing and departing international aircrafts as a result of the general development of the DANUBE FAB countries;
- Developing strong relationships with EU institutions;
- Current Romanian Presidency of the EU (1st Semester 2019) might be an opportunity to better represent FAB interests in the discussions on SES regulatory framework.

Threats

- Changing European legislative framework;
- Unpredictable political situation in the region;
- The conflicts in Ukraine and the Middle East result in significant volatility of the main flow of en-route traffic, diverting operational FAB managers to the operations room during the summer season causing staffing difficulties;
- Regional traffic flow changes due to traffic increases could have knock on effects and cause local disagreements with neighbouring states.

Conclusions

European ATM Situation

The current situation of Air Traffic Management (ATM) in Europe is raising the need for a proactive position from FABs to ensure that the evolution of the whole (Pan-European) ATM system is satisfactory and synchronised with the ANSPs rather than being imposed to them. This situation has to take into account the global aspects both on institutional perspectives (e.g. ICAO GANP and other regional ATM development plans) and on technological perspectives (SESAR collaborative actions and validated results). As the European ATM Master Plan constitutes the primarily input for SESAR, including new operational concept and technologies, DANUBE FAB follows the trend towards implementing advanced technologies with high performance levels to support sufficient capacity for airspace users. The ESSIP and LSSIP processes enable the European ATM Master Plan activities to be planned at local level. Whilst not all objectives can be addressed in a common FAB manner, many can be, and these need to be reflected in the DANUBE FAB strategy.

Implementation of a Single European Sky

On the 30th November 2017 the European Court of Auditors (ECA) released the special report of the Audit performed in relation with the Single European Sky initiative. The audit was performed pursuant to Article 287(4), second subparagraph from TFEU and revealed that "*the European airspace management remains fragmented and the SES as a concept has not yet been achieved".* Furthermore, in ECA's opinion, *"the navigation charges have not been substantially reduced and ATM-related delays has started to increase again…. In substance, the EU's intervention in SESAR has evolved from one with a target deadline for achievement to a more open-ended commitment".*

To this end the ECA issued a number of recommendations to the European Commission and the Member States to help improve the effectiveness of the SES. These recommendations are considered by DANUBE FAB as key factors that may affect the performance of DANUBE FAB, through the legislative changes that the European Commission may make to comply with ECA recommendations and to improve the effectiveness of SES.

FAB Implementation

The European Commission has independently expressed its concerns regarding the implementation of FABs. In January 2017 the European Commission (through DG MOVE) released a study assessing the organisational, operational and technical progress of FABs since their creation in December 2012. DANUBE FAB participated actively in all stages of the study ('EC Specific Contract MOVE E2/SER/2016_194/SI 2.73546') and the final report revealed a series of general recommendations for FABs and a number of specific recommendations for DANUBE FAB.

Most of these recommendations have been achieved at DANUBE FAB level or are foreseen within the FAB's strategic documents. For example:

- FAB enlargement;
- inter-FAB coordination;
- Update of DANUBE FAB Cost-Benefit Analysis.

Performance and Economic Factors

The economic factors analysis highlighted that the recent geopolitical and economic crisis has had a negative impact on the DANUBE FAB performance. The events in the Crimean Peninsula (March 2014), which have caused de-facto unavailability of the airspace within Simferopol FIR (including a large part of the airspace above the Black Sea); and the crash of Malaysia Airlines MH17 in Eastern Ukraine (17 July 2014), which led to de facto closure of the airspace for the civil air traffic over Eastern Ukraine. Simultaneously, in the Middle East and Far East the conflicts in Iraq and Syria have forced most aircraft operators to consider the associated airspace insecure and consequently avoid these areas.

These events have led to major southward redistribution of east/west air traffic flying to/from Europe and the Middle and Far East and the reorientation of north / south air traffic flows flying to / from the Russian Federation and Greece / Turkey. Resulting in a significant increase in traffic flow through DANUBE FAB airspace, which required a revision of the DANUBE FAB performance plan.

The ongoing crises and likely traffic volatility will require careful consideration and contingency planning to avoid having to revise RP3 performance plans mid-term.

Stakeholder Engagement & Social Consultation

DANUBE FAB involves several stakeholders, each with different requirements and objectives depending on the nature of their business (e.g. military providers vs. civil providers). A smooth an efficient governance structure and working arrangements are required to ensure adequate engagement and effective decision making.

The social dimension of DANUBE FAB remains an important consideration and is reflected through the regular Social Consultation Forums and the broader stakeholder consultation with airspace users and airports. Reflecting on the ECA findings DANUBE FAB has built an effective on-going social dialogue process, in order to fully engage staff and mitigate the generally cautious attitude of both airspace users and air traffic controllers towards FAB implementation.

Regulation

A significant amount of regulation falls under the SES legislative framework, impacting all aspects of the operation of DANUBE FAB. The present priority of DANUBE FAB is to prepare for the implementation of:

- Regulation (EU) 2018/1139 (“New EASA BR”);
- Commission Implementing Regulation (EU) 2017/373;
- Commission Implementing Regulation (EU) 2019/317;
- Commission Implementing Regulation (EU) 2019/123;
- Commission Implementing Regulation (EU) 2018/1048.

DANUBE FAB is closely and actively monitoring the evolution of the SES regulatory framework, to ensure continued compliance.

Environmental

Regarding the environmental aspects, the DANUBE FAB partners aim to reduce the environmental impact of their operations; by minimising delay attributable to air traffic management and maximising the horizontal efficiency of trajectories. An environmentally conscious culture shall be fostered within the FAB; for example, the use of video conferencing facilities in lieu of a flight.

STRATEGIC OBJECTIVES

The DANUBE FAB Strategic Objectives are focused on the Key Performance Areas of the RP2 Performance Plan and other elements to ensure the continued evolution of the DANUBE FAB.

Performance targets for each key performance indicator are established in accordance to the DANUBE FAB Performance Plan for the second reference period (2015-2019). Revised performance targets shall be established with the BULATSA and ROMATSA Performance Plans for the third reference period (2020 – 2024).

Strategic Objective 1 (SO1): SAFETY

SO1 *PERFORMANCE INDICATORS*	*Maintain and wherever possible improve the current level of safety so that the number of accidents or serious incidents induced by air navigation services at least remains at, or decreases from, its current level, notwithstanding increased traffic.* Measurable Performance indicators: • Level of Effectiveness of Safety Management; • Zero Accidents with ATM contributions per year; • Just Culture.

Strategic Objective 2 (SO2): CAPACITY

SO2 *PERFORMANCE INDICATORS*	*Provide capacity to accommodate increasing traffic and airspace user demands, whilst reducing flight delays.* Measurable Performance indicators: • En-route ATFM delay per flight.

Strategic Objective 3 (SO3): COST-EFFICIENCY

SO3 *PERFORMANCE INDICATORS*	*Deliver high quality air navigation services at a competitive rate in line with European-wide targets* Measurable Performance indicators: • Determined unit cost (DUC) for en-route ANS.

Strategic Objective 4 (SO4): ENVIRONMENT

SO4 *PERFORMANCE INDICATORS*	*Improve the efficiency of flight operations and minimise the environmental impact of ATS.* Measurable Performance indicators: • Horizontal en-route flight efficiency (KEA).

Strategic Objective 5 (SO5): TRANSVERSAL

SO5 *PERFORMANCE INDICATORS*	*Drive benefits through technological changes and interoperability of systems and procedures.* Measurable Performance indicators: • Compliance with the established deployment / implementation deadlines; • Meeting the expectations and needs of customers and stakeholders. Performance against this strategic objective is assessed through the Annual Report.

IMPLEMENTATION PROJECTS

The DANUBE FAB Strategic Programme consists of the following working areas identified and shared by the FAB ANSPs, NSAs and Military authorities:

A. Strategy, Planning, External Relations and Communications;
B. NSA Coordination;
C. FAB Performance;
D. Human Resources and Training;
E. Technical Rationalization and Infrastructure;
F. Operational Activities;
G. Safety, Quality, Environment & Security activities.

These working areas have been transcribed into eponymously named projects covering the period from 2019 to 2023 inclusive. Each project in this section has been further split into one of more 'activities'; the level of detail of this section is such that it does not set out the plan for each individual activity, but it is presented at such a high level that effectively every activity appears as a continuous activity running for the full term of the Strategic Programme.

Implementation project information is presented in this section in two standard tables, representing:

- **General Attributes:** These include the main objectives, benefits, outputs, schedule and resources needed to deliver the project. In the annual plan these aspects are identified for each project activity and task, at this Strategic level they are only identified per project.

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Development, implementation and monitoring DANUBE FAB NSAs Annual Plan for 2019.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	In particular: NSAs, ANSPs, State authorities on transport (but possible also on Military Authorities and airspace users).
EXPECTED COSTS/BENEFITS	Benefits: • Increase the efficiency of NSAs coordination due to the implementation of working arrangements for specific common NSAs activities, set up in accordance with NSA Cooperation Agreement. • Financial implication for each NSA will be annually assessed. Costs: • Staff Costs.
HOW ACHIEVEMENT MIGHT BE MEASURED	Assessment of results for specific activities/ sub-activities.
RISKS	Modification on initial plan in the second semester 2018 due to objective reasons.
SCHEDULE	May 2019 (to be formally adopted)
DELIVERABLES / EXPECTED OUTPUTS	• Identification of possible common activities on continuing oversight of ANSPs and Training Organisations; • Identification of national rules and procedures that should be harmonised; • Documents developed further the application of the "Consultation Mechanism and processes for the harmonization of rules and procedures"; • Exchange of good practice and information.
REFERENCE	• Annual Audit Programmes of all NSAs; • National rules and procedures relevant for supervisory tasks; • Regulation (UE) 1035/2011, as modified.
IMPACT ON PERFORMANCE	N/A
RESPONSIBILITIES	NSA Board

- **Schedule:** Activities and target completion dates associated with the implementation project. Former activity denotation is included in blue.

ACTIONS		TARGET DATE
[ACTIVITY B01] FORMERLY A17	Review NSA rules and procedures and harmonise as required.	2019-2023
[ACTIVITY B02] FORMERLY A18	Implementation of the "Consultation Mechanism and processes for the harmonisation of rules and procedures", ed. 1/2013.	2019-2023
[ACTIVITY B03] FORMERLY A19	Mutually recognise supervisory tasks.	2019-2023
[ACTIVITY B04] FORMERLY A20	Cooperate in supervision, oversight, safety policy, coordination with the Network Manager and stakeholder consultation.	2019-2023

Further detail is provided in the DANUBE FAB Annual Plan, where the Activities are broken down into implementation tasks.

A-STRATEGY, PLANNING, EXTERNAL RELATIONS AND COMMUNICATIONS

General Attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Project to maintain the established governance structure of DANUBE FAB; including regular meetings of the Governing Council, the ANSP and NSA Boards. Additionally, to formulate robust implementation projects and activities that clearly articulate how new policies, programmes, plans and actions will be delivered on time, on budget and to expectations; so as to maintain effective strategic and planning processes within DANUBE FAB.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	States Authorities on transport, NSAs, ANSPs, MIL Authorities, airspace users, airports
EXPECTED COSTS/BENEFITS	Benefits: • Maintain common governance structure for the FAB; • Maintain FAB processes, procedures. Costs: • Staff Costs; • Mission Costs; • Project Management Contractor Costs.
HOW ACHIEVEMENT MIGHT BE MEASURED	Effective strategic and planning processes within DANUBE FAB.
RISKS	• Delay in organising the governance structure; • Risk of late involvement and late input from the stakeholders; • Different understanding on specific projects development and deployment.
SCHEDULE	2019 – 2023
DELIVERABLES / EXPECTED OUTPUTS	• FAB common functions; • Maintenance of FAB governance structure; • FAB external communications; • FAB strategic documentation; • Management of FAB activities.
REFERENCE	To any related: • DANUBE FAB State Agreement; • NSA Cooperation Agreement; • ANSP Cooperation Agreement; • FAB common functions; • EU Regulations; • European ATM Master Plan, edition 2015; • ESSIP objectives.
IMPACT ON PERFORMANCE	Safety, Capacity, Cost efficiency, Environment
RESPONSIBILITIES	The responsibility lies with the SAPSC.

Schedule

ACTIONS		TARGET DATE
[ACTIVITY A01] FORMERLY A01	Maintain Governing Bodies and their specialised Standing Committee/Supporting Bodies.	2019-2023
[ACTIVITY A02] FORMERLY A02	Maintain DANUBE FAB Airspace Policy Body.	2019-2023
[ACTIVITY A03] FORMERLY A03	Update DANUBE FAB Strategic Programme.	2019-2023
[ACTIVITY A04] FORMERLY A04	Develop DANUBE FAB Annual Plan.	2019-2023
[ACTIVITY A05] FORMERLY A05	Develop DANUBE FAB Annual Report.	2019-2023
[ACTIVITY A06] NEW	Maintenance of DANUBE FAB Project Management Plan.	2019-2023
[ACTIVITY A07] FORMERLY A06	Coordination at FAB level to prepare national LSSIPs.	2019-2023
[ACTIVITY A08] FORMERLY A07	FAB enlargement.	2019-2023
[ACTIVITY A09] FORMERLY A08	Update DANUBE FAB Cost Benefit Analysis.	2019-2020
[ACTIVITY A10] FORMERLY A09	Inter-FAB coordination and cooperation.	2019-2023
[ACTIVITY A11] FORMERLY A10	Maintain and update DANUBE FAB website and extranet application.	2019-2023
[ACTIVITY A12] FORMERLY A11	DANUBE FAB Publicity.	2019-2023
[ACTIVITY A13] FORMERLY A12	Support FAB international standing and relations.	2019-2023
[ACTIVITY A14] FORMERLY A13	Maintain regular stakeholder consultation.	2019-2023
[ACTIVITY A15 FORMERLY A14	Coordinate position for Network Management Board.	2019-2023
[ACTIVITY A16] FORMERLY A15	External communication relating to SESAR.	2019-2023
[ACTIVITY A17] FORMERLY A16	Maintain Social Consultation Forum.	2019-2023

B-NSA COORDINATION

General Attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Development, implementation and monitoring DANUBE FAB NSAs Annual Plan for 2019.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	In particular: NSAs, ANSPs, State authorities on transport (but possible also on Military Authorities and airspace users).
EXPECTED COSTS/BENEFITS	Benefits: • Increase the efficiency of NSAs coordination due to the implementation of working arrangements for specific common NSAs activities, set up in accordance with NSA Cooperation Agreement. • Financial implication for each NSA will be annually assessed. Costs: • Staff Costs; • Mission Costs.
HOW ACHIEVEMENT MIGHT BE MEASURED	Assessment of results for specific activities/ sub-activities.
RISKS	Modification on initial plan in the second semester 2019 due to objective reasons.
SCHEDULE	May 2019 (to be formally adopted)
DELIVERABLES / EXPECTED OUTPUTS	• Identification of possible common activities on continuing oversight of ANSPs and Training Organisations; • Identification of national rules and procedures that should be harmonised; • Documents developed further the application of the “Consultation Mechanism and processes for the harmonization of rules and procedures”; • Exchange of good practice; • Exchange of information, including information on how compliance with Regulation (EU) 1035/2011, as modified, Annex 1, art. 6 - financial oversight is done, as well as on findings during NSAs’ annual audits.
REFERENCE	• Annual Audit Programmes of all NSAs; • National rules and procedures relevant for supervisory tasks; • Regulation (UE) 1035/2011, as modified (to be replaced by Commission Implementing Regulation (EU) 2017/373, starting on January 2, 2020).
IMPACT ON PERFORMANCE	N/A
RESPONSIBILITIES	NSA Board

Schedule

ACTIONS		TARGET DATE
[ACTIVITY B01] FORMERLY A17	Review NSA rules and procedures and harmonise as required.	2019-2023
[ACTIVITY B02] FORMERLY A18	Implementation of the “Consultation Mechanism and processes for the harmonisation of rules and procedures”, ed. 1/2013.	2019-2023
[ACTIVITY B03] FORMERLY A19	Mutually recognise supervisory tasks.	2019-2023
[ACTIVITY B04] FORMERLY A20	Cooperate in supervision, oversight, safety and security policy, coordination with the Network Manager and stakeholder consultation.	2019-2023
[ACTIVITY B05] FORMERLY A21	Formal coordination forum between the NSAs, including coordination of security issues (physical, cyber and airspace).	2019-2023

C- FAB PERFORMANCE

General Attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Activities relating to the planning, monitoring and reporting of DANUBE FAB performance. DANUBE FAB is now in the final year of RP2 and shall continue to monitor and report performance as required. RP3 is expected to bring the option of ANSP level performance scheme or FAB level, a decision needs to be made on which direction to proceed.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	All stakeholders, including airports and airspace users.
EXPECTED COSTS/BENEFITS	Benefits: • Safety, capacity, environment and cost-efficiency improvements by contributing adequately to the EU targets. Costs: • Staff costs; • Mission costs (if required).
HOW ACHIEVEMENT MIGHT BE MEASURED	• Adoption of the DANUBE FAB Performance for RP3 by the European Commission (if performance planning is submitted as a FAB); • PRB Annual Monitoring Reports; • DANUBE FAB CBA update.
RISKS	• Short timescales for ANSP performance plans to be written, FAB performance plan dependant on ANSP plans; • FAB-wide performance planning is optional in RP3 as per the Commission Implementing Regulation (EU) 2019/317 of 11 February 2019 laying down a performance and charging scheme in the Single European Sky and repealing Implementing Regulations (EU) No 390/2013 and (EU) No 391/2013; • Unrealistic and unachievable targets for RP3.
SCHEDULE	2019-2023
DELIVERABLES / EXPECTED OUTPUTS	• Decision on FAB level or ANSP level performance planning for RP3; • DANUBE FAB Performance Plan for RP3 (if required); • DANUBE FAB Performance Plan - Annual Monitoring Reports and Reporting Tables for 2019; • Updated DANUBE FAB CBA.
REFERENCE	• Regulation (EU) 390/2013 (for RP2); • Regulation (EU) 391/2013 (for RP2); • Regulation (EU) 2019/317 (for RP3); • Other new relevant EU Regulations.
IMPACT ON PERFORMANCE	Safety, Capacity, Cost efficiency, Environment.
RESPONSIBILITIES	NSA Board with the participation of all stakeholders.

Schedule

ACTIONS		TARGET DATE
[ACTIVITY C01] FORMERLY A22	Preparation and approval of the draft DANUBE FAB Performance Plan for RP3 (if required).	Q3 2019
[ACTIVITY C02] FORMERLY A23	Implementation of DANUBE FAB Performance Plan (as required).	2019-2023
[ACTIVITY C03] FORMERLY A24	Reporting of performance (as required).	2019-2023
[ACTIVITY C04] FORMERLY A25	Alignment of performance planning activities and sharing of information (as required).	2019-2023

D-HUMAN RESOURCES AND TRAINING

General Attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	The Human Resources and Training project of DANUBE FAB aims to increase the efficiency and cost-effectiveness of training across the FAB. This will be achieved through harmonisation of annual training plans, methodologies and investigating the implementation of shared training courses.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	NSAs, CAAs, ANSPs, staff.
EXPECTED COSTS/BENEFITS	Benefits: • Improvement in training quality and cost-effectiveness across DANUBE FAB. Costs: • Staff costs; • Mission costs (if required).
HOW ACHIEVEMENT MIGHT BE MEASURED	• Joint training plans established; • Joint training undertaken; • Training expertise shared across the FAB.
RISKS	• Differing training requirements of FAB member organisations; • Conversion of national training packages to English; • Difficulties to select and train relevant ANSPs staff; • Difficulties to identify training organization for NSAs' staff (except IANS).
SCHEDULE	2019 - 2023
DELIVERABLES / EXPECTED OUTPUTS FOR ANSPS	• Harmonised Annual Training Plans; • Common training approach specifications.
DELIVERABLES / EXPECTED OUTPUTS FOR NSAS	• Harmonisation of methodologies to identify training needs for NSAs' staff.
REFERENCE	• DANUBE FAB ANSP Agreement; • ANSP Cooperation Agreement; • NSA Cooperation Agreement; • "New EASA BR" (Regulation (EU) 2018/1139).
IMPACT ON PERFORMANCE	Organisational Excellence, Safety, Capacity, Flight Efficiency.
RESPONSIBILITIES	OSC, Common Training Board, NSA Board.

Schedule

ACTIONS		TARGET DATE
GENERAL		
[ACTIVITY D01] FORMERLY A27	Maintain DANUBE FAB Common Training Board.	2019-2023
[ACTIVITY D02] FORMERLY A28	Joint FAB approach to EUROCONTROL training and testing services.	2019-2023
ESTABLISH COMMON APPROACH FOR ATCO TRAINING		
[ACTIVITY D03] FORMERLY A29	Applying the requirements of Regulation 2015/340.	Q4 2019
[ACTIVITY D04] FORMERLY A30	Coordination and harmonisation of ATCO selection activities (response to increased traffic).	Q4 2019
HARMONISATION OF MET TRAINING		
[ACTIVITY D05] FORMERLY A31	Annual coordination between BULATSA and ROMATSA MET training managers.	2019-2023
[ACTIVITY D06] FORMERLY A32	Identify common training opportunities for AMP professional development.	2019-2023
ATSEP TRAINING		
[ACTIVITY D07] FORMERLY A33	Investigate common approach to ATSEP training and certification.	2019-2023
[ACTIVITY D08] FORMERLY A34	Investigate a common Roadmap for implementation of requirements of Reg. EU 2017/373.	2019-2020

E-TECHNICAL RATIONALISATION AND INFRASTRUCTURE

General Attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	The DANUBE FAB Technical rationalisation and infrastructure implementation project have been established to facilitate and encourage the rationalisation of technology and infrastructure across the FAB. The activities addressed under this project have been identified as essential rationalisation efforts. Further activities are expected to be introduced as part of any common procurement initiatives that may be identified.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	ANSPs, MIL Military Authorities, airspace users, Aerodrome Operators, NSAs.
EXPECTED COSTS/BENEFITS	Benefits: • Reduced costs following the implementation of all activities; • Increased interoperability and information sharing; • Reduce human and time efforts for developing technical requirements related to joint procurement of technical assets; • Reduced costs for procurement of technical assets. Costs: • Staff costs; • Mission costs (if required); • Infrastructure / equipment costs; • Write-off costs should equipment be replaced early in lifecycle.
HOW ACHIEVEMENT MIGHT BE MEASURED	A specific weight will be associated with each activity/ sub-project/ task. Each finalised activity/ task weight will be added in order to measure the project achievement.
RISKS	• Implementation Delays; • Procurement procedure delays; • Certification delays; • Cost overrun; • BULATSA and ROMATSA procurement cycles at different stages, making joint investment challenging.
SCHEDULE	2019-2023
REFERENCE	N/A
IMPACT ON PERFORMANCE	Interoperability, Flight Efficiency, Cost Efficiency, Environment, Safety, Capacity.
RESPONSIBILITIES	OSC, SAPSC.

Schedule

ACTIONS		TARGET DATE
[ACTIVITY E01] FORMERLY A36	Establish Technical Working Group (TWG) RoPs.	2019
[ACTIVITY E02] FORMERLY A37	Maintain Technical Working Group (TWG).	2019-2023
[ACTIVITY E03] FORMERLY A38	Implementation of Voice Over Internet Protocol (VOIP) in ATM (ground-ground).	2019
[ACTIVITY E04] FORMERLY A39	Support Inter-FAB cooperation activities.	2019-2023
[ACTIVITY E05] FORMERLY A40	Implement Data Link Services above FL 285 (including CPDLC using VDL/2).	ON-HOLD
[ACTIVITY E06] FORMERLY A41	Provide appropriate terrestrial navigation infrastructure to support RNAV operation.	2019-2023
[ACTIVITY E07] FORMERLY A42	Operational use of and exchange of ADS-B surveillance data within DANUBE FAB.	2020-2023
[ACTIVITY E08] FORMERLY A43	Implement extended set of OLDI messages.	2019-2023
[ACTIVITY E09] FORMERLY A45	Maintain Service Level Agreements for the shared use of Communication, Navigation and Surveillance.	2019-2023

F-OPERATIONAL ACTIVITIES

Airspace Design

General attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Under this project new routes will be implemented by applying the necessary process for airspace changes including capacity analysis and safety assessments of the route changes. Airspace proposed changes must be agreed and endorsed by all institutional bodies involved according to legislation, in order to become valid. The safety assessments are assumed to be a common effort and the NSAs will need to approve the safety assessment before publication. The final step is the publication of the route changes in the AIPs and this would usually need to be delivered for processing 3-4 AIRAC cycles before the effective date. Significant airspace redesign usually requires around 2-3 days' training per ATCO. Routes that could require cross-border sectorisation may require small-scale RTS. Integrated Airspace Management (ASM) and Air Traffic Flow and Capacity Management (ATFCM) process within the collaborative air traffic management framework will be gradually applied within the DANUBE FAB area. Proposed DANUBE FAB routes are part of the ERNIP.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	NSAs, ANSPs, Military Authorities, airspace users
EXPECTED COSTS/BENEFITS	Benefits: • Fuel reduction and CO_2 reduction according with the figures provided by Route Network Catalogue, Enhanced capacity, Flight Efficiency; • Increase interoperability, capacity and airspace usage; • Provide useful feedback from the stakeholders. Costs: • Develop study for definition of activities, train the personnel to develop a coordinated ASM/FUA/ATFCM tasks and associated cost to interconnect the working procedures; • Staff costs; • Mission costs.
HOW ACHIEVEMENT MIGHT BE MEASURED	• According to Regulation (EU) 677/2011 (to be replaced by Commission Implementing Regulation (EU) 2019/123, starting on 1st January 2020) and Regulation 390/2013 (to be replaced by Commission Implementing Regulation (EU) 2019/317, starting on 1st January 2020); • NEST measurement before airspace change implementation; • According to Regulation (EC) 255/2010, as modified and Regulation (EC) 2150/2005.
RISKS	Reduced efficiency and capacity.

SCHEDULE	2019– 2023
DELIVERABLES / EXPECTED OUTPUTS	The full list of expected deliverables is outlined in: • DANUBE FAB Airspace Design – Phase 2, Catalogue of ATS route network proposals; • Updated European Route Network Improvement Plan, 8 Studies for specific aspects for Airspace Management Working arrangements and procedures regarding ASD/ASM/ATFCM.
REFERENCE	ASM: • Regulation (EC) 2150/2005 FUA ATFCM: • Regulation (EC) 255/2010, as modified; Other: • Regulation (EU) 390/2013 (to be replaced by Commission Implementing Regulation (EU) 2019/317, starting on 1st January 2020); • Regulation (EU) 677/2011 (to be replaced by Commission Implementing Regulation (EU) 2019/123, starting on 1st January 2020); • Commission Implementing Regulation (EU) 2018/1048; • European NOP and ERNIP; • DANUBE FAB Airspace Design – Phase 2; • Catalogue of ATS route network proposals; • ICAO Standards and Recommended Practices; • DANUBE FAB State Agreement; • NSA Cooperation Agreement; • ANSP Cooperation Agreement.
IMPACT ON PERFORMANCE	Environment, Capacity, Flight Efficiency, Cost efficiency
RESPONSIBILITIES	ANSP Board, NSA Board, Military Authorities, OSC, SQSESC, as well as State Authorities on Transport, Airspace Policy Body and Governing Council, as the case may be.

Schedule

ACTIONS		**TARGET DATE**
[ACTIVITY F01] FORMERLY A46	Routes and airspace changes for the period 2019-2022 as planned in ERNIP.	2019-2023
[ACTIVITY F02] FORMERLY A47	Implement necessary sector re-shaping.	2019-2023
[ACTIVITY F03] FORMERLY A48	Develop common airspace policy and perform annual updates.	2020-2023
[ACTIVITY F04] FORMERLY A49	Implementation of SEE FRA.	2019
[ACTIVITY F05] FORMERLY A50	Implement extension of SEE FRA with the participation of other neighbouring countries.	2019-2023
[ACTIVITY F06] FORMERLY A52	Implement longer term airspace changes after 2021 as proposed in ERNIP.	2019-2021
[ACTIVITY F07]	Terminal airspace projects and evolution towards future	2019-2023

FORMERLY A53	CDA operations.	
[ACTIVITY F08] FORMERLY A54	Common ASM/ATFCM functions applied within the FAB.	ON-HOLD
[ACTIVITY F09] FORMERLY A55	Analyse the possibility of introducing the dynamic airspace management.	2019-2023

Operational Procedures Management

General attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Operational procedures need to be continuously updated and revised as the airspace is developed and improved in order to remain safe and efficient. The Operational Procedures working group is tasked with fulfilling that role. DANUBE FAB operates using a common Concept of Operations (DANUBE FAB Concept of Operations, edition 4.0, dated 07.05.2018 – 'ConOps') which describes the DANUBE FAB operational environment and associated operational improvements planned up to and after 2019. The 'ConOps' is a living document, which describes the provision of ATM/ANS in the DANUBE FAB, and as such it is important that it is developed and maintained as the FAB develops.
PROJECT PRIORITY	High/Medium
IMPACT ON RELEVANT STAKEHOLDERS	ANSPs, NSAs, Military Authorities and airspace users.
EXPECTED COSTS/BENEFITS	Benefits: • Improve the activity, working arrangements and overall performance. • Enhanced performance of the ATM network in the region in terms of safety, capacity, cost-efficiency and protection of the environment. Costs: • Staff costs; • Mission costs (if required).
HOW ACHIEVEMENT MIGHT BE MEASURED	• Regular review of 'ConOps'; • ATS procedures harmonised; • Ease of Civil-Military coordination.
RISKS	Difficulties to interconnect the ATM/ANS systems, reduced performance.
SCHEDULE	2019–2023
DELIVERABLES / EXPECTED OUTPUTS	• Continuous amendments to LoAs in the light of DANUBE FAB development; • Working arrangements and procedures regarding the further development/extension of FRA; • Effective Cross border operations; • Harmonized procedures for provision of ATS; • DANUBE FAB Concept of Operations (updated, as the case may be).
REFERENCE	• Commission Implementing Regulation (EU) No 923/2012, as modified (including the amendments made by Commission Implementing Regulation (EU) No 2016/1185); • ICAO Doc 4444 PANS-ATM; • ICAO Doc 7030 EUR/NAT.

IMPACT ON PERFORMANCE	• Interoperability; • Safety; • Capacity; • Flight Efficiency; • Environment; • Cost Efficiency.
RESPONSIBILITIES	ANSP Board

Schedule

ACTIONS		**TARGET DATE**
[ACTIVITY F10] FORMERLY A56	Maintain harmonised ATS procedures.	2019-2023
[ACTIVITY F11] FORMERLY A57	Maintenance of LOA.	2019-2023
[ACTIVITY F12] FORMERLY A58	Maintain up to date & comprehensive DANUBE FAB 'ConOps'.	2019-2023
[ACTIVITY F13] FORMERLY A59	Enhanced civil-military cooperation (TSA/TRA optimisation, increased use of CDRs, LARA at FAB level).	2019-2023
[ACTIVITY F14] FORMERLY A60	Enhanced civil-military coordination and other activities.	2019-2023

Aeronautical Information Services

General Attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	The DANUBE FAB AIS project is based on a roadmap of activities developed during the pre-implementation phase. The following key documents developed form the basis of the Strategic Programme and Annual Plans: • Study on areas for harmonisation of AIS services; • Strategic implementation schedule for harmonisation activities.
PROJECT PRIORITY	Medium
IMPACT ON RELEVANT STAKEHOLDERS	Both ANSPs, and NSAs, Aerodrome Operators, Data providers.
EXPECTED COSTS/BENEFITS	Benefits: • Improved quality of provided AIS products and service. Costs: • Staff costs; • Mission costs (if required); • Any required equipment.
HOW ACHIEVEMENT MIGHT BE MEASURED	• Update of AIS operational manuals; • Update of AIPs, implementation of new AIS software.
RISKS	Delay in coordination between the AIS providers.
SCHEDULE	2019-2023
DELIVERABLES / EXPECTED OUTPUTS	• Update of AIS operational manuals; • Update of AIPs; • Implementation of new AIS software.
REFERENCE	• ICAO Annex 15; • Reg. (EU) 73/2010, as modified; • Regulation (EU) 1035/2011, as modified (to be replaced by Commission Implementing Regulation (EU) 2017/373, starting on January 2, 2020).
IMPACT ON PERFORMANCE	Improved quality of provided AIS products and service.
RESPONSIBILITIES	SAPSC, OSC

Schedule

ACTION		TARGET DATE
[ACTIVITY F15] FORMERLY A61	Maintain AIS services compliance with SESAR, ICAO and EU regulations and standards.	2019-2023
[ACTIVITY F16] FORMERLY A62	Maintain AIS aspects of the DANUBE FAB ‘ConOps’.	2019-2023

MET Services

General Attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Within DANUBE FAB, significant areas for collaboration and harmonisation have been identified and scheduled for progressive roll out. This including identification of common KPIs, mutual MET data access, common competency schemes and the development of common best practice.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	Both ANSPs, Aircraft and Airport Operators.
EXPECTED COSTS/BENEFITS	Benefits: • Improved efficiency and quality of MET products and services; • Increased forecasting redundancy across the FAB. Costs: • Staff costs; • Mission costs (if required); • Any required equipment.
HOW ACHIEVEMENT MIGHT BE MEASURED	Achievement of the harmonisation areas identified above.
RISKS	• Delay in coordination between MET units and relevant technical departments in both ANSPs; • Technological implementation delays; • Long duration of the acceptance process on behalf of NSAs.
SCHEDULE	2019 – 2023
DELIVERABLES / EXPECTED OUTPUTS	Separate deliverable developed for each specific activity completed, Appropriate update of MET Manual, procedures, instructions, as well as of the QMS Manual.
REFERENCE	• ICAO Annex 3; • Regulation (EU) 1035/2011, as modified (to be replaced by Commission Implementing Regulation (EU) 2017/373, starting on January 2, 2020); • Harmonisation of MET Services within DANUBE FAB, ed. 1.0 dated 29.08.2012; • Strategic Plan for MET Services Implementation within DANUBE FAB, ed. 1.0, dated 05.10.2012; • DANUBE FAB 'ConOps', edition 4.0, dated 07.05.2018.
IMPACT ON PERFORMANCE	Improved timeliness, more accurate weather observations and forecasts will contribute to increase the airport capacity and to enhance safety. They will also support the calculation of optimum flight path and trajectory for each flight in order to minimize fuel burn and reduce the aircraft noise footprint.
RESPONSIBILITIES	SAPSC, OSC

Schedule

ACTION		TARGET DATE
[ACTIVITY F17] FORMERLY A63	Maintain MET services compliance with international standards.	2019-2023
[ACTIVITY F18] FORMERLY A64	Harmonisation of services and exchange of GAMET (BULATSA) AND LL SIGWX (ROMATSA).	2019-2023
[ACTIVITY F19] FORMERLY A65	Coordination between MWOs for issuing coherent SIGMETS.	2019
[ACTIVITY F20] FORMERLY A66	Harmonisation of Low-Level Significant Weather Charts.	2019
[ACTIVITY F21] FORMERLY A67	Harmonisation of MET KPIs.	2021
[ACTIVITY F22] FORMERLY A68	Establish common minimum levels of service for MET. service provision within DANUBE FAB.	2022
[ACTIVITY F23] FORMERLY A69	Approach to volcanic ash or other contaminants.	2020

G-SAFETY, QUALITY, ENVIRONMENT & SECURITY ACTIVITIES

Safety Management

General attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	The DANUBE FAB ANSP Safety Management activities are intended to enhance the Safety Management Systems within DANUBE FAB. A detailed set of safety domain harmonisation activities have been identified between BULATSA and ROMATSA and a schedule for implementation was laid out in the ANSP's Safety Management System Roadmap and their common Safety Management Manual. The Safety Management activities require close cooperation also with NSAs, responsible for providing oversight for BULATSA and ROMATSA.
PROJECT PRIORITY	High
IMPACT ON RELEVANT STAKEHOLDERS	ANSPs, Both NSAs,
EXPECTED COSTS/BENEFITS	Benefits: • Safety improvement and, over the long term, cost savings. Costs: • Staff costs; • Mission costs (if required).
HOW ACHIEVEMENT MIGHT BE MEASURED	• Harmonised safety KPIs; • Maintenance of Common Safety Management Manual; • Safety Culture improvement across the FAB.
RISKS	Shortage in human resources.
SCHEDULE	2019 – 2023
DELIVERABLES / EXPECTED OUTPUTS	• BULATSA and ROMATSA common safety Policy and Safety Management Manual within DANUBE FAB; • Common safety KPIs.
REFERENCE	• Regulation (EU) No.1035/2011, as modified; • Commission Implementing Regulation (EU) 2017/373 (replacing Regulation (EU) No. 1035/2011, starting on January 2, 2020); • DANUBE FAB Safety Case; • SMS ROADMAP for the harmonisation and enhancement of BULATSA and ROMATSA Safety Management Systems within DANUBE FAB.
IMPACT ON PERFORMANCE	Common safety policy and improved safety management.
RESPONSIBILITIES	SQSESC

Schedule

ACTIONS		TARGET DATE
[ACTIVITY G01] FORMERLY A70/A71	Ongoing updates of the safety case, safety policy and common generic safety management manual.	2019-2023
[ACTIVITY G02] FORMERLY A74	Safety culture measurement and improvement.	2019-2023
[ACTIVITY G03] FORMERLY A75/A76	Development of DF safety targets and safety performance monitoring.	2019-2023
[ACTIVITY G04] FORMERLY A77	Coordinated adoption of best safety practices.	2019-2023

Quality & Environmental Management Systems

General attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	The main objective of this Implementation Project is to rationalise and improve the quality management of air navigation services provision in the DANUBE FAB; and to minimize the environmental impact in all domains of activities. It is also important to note that safety should be kept as a priority over commercial, operational, environmental and social pressures. In view of the new approach of Reg. 2017/373 on the Management System of the ATM/ANS providers (Part-ATM/ANS.OR.B), the quality management system based on ISO 9000 series of standards is the basis for the Management System of the provider, covering different areas and respective responsibilities, such as safety, quality, security, finance, human resources, etc.
PROJECT PRIORITY	Medium
IMPACT ON RELEVANT STAKEHOLDERS	ANSP`s, NSAs
EXPECTED COSTS/BENEFITS	Benefits: • Quality improvement of the level of services and minimise environmental impact in all domains of activities. Costs: • Staff costs; • Mission costs; • IMS administration, auditing, certification, training, specialist forums participation.
HOW ACHIEVEMENT MIGHT BE MEASURED	• KPIs as per Performance Scheme at FAB level; • Maintenance of accredited certification.
RISKS	Shortage in human resources/ lack of commitment.
SCHEDULE	2019 – 2023
DELIVERABLES / EXPECTED OUTPUTS	• Harmonised internal audit process, customer satisfaction and environmental external communication, QMS/EMS competence and training, identify the environmental aspects harmonised; • Harmonisation of the specific management system processes in view of the Reg.2017/373 requirements to the management system of ATM/ANS providers;

	• Common KPIs.
REFERENCE	• Regulation (EU) 1035/2011, as modified; • Commission Implementing Regulation (EU) 2017/373 (replacing Regulation (EU) No. 1035/2011, starting on January 2, 2020); • Study on harmonisation of QMS/EMS within DANUBE FAB; • ISO 9000:2015 Quality Management Systems – Fundamentals and vocabulary; • ISO 9001:2015 Quality Management Systems – Requirements; • ISO 9004:2009 Managing for the sustained success of an organization – A quality management approach; • ISO 14001:2015 Environmental management systems – Requirements with guidance for use; • ISO 19011:2018 Guidelines for auditing management systems; • Commission Regulation (EU) No. 390/2013 laying down a performance scheme for air navigation services and network functions (to be replaced by Commission Implementing Regulation (EU) 2019/317 starting on 1st January 2020); • CANSO Standard of excellence: Improving Business Performance through Auditing.
IMPACT ON PERFORMANCE	Improved quality of services and minimised environmental impact.
RESPONSIBILITIES	SQSESC

Schedule

ACTIONS		**TARGET DATE**
[ACTIVITY G05] FORMERLY A78	Monitoring of environmental KPIs.	2019-2023
[ACTIVITY G06] FORMERLY A79	Harmonisation of the Quality and Environment management systems within the overall management system of both ATM/ANS providers.	2019-2023

ATM Security Management Systems

General attributes

ATTRIBUTE	DESCRIPTION
DESCRIPTION	Following the first meeting which was held in Sofia, in December 2012, where the document "Harmonization Review Report for ANSP Security Systems and Procedures in Danube FAB" was completed, there has been set a number of steps for harmonisation of both ATM Security Management Systems according to the requirements of EU REG nr.1035, ECAC Doc 30, Part II, Chapter 13, ICAO – ATM Security Manual (approved at the end of 2012). Regarding Cyber Security (protection of information/ digital systems and operational data) both countries remain compliant with the international requirements and legislations (e.g. ISO 27001 and ECAC Doc 30, Part. II, Chapter 14, ICAO Annex 17-Chapter 18. ROMATSA and BULATSA have already implemented ISMS – Information Security Management System (IT&C), which is based on the requirements of ISO 27001. BULATSA has been certified since May 2017 in accordance with ISO 27001, ROMATSA operates in alignment with ISO 27001 as provided for in national legislation.
PROJECT PRIORITY	Medium
IMPACT ON RELEVANT STAKEHOLDERS	• Both ANSPs; • Both NSAs; • Military authorities; • State authorities on security; • Aircraft operators.
EXPECTED COSTS/BENEFITS	Benefits: • Quality of processes and services improvement; • Safety Improvement; • Cost savings; • Security of operational data and networks across the FAB; • Capacity improvement. Costs: • Staff costs; • Mission costs (if required).
HOW ACHIEVEMENT MIGHT BE MEASURED	• Number of security incidents affecting the provision of ANS.
RISKS	• Insufficient number of personnel; • Lack of culture in the ATM Security domain; • Lack of training.
SCHEDULE	2019 – 2023
DELIVERABLES / EXPECTED OUTPUTS	• Sharing of experience and security information between staff; • Analysis of applicable cyber security legislation in view of harmonised implementation; • Defining DANUBE FAB Security Indicators.
REFERENCE	• Regulation (EU) No.1035/2011, as modified (to be replaced by Commission Implementing Regulation (EU) No.2017/373, which will enter into force in January 2, 2020); • Directive (EU) 2016/1148 ("NIS Directive");

	• Regulation (EU) 2017/0225 (COD) („Cybersecurity Act), adopted through Resolution of European Parliament on 12 March 2019; • ISO 27000 Series on 'information security management systems (ISMS)' standards; • ISO 31000 Series on 'risk management' standards • CEN – EN 16495 on standards for 'Air Traffic Mana;gement – Information security for organisations supporting civil aviation operations'; • ECAC Document 30 'Recommendations on cyber security and supporting Guidance Material'; • ISO 27000 Series on 'information security management systems (ISMS)' standards; • ISO 31000 Series on 'risk management' standards • CEN – EN 16495 on standards for 'Air Traffic Management – Information security for organisations supporting civil aviation operations'. • — ECAC Document 30 'Recommendations on cyber security and supporting Guidance Material'
IMPACT ON PERFORMANCE	Safety, security, interoperability, capacity.
RESPONSIBILITIES	SQSESC.

Schedule

ACTIONS		**TARGET DATE**
[ACTIVITY G07] FORMERLY A82	Harmonisation of Information Security Management Systems.	2019
[ACTIVITY G08] FORMERLY A83	Develop DANUBE FAB Information Security Incidents reporting procedure.	2019
[ACTIVITY G09] FORMERLY A84	Ongoing AvSEC activities.	2019-2023
[ACTIVITY G10] FORMERLY A80	ATM Security Roadmap.	Q4 2019

DEFINITIONS & ACRONYMS

For purpose of this document the definitions in the harmonised regulatory framework for the creation of the Single European Sky shall apply:

AIS – Aeronautical Information Service
AP – Annual Plan
AR – Annual Report
ANSP – Air Navigation Service Provider
ARN – ATM Route Network
CDM – Collaborative Decision Making
CNS – Communications, Navigation and Surveillance
DM – Deployment Manager
DUC – Determined Unit Cost
EATM – European Air Traffic Management
EC – European Commission
ERNIP – European Route Network Implementation Plan
EU – European Union
FAB – Functional Airspace Block
ICAO – International Civil Aviation Organisation
IMS – Integrated Management System
IDP – Interim Deployment Programme
IDSG – Interim Deployment Steering Group
KPA – Key Performance Indicator
MET – Aeronautical Meteorological Services
MIL – Military
MWO – Meteorological Watch Office
NM – Network Manager
NMB – Network Management Board
NOP – Network Operations Plan
NSA – National Supervisory Authority
NSP – Network Strategic Plan
OI – Operational Improvement
OSC - Operational Standing Committee
PCP – Pilot Common Project
PCP CIR – Pilot Common Project Commission Implementing Rule
PP – Performance Plan
PRB – Performance Review Body
RAT – Risk Analysis Tool
SAPSC - Strategies and Planning Standing Committee
SBP – Strategic Business Plan
SEC MS– Security Management System
SES – Single European Sky
SESAR – SES ATM Research
SP – Strategic Programme
SSC – Single Sky Committee
(E)/(L)SSIP – European/Local Single Sky Implementation (mechanism/documents)
SQSE - Safety, Quality, Security and Environment
SQSESC– Safety, Quality, Security and Environment Standing Committee