2022

Annual SW FAB Report

This page is left intentionally blank for printing purposes

REPORT DOCUMENTATION PAGE

TITLE OF THE DOCUMENT:	
2022 Annual SW FAB Report	
AUTHOR(S):	**ORIGINATOR:**
Council; Supervisory Authorities Committee (SAC); Operational Board (OB); Standing Secretariat.	SW FAB State Agreement.
EDITION:	**DATE:**
1.0	29th May 2023
SCOPE:	**KEY WORDS:**
SW FAB / Council / SAC / OB	SW FAB / SW FAB OB CP / Annual Report / SCF / AWG / TWG / SAC

ABSTRACT:

This document contains the yearly report of the SW FAB initiative, as required by the article 10 of the SW FAB State Agreement. It summarizes the main activities developed by the different bodies of the SW FAB in 2022.

This report is elaborated by the SW FAB governing bodies, namely the Supervisory Authorities Committee (SAC), the Operational Board (OB) and the Council, taking into account the contributions and comments provided by all SW FAB experts under the coordination of the SW FAB Standing Secretariat.

The Annual Report is approved by the SW FAB Council and included in the SW FAB web page (www.swfab.eu) for transparency.

DOCUMENT CHANGE RECORD

EDITION	DATE	REASON FOR CHANGE	SECTIONS AND PAGES AFFECTED
0.1	14th March 2023	First Draft	ALL
0.2	26th May 2023	Second Draft	ALL
0.3	29th May 2023	Final edition	ALL

HIGHLIGHTS

Although still under a recovery process from the Coronavirus pandemic that caught the world by surprise in 2020 and in spite of the conflict in Ukraine, air traffic started to pick up the high figures of 2019. In some cases, and specific dates, it even got to surpass the figures from the abovementioned year. Nevertheless, due to the well-known social unrest in the European territory, these figures may present a very high volatility degree.

Air transport in the SW FAB, although moving in this same overall scenario, has shown a steady and rather highly noticeable recovery behavior in specific months of the year. In both Portugal and Spain, throughout 2022, a change in trend was evident, starting a recovery that was confirmed during the previous year that mainly took place in several specific months rather than in the summer/winter months.

Despite the limitations derived from the restrictions imposed by COVID-19, the tasks and activities of all the SW FAB bodies have been maintained in a very collaborative atmosphere. As a result, progress has continued to be made towards the objectives established.

It is worth highlighting the ongoing mitigation activities carried out by the SW FAB service providers regarding the effects of the pandemic and to allow a gradual increase in air traffic levels with the establishment of recovery plans for air navigation services in collaboration with the European Network Manager.

At the institutional level, the year 2022 has been marked by the continuation of negotiations on SES 2+, with the participation of the Spanish and Portuguese aviation authorities.

As for the performance targets, and although they are now set as individual targets for each State and not for the SW FAB as a whole, it should be noted that both Portugal and Spain have fully committed to doing their best to meet the targets set by the Commission.

Regarding one of the most important activities carried out in the SW FAB, the Operational Board Common Plan, it should be noted that despite the difficult circumstances, progress has been made in the implementation of various technical and operational projects in 2022. A new edition 2023-2027 has been approved by the SW FAB Council.

SW FAB: The Europe Gate to the Atlantic

The members of the SW FAB Council in 2022 were:

- ***Mr. Raúl Medina Caballero, Director General of Civil Aviation (until November 2022) replaced by Mr. David Benito Astudillo*** *– Spanish CAA – DGAC*
- ***Mr. Alvaro Fernández-Iruegas****, Deputy Director General for Airports and Air Navigation - Spanish CAA – DGAC (Alternate)*
- ***Ms. Tânia Cardoso Simões****, Chairwoman Portuguese CAA - ANAC*
- ***Mr. Duarte Nuno Lopes da Silva****, Member of the board, Portuguese CAA – ANAC (Alternate)*
- *General Ignacio Bengoechea, Second Chief of Staff of the Air Force – Spanish Air and Space Force*
- *Colonel Arturo Vicente Pérez Cuartero, Ops Division A-3 / Airspace and ATM Branch / Spanish Air and Space Force (Alternate)*
- *Major-General Piloto Aviador João Manuel Cardeiro Caldas - National Aeronáutical Authority - AAN*
- *Mr. Colonel Carlos Paulos - National Aeronautical Authority – AAN (Alternate)*

This page is left intentionally blank for printing purposes

TABLE OF CONTENTS

1 Introduction 11
2 SW FAB Council 13
3 SW FAB Supervisory Authorities Committee 19
4 SW FAB Operational Board 24
5 List of Abbreviations/Acronyms 30

This page is left intentionally blank for printing purposes

1 Introduction

This document contains the yearly report of the SW FAB initiative, as required by the article 10 of the SW FAB State Agreement. It summarizes the main activities developed by the different bodies of the SW FAB in 2022.

This report is elaborated by the SW FAB governing bodies, namely the Supervisory Authorities Committee (SAC), the Operational Board (OB) and the Council, taking into account the contributions and comments provided by all SW FAB experts under the coordination of the SW FAB Standing Secretariat.

The Annual Report is approved by the SW FAB Council and included in the SW FAB web page (www.swfab.eu) for transparency.

This page is left intentionally blank for printing purposes

2 SW FAB Council

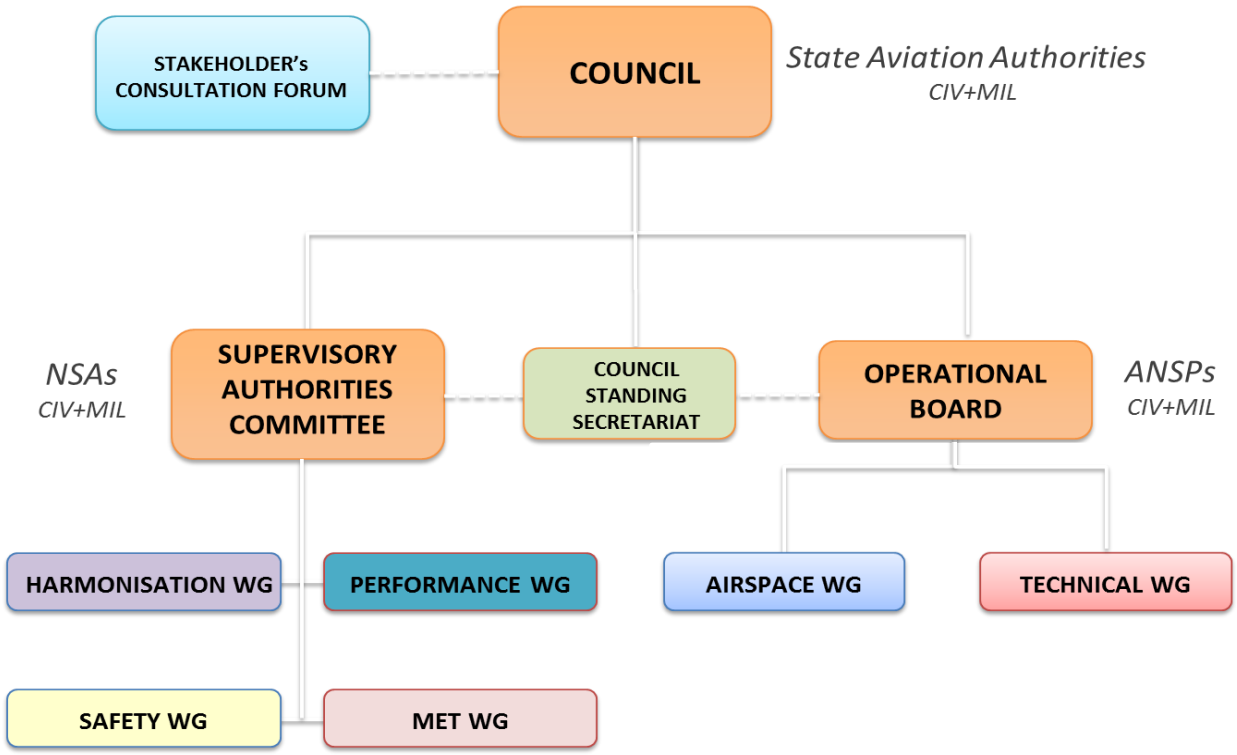
The SW FAB Council (the "Council") is the highest governing body. It was created by Article 9 "Bodies of the SW FAB" of Chapter 3 "Bodies and Operation" of the SW FAB State Agreement signed between the Republic of Portugal and the Kingdom of Spain, on 17th May 2013.

This SW FAB body is established as a joint decision-making body for the purposes of the implementation, operation and further development of the SW FAB State Agreement. It is composed of one representative from the authority responsible for military aviation and one representative from each Civil Aviation Authority (CAA) of each SW FAB State.

By Portugal, the Autoridade Aeronáutica Nacional (**AAN**) and the Autoridade Nacional da Aviação Civil (**ANAC**) and, by Spain, the Estado Mayor del Ejército del Aire (**EMA**) and the Dirección General de Aviación Civil (**DGAC**) are the four members in the Council.

The Council Chair rotates annually between the two CAAs. Therefore, in 2022 the Spanish DGAC took over the annual duties for the Council.

The structure of the SW FAB bodies is shown in the following figure:



Main facts and activities at institutional level in 2022

In its role of governing body of the SW FAB, the Council carried out all the required tasks for the steering, coordination and strategic decision-making of the SW FAB development.

Institutional matters

As relevant decisions of this year, the Council undertook the review and final approval of the SW FAB OB Common Plan 2023-2027. This document will be sent to the European Commission. Also, the Council carried out a review of the Monitoring Report of the previous edition of the Common Plan, the OB Common Plan 2022-2026.

In 2022, the drop in air traffic figures suffered in the previous year due to COVID-19 has slowed down thanks to vaccination and EU digital COVID certificates to travel. Although at a slower pace than expected, this recovery trend in Portugal and Spain in the last months of the year, despite the Omicron variant, and Russia's invasion of Ukraine in February 2022, brought air traffic closer to pre-pandemic levels, heralding, with some uncertainty, better prospects for 2023.

Collaboration at all national and European institutional levels has proven to be an essential factor in achieving progressive recovery and greater stability for air operations.

Consultation with users

Having in mind the experience gained with the previous SCF, the Council decided that it was important to keep in close collaboration with users and stakeholders and to get their feedback on the SW FAB. Consequently, in March 2023, a new online questionnaire has already been sent to gather their vision and feedback.

Council meetings

The SW FAB Council met twice in 2022.

Meeting	Date	Location
20th Council meeting	**29 June 2022**	Videoconference
21th Council meeting	**11th November 2022**	Videoconference

At the Council meetings, issues related to the coordination and implementation of the SW FAB and its progress, the decision-making process or the approval of strategic documents, were addressed.

Although the performance plan is no longer developed at SW FAB level, the evolution of the performance targets of both States has continued to be shared at the Council meetings, thus allowing for an overview of the SW FAB airspace and strengthening collaboration where necessary. The impact of COVID-19 on air traffic, as well as recovery measures, were understandably at the center of the debates held in those meetings.

Besides, the aspects mentioned in the preceding points, other FAB related matters or issues affecting the SW FAB initiative progress were also treated in the Council meetings seeking the greatest possible coordination between Portugal and Spain. One example of these matters has been the collaboration between the respective Authorities and ANSPs of Spain and Portugal concerning the uncontrolled fall of debris from the Chinese rocket and the launch of the Virgin Orbit that created some constraints in both national airspaces.

One of the most relevant issues discussed at the 2022 Council meetings was still the ongoing negotiations of the SES 2+ recast, namely that the FABs are still included in the text not as a mandatory structure, but as a voluntary platform for cooperation. With this regard and having in mind what the future of the FABs may be, the SW FAB Council agreed

to jointly continue to analyze the way to proceed, how this cooperation can be improved and how it is going to be settled in the future.

Another issue that has been relevant during 2022 was the debate at the SW FAB council meetings about the emerging area of space activities. It was recognized the importance of the collaboration between Portugal and Spain regarding events like the Virgin Orbit launch from Cornwall or the re-entry of a Chinese rocket that crossed both countries airspace.

On an internal level it was possible to reach an agreement that resulted in a Council decision to reduce the SW FAB bureaucratic workload by improving the administrative and management processes.

This page is left intentionally blank for printing purposes

3 SW FAB Supervisory Authorities Committee

The **SW FAB Supervisory Authorities Committee** (SAC) was created by Article 9 "Bodies of the SW FAB" of Chapter 3 "Bodies and Operation" of the SW FAB State Agreement, between the Republic of Portugal and the Kingdom of Spain, signed on 17th of May 2013.

The SAC, in accordance with the framework of the State Agreement, addresses all matters related to the supervision, performance and harmonization of rules and procedures within the SW FAB. It is made up of representatives of each NSA and of the military aviation authorities that are not established as NSAs.

As operational arms of the SAC, four Standing Working Groups (WGs) have been set up to develop the matters that fall under the remit of the SAC: the Safety WG (SAF WG), the Harmonization WG (HAR WG), the Performance WG (PER WG) and the Meteorological WG (MET WG).

SAC activities

Two meetings of the Committee were held along 2022, the eighteenth meeting was celebrated on the 28th of June and the nineteenth meeting took place on the 10th of November. Both were held online via Microsoft Teams. As from 2023, both delegations agree to return to face-to-face meetings.

The following points were highlighted during the SAC meetings:

Monitoring

From 2020, and for all the RP3, in which 2023 is included, Performance Plans are set at national level, so that the Monitoring Process and the follow up of the targets will be held at national level as part of the continuous monitoring and to prepare the Annual Monitoring Report to be submitted to the European Commission during RP3 (2020-2024). The SAC Performance WG presented the 2022 monitoring indicators results with the following conclusions, mainly focused on the COVID-19 Recovery 2022-2019 Comparison and the compliance with the Performance Plan:

Regarding ANAC monitoring activities during 2022:

The results of the Portuguese monitoring until Q3 2022, regarding IFR traffic variation in Lisbon and Porto, although was below 2019 levels, recovered strongly when compared with 2021:

- +40,8% IFR Traffic variation Lisbon FIR Q· 2022/2021
- +45,3% LIS APT
- +41,5% OPO APT

The Service Units were positive for the 2022 exercise until Q3 but still below if compared to the 2019:

- En Route +9,0% vs. Performance Plan expectations.
- Terminal +8,8% vs. Performance Plan expectations.

Regarding Environment KPI KEA, at the end of Q3 was slightly below the 2022 target and was expected to continue on target by the end of the year.

- 1,55% KEA Lisbon FIR

The Capacity KPIs, En Route ATFM Delay and Arrival ATFM Delay were, in Q3 2022:

- En Route ATFM Delay was 0,29 min/f, above the 2022 target
- Arrival ATFM Delay was 1,47 min/f, in compliance with the 2022 target

- The causes of the ERD delay were related with the change of ATM System (TOPSKY implementation tests, which was the main cause of the total delay), followed by ATC capacity and the third cause of delay was Equipment (ATC). Therefore, it is expected that by the end of the year a non-compliance exists.

Regarding AESA monitoring activities during 2022:

Concerning 2021 KPI´s targets, as reported to the European Commission within the Annual Monitoring Report on June 2022, Capacity, Safety and Cost Efficiency KPIs were met. On the other hand, Environment KPI KEA was not met.

The Spanish monitoring process and the data collected in Spain until Q3 2022, is focused on the improvement over 2021 traffic data and the progressive approach to the 2019 results.

Regarding Spanish monthly monitoring process, the results of the traffic evolution are the following, comparing until September 2022:

- +30% Traffic Spain (IFR Flights)
- +26% APT Inbound IFR Flight SPAIN 7

The actual service units, comparing September 2022 vs September 2021:

- +30,3 % for SPAIN-CONTINENTAL
- +48,3 % for SPAIN-CANARY ISLANDS

It is noted that this is a relevant improvement over 2021 service units, but 2019 is still a 6% above.

- En Route ATFM Delay was 0,32 min/f, above the 2022 target
- Arrival ATFM Delay was 0,48 min/f, in compliance with the 2022 target

The main ERD and TAD delay causes were ATC Capacity and Weather. It was expected not to meet the ERD target by the end of the year.

Concerning the environmental KPI – KEA, by September 2022, it is at 3,34%, above the target for 2022 and is expected not to meet the target by the end of the year.

- OVERSIGHT COLLABORATION BETWEEN NSAs, 2022 COMMON AUDIT PLAN

The oversight calendar proposed for 2022 by AESA and ANAC was partially completed. An audit on FPD NAV PORTUGAL Espaço aéreo e procedimentos (ESAPRO) took place on 15th November 2022. The remaining two planned shared audits (CNS NAV PORTUGAL by AESA and the visit to AIS SSCC ENAIRE by ANAC) had to be cancelled by ANAC.

In the MET domain, GAMA staff attended as observer an ANSMET audit at the Gran Canaria WMO and ANSMET staff attended as observer a GAMA audit at the AMS in Porto airport.The 2023 oversight programs will be shared at the beginning of the year in order to resume the shared audits as soon as possible during 2023.

- FUNCTIONAL AND NON-FUNCTIONAL CHANGE MANAGEMENT

As ANAC referred to some issues regarding the process of identification and management of changes to functional systems of its service providers and due to AESA´s experience on that matter, a meeting to hold an overview on how both authorities deal with functional changes identification and its management was held on October 21st, 2022. AESA shared its expertise and the lessons learned on functional and non-functional change management.

- UKRAINE WAR

Regarding the Impact of the Ukraine War shows little impact on both Spain and Portugal and presented the emergence of some new routes in Spanish airspace. Only the application of sanctions and the dissemination and aeronautical information regarding the conflict were noticeable activities for both NSAs.

4 SW FAB Operational Board

The SW FAB Operational Board (OB) was created by Article 9 "Bodies of the SW FAB" of Chapter 3 "Bodies and Operation" of the SW FAB State Agreement, between the Republic of Portugal and the Kingdom of Spain, signed on May 17th, 2013.

The OB is the body established in the framework of the State Agreement to address all matters related to the technical and operational functioning of the SW FAB. It is made up of representatives of each SW FAB ANSP (NAV Portugal, ENAIRE, EMFA, EA-ANSP, AEMET and IPMA).

Further to this structure, and in order to streamline communication flows and to allow a greater efficiency between these groups, the OB proposed to merge the Operation Coordination Committee (OCC) and the Operational Board. This proposal was approved by the Council in the mid of the year.

The Organizational Structure for the Operational Board is as follows:

- **Operational Board (OB):** besides the tasks of the previous OB, this body is now also responsible for preparing conclusions, recommendations and giving advice to the Council as well as direct the development of the working groups under its umbrella, by validating and approving the recommendations made, as well as monitoring the work done;

- **Airspace Working Group (AWG):** mainly responsible for the identification, harmonization and development of airspace structure taking into account civil and military air traffic flows, European route network, Network Manager (NM) and Performance Plans established at national level, ensuring optimum airspace utilization and military mission effectiveness in the application of the FUA concept;

Technical Working Group (TWG): mainly responsible for proposing activities or plans towards harmonized and interoperable technical systems for the provision of air traffic management, communication, navigation, surveillance and meteorological services by the civil and military air navigation service providers, providing a high level of safety operations and making optimal use of technical resources.

The work is carried out ensuring technical coordination between ANSPs of the SW FAB, as well as between SW FAB ANSP(s) and ANSP(s) of neighboring States, including the elaboration of technical written agreements of relevance for the provision of ANS.

OB/OCC activities.

During 2022 the OB/OCC held two coordination meetings on 19th May and 06th October, now as a first OB meeting in accordance with the new structure.

The work of the OB/OCC was mainly oriented to produce the new edition of the SW FAB Operational Board Common Plan, SW FAB OB CP 2023-2027. This rolling annual plan contains an overview of those technical and operational activities planned to be implemented by the SW FAB ANSPs, and the monitoring of the implementation of the projects included in the SW FAB Operational Board (OB) Common Plan 2022-2026, aiming to improve the performance of the airspace under its responsibility as part of the whole European Network. The OB monitors the developments of these projects and, likewise, periodically provides reports to the SW FAB Council regarding the status of the SW FAB OB CP, to be afterwards released to the EC.

Along 2022, the SW FAB OB CP in force covered the period 2022-2026, and the OB developed the new edition of this plan, the SW FAB OB CP 2023-2027, covering the period

2023-2027. This new edition was agreed by the bodies that compose the SW FAB (the OB, the SAC and the Council), and is already in force during this year 2023.

From an institutional point of view, it is recognized the success of the AEFMP regional cooperation where the members of the SW FAB, Spain and Portugal, have a long- lasting history of inter-FAB/regional collaboration, since the '90s, well before the SES legislation.

In this framework of collaboration that can be considered the precursor of the FAB concept, Spain and Portugal (ENAIRE, NAV Portugal, ANAC and the Spanish DGAC) work with Algeria, Morocco, France, and Tunisia. AEFMP aims to the harmonization of procedures, improvement of interoperability and management of implementation of new systems.

Furthermore, among the several activities carried out by the OB during 2022, it is important to mention the participation in the elaboration of the LSSIP (end of the 2021 cycle and beginning of 2022 cycle).

In this year, the 2022 LSSIP cycle has been successfully completed by agreeing a joint report on 13 objectives included in the European ATM Master Plan (MP) Level 3 Implementation Plan, edition 2022. Further to the coordination of the common report for the LSSIP database, the content of LSSIP level 1 section 4.1 'FAB Co-ordination' and section 4.2 'Regional Multinational cooperation initiatives' have also been jointly agreed.

Moreover, in the last quarter of 2022, as foreseen in the SW FAB OB Common Plan, the coordination of civil ANSPs contribution to national LSSIP for cycle 2022 was initiated between ENAIRE and NAV Portugal. Both, a detailed working schedule for the 2022 cycle and a list containing the proposed FAB dimension objectives for common reporting, were elaborated as the starting point for the LSSIP 2022 cycle.

This is an ongoing project that is yearly updated to be aligned with the ATM MP level 3 report and national LSSIPs elaboration processes.

❑ *AWG activities*

The Airspace Working Group (AWG) projects defined in the Operational Board Common Plan 2022-2026 edition 1.0 (November 2021) comprise 11 projects, distributed into 3 sub-areas of work, to be developed and implemented up to 2025.

Along 2022, it should be noted that one operational project of the SW FAB OB CP 2022-2026, has been finalized:

FRA 4 SW FAB FRA Phase II

The project was successfully completed in April 2022, two months in advance of the proposed scheduled date (June 2022), with the implementation of the FRA concept in Madrid, Barcelona and Canarias UIRs.

On the other hand, one of the projects was suspended in 2022:

NMP 1 Marseille Interface Project

The project was suspended until DSNA implements the technical and operational improvements required to carry out the pending activity “LUMAS interface reorganization”. Therefore, this activity cannot be planned but is expected to be restarted as soon as the implementation in France is ready.

The AWG actively participated in the preparation of the operational component of the new 2023-2027 edition of the SW FAB Common Plan, within three main operational areas:

- Free route airspace (FRA) concept

- Network management (NMP)
- Terminal area management (TMA)

❑ *TWG activities.*

The Technical Working Group (TWG) projects defined in the Operational Board Common Plan 2022-2026 edition 1.0 (November 2021) comprise 5 projects, included in 1 sub-area of work, to be developed and implemented until the end of 2022.

Along 2022, it should be noted that one technical projects of the SW FAB OB CP 2022-2026, has been canceled.

CNS 15 IPv6 Services

The project has been canceled due to the change of infrastructure to REDAN V. The need to revalidate the solution with the new infrastructure would mean opening all the other activities in the project, which in fact would represent reinitiating the project. Due to the current prioritization of other internal projects, today it is not possible to fix dates for such activities and, therefore, the activities cannot be included in the SW FAB OB CP.

On the other hand, one of the projects was finalized in 2022:

CNS 1 Datalink Phase I

Project successfully completed in October 2022, with the implementation of common technical solutions (CPDLC, VGS Computer,…) for the implementation of Datalink services.

The TWG actively participated in the preparation of the operational component of the new 2023-2027 of the SW FAB Common Plan, within one main technical area:

- CNS sub-area of work**.**

This page is left intentionally blank for printing purposes

5 List of Abbreviations/Acronyms

AAN – Autoridade Aeronáutica Nacional
ADS-B – Automatic Dependent Surveillance-Broadcast
AEFMP – ATM Evolution Framework through Multipurpose Partnership
AEMET – Agencia Estatal de Meteorología
AESA – Agencia Estatal de Seguridad Aérea
ANAC – Autoridade Nacional da Aviação Civil
ANSP –Air Navigation Service Provider
ATC – Air Traffic Control
ATFM – Air Traffic Flow Management
ATM – Air Traffic Management
AWG – Airspace Working Group
CAA– Civil Aviation Authority
CP – Common Plan
DLS – Datalink Services
EA-ANSP – Ejército del Aire y del Espacio, Military Air Navigation Service Provider
EASA –European Aviation Safety Agency
EC – European Commission
EMA – Estado Mayor del Ejército del Aire y del Espacio
EMFA – Estado-Maior da Força Aérea
EU – European Union
FAB –Functional Airspace Block
FIR – Flight Information Region
FRA – Free Route Airspace
FUA – Flexible Use of Airspace
HAR WG – Harmonisation Working Group
IP – Internet Protocol
IPMA – Instituto Português do Mar e da Atmosfera
KEA - Key performance Environment indicator based on Actual trajectory
LSSIP – Local Single Sky ImPlementation
MP – Master Plan
MET WG –Meteorological Working Group

NM – Network Manager / Nautical Miles

NSA– National Supervisory Authorities

OB – Operational Board

OCC– Operational Coordination Committee

PER WG – Performance Working Group

RNP APCH – Required Navigation Performance Approach

RP2 – Reference Period 2

RP3 – Reference Period 3

RWY – Runway

SAC – Supervisory Authorities Committee

SAF WG – Safety Working Group

SCF – Stakeholder Consultation Forum

SES – Single European Sky

SPA ERD – Spanish En route Delay

SW – South West SW FAB – South West FAB

TMA – Terminal Movement Area

TTE Council – Transport, Telecommunications and Energy Council

TWG – Technical Working Group

WAM – Wide Area Multilateration