



Operational Excellence Programme

Programme Management Plan

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APPROVAL TABLE

The following table identifies all management authorities who have successively approved the present issue of this document.

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1 Introduction

1.1 Purpose

- (1) The purpose of this Plan is to organise the Operations Excellence Programme.

1.2 Audience

- (1) The intended audience of this Plan is EUROCONTROL Network Manager operational stakeholders.

1.3 Approval

- (1) This Plan is approved by the NMB following recommendations made by the Network Directors of Operations Group (NDOP) and Network Directors of Technology Working Group (NDTECH).

2 Programme Overview

2.1 Programme Identification

- (1) This programme is called Operational Excellence.

2.2 Programme Background

- (1) Operations excellence is about partnering among operational stakeholders to identify operational and technical evolutions and then ensuring their implementation to achieve harmonisation across the European network.
- (2) The Operational Excellence programme will be run under the Network CDM process, using the current working arrangements and resources, while taking into account the legal framework covering the NM functions and tasks. The need for consistent and harmonised application of ATFM, airspace design, operational procedures, airspace management, flight planning, etc. are covered by the Network Functions Implementing Rule.
- (3) The Operational Excellence Programme is managed by the NDOP and NDTECH and reports to the Network Management Board (NMB).

2.3 Programme Purpose

- (1) The Operational Excellence Programme is created to complement the development and implementation of the Airspace Re-configuration Programme. Its aim is to identify and implement best-in-class operational and technical evolutions to deliver harmonised common operational capabilities among all operational stakeholders. This will ensure the achievement of operational and technical harmonisation aligning on best-in-class performance and delivering the required operational performance.
- (2) The Operational Excellence Programme will deliver gradual improvements taking into consideration other major projects under development and implementation such as network strategic projects. The need to progress towards seamless cross-border operations will also address systems connectivity and interoperability and improvement of operational procedures.

2.4 Programme Scope

- (1) Within the framework provided by the EU Implementing Regulations, in particular CIR (EU) 2019/123 on air traffic management (ATM) network functions, the Operational Excellence Programme (OEP) will ensure the co-ordination for the implementation of operational and technical evolutions, enhanced operational and technical concepts, covering: changes of operational procedures, Letters of Agreement, application of A-FUA and ATFCM (including associated system support), AIM data publication and flexibility, flight planning improvements, flight notification and coordination exchanges, operational utilisation of human resources, harmonised implementation of new operational concepts and technologies, enhanced sector throughput, airports as a component part of the Network and associated airport operational improvements, systems connectivity and interoperability, harmonised implementation of new concepts and evolutions of CNS infrastructure and technologies. OEP will carry out its work within the Network Operations Plan CDM Processes in cooperation with all operational stakeholders.

2.5 Programme Approval

- (1) Following support expressed at the NDOP/24 in November 2019, Network Management Board at its 26th meeting in December 2019 approved the Operational Excellence Programme proposed organisation and the scope of and the stakeholders' participation.
- (2) The initial scope of the programme was supported by NDOP and NMB.
- (3) NDOP and NDTECH, at their meetings in June 2020, agreed to organise three dedicated NDOP/NDTECH workshops in September and October 2020 to prioritise the Operational Excellence Programme scope. An amended Operational Excellence Programme Management Plan was agreed by the NDOP/NDTECH and approved by the NMB/29 in November 2020.
- (4) This version of the Operational Excellence Programme Management Plan incorporates the latest proposals discussed by the Network CDM Working arrangements and NM Strategic projects that were agreed at Teams' level.

2.6 Programme Initiation

- (1) The work on the Operational Excellence Programme started in November 2020 following the agreement of the Programme Management Plan by NDOP/NDTECH and approval by NMB. The main activities in 2021 were focused on review and update of related documentation, agreement on the harmonisation approach and, as from autumn 2021 the initiation of detailed implementation planning, while maintaining the benefits delivered by the ongoing activities included in this programme.
- (2) The Operational Excellence Programme planning will be integrated as agreed into the Network Operations Plan. The following timeline was supported:
 - Autumn 2021 edition
 - High level description aligned with NMB/NDOP/NDTECH
 - Spring 2022 edition – NOP 2022-2026
 - Inclusion of detailed implementation planning to take place over the 5-years period covered by the NOP
 - Regular progress reports to NDOP/NDTECH and NMB

2.7 Work-streams and topics

- (1) The deliveries of this programme will include identification, sharing and implementation of operational and technical evolutions to deliver harmonised common operational capabilities among all operational stakeholders. Work-streams have been grouped according to the following ATM areas of expertise: En-route (ENR)/ACC, Terminal (TMA)/APP and Airport/TWR (including airport operations) to better reflect various types of the local expertise.
- (2) Below is the list of work-streams, topics and supporting working arrangements. Champions per work-stream topics are included in the Annex 1 of the PMP, following a consultation between the NDOP and NDTECH Chair Teams. Details of other relevant elements (i.e. related Implementing Regulation, Champion, Work-stream Topic Leader, Linked Topics, Linked Projects, Potentially blocking issues, Documentation, Target Date, Implementation status) in support of specific work-stream topics will be developed as part of the Programme Management.

2.7.1 WST 01: ATS procedures

ATM areas of expertise: ENR/TMA/APT/TWR

Working Arrangements: NETOPS (APDSG) {harmonised project managed implementation}

Work-stream Topics:

- Optimisation of coordination and transfer to maximize interface throughput, including enhanced automated support
- Cross unit/centre support for CCO/CDO
- Harmonisation and dynamicity of LoAs
- Identification of routine non-time critical air-ground voice messages and replacement with CPDLC
- Use of tactical sector/unit safety nets
- Accommodation of flow measures – including arrival and departure management – at CWP and CWP feedback to NM (*note: start date to be confirmed Q1 2023*)
- Utilisation of Mode S DAP/CAP
- Intra sector team workload balancing
- Multi-sector planner

2.7.2 WST 02: Application of A-FUA

ATM areas of expertise: ENR

Working Arrangements: NETOPS (ASMSG, RNDSG and NETSYS)

Work-stream Topics:

- Planning of military exercises
- Application of FUA at Level 1, 2 and 3 (based on existing provisions in ERNIP Part 3 – ASM Procedures)
- Utilisation of AUP/UUP processes
- Harmonisation of ASM support tools and interoperability with NM systems
- FUA with modular areas

2.7.3 WST 03: Application of ATFCM

ATM areas of expertise: ENR/TMA/APT/TWR

Working Arrangements: NETOPS (ODSG, CAPLANSG, NETSYS and CTM Project) and AOT

Work-stream Topics:

- Harmonised application of ATFM measures
- Adapting number of sector configurations to traffic demand
- N-CAP (Network Collaborative ATFCM Planning) process, including route and time measures for specific flights and flows
- Coordination ATC/FMP
- Targeted CASA/flow specific Regulations
- Harmonisation of En-route/TMA weather management

- Target Time measures
- Sharing/improving NIA (Network Impact Assessment) information
- Harmonised local and network tools functionalities including B2B utilisation in support of ATFCM (**note: start date to be confirmed Q4 2023**)
 - Flight Improvements/Exclusions from Regulations via B2B
 - DPI via B2B
 - Regulation Simulations via B2B
 - MCPs/ Regulations via B2B
 - Targeted CASA (flow specific Regulations) via B2B
- Development and implementation of harmonised predictability indicators (**note: start Q1 2023**)
- Optimising predictability of flight delivery at congested sectors or airports resulting in improved use of existing capacities (**note: start date to be confirmed Q4 2023**)
- Harmonisation of Complexity models (**note: start Q1 2023**)
- Harmonisation of Complexity tools (**note: start date to be confirmed Q4 2023**)

2.7.4 WST 04: Flight Planning Evolution

ATM areas of expertise: ENR/TMA

Working Arrangements: NETOPS (ODSG and FPFDE Project) and NM AOG

Work-stream Topics:

- Expanded, enhanced and harmonised utilisation of existing NM tools including GRRT and Rerouting tools
- Harmonised implementation of eFPL (FF-ICE Flight Plan) {harmonised project managed implementation - based on FPFDE Implementation Strategy}
- Harmonised implementation of OAT flight planning {harmonised project managed implementation}
- Enhanced collaboration NM/CFPSs/AOs/ANSPs supported by trajectory exchange {harmonised project managed implementation}
- Enhanced flight planning practices, including utilisation of FRA and FUA airspace structures and addressing YOYO flight plans
- Harmonised evolutions of the CFSPs systems in line with NM system evolutions {harmonised project managed implementation}

2.7.5 WST 05: Enhancing sectors throughput, including occupancies

ATM areas of expertise: ENR/TMA

Working Arrangements: NETOPS (CAPLANGS)

Work-stream Topics:

- Achievement of higher sector throughputs
- OLDI exchanges of limited trajectory data
- What if probing tool for traffic complexity and MTCD
- Harmonised implementation of Dynamic Airspace Configurations

2.7.6 WST 06: Operational Utilisation of Human Resources

ATM areas of expertise: ENR/TMA/APT/TWR

Working Arrangements: NETOPS (CAPLANSG)

Work-stream Topics:

- ANSP resilience to manage crisis (e.g. COVID-19)
- Enhanced rostering practices
- Best practices for the cross border utilisation of ATCOs
- Enhanced training practices (**note: start date to be confirmed Q1 2023**)
- Training syllabi and awareness packages (**note: start date to be confirmed Q1 2023**)

2.7.7 WST 07: ANSP/ANSP and ANSP/NM system connectivity and interoperability

ATM areas of expertise: ENR/TMA/APT/TWR

Working Arrangements: NETOPS (NETSYS and OLDI SG)

Work-stream Topics:

- Wider utilization of OLDI transfer and dialogue messages
- Provision of sector configurations and sectors opening hours to NM in electronic form as well as data about the dynamic sectorisation
- TWR/APP/ACC flight data exchanges for notification and coordination purposes
 - OLDI or legacy ones
- Collaborative flight planning exchanges between ANSP and NM (AFP, APL, ACH, EFD) or their B2B equivalents (**note: start date to be confirmed Q4 2023**)

2.7.8 WST 08: Airport operational improvements, including RWY throughput

ATM areas of expertise: APT/TWR

Working Arrangements: AOT

Work-stream Topics:

- Implement and improve the Network Airport Function (Pre-tactical)
- Implement and improve the Network Airport Function (Tactical)
- Integrate major airports through AOP NOP
- A-CDM and Advanced ATC Tower
- Connect Regional airports
- Improve the Airport Network Digital Data Centre (Airport Corner)
- Airport Capacity and Performance Studies
- Deploying sustainable and optimised runway improvements
- Harmonised procedures for airports with similar operational environment
- Airport SMART weather report actions, as appropriate

2.7.9 WST 09: Harmonised operational requirements supporting system connectivity, interoperability and implementation

ATM areas of expertise: APT/TWR

Working Arrangements: AOT

Work-stream Topics:

- Harmonised Network Connectivity Specifications and Guidance
- Runway and TMA Service Requirements, Guidance, safety cases
- Services for analysis and Calibration Of Arrival Separation Tool (COAST)
(Note: readily available when traffic developments will require it)

2.7.10 WST 10: AIM data provision harmonisation and digitalisation

ATM areas of expertise: ENR/TMA/APT/TWR

Working Arrangements: IMT (AIMG), NETOPS (RNDSG and ASMSG) and EAD SSG (where relevant) {harmonised project managed implementation}

Work-stream Topics:

- Harmonisation:
 - Harmonised identification and provision of airspace data
 - Harmonised vertical limits and applicability times of airspace and ATS routes
 - Harmonised provision of Free Route Airspace
 - Cross-border data harmonisation
 - Harmonised use of hand amendments in relation with electronic documents
- Digitalisation:
 - Adaptation of airspace and route data for digital use
 - Digital data chain for operationally used aeronautical information
 - Digital NOTAM Origination and Provision capabilities in support of CP1
 - Secure SWIM-based network aeronautical information exchanges

2.7.11 WST 11: Post Operational Analysis

ATM areas of expertise: ENR/TMA/APT/TWR

Working Arrangements: NETOPS (ODSG and CAPLANG) and AOT

Work-stream Topics:

- Inventory of Post-ops capabilities together with operational stakeholders including military.
- Identify and share Post-ops best practice

2.7.12 WST 12: Support operational priorities through the harmonised implementation of DataLink

ATM areas of expertise: ENR

Working Arrangements: JCSP-CNST

Work-stream Topics:

- DLS Harmonized Operational and Technical Deployment
- ATS B2 early deployment
- DLS SATCOM early accommodation (*note: pending discussion in NDOP/NDTECH*)

2.7.13 WST 13: Harmonisation of infrastructure, systems connectivity, interoperability**ATM areas of expertise: ENR/TMA****Working Arrangements: JCSP-CNST (COM SG) and IMT (SWIMG)**Work-stream Topics:

- Secure SWIM-based network information exchanges
- Surveillance infrastructure evolution
- Navigation infrastructure optimisation and harmonisation
- IP services and Voice over IP
- Harmonised Downlinked Aircraft Parameters
- 8.33 extension to frequency congested areas (*note: pending discussion in NDOP/NDTECH*)
- Precision approaches using GBAS CAT II/III (*note: pending discussion in NDOP/NDTECH*)
- Initial implementation of virtualisation (*note: pending discussion in NDOP/NDTECH*)

2.7.14 WST 14: Network Resilience / Infrastructure risks**ATM areas of expertise: ENR/TMA/TWR****Working Arrangements: JCSP-CNST and IMT (CYBERG)**Work-stream Topics:

- GNSS threats assessment
- Address Spectrum efficiency, sharing and robustness to interferences increasing the scalability and the resilience of CNS systems
- Infrastructure outages, infrastructure monitoring - {harmonised project managed implementation}
- Resolve key Avionics anomalies - {harmonised project managed implementation}
- Address GNSS reversion issues, strategies for Infra outages
- Address Saturation/ Over-interrogation in 1030/1090 Bands
- Address Cyber-resilience - {harmonised project managed implementation}

2.8 Evolutions of this Plan

- (1) This plan shall be reviewed regularly by NDOP and NDTECH. Significant changes that require high-level decisions shall be submitted to the NMB for approval.
- (2) Annex(es) of this PMP will be maintained by the Programme Management Team and any changes notified to the NDOP/NDTECH.

3 Programme Organisation

3.1 Organisational Structure

- (1) This Programme is coordinated by EUROCONTROL Network Manager.
- (2) EUROCONTROL Network Manager will provide the programme manager and the secretariat support.
- (3) The Programme is divided in a number of Work-streams and Topics.
- (4) Each Work-stream Topic will be led by a Champion (an operational stakeholder) and Work-stream Topic Leader (EUROCONTROL NM) – see [Annex 1](#). They will be using resources and relying on the current Network CDM Working Arrangements.

3.2 Network CDM Working Arrangements

3.2.1 Working Arrangements

- (1) The Operational Excellence Programme will have access to all the Network CDM working arrangements. All working arrangements will organise their work programme and agenda to include topics related to the Operational Excellence Programme.
- (2) The Operational Excellence Programme will carry out its work within the Network Operations Plan CDM Processes in cooperation with operational stakeholders.
- (3) The existing Network Strategic Projects will be re-adapted to respond also to the requirements of the Operational Excellence Programme.
- (4) The following working arrangements and their subordinated working arrangements will be responsible for the topics covering the Operational Excellence Programme:
 - **NETOPS**
 - Changes of operational procedures and Letters of Agreement
 - A-FUA (through A-FUA Network Strategic Project)
 - ATFCM (through Cooperative Traffic Management)
 - Flight planning improvements (through FPFDE)
 - Enhancing sectors throughput, including occupancies
 - Operational utilisation of human resources (rostering, training, licensing, ops room organisation)
 - Harmonised implementation of new operational concepts
 - Harmonisation of systems connectivity and interoperability (ops requirements)
 - **AOT**
 - Integrating airports as a component of the network
 - Airport operational improvements
 - Harmonised implementation of new operational concepts
 - Harmonisation of systems connectivity and interoperability (ops requirements)
 - Support operational priorities through the harmonised implementation of technologies
 - Implementation of Smart Weather Report Actions, as appropriate
 - **JCSP-CNST**
 - Support operational priorities through the harmonised implementation of technologies

- Harmonisation of systems connectivity and interoperability
 - Infrastructure risks
 - Harmonised implementation of new operational concepts
 - **IMT**
 - AIM data publication harmonisation and digitalisation
 - Secure SWIM-based network information exchanges
 - Network cyber resilience
 - **NM AOG**
 - Enhanced flight planning practices, including utilisation of FRA and FUA airspace structures
 - Harmonised evolutions of the CFSPs systems in line with NM system evolutions
- (5) Priorities have been established following the guidance provided by NDOP and NDTECH.

4 Programme Management

4.1 Programme Organisation

- (1) The Operational Excellence Programme Manager is Žarko Sivčev.
- (2) The Programme has a supporting Core Team and is supported by representatives from the different Teams/Units involved in/impacted by the Programme.
- (3) The Programme Manager is responsible for the overall management of the Programme:
 - a) Define and manage the Programme Plan that includes the work packages.
 - b) Obtain the necessary resources for the programme: human resources (in-house, external, consultancy, if required), hardware and software resources.
 - c) Identify and manage risks and issues related to the Programme.
 - d) Follow-up and coordinate the different activities of the Programme.
 - e) Coordinate with the different teams involved/impacted by the Programme through the Core Team members.
 - f) Define and manage the Programme Communications Plan.
 - g) Regularly report about the Programme progress to the NDOP and NDTECH, in close coordination with the Champions and Work-stream Topic Leaders.
- (4) This Programme follows a matrix organisation where members are working within their own Teams/Units but executing tasks for this Programme. The EUROCONTROL Network Manager will ensure that the necessary resources are allocated to this programme and will execute the tasks according to this PMP.

4.2 Risk Management and Opportunities

- (1) Given its wide scope, the Operational Excellence Programme is subject to a number of risks. A risk log is maintained and risks are re-assessed on a regular basis. The following is the list of risks currently identified and relevant mitigation measures:
 - Lack of commitment and resources
 - Prioritise internal resources
 - Strong support from NMB/NDOP/NDTECH to commit to implement
 - Exportability/Applicability of Harmonised Practices
 - Ops environment
 - En-route
 - TMA
 - APT
 - Complexity
 - Cost involved
 - Legal obstacles
 - System limitation
 - Lack of harmonisation and standardisation material
 - Prioritisation of the delivery of the NM CDM Working Arrangements
 - No interest to share local operational and technical evolutions
 - Competition
 - Sensitivity – national/commercial
- (2) Opportunities that might arise within the Operational Excellence Programme will be identified by CDM Working arrangements and the Core Team. Those opportunities will be presented for consideration to the NDOP and NDTECH and if required to the NMB.

4.3 Safety Assessment

- (1) If required and not already done, a generic safety case may be produced for particular work-stream topic in support of the preparation for the implementation. This will be decided on a case-by-case basis.

4.4 CBA

- (1) If required a cost-benefit analysis will be performed for every work-stream topic in support of the preparation for the implementation. This will be decided on a case-by-case basis.

4.5 Communications Plan

4.5.1 Programme communication objectives

- (1) Programme communication objectives are:
 - Manage awareness and outreach of the Operational Excellence Programme and its components among the ATM stakeholders, both internally and externally
 - Disseminate the progress achieved throughout the programme lifecycle
 - Reinforce the operational stakeholder buy-in, acceptance and subsequent implementation of the agreed operational and technical evolutions.

4.5.2 Targeted audiences

- (1) Targeted audiences include: operational stakeholders, EUROCONTROL/NM and decision-makers (EU, national, international).

4.5.3 Key communication messages

- (1) The Operational Excellence Programme will aim to convey the following key messages:
 - a) Partnering
 - b) Implementation of operational and technical evolutions delivering best-in-class performance
 - c) Sharing to achieve harmonisation across European network.

4.5.4 Communication channels

- (1) The following communication channels will be used in support of the Operational Excellence Programme:
 - Programme branding;
 - Creation of a dedicated web page for the programme on EUROCONTROL website;
 - Creation of a dedicated placeholder on the EUROCONTROL online working pages (One Sky Online) in support of the programme management activities;
 - Establishment of a repository for the agreed operational and technical evolutions;
 - Promotion through social media, such as Twitter, Facebook and LinkedIn;
 - Creation and distribution of video/multimedia material.

5 Work Breakdown

5.1 Work Packages

5.1.1 Preparation

- (1) This Work Package includes:
- a) Identifying a set of Local Operational and Technical Evolutions per Work Stream Topic.
 - b) Target date: end 2021.

5.1.2 Documentation

- (1) This Work Package includes:
- a) Identifying and updating existing documentation that supports harmonised implementation of operational and technical evolutions.
 - b) Target dates:
 - i) Identifying and updating – as from 2021

5.1.3 Implementation

- (1) This Work Package includes:
- a) Establishment of a plan of harmonised implementation per stakeholder and per work-stream topic and inclusion into the NOP.
 - b) Target dates:
 - i) Establishment of an implementation plan – until spring 2022
 - ii) NOP integration:
 - Autumn 2021 edition
 - High level description aligned with NMB/NDOP/NDTECH
 - Spring 2022 edition – NOP 2022-2026
 - Inclusion of detailed implementation planning to take place over the 5-years period covered by the NOP.

5.1.4 Communication

- (1) This Work Package includes:
- a) Establishing a repository of operational and technical evolutions in support of sharing them in a user-friendly, easy-to-apprehend manner.
 - b) Target date: end 2021.

5.1.5 Monitoring

- (1) This Work Package includes:
- a) Monitoring of the plan of harmonised implementation per stakeholder and per work-stream topic.
 - b) Target date: as of 2022 – continuous.

5.2 Budget and Resource Allocation

- (1) The effort related to the Operational Excellence Programme is included in the overall NM Work Programme.

Annex I – Champions and WST Topic Leaders of Operational Excellence Programme

A. Champions – Definition, roles and responsibilities

A.1 Definition:

Champion is an **operational stakeholder** who has already **implemented** a relevant operational and/or technical evolution with **proven benefits** for local and/or network **performance**.

A.2 Roles and responsibilities:

Champion will coordinate the activities related to a specific Work-stream Topic and will be supported in the execution of the programme by a Work-stream Topic Leader from EUROCONTROL Network Manager, using the existing Network CDM Working arrangements and processes.

The work will be performed jointly by the members of the related Network CDM Working arrangement, supported by EUROCONTROL Network Manager.

The Champion will:

- Share expertise and experience, including knowledge and documentation on the implementation of their specific operational or technical evolutions;
- Upon request, explain in practice the local implementation aspects and present benefits to interested operational stakeholders and drive the peer operational stakeholders towards the key goal of the programme, network-wide harmonised implementation of best practices;
- Coordinate with the EUROCONTROL NM Work-stream Topic Leader the preparation of the technical material to be presented and discussed in the Network CDM Working arrangements;
- Provide advice on various implementation phases, and the risks and opportunities experienced, related to technical, financial, legal etc. aspects;
- Participate in the programme's communication campaigns, promoting the programme and raising awareness.

A.3 Selection process:

- The list of the Champions per WST Topic, provided in this Annex, are confirmed following a consultation between the NDOP and NDTECH.
- Future candidates for the Operational Excellence Champion for vacant WST Topics, need to provide the relevant Network CDM Working arrangement their intention to be a champion on the basis of their own experience in the implementation of operational and/or technical evolution(s) with proven benefits for local and/or network performance.

B. Work-stream Topic Leader – Definition, roles and responsibilities

B.1. Definition:

Work-stream Topic Leader is a EUROCONTROL NM expert who may also be a chairperson of a Network CDM Working Arrangement/NM Strategic Project.

B.2. Roles and responsibilities:

Work-stream Topic Leader will work closely with the Champion in the execution of the programme, using the existing Network CDM Working Arrangements and processes.

The Work-stream Topic Leader, together with the Champion and members of the relevant Network CDM Working Arrangement will:

- Plan and organise meetings and consultation, to meet the objectives and target dates of the Operational Excellence Programme;
- Assist in the identification of best-in-class operational and technical evolutions;
- Identify and, if required, update existing documentation in support of operational and technical evolutions;
- Establish and monitor a Plan of Harmonised Implementation per Stakeholder and per Work-stream Topic;
- Coordinate the input on the specific Topic into the programme;
- Support the Programme Management Team in monitoring the Plan of Harmonised Implementation;
- As required, report to Programme Management Team any risks or opportunities identified during the programme's execution;
- Participate in the programme's communication campaigns, promoting the programme and raising awareness.

B.3. Appointment:

The EUROCONTROL NM Work-stream Topic Leaders will be confirmed by the appropriate Heads of Divisions at the Network Management Directorate of EUROCONTROL.

C. Champions of Operational Excellence Programme per WST Topic

WST 01:	ATS Procedures	Champion
01.01	Use of tactical sector/unit safety nets	Harmonised Project Managed Implementation
01.02	Harmonisation and dynamicity LoAs	Harmonised Project Managed Implementation
01.03	Identification of routine non-time critical air-ground voice messages and replacement with CPDLC	Harmonised Project Managed Implementation
01.04	Optimisation of coordination and transfer to maximize interface throughput, including enhanced automated support	Harmonised Project Managed Implementation
01.05	Cross unit/centre support for CCO/CDO	Harmonised Project Managed Implementation
01.06	Accommodation of flow measures – including arrival and departure management – at CWP and CWP feedback to NM Note: Start date to be confirmed Q1 2023	
01.07	Utilisation of Mode S DAP/CAP	Harmonised Project Managed Implementation
01.08	Intra sector team workload balancing	Harmonised Project Managed Implementation
01.09	Multi-sector planner	Harmonised Project Managed Implementation
WST 02:	Application of A-FUA	Champion
02.01	Planning of military exercises	DIRCAM/DSNA ROMATSA ENAIRE/Spain MIL Crocontrol
02.02	Application of FUA at Level 1, 2 and 3	DIRCAM/DSNA PANSAs Crocontrol ROMATSA
02.03	Utilisation of AUP/UUP processes	as in WST Topic 02.02
02.04	Harmonisation of ASM support tools and interoperability with NM systems	To be nominated
02.05	FUA with modular areas	To be nominated
WST 03:	Application of ATFCM	Champion
03.01	Harmonised application of ATFM measures	MUAC ENAIRE
03.02	Adapting number of sector configurations to traffic demand	skyguide
03.03	N-CAP (Network Collaborative ATFCM Planning) process, including route and time measures for specific flights and flows	DSNA

03.04	Coordination ATC/FMP	DSNA
03.05	Targeted CASA/flow specific Regulations	ENAIRE
03.06	Harmonisation of En-route/TMA/Airport weather management	Finnavia/Helsinki Airport
03.07	Target Time measures	ENAV
03.08	Sharing/improving NIA (Network Impact Assessment) information	To be nominated
03.09	Harmonised local and network tools functionalities including B2B utilisation in support of ATFCM Note: Start date to be confirmed Q4 2023	
	- Flight Improvements/Exclusions from Regulations via B2B	ENAV
	- DPI via B2B	DSNA
	- Regulation Simulations via B2B	ENAIRE
	- MCPs/ Regulations via B2B	To be nominated
	- Targeted CASA (flow specific Regulations) via B2B	To be nominated
03.14	Development and implementation of harmonised predictability indicators Note: Start Q1 2023	To be nominated
03.15	Optimising predictability of flight delivery at congested sectors or airports resulting in improved use of existing capacities Note: Start date to be confirmed Q4 2023	
03.16	Harmonisation of Complexity models Note: Start Q1 2023	To be nominated
03.17	Harmonisation of Complexity tools Note: Start date to be confirmed Q4 2023	
WST 04:	Flight Planning Evolution	Champion
04.01	Expanded, enhanced and harmonised utilisation of existing NM tools, including GRRT and Rerouting tools	Harmonised Project Managed Implementation
04.02	Harmonised implementation of eFPL (FF-ICE Flight Plan)	Harmonised Project Managed Implementation
04.03	Enhanced collaboration NM/CFSPs/AOs/ANSPs supported by trajectory exchange	Harmonised Project Managed Implementation
04.04	Enhanced flight planning practices including utilisation of FRA and FUA airspace structures and addressing YOYO flight plans	Harmonised Project Managed Implementation
04.05	Harmonised evolutions of the CFSPs systems in line with NM system evolutions	Harmonised Project Managed Implementation
04.06	Harmonised implementation of OAT flight planning	Harmonised Project Managed Implementation

WST 05:	Enhancing sectors throughput, including occupancies	Champion
05.01	Achievement of higher sector throughputs	MUAC PANSA Hungarocontrol IAA ENAV ROMATSA
05.02	OLDI exchanges of limited trajectory data	Hungarocontrol ROMATSA
05.03	What-If probing tool for traffic complexity and MTCO	BULATSA Hungarocontrol ROMATSA
05.04	Harmonised implementation of Dynamic Airspace Configurations	FINEST Hungarocontrol IAA ENAV ROMATSA
WST 06:	Operational Utilisation of Human Resources	Champion
06.01	ANSP resilience to manage crisis (e.g. COVID19)	Harmonised Project Managed Implementation
06.02	Enhanced rostering practices	skyguide ENAV BULATSA
06.03	Best practices for the Cross border utilisation of ATCOs	FINEST SMATSA Crocontrol Hungarocontrol
06.04	Enhanced training practices Note: Start date to be confirmed Q1 2023	
06.05	Training syllabi and awareness packages Note: Start date to be confirmed Q1 2023	
WST 07:	ANSP/ANSP and ANSP/NM system connectivity and interoperability	Champion
07.01	Wider utilization of OLDI transfer and dialogue messages	ROMATSA
07.02	Provision of sector configurations and sectors opening hours to NM in electronic form as well as data about the dynamic sectorisation	skyguide
07.03	TWR/APP/ACC flight data exchanges for notification and coordination purposes - OLDI or legacy ones	ROMATSA
07.05	Collaborative flight planning exchanges between ANSP and NM (AFP, APL, ACH, EFD) or their B2B equivalents Note: Start date to be confirmed Q4 2023	

WST 08:	Airport operational improvements, including RWY throughput	Champion
08.01	Implement and improve the Network Airport Function: Pre-Tactical	SWEDAVIA
08.02	Implement and improve the Network Airport Function: Tactical	SWEDAVIA
08.03	Integrate major airports through AOP NOP	Amsterdam Schiphol airport
08.04	A-CDM and Advanced ATC Tower	FedEx
08.05	Connect Regional airports	UAF ENAV
08.06	Improve the Airport Network Digital Data Centre (Airport Corner)	Athens airport
08.07	Airport Capacity and Performance Studies	Aeroporti di Roma
08.08	Deploying sustainable and optimised runway improvements	To be nominated
08.09	Harmonised procedures for airports with similar operational environment	A4E EUMETNET
08.10	Implementation of Smart Weather Report Actions, as appropriate	To be nominated
WST 09:	Harmonised operational requirements supporting system connectivity, interoperability and implementation	Champion
09.01	Harmonised Network Connectivity Specifications and Guidance	as in WST Topic 08.04
09.02	Runway and TMA Service Requirements, Guidance, safety cases	as in WST Topic 08.08
09.03	Services for analysis and Calibration Of Arrival Separation Tool (COAST) <i>Note: readily available when traffic developments will require it</i>	as in WST Topic 08.08

WST 10:	AIM data provision - Harmonisation and Digitalisation	Champion
10.01	Harmonised identification and provision of airspace data	Harmonised Project Managed Implementation
10.02	Harmonised vertical limits and applicability times of airspace and ATS routes	Harmonised Project Managed Implementation
10.03	Harmonised provision of Free Route Airspace	Harmonised Project Managed Implementation
10.06	Cross-border data harmonisation	Harmonised Project Managed Implementation
10.07	Harmonised use of hand amendments in relation with electronic documents	Harmonised Project Managed Implementation
10.09	Adaptation of airspace and route data for digital use	Harmonised Project Managed Implementation
10.10	Digital data chain for operationally used aeronautical information	Harmonised Project Managed Implementation
10.11	Digital NOTAM Origination and Provision capabilities in support of CP1	Harmonised Project Managed Implementation
10.12	Secure SWIM-based network aeronautical information exchanges	Harmonised Project Managed Implementation
WST 11:	Post Operational Analysis	Champion
11.01	Inventory of Post-ops capabilities together with operational stakeholder including military	
	AOs	To be nominated
	APT _s	To be nominated
	ANSP _s	DSNA ENAV
	MIL	To be nominated
11.02	Identify and share Post-ops best practices	
	AOs	To be nominated
	APT _s	To be nominated
	ANSP _s	DSNA ENAV
	MIL	To be nominated

WST 12:	Support operational priorities through the harmonised implementation of DataLink	Champion
12.01	DLS Harmonized Operational and Technical Deployment	MUAC
12.02	ATS B2 early deployment	To be nominated
12.03	DLS SATCOM early accommodation <i>Note: pending discussion in NDOP/NDTECH</i>	
WST 13:	Harmonisation of systems connectivity and interoperability	Champion
13.01	Secure SWIM-based network information exchanges	To be nominated
13.02	Surveillance infrastructure evolution	DSNA
13.03	Navigation infrastructure evolution	ENAIRES
13.05	IP Services and Voice over IP	MUAC
13.06	Harmonised Downlinked Aircraft Parameters	Harmonised Project Managed Implementation
13.07	8.33 extension to frequency congested areas <i>Note: pending discussion in NDOP/NDTECH</i>	
13.08	Precision approaches using GBAS CAT II/III <i>Note: pending discussion in NDOP/NDTECH</i>	
13.09	Initial implementation of virtualisation <i>Note: pending discussion in NDOP/NDTECH</i>	
WST 14:	Network Resilience / Infrastructure risks	Champion
14.01	GNSS threats assessment	ENAV
14.02	Address Spectrum efficiency, sharing and robustness to interferences increasing scalability and resilience of CNS systems	Harmonised Project Managed Implementation
14.03	Infrastructure outages, infrastructure monitoring	Harmonised Project Managed Implementation
14.04	Resolve key Avionics anomalies	Harmonised Project Managed Implementation
14.05	Address GNSS reversion issues, strategies for Infra outages	ENAV
14.06	Address Saturation/ Over-interrogation in 1030/1090 Bands	Harmonised Project Managed Implementation
14.07	Address Cyber-resilience	Harmonised Project Managed Implementation

References

- [1] Reference 1
- [2] Reference 2
- [3] Reference 3

Abbreviations

Abbreviations and acronyms used in this document are available in the EUROCONTROL Air Navigation Inter-site Acronym List (AIRIAL) which may be found online:

<http://www.eurocontrol.int/airial/definitionListInIt.do?skipLogon=true&glossaryUid=AIRIAL>.



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