Enhanced DCB Safety and Performance Requirements for Step 1 - Final (SPR)

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DFS/SKYGUIDE, DSNA, ENAIRE, ENAV, EUROCONTROL, INDRA, NATS, SELEX	

Abstract

This "Safety and Performance Requirements" (SPR) document describes the Enhanced DCB operational concept (SESAR Step 1) defined in the Operational Service and Environment Description (OSED) in terms of safety and performance requirements in the scope of the Operational Focus Area 05.03.04 "Enhanced ATFCM Processes".

1 Authoring & Approval

Prepared By - *Authors of the document.*		
Name & Company	Position & Title	Date
[redacted] SKYGUIDE/DFS	[redacted]	27/04/2015
[redacted] EUROCONTROL		17/06/2016
[redacted] DFS		17/06/2016
[redacted] SKYGUIDE/DFS		17/06/2016
[redacted] EUROCONTROL		17/06/2016

2

Reviewed By - *Reviewers internal to the project.*		
Name & Company	Position & Title	Date
[redacted] INDRA	[redacted]	04/07/2016
[redacted] ENAV		04/07/2016
[redacted] ENAV		04/07/2016
[redacted] EUROCONTROL		04/07/2016
[redacted] DSNA		04/07/2016
[redacted] DFS		04/07/2016
[redacted] ENAIRE		04/07/2016
[redacted] NATS		04/07/2016
[redacted] SKYGUIDE/DFS		04/07/2016
[redacted] SELEX		04/07/2016
[redacted] EUROCONTROL		04/07/2016

3

Reviewed By - *Other SESAR projects, Airspace Users, staff association, military, Industrial Support, other organisations.*		
Name & Company	Position & Title	Date
[redacted] Heathrow	[redacted]	04/07/2016
[redacted] EUROCONTROL		04/07/2016
[redacted] DSNA		09/07/2016
[redacted] EUROCONTROL		04/07/2016
[redacted] EUROCONTROL		04/07/2016
[redacted] ENAIRE		04/07/2016
[redacted] EUROCONTROL		04/07/2016
[redacted] NORACON		04/07/2016
[redacted] LUFTHANSA		04/07/2016
[redacted] ENAIRE		04/07/2016
[redacted] AIR FRANCE		04/07/2016
[redacted] Météo France		04/07/2016
[redacted] THALES		04/07/2016
[redacted] Met Office UK		04/07/2016
[redacted] ENAV		04/07/2016
[redacted] ENAIRE		04/07/2016
[redacted] ENAIRE		04/07/2016
[redacted] ENAIRE		04/07/2016

[redacted] NATS	[redacted]	04/07/2016
[redacted] NORACON		04/07/2016

4

Approved for submission to the SJU By - *Representatives of the company involved in the project.*		
Name & Company	Position & Title	Date
[redacted] INDRA	[redacted]	17/08/2016
[redacted] ENAV		17/08/2016
[redacted] EUROCONTROL		17/08/2016
[redacted] DSNA		17/08/2016
[redacted] DFS		17/08/2016
[redacted] ENAIRE		17/08/2016
[redacted] NATS		17/08/2016
[redacted] SELEX		17/08/2016
[redacted] EUROCONTROL		17/08/2016

5

Rejected By - *Representatives of the company involved in the project.*		
Name & Company	Position & Title	Date
None		

6

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This deliverable consists of SJU foreground.

Table of Contents

List of tables

List of figures

Executive summary

This Safety and Performance Requirements (SPR) applies to Application and Information Services related to the OFA for SESAR Step1 enhanced Demand and Capacity Balancing (OFA05.03.04).

The performance requirements are defined using the top-down principle, originating at B.04.01 level, cascaded down from strategic targets to SWP 07.02 level and subsequently to primary projects.

In the Enhanced DCB Step1, the following concept elements are proposed:

- DCB-0308: Advanced Short Term ATFCM (Solution #17)
- DCB-0208: DCB in a trajectory management context (Solution #18)

According to the Validation Report, the maturity level assessment is indicated in the table hereafter :

Code	Name	Project contribution	Maturity at project start	Maturity at project end
DCB-0308 – Solution #17	Advanced Short Term ATFCM	P13.02.03 developed, validated (through exercises VP-314, VP-522, VP-700 and VP-632) and provided recommendations on the following concept features of this OI Step: • Hotspot detection, • Analysis and preparation of STAM, • STAM coordination, • STAM implementation, • NMOC supervision.	V2	V3 with acceptable issues
DCB-0208 - Solution #18	DCB in a Trajectory Management Context	P13.02.03 developed, validated (through exercises VP-632, VP-634, VP-723 and VP-749) and provided recommendations on the following concept features of this OI Step: • TTA dissemination • TTA monitoring • Local TTA assignments • Roles & Responsibilities (NM, FMP & Airport side)	V2	V3 with acceptable issues

Table 1: Maturity level assessment for Solutions #17 and #18

Following major changes have been made in this deliverable, in order to account for SJU comments provided in the assessment report of D322 and to ensure content alignment with the OSED S1 Final (D303) [12]:

- Update of SPR requirements' status after execution of validation exercises according to VALR (success criteria).
- Linkage of SPR requirements to functional blocks and to services.
- Completion of Information Exchange Requirements (IER) in section 3.2.

- Thorough update of Safety Assessment Report (SAR); this takes special account for the new contents on Target Time Management described in the OSED S1 Final [12].

Important: the OIs DCB-0103-A (Collaborative NOP for Step 1/MassDiv) and DCB-0310 (Improved Efficiency in the management of Airport and ATFCM Planning) have not been covered by this SPR.

1 Introduction

1.1 Purpose of the document

This Safety and Performance Requirements (SPR) document provides the safety and performance requirements for Application and Information Services related to the Operational Processes and Services defined in the P13.02.03 Enhanced DCB OSED Step1 Final [12]. The SPR also provides their allocation to system functions and information services. This document is used to provide the basis for ensuring that these SPR requirements are applicable during initial implementation and continued operation.

1.2 Scope

This document supports the operational services and concept elements identified in the Operational Service and Environment Definition (OSED) Step 1 Final [12].

The performance requirements are defined using the top-down principle, originating at B04.01 level, cascaded down from strategic targets to SWP 07.02 level and subsequently to primary projects.

Performance requirements considered in this document shall apply to Application and Information Services in the scope of the Operational Focus Area (OFA) addressed by the P13.02.03 Enhanced DCB OSED Step 1 Final (OFA05.03.04 Enhanced ATFCM Processes), written by the same operational project as agreed with the coordinating federating project.

The requirements developed in this document should show traceability to the higher level requirements described in the corresponding OSED and particularly to the Performance Requirements expressed in the OSED, which show traceability to the higher level KPAs (through DOD).

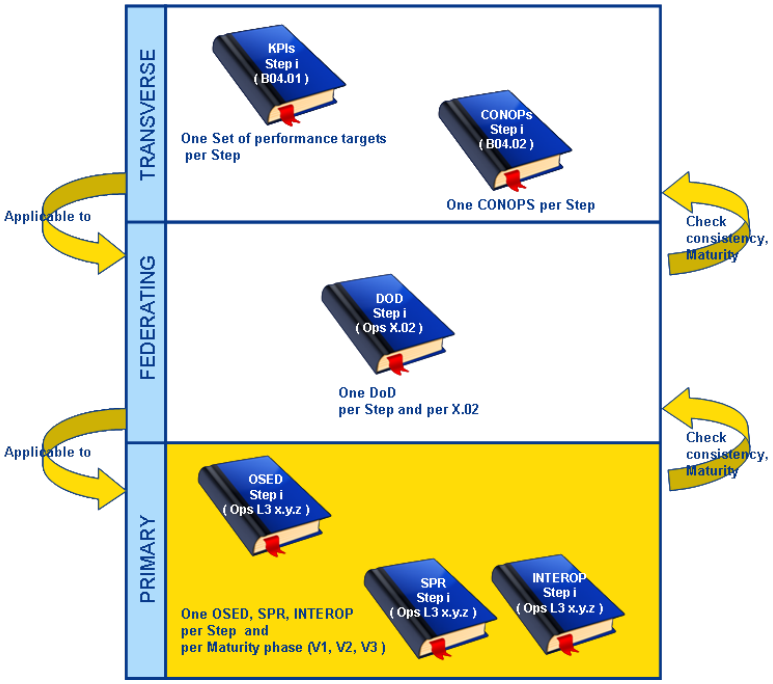

Figure 1: SPR document with regard to other SESAR deliverables

In Figure 1, the Steps are driven by the OI Steps addressed by the project in the Integrated Roadmap document.

In the Enhanced DCB Step1, following concept elements are proposed:

- DCB-0308: Advanced Short Term ATFCM (Solution #17)
- DCB-0208: DCB in a trajectory management context (Solution #18)
- DCB-0310: Improved Efficiency in the management of Airport and ATFCM Planning
- DCB-0103-A: Collaborative NOP for Step 1

1.3 Intended readership

This document is aimed at the following stakeholders:

- The SJU;
- P07.02 (“Network Federating View”), as the coordinating federating project for the OFA 05.03.04 – enhanced ATFCM processes;
- P04.02, as the coordinating federating project for WP4 “En-Route Operations”;
- The P13.02.03 “Enhanced DCB” project team;
- The P13.02.03 “Enhanced DCB” stakeholders including ANSP and Airline Operators;
- OFA05.03.04 (“Enhanced ATFCM Processes”), which includes P13.02.03;
- OFA05.01.01 (“Airport Operations Management”), with regard to elements related to TTA;
- P05.06.01 (“QM1 – Ground and Airborne Capabilities to Implement Sequence”), with regard to the CTA allocation process;
- P11.01.02 (“FOC/WOC Operational Requirements Definition”), with regard to FOC processes and systems;
- P11.02.01 (“Requirements for MET Information”), with regard to MET information
- P11.02.02 (“MET Information System Development, Verification & Validation), with regard to MET Information System
- P16.06.zz (“Safety/Security/Environment/Human Performance support and coordination function”);
- B05 (“Performance Analysis of ATM Target Concept”);
- Airspace users.

1.4 Structure of the document

This document is divided into 4 chapters:

- Chapter 1 gives a general description of the document structure and scope;
- Chapter 2 gives a description of the operational concept;
- Chapter 3 gives a description of the requirements;
- Chapter 4 indicates the references.

This document also includes following annexes:

- Annex 1: Safety Assessment Report
- Annex 2a: Operational Performance Assessment for STAM
- Annex 2b: Operational Performance Assessment for TTA

1.5 Background

N/A

1.6 Glossary of terms

Please refer to section 1.6 “Glossary of terms” in P13.02.03 Enhanced DCB OSED for Step1 Final [12].

1.7 Acronyms and Terminology

Term	Definition
4D	Four-Dimension
ACC	Air Traffic Control Centre
ACC	Area Control Centre
A-CDM	Airport CDM
ADI	Average Departure Interval
ADR	Airspace Data Repository
AEM	Advanced Emission Model
AENA	Aeropuertos Españoles y Navegación Aérea
AFUA	Advanced Flexible Use of Airspace
AMAN	Arrival Manager
AMC	Airspace Management Cell
ANSP	Air Navigation Service Provider
AO	Aircraft Operator
AOC	Aircraft Operator Centre
AOLO	Airline Operator Liaison Officer
AOP	Airport Operations Plan
APOC	Airport Operations Centre
ASM	Airspace Management
ATA	Actual Time of Arrival
ATC	Air Traffic Control
ATCO	Air Traffic Controller
ATFCM	Air Traffic Flow and Capacity Management

Term	Definition
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
ATO	Actual Time Over
ATOT	Actual Take-Off Time
ATSU	Air Traffic Service Unit
AU	Airspace User
BADA	Base of Aircraft Data
BMT	Business/Mission Trajectory
BT	Business Trajectory
CAA/JAA	Civil Aviation Authority/Joint Aviation Authorities
CASA	Computer-Assisted Slot Allocation
CAMES	Cooperative ATM Measures for a European Single Sky
CDM	Collaborative Decision Making
CDR	Conditional Route
CFMU	Central Flow Management Unit
CHG	Change Message
CHILL	Collaborative Human in the Loop Laboratory
CHMI	CFMU Human Machine Interface
CND	Cooperative Network Design
COE	Centre of Expertise
CONOPS	Concept of Operations
CTA / CTO	Controlled Time of Arrival / Controlled Time Over
CTOT	Calculated Take-Off Time
CWP	Controller Working Position
DARTIS	Decision Aid to Real Time Synchronisation
DCB	Demand and Capacity Balancing

Term	Definition
dDCB	Dynamic Demand and Capacity Balancing
eDCB	Enhanced Demand and Capacity Balancing
DFS	Deutsche Flugsicherung
DMAN	Departure Manager
DMEAN	Dynamic Management of the European Airspace Network
DOD	Detailed Operational Description
DPI	Departure Planning Information
DSNA	Direction des Services de la Navigation Aérienne
EC	Entry Counts
ECAC	European Civil Aviation Conference
ECTL	EUROCONTROL
EET	Estimated Elapsed Time
EFPL	Extended Flight Plan
EOBT	Estimated Off-Block Time
E-OCVM	European Operational Concept Validation Methodology
EP3	Episode 3 project from the European Commission
EPP	Extended Projected Profile
ETA/ETO	Estimated Time of Arrival / Estimated Time Over
ETFMS	Enhanced Tactical Flow Management System
FAB	Functional Airspace Block
FAM	Future ATM Measures
FDPS	Flight Data Processing System
FL	Flight Level
FMD	Flow Management Division
FMP	Flow Management Position
FMS	Flight Management System

Term	Definition
FOC	Flight Operations Centre
FPFS	First Plan First Served
FPL	Flight Plan
FUA	Flexible Use of Airspace
FUM	Flight Update Message
IAF	Initial Approach Fix
IBP	Industrial Based/Pre-Operational Validation & Verification Platform
ICAO	International Civil Aviation Organization
iFACTS	interim Future Area Control Tools Support
INAP	Integrated Network Management & ATC Planning
INTEROP	Interoperability document
IP	Implementation Package
IRBT	Initial Reference Business Trajectory
ISBT	Initial Shared Business Trajectory
KPA	Key Performance Area
KPI	Key Performance Indicator
M-CDM	Measures Collaborative Decision Making
MDI	Minimum Departure Interval
MIT	Miles In Trail
MPR	Most Penalizing Regulation
MSP	Multi-Sector Planner
MUAC	Maastricht Upper Area Control Centre
NATS	National Air Traffic Services
NM	Network Manager
NMf	Network Management functions
NMOC	Network Management Operations Centre

Term	Definition
NOP	Network Operations Plan
OC	Occupancy Counts
OI	Operational Improvement
OPA	Operational Performance Assessment
OSA	Operational Safety Assessment
OSED	Operational Service and Environment Description
OTMV	Occupancy Traffic Monitoring Values
R&D	Research & Development
RAD	Route Availability Document
RBT	Reference Business Trajectory
RFL	Request Flight Level
RPL	Repetitive Flight Plan
RTA	Required Time of Arrival
SBT	Shared Business Trajectory
SESAR	Single European Sky ATM Research
SJU	SESAR Joint Undertaking
SPR	Safety and Performance Requirements
SRM	Slot Revision Message
STAM	Short Term ATFCM Measures
STAR	Standard Instrument Arrival
SWIM	System Wide Information Management
SWP	Sub-Work Package
TMA	Terminal Control Area
TOBT	Target Off-Block Time
TOC	Top Of Climb
TOD	Top Of Descent

Term	Definition
TOT	Take-Off Time
TTREV	Target Time Revision Proposal
TSAT	Target Start-Up Approval Time
TTA/TTO	Target Time of Arrival / Target Time Over
TW	Target Window
UDPP	User Driven Prioritisation Process
WP	Work Package
OTMV	Occupancy Traffic Monitoring Value
TONB	Take Off Not Before
WILCO	Will Comply (Phraseology)
WOC	Wing Operations Centre

165

2 Summary of Operational Concept (from OSED)

2.1 Description of the Concept Element

The applicable Enhanced DCB Safety and Performance Requirements for Step 1 - Final (SPR) is the response to the SESAR eDCB Concept for Step 1. The goal of Enhanced DCB Step 1 is to prepare ATFCM for the first step of the SESAR concept “time based operations”.

In the Enhanced DCB Step1, the following concept elements are proposed:

- DCB-0308: Advanced Short Term ATFCM (Solution #17)
- DCB-0208: DCB in a trajectory management context (Solution #18)

Solution #17: Advanced Short Term ATFCM (STAM) – DCB-0308

The introduction of STAM was mainly justified by:

- The excessive cost of tactical ATFCM for airspace users today, because of a crude process mainly based on the application of ground regulations. Regulations limit the traffic entering a sector through the systematic allocation of departure slots to all concerned flights, regardless of how they contribute to the expected overload. This process, remaining valuable in case of major imbalance, is no longer acceptable when the demand does not significantly exceed the available capacity.
- The efforts undertaken by some ANSPs to improve the efficiency of their local flow management process thanks to an accurate management of the sector load based on a deep analysis of the traffic situation and the application of targeted measures to face fully characterised traffic peaks. Significant benefits are already observed in terms of ATFM delay reduction.

STAM is consisting of an approach to smooth sector workloads by reducing traffic peaks through short-term application of minor ground delays, appropriate flight level capping and exiguous re-routings to a limited number of flights. These measures are capable of reducing the traffic complexity for ATC with minimum curtailing for the airspace users. STAM is based on high-quality data for prediction and accurate traffic analysis and will be an important contribution to Enhanced DCB.

It is proposed to benefit from these local STAM practices and to include them into the defined Enhanced DCB Step 1 processes, being subject to agreed procedures between involved actors. In particular, the proposed evolution in Step 1 is:

- The definition of a uniform process in accordance with the ATFCM implementing rules, connecting ATFCM planning activities with tactical ATFCM interventions up to the ATC working horizon.
- The definition of clear procedures based on this process and enabled by transparent information sharing throughout the network, to ensure Collaborative Decision-Making (CDM) involving all partners.
- The definition of a new allocation of roles and responsibilities between regional, sub-regional and local actors and ATC involved in network operations, resulting in the evolution of an Enhanced DCB process within a FAB context, from strategic to tactical phase.
- The reinforcement of the roles and responsibilities of the Airspace Users.
- The definition of supporting tools.

The process starts from a strategy defined at DCB level. The iterative process of DCB takes place between a few hours and a few minutes before sector entry time, consisting of:

- Detection of Demand and Capacity imbalance: A continuous monitoring of traffic performed by responsible DCB actors over their area of responsibility based on entry counts, occupancy counts and traffic complexity in order to estimate controller’s workload. Nowadays the quality

of evaluation is to a high level based on responsible DCB actors' expertise and experience. In the future it will be increasingly supported by analysis tools allowing advanced and consistent data interpretation.

- Network View: A network consolidation of the traffic situation, based on the advisory information sent by responsible DCB actors, will enable airspace users to express preferences for their operational intention and propose alternative options while Network Manager may ensure coordination of network solutions when needed to avoid multiple overloads.

- Complexity Assessment and elaboration of the STAM solution: A STAM solution is investigated seeking minimum impact on airspace users:

  1) either dynamic capacity adjustments based on short-notice configuration changes or negotiations with military authorities or

  2) cherry-picking actions based on the identification of the flights creating the complexity, thanks to enhanced flight list attributes providing responsible DCB actors with the accurate flight status and aircraft attitude.

  Possible actions would include in order of priority:

  - the allocation of small ground delay to specific flights,
  - flight level reassignments or route changes negotiated with airspace users,
  - interventions on airborne flights coordinated with adjacent responsible DCB actors when needed (if all other options have been identified as unfeasible or not beneficial). The impact of any intervention on airborne flights (re-routing or flight-level capping) on fuel consumption shall be minimized; nevertheless, in the event of an expected significant impact, medium-/long-haul flights shall be targeted, since short-haul flights carry less contingency fuel.

- Updates are increasingly shared and coordinated with relevant actors in a network environment following a CDM approach. The initial developments to link ATC to the network are established with the introduction of INAP through dDCB and extended ATC Planning (EAP). The associated roles LTM and EAP are building the coordination to fill the gap and organise the overlap between ATFCM and ATC
- STAM Implementation: Implementation of STAM will be coordinated with the relevant actors and fed into the network systems by systematic flight data updates. The feedback of the concerned actors to proposed measures into the network is the key to stability and traffic prediction.

- STAM Supervision: The Supervision shall support the NMOC monitoring of the STAM activity in the Network and the elaboration of the NMOC mental picture in term of network situation awareness and understanding.

Solution #18: DCB in a trajectory management context – DCB-0208

Target Time management is a transversal concept impacting WP4 (En Route Operations), WP5 (TMA Operations), WP7 (Network Operations) and WP11FW (Flight and Wing Operations Centres). The general overview and process will be described at the B04.02 CONOPS level, then detailed at the Federating View level (XX.02).

The WP7 operational description focuses on the contribution of the Network Management functions to the Target Time management. The availability of accurate and most up to date flight trajectory information between the air and ground components is a key feature to guarantee a sufficient level of accuracy and predictability in regards to the calculated/estimated time over the target fix point (i.e. ETO) by the ground NM functions' systems. A shared situation awareness by all involved stakeholders will contribute to an efficient Target Time management for maintenaing network operations safe and ensuring the ATCO workload will not increase.

At the P13.02.03 level, the Target Time Management concept describes the NMf process, which proposes new improvements focusing on:

- Target Time assignment (TTO/TTA) for flights involved in a DCB hotspot[1]

  The Local DCB actor decides which flight is assigned with a Target Time in order to support the hotspot resolution. The Target Time assignment process could be based on a collaborative approach in order to take into account the constraints of the different actors (eg airports, AU) to reach an optimised and agreed solution.

- Reconciliation of multiple DCB time-based constraints

  The DCB Local Actors (En-Route, Airport) will be able to apply Target Time (TTO/TTA) for the en-route and arrival congestion[2]. At any point during the planning and execution timeframe there will be a NM reconciliation process between all time constraints applicable to an individual trajectory. In Step 1 a simple mechanism shall ensure the reconciliation of multiple STAM time-based constraints and FPFS CASA time-based constraints; the CASA regulation time-based constraints will overrule the time-based STAM Measures. The MPR mechanism is expected to be further developed for Step 2.
  If the flight is involved in several hotspots, the process selects one Target Time by using the MPR (Most Penalizing Regulation).
  All the time-based constraints will be collected in the NM component
    - CASA constraints for flight in the pre-departure phase
    - STAM TT constraints for flight in the pre-departure phase (in the form of force_CTOT)
    - STAM TT constraints for flight in the execution phase

  The STAM TT constraint can be issued for flight in the pre-departure and execution phases[3].
  The TT information will contain:
    - Reference Measure (CASA/STAM)
    - TT value
    - TT previous_value
    - TT_Fix
    - TT_status {creation, update, cancellation}

- Management and Dissemination of Target-Time information in the planning phase

  Only the Target Time calculated on the most penalising DCB constraint is notified to the AU and will enable the FOC to establish the appropriate trajectory. AU is involved in negotiating the best way to accommodate the constraint (the flight might reroute to avoid the hotspot, in which case there may be no Target-Time). When AU updates the flight plan to comply with the Target-Time, it marks the end of negotiation. Such revised flight plan must be tagged for prioritization in airport DCB processes and A-CDM milestone handling.

  In Step 1, the CTOT remains and is back calculated from the Target Time and hence the standard A-CDM process still applies.

- Management and Dissemination of Target-Time information in the execution phase

  In the execution phase, a STAM Time-based Measure can be assigned to resolve hotspots[4], coordinated using the M-CDM STAM coordination process, and implemented based on the STAM process.

- Target Time deviation monitoring

  The monitoring of Target-Time deviations concerns the execution phase and will be performed by NM and by the local units. The target time deviation monitoring is an important element that allows the local units in particular to assess and monitor the effects of the observed deviations on the hotspot resolution. The ETO/ETA at target is continuously

[1] In Step 1, this applies to flights not yet airborne or to medium- and long-haul airborne flights.
[2] Refer to previous note.
[3] Refer to previous note.
[4] Refer to previous note.

compared with the Target-Time to produce a TDI (Target Deviation Indicator); this computation will be performed by a NM technical system. When a hotspot is detected, automatically the Target-Time deviation indicator (i.e. the difference between the ETO/ETA and the TT values) for the flight(s) involved in the hotspot is calculated by NM. For this calculation, the ETO/ETA value is processed using different data sources and the most up to date flight trajectory information available.

The Target Deviation Indicator will be enriched with the tolerance window associated to the Target Time. This time window is named DCB Target Window (TW) and is a static parameter for Step1. The static DCB Target Window shall depend on the status of the flight (e.g. +- 10 min after TOBT, +- 5 min after TSAT, +- 3 min after ATOT…). The precise value of the Target Window must be refined with validation exercises.

- Target Time revision

The Target Time Revision will only be managed for STAM TT (not for CASA) in the SESAR1 Phase 1 timeframe[5].

Following hotspot detection and analysis, NM will detect when the Target Time constraint of a flight is obsolete and needs a revision (i.e. for an update or a cancellation). It is proposed to trigger the revision when the TDI is detected to be outside the associated static Target Window or when the hotspot has disappeared (i.e. when a constraint is obsolete).
NM will publish a Target Time Revision Proposal (TTREV) to the Local DCB actor initiator of the constraint, which can decide either:

- To update the STAM TT measure according to the STAM implementation / update procedure. A STAM TT implementation/update will be notified to the affected actors and NM[6].
- Or to cancel the STAM TT measure. A STAM TT cancellation will be notified to the affected actors and NM (based on the STAM cancellation procedure).
- To do nothing depending of the hotspot resolution progress.

- Linking the DCB and the Arrival Management procedures

Concept Maturity Level Assessment

The following table shows the maturity level of the Operational Improvements Step DCB-0308 and DCB-0208 in P13.02.03 Enhanced DCB OSED for Step1 Final [12].

Operational Package	Operational Focus Area	OIs or Operational Services	Initial Maturity Level	Target Maturity Level	Maturity Level after the exercise
PAC05 Integrated and Collaborative Network Management	Enhanced ATFCM Processes.	DCB-0308 “Short-Term ATFCM”	V2	V3	V3 with acceptable issues
	Enhanced ATFCM Processes.	DCB-0208 “DCB in a trajectory management context”	V2	V3	V3 with acceptabme issues

Table 2: Concept Maturity Level Assessment (acc. to E-OCVM)

2.2 Description of Operational Services

No services are defined yet either by B04.02 or P07.02 (in accordance with section 2.3.1 in [12]).

[5] In Step 1, once the flight is airborne, this only applies for TT cancellation and/or medium- and long-haul flights.
[6] Refer to previous note.

2.3 Description of Operational Environment

This section is described in the DOD 07.02 Step 1[16].

3 Requirements

3.1 Enhanced DCB Requirements

Note: The status of the SPR requirements is derived from the P13.02.03 Step 1 Validation Report document [14]. The SPR requirements not fully validated shall be addressed in the S2020 PJ09 validation activities.

3.1.1 Safety Requirements

The Safety Requirements have been derived from:

- Safety Assessment Report (Annex 1 of this SPR).

3.1.1.1 Solution #17: Advanced Short Term ATFCM Measures (STAM) - DCB-0308

[REQ]

Identifier	REQ-07.06.05-SPR-0300.0000
Requirement	Training of responsible DCB actors shall ensure their qualification is adequate to assess STAM options and select appropriate STAM
Title	Training of responsible DCB actor (1)
Status	<In Progress>
Rationale	Today, the level of expertise significantly varies. Notably some LTM are already very familiar with using Occupancy Counts as primary DCB indicators, whilst others are not. Alignment of LTM training in particular, is therefore regarded as key for maximising the benefit of implementing dynamic DCB over the network
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0301.0000
Requirement	Training of responsible DCB actors shall ensure their qualification are adequate to assess STAM options and select series of STAM as alternative to regulation only when applicable
Title	Training of responsible DCB actor (2)
Status	<In Progress>
Rationale	Today, the level of expertise significantly varies. Notably some LTM are already very familiar with using Occupancy Counts as primary DCB indicators, whilst others are not. Alignment of LTM training in particular, is therefore regarded as key for maximising the benefit of implementing dynamic DCB over the network

Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0302.0000
Requirement	Training of responsible DCB actors shall address the necessity for coordinating with upstream/downstream responsible DCB actors for entry/exit points affected by STAM
Title	Training of responsible DCB actor (3)
Status	<In Progress>
Rationale	Today, the level of expertise significantly varies. Notably some LTM are already very familiar with using Occupancy Counts as primary DCB indicators, whilst others are not. Alignment of LTM training in particular, is therefore regarded as key for maximising the benefit of implementing dynamic DCB over the network
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0303.0000
Requirement	Training of responsible DCB actors shall ensure their qualification are adequate to detect hotspots in time within their area of responsibility using the DCB Toolbox
Title	Training of responsible DCB actor (4)
Status	<In Progress>
Rationale	Today, the level of expertise significantly varies. Notably some LTM are already very familiar with using Occupancy Counts as primary DCB indicators, whilst others are not. Alignment of LTM training in particular, is therefore regarded as key for maximising the benefit of implementing dynamic DCB over the network
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0304.0000
Requirement	Training of responsible DCB actors shall ensure their qualification are adequate to assess STAM options and select appropriate STAM using DCB Toolbox
Title	Training of responsible DCB actor (5)
Status	<In Progress>
Rationale	Today, the level of expertise significantly varies. Notably some LTM are already very familiar with using Occupancy Counts as primary DCB indicators, whilst others are not. Alignment of LTM training in particular, is therefore regarded as key for maximising the benefit of implementing dynamic DCB over the network
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0305.0000
Requirement	Training of responsible DCB actors shall include the necessity to check that FPL has been properly changed, supported by implementation time-out displayed on DCB Toolbox
Title	Training of responsible DCB actor (6)
Status	<In Progress>
Rationale	Today, the level of expertise significantly varies. Notably some LTM are already very familiar with using Occupancy Counts as primary DCB indicators, whilst others are not. Alignment of LTM training in particular, is therefore regarded as key for maximising the benefit of implementing dynamic DCB over the network
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0307.0000
Requirement	Responsible DCB actors shall identify the flight affected by STAM predicted to enter their area of responsibility in order to inform the corresponding ATCOs for the latter to avoid altering the trajectory of those flights where safety/separation permits
Title	Inefficient STAM 1
Status	<In Progress>
Rationale	DCB actors shall ensure the implementation of STAM Measures will be efficient

Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0043.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0308.0000
Requirement	Responsible DCB actors shall monitor implementation of STAM (profile changes in real time) and in case hotspot is not solved take appropriate action involving ATC as necessary
Title	Inefficient STAM 2
Status	<In Progress>
Rationale	DCB actors shall ensure the implementation of STAM Measures will be efficient
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	HotspotManagement	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0027.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0097.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0309.0000
Requirement	In case of position hand over (e.g. shift change) the responsible DCB actors (the one leaving and the other coming in duty) shall coordinate the STAM measures for implementation and those under coordination
Title	Shift change
Status	<In Progress>
Rationale	The Shift change of DCB actors shall be efficient
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0060.0000	<Partial>

390 [REQ]

Identifier	REQ-07.06.05-SPR-0310.0000
Requirement	The STAM process shall support the operators' assessment, selection and coordination with checklists and methodologies
Title	STAM Process
Status	<In Progress>
Rationale	The STAM process shall cimply with the LTM tasks
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

391

392 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0042.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0043.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0045.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>

393

394 [REQ]

Identifier	REQ-07.06.05-SPR-0311.0000
Requirement	Training of responsible DCB actors and NMOC (Network Manager Operational Center) operator shall address the risk for ATFCM regulations to reduce or negate STAM measures
Title	Reduce STAM effect
Status	<In Progress>
Rationale	The NMf actors shall ensure the consistency between ATFCM regulation and local STAM Measures.
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

395

396 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

397

398 [REQ]

Identifier	REQ-07.06.05-SPR-0312.0000
Requirement	Training of responsible DCB actors and NMOC operator shall prevent the design of series of STAM which are too difficult/workload demanding to implement
Title	Induced overload
Status	<In Progress>
Rationale	LTM actors shall be trained to ensure the proper planning of STAM Measures
Category	<Operational><Safety>

Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0313.0000
Requirement	Training of local DCB and NMOC actors shall prevent the design of series of STAM that are not feasible due to operational considerations (performance, required entry point, fuel, etc.)
Title	STAM feasible
Status	<In Progress>
Rationale	LTM actors shall be trained to ensure the proper planning of STAM Measures
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0316.0000
Requirement	A DCB toolbox shall display an indication to allow detection of temporary loss of input from ETFMS in order to ensure confidence in the traffic prediction
Title	Alarm
Status	<In Progress>
Rationale	The LTM actors shall be informed of the information disruption
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0317.0000
Requirement	Phone connections shall be available for verbal coordination (fall-back for technical problem preventing system support for coordination / implementation)
Title	Phone connection

Status	<Validated>
Rationale	The phone connection shall be available to provide a communication fallback
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

411
412 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0098.0000	<Partial>

413
414 [REQ]

Identifier	REQ-07.06.05-SPR-0319.0000
Requirement	In local implementation where local prediction data is used in complement to ETFMS, the quality accuracy of the locally provided prediction data for occupancy counts shall support correct STAM implementation
Title	Data accuracy
Status	<In Progress>
Rationale	Predicted Workload provided by NM systems shall be complemented in a consistent way with additional local predicted workload
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

415
416 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0004.0000	<Partial>

417
418 [REQ]

Identifier	REQ-07.06.05-SPR-0320.0000
Requirement	The CWP hand-over procedure (position relief) shall include information concerning STAM measures for implementation and ongoing (i.e. any aircraft for which a STAM has been already implemented and ATC interference is not desired)
Title	Hand-over procedure
Status	<Validated>
Rationale	The CWP hand-over procedure (position relief) shall include information concerning STAM measures for implementation and ongoing (i.e. any aircraft for which a STAM has been already implemented and ATC interference is not desired)
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

419
420 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0072.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0321.0000
Requirement	Training of ATCOs shall include the necessity for crosscheck between PLN and EXE ATCO with regards to the correct implementation of STAM measures
Title	Planning and Executive Controller Cross-Check
Status	<In Progress>
Rationale	Training of ATCOs shall include the necessity for crosscheck between PLN and EXE ATCO with regards to the correct implementation of STAM measures
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0322.0000
Requirement	STAMs shall Implement and ensure adherence to RAD (Route Availability Document) restrictions
Title	RAD
Status	<Validated>
Rationale	The STAM Measures shall be designed accordingly to the RAD constraints
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0439.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0440.0000	<Partial>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0341.0000

Requirement	Training of responsible DCB actor shall address the risk of implementing late a STAM and the adequate recovery by local DCB actors in terms of STAM cancelation or partial implementation (all potential "constraints for STAM implementation e.g. LoA are to be taken into account during the coordination phase - to be addressed in each local implementation)
Title	Training of responsible DCB actor (9)
Status	<In Progress>
Rationale	LTM actors shall be trained to prevent late implementation of STAM Measures impacting the efficiency of resolving hotspots
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0342.0000
Requirement	ATCO shall be able to accept/reject the STAM required for implementation. During the coordination phase, the implementer responsible DCB actor checks with the supervisor or directly with the ATCO if a specific STAM can be applied or not in his area of responsibility. Once it has been agreed and for implementation, ATCO can still decide to not implement it depending on the traffic situation.
Title	ATCO TT handling 2
Status	<In Progress>
Rationale	The ATC actors shall be able to accept/reject the STAM Measures proposal.
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0343.0000
Requirement	The loss of DCB toolbox, either hardware failure or software failure requiring re-booting and involving loss of data, shall not occur more frequently than 6e-3 per sector hour
Title	Toolbox integrity 1
Status	<In Progress>
Rationale	The loss of DCB toolbox, either hardware failure or software failure requiring re-booting and involving loss of data, shall not occur more frequently than 6e-3 per sector hour
Category	<Operational><Safety>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0344.0000
Requirement	The permanent loss of connection of DCB Toolbox to NOP system shall not occur more frequently than 6e-3 per sector hour
Title	Toolbox integrity 2
Status	<In Progress>
Rationale	The permanent loss of connection of DCB Toolbox to NOP system shall not occur more frequently than 6e-3 per sector hour
Category	<Operational><Safety>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

3.1.1.2 Solution #18: CTOT and TTA - DCB-0208

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Cooperative Airspace Design	N/A
<ALLOCATED_TO>	<Functional block>	Cooperative Airspace Management	N/A
<ALLOCATED TO>	<Functional block>	Cooperative Scenario Planning	N/A
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0324.0000
Requirement	The TT electronic transmission & reception shall be secured through acknowledgement based on a procedure for the Flight Crew to confirm, similar to WILCO
Title	TT dissemination
Status	<In Progress>
Rationale	SA Hz 010 : One aircraft is not provided or does not adhere to TT or adheres to wrong TT Hz 011 : Multiple aircraft flying to same destination terminal area either do not meet their TT or fly a wrong TT, without Network Manager timely awareness Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

453 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0409.0000	<Partial>

454

455 [REQ]

Identifier	REQ-07.06.05-SPR-0325.0000
Requirement	Training of Pilots shall include the TT handling and importance of adhering to it
Title	Pilot TT handling 1
Status	<In Progress>
Rationale	SA Hz 010 : One aircraft is not provided or does not adhere to TT or adheres to wrong TT Hz 011 : Multiple aircraft flying to same destination terminal area either do not meet their TT or fly a wrong TT, without Network Manager timely awareness Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

456

457 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0114.0000	<Partial>

458

459 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

460

461 [REQ]

Identifier	REQ-07.06.05-SPR-0329.0000
Requirement	ATSUs shall support adherence to the Target Time and/or assess and monitor the effects of the deviations.
Title	TT adherence 1
Status	<In Progress>
Rationale	SA Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

462

463 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A

<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0213.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0219.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0440.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0330.0000
Requirement	NMOC/Local units shall be informed of Target Time deviations exceeding the defined Target Window when these deviations have an impact on hotspot.
Title	TT adherence 2
Status	<In Progress>
Rationale	SA Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0439.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0440.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0331.0000
Requirement	A Target Time with zero delay shall be assigned, if considered necessary, for a sub-set or all the flights with no delay assigned but which belong to the Hotspot Resolution area.
Title	TT assignment 1
Status	<In Progress>
Rationale	SA TTM step 02 Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0332.0000
Requirement	The assignment of a TT-zero delay shall trigger a CTOT.

Title	TT assignment 2
Status	<Validated>
Rationale	SA TTM step 02 Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0204.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0214.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0444.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0333.0000
Requirement	Flight Crew shall refrain from questioning, for the sake of TT achievement, any ATC instruction.
Title	Pilot TT handling 2
Status	<In Progress>
Rationale	SA TTM step 07 Validation Plan Questionnaire Deleted in the frame of the external review, with the rationale that TT achievement is not a priority objective - as separation provision / safety are - and the flight crew shall therefore be able to question ATC instructions with regard to TT. After coordination with safety experts, the requirement has been reworded and its status updated to “in progress”, with the rationale that the flight crew shall not question any ATC instruction, even if such ATC instructions might lead to non-achievement of TT. The previous wording was to a certain extent misleading.
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0334.0000
Requirement	Responsible DCB actors shall be trained and receive necessary supplementary instructions to ensure that they monitor the efficiency of TT based ATFCM measures. In this regard, the monitoring will be performed on hotspot first. Then, if a hotspot is created/ detected/ worsening, analysis on TDI will be done. The latter shall support adherence to the Target Time in the frame of hotspot monitoring and analysis; to this end, responsible DCB actor will assess and monitor the effects of the deviations.
Title	Training of responsible DCB actor (8)
Status	<In Progress>
Rationale	SA TTM step 09 Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0335.0000
Requirement	For safety purposes, in case the design option is retained where ATCO advises TT cancellation to aircraft, ATCO shall advise the TT cancellation only if workload permits.
Title	ATCO TT handling 1
Status	<In Progress>
Rationale	SA TTM step 11 Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0336.0000

Requirement	Initial and recurrent Flight Crew training should highlight the impact of speed changes on ATC and how to handle situations where maintaining/ recovering TTs would require significant speed changes (WP11).
Title	Pilot training
Status	<In Progress>
Rationale	SA Hz 012 : Conflict due to speed deviation of TT aircraft without informing ATC Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

494
495 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

496
497 [REQ]

Identifier	REQ-07.06.05-SPR-0337.0000
Requirement	ATCOs shall be trained/ briefed that TT cancellations should take lower priority than safety critical ATC tasks.
Title	ATCO training 1
Status	<In Progress>
Rationale	SA Hz 013: Multiple TT cancellations induce significant workload increase in a sector (receiving information from responsible DCB actor, instruction to pilots, etc.) Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

498
499 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

500
501 [REQ]

Identifier	REQ-07.06.05-SPR-0338.0000
Requirement	ATCOs shall be trained/ briefed as to what priority to allocate to TT related requests from Flight Crew.
Title	ATCO training 2
Status	<In Progress>
Rationale	SA Hz 014: Extra TT reporting and communications Validation Plan Questionnaire SXX

Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0339.0000
Requirement	Introduce a readback for TT between TWR ATCO and flight crew.
Title	TWR readback
Status	<In Progress>
Rationale	SA Hz 010 : One aircraft is not provided or does not adhere to TT or adheres to wrong TT Validation Plan Questionnaire SXX
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

3.1.2 Performance Requirements

The Performance Requirements have been derived from the Operational Performance Assessment (annex 2 of this document).

3.1.2.1 Solution #17: Advanced Short Term ATFCM Measures (STAM) - DCB-0308

[REQ]

Identifier	REQ-07.06.05-SPR-0001.0000
Requirement	Applying STAM shall provide the ability to seek solutions which more efficiently use available airspace capacity leading to better overall capacity utilisation.
Title	Efficient use of airspace capacity
Status	<Validated>
Rationale	Applying STAM shall provide the ability to seek solutions which more efficiently use available airspace capacity leading to better overall capacity utilisation.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0015.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0042.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0002.0000
Requirement	A reduction of capacity buffers, which is expected through a better demand predictability, shall reduce safety margin as well but should maintain safety at an acceptable level
Title	Maintain Safety Margin
Status	<In Progress>
Rationale	A reduction of capacity buffers, which is expected through a better demand predictability, shall reduce safety margin as well but should maintain safety at an acceptable level
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0015.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0003.0000
Requirement	A reduction of capacity buffers shall increase the available capacity and thus reduce the need for CASA regulations and the average flight delay
Title	Reduce flight delay
Status	<In Progress>
Rationale	A reduction of capacity buffers shall increase the available capacity and thus reduce the need for CASA regulations and the average flight delay
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0004.0000
Requirement	The Network View enabling information sharing between actors shall allow responsible DCB actor and AUs to take efficient decision
Title	Network view to support decision-making process
Status	<Validated>
Rationale	The Network View (Collaborative NOP) shall contain the DCB Plan (hotspot, STAM Measures)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Network Operations Plan Management	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0081.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0005.0000
Requirement	STAM coordination shall address and resolve issues with hotspot while considering the effects on downstream sector
Title	Network Impact
Status	<Validated>
Rationale	STAM coordination shall ensure an efficient coordination between NMf actors
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0055.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0006.0000
Requirement	Application of STAM shall resolve an imbalance by addressing the most critical flights (those increasing complexity) instead of applying a broad CASA regulation, which shall reduce (focus on reducing) traffic complexity at the hotspot and therefore improve safety.
Title	Complexity
Status	<In Progress>
Rationale	The Predicted Workload based on Complexity methodologies shall allow to select the most-critical flights
Category	<Operational><Performance>
Validation Method	<Live Trial>

Verification Method	

538
539 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0033.0000	<Partial>

540
541 [REQ]

Identifier	REQ-07.06.05-SPR-0007.0000
Requirement	STAM shall improve the cost-effectiveness for the controller productivity (increased controller productivity, i.e. providing permanently th optimum number of flights)
Title	ATC Cost-effectiveness
Status	<In Progress>
Rationale	The STAM measures shall allow to improve the cost-effectiveness
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

542
543 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

544
545 [REQ]

Identifier	REQ-07.06.05-SPR-0008.0000
Requirement	STAM shall maintain cost-effectiveness for the responsible DCB actor (increased requirements to the competence of the responsible DCB actor and increase the workload may overall increase the cost of operating the flow management)
Title	Cost-effectiveness of DCB actor
Status	<Validated>
Rationale	STAM shall maintain cost-effectiveness for the responsible DCB actor (increased requirements to the competence of the responsible DCB actor and increase the workload may overall increase the cost of operating the flow management)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

546
547 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

548
549 [REQ]

Identifier	REQ-07.06.05-SPR-0009.0000
Requirement	The Network View shall keep AUs informed on the overall status of the STAM coordination process and support them in choosing their preferred trajectories.
Title	Accommodate AU trajectory preference
Status	<Validated>
Rationale	The Network view (Collaboratibe NOP) shall allow the AU to be informed aboout the DCB plan (hotspot/STAM Measures)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

550
551 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Network Operations Plan Management	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	HotspotManagement	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<APPLIES TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0047.0000	<Partial>

552
553 [REQ]

Identifier	REQ-07.06.05-SPR-0010.0000
Requirement	Application of STAM shall resolve an imbalance by cherry picking individual flights instead of applying instead CASA regulation, which will reduce the number of affected flights (increase conformance with Airline Preferred Trajectory) at the hotspot.
Title	Cherry-picking instead CASA
Status	<Validated>
Rationale	Application of STAM shall resolve an imbalance by cherry picking individual flights instead of applying instead CASA regulation, which will reduce the number of affected flights (increase conformance with Airline Preferred Trajectory) at the hotspot.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

554
555 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>

556
557 [REQ]

Identifier	REQ-07.06.05-SPR-0011.0000

Requirement	STAM shall increase punctuality (less flights affected by regulations result on less ground delays and less rerouting, which increase number of flights arriving on time).
Title	Increase Punctuality
Status	<In Progress>
Rationale	STAM shall increase punctuality (less flights affected by regulations result on less ground delays and less rerouting, which increase number of flights arriving on time).
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0012.0000
Requirement	STAM shall improve Flight Efficiency. STAM measures shall provide less extensive rerouting by using available capacity (e.g. in neighbouring sector or due to early release of reserved airspace) giving reduction in the average extension of flights affected by measure reducing on average additional fuel consumption.
Title	Improve flight efficiency
Status	<Validated>
Rationale	STAM shall improve Flight Efficiency. STAM measures shall provide less extensive rerouting by using available capacity (e.g. in neighbouring sector or due to early release of reserved airspace) giving reduction in the average extension of flights affected by measure reducing on average additional fuel consumption.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0013.0000
Requirement	STAM shall improve participation (AUs perception of being involved and having influence of the measure will increase).
Title	AU participation
Status	<Validated>
Rationale	The DCB process shall improve the NMF (including AU) participation

Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

566
567 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0043.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0047.0000	<Partial>

568
569 [REQ]

Identifier	REQ-07.06.05-SPR-0014.0000
Requirement	STAM shall improve airspace capacity (higher throughput) (refer to the performance target regarding to airspace capacity, which in the case of OFA05.03.04 corresponds to an increase of 1,19% and 1,72% for TMA and en-route, respectively).
Title	Improve Airspace Capacity
Status	<In Progress>
Rationale	STAM shall improve airspace capacity (higher throughput) (refer to the performance target regarding to airspace capacity, which in the case of OFA05.03.04 corresponds to an increase of 1,19% and 1,72% for TMA and en-route, respectively).
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

570
571 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

572
573 [REQ]

Identifier	REQ-07.06.05-SPR-0015.0000
Requirement	The STAM procedures shall support a logical workflow (timeline, task, dependencies)
Title	Logical workflow
Status	<In Progress>
Rationale	A standardized logical workflow shall be provided
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

574
575 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A

<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0053.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0056.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0058.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0064.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0065.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0016.0000
Requirement	The procedure shall allow enough time to provide roles/systems with the required output
Title	Time pressure
Status	<In Progress>
Rationale	A standardized procedures shall be provided
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0052.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0017.0000
Requirement	The procedure shall allow standardised criteria for decision-making
Title	P-17
Status	<In Progress>
Rationale	A standardized procedures for decision-making shall be provided
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0053.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0056.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0058.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0064.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0065.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0018.0000
Requirement	The procedure shall enhance the coordination with other actors
Title	Enhance coordination
Status	<In Progress>

Rationale	A standardized procedures for coordination shall be provided
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

586
587 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0043.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0053.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0056.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0058.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0064.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0065.0000	<Partial>

588
589 [REQ]

Identifier	REQ-07.06.05-SPR-0019.0000
Requirement	The procedure shall support the STAM measure process (NMf actors). This requirement will be assessed from responsible DCB actor subjective feedback (questionnaire).
Title	Procedures
Status	<In Progress>
Rationale	A standardized procedures shall support the STAM Measures process
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

590
591 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0047.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0053.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0056.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0058.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0064.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0065.0000	<Partial>

592
593 [REQ]

Identifier	REQ-07.06.05-SPR-0020.0000
Requirement	The Network view enabling information sharing between actors shall allow responsible DCB actor and AUs to take decision
Title	Decision-making process
Status	<In Progress>
Rationale	The Network view enabling information sharing between actors shall allow responsible DCB actor and AUs to take decision
Category	<Operational><Performance>

Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Network Operations Plan Management	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0047.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0023.0000
Requirement	The coordination of a STAM with AUs shall increase, compared with a broader regulation, the ability to accommodate AUs trajectory preferences to the individual flights affected by the STAM leading to a more optimal trajectory (less delay, less fuel consumption, etc.) and the AU feeling more involved in designing measures
Title	Enhance coordination
Status	<Validated>
Rationale	The coordination of a STAM with AUs shall increase, compared with a broader regulation, the ability to accommodate AUs trajectory preferences
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0043.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0024.0000
Requirement	The situational awareness of all stakeholders involved in the STAM coordination process shall be enhanced in order to support the decision-making process and allow for an increased confidence in the decision made
Title	Reduce uncertainty
Status	<In Progress>
Rationale	The situational awareness of all stakeholders involved in the STAM coordination process shall be enhanced in order to support the decision-making process and allow for an increased confidence in the decision made
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A

<ALLOCATED_TO>	<Functional block>	Network Operations Plan Management	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0025.0000
Requirement	Improved prediction of demand (and workload of the controller) shall lead to an increased confidence of the controller in Flow Management which shall reduce the capacity buffers required by the controller to accommodate unforeseen traffic peaks
Title	Improve ATCO confidence
Status	<In Progress>
Rationale	Improved prediction of demand (and workload of the controller) shall lead to an increased confidence of the controller in Flow Management which shall reduce the capacity buffers required by the controller to accommodate unforeseen traffic peaks
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0026.0000
Requirement	Improved prediction of demand shall lead to an increased confidence of the responsible DCB actor leading to less extensive measures (regulations) to protect the controller against unforeseen traffic peaks which shall reduce the capacity buffers required to accommodate unforeseen traffic peaks.
Title	Increase responsible DCB actor confidence
Status	<In Progress>
Rationale	Improved prediction of demand shall lead to an increased confidence of the responsible DCB actor leading to less extensive measures (regulations)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

613 [REQ]

Identifier	REQ-07.06.05-SPR-0027.0000
Requirement	Improved prediction of demand shall lead to an increased confidence of the NM leading to less extensive measures (regulations) to protect the controller against unforeseen traffic peaks which shall reduce the capacity buffers required to accommodate unforeseen traffic peaks.
Title	Improve NM confidence
Status	<In Progress>
Rationale	Improved prediction of demand shall lead to an increased confidence of the NM leading to less extensive measures (regulations)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

614

615 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

616

617 [REQ]

Identifier	REQ-07.06.05-SPR-0028.0000
Requirement	Improved prediction of demand shall lead to a decrease in the number of undetected Demand / Capacity imbalance, which shall reduce controller workload resolving imbalances tactically and enable the controller to reduce capacity buffers.
Title	Controller Workload
Status	<In Progress>
Rationale	Improved prediction of demand shall lead to a decrease in the number of undetected Demand / Capacity imbalance
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

618

619 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

620

621 [REQ]

Identifier	REQ-07.06.05-SPR-0029.0000
Requirement	Monitoring traffic demand, assessing options and selecting the most optimal measure shall minimise the workload of the responsible DCB actor leading to an increase staffing requirements.
Title	responsible DCB actor Workload
Status	<In Progress>

Rationale	Monitoring traffic demand, assessing options and selecting the most optimal measure shall minimise the workload of the responsible DCB actor leading to an increase staffing requirements.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0030.0000
Requirement	The DCB toolbox shall allow the responsible DCB actor to plan and organise efficiently the work
Title	responsible DCB actor STAM Management
Status	<In Progress>
Rationale	The DCB toolbox shall allow the responsible DCB actor to plan and organise efficiently the work
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	HotspotManagement	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<APPLIES TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0098.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0031.0000
Requirement	Monitoring traffic, assessing options and selecting the most optimal measure shall require increased competence of the responsible DCB actor, which shall increase staffing requirements.
Title	Competence of responsible DCB actor
Status	<Validated>
Rationale	Monitoring traffic, assessing options and selecting the most optimal measure shall require increased competence of the responsible DCB actor, which shall increase staffing requirements.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0032.0000
Requirement	STAM shall improve the cost-effectiveness (increased controller productivity, i.e. more flights per time unit)
Title	ATC Cost-effectiveness
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0033.0000
Requirement	STAM shall maintain cost-effectiveness for the FMP (increased requirements to the competence of the FMP and increase the workload may overall increase the cost of operating the flow management)
Title	FMP Cost-effectiveness
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0034.0000
Requirement	Use of occupancy count and complexity indicators shall improve the predictability (prediction of demand) leading to an increased confidence that the responsible DCB actor can protect controllers against unforeseen peak demand and thus controller overload.
Title	Occupancy Counts
Status	<In Progress>
Rationale	Use of occupancy count and complexity indicators shall improve the predictability
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

642
643 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

644
645 [REQ]

Identifier	REQ-07.06.05-SPR-0035.0000
Requirement	The DCB toolbox usability shall provide the user with an efficient method of managing hotspots.
Title	Usability for hotspot
Status	<In Progress>
Rationale	The DCB toolbox usability shall provide the user with an efficient method of managing hotspots.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

646
647 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	HotspotManagement	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0018.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0019.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0020.0000	<Partial>

648
649 [REQ]

Identifier	REQ-07.06.05-SPR-0036.0000
Requirement	The DCB toolbox usability shall provide the user with an efficient method of identifying STAM measures.
Title	Usability to identify STAM Measure
Status	<In Progress>
Rationale	The DCB toolbox usability shall provide the user with an efficient method of identifying STAM measures.(hotspot area, flight list, ….)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

650
651 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0026.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0032.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0034.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0039.0000	<Partial>

652
653 [REQ]

Identifier	REQ-07.06.05-SPR-0037.0000
Requirement	The DCB toolbox usability shall be efficient to facilitate the STAM Measure coordination
Title	Usability to coordinate STAM Measure
Status	<In Progress>
Rationale	The DCB toolbox usability shall be efficient to facilitate the STAM Measure coordination
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

654
655 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0045.0000	<Partial>

656
657 [REQ]

Identifier	REQ-07.06.05-SPR-0038.0000
Requirement	The DCB toolbox shall provide a sufficient level of information that supports the management of hotspots.
Title	Information to manage hotspot
Status	<In Progress>
Rationale	The DCB toolbox shall provide a sufficient level of information that supports the management of hotspots.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

658
659 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	HotspotManagement	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0024.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0025.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0026.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0027.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0028.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0029.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0030.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0031.0000	<Partial>

660
661 [REQ]

Identifier	REQ-07.06.05-SPR-0039.0000
Requirement	The information available shall be efficient to identify STAM Measure
Title	Information to identify STAM Measure

Status	<Validated>
Rationale	The information available shall be efficient to identify STAM Measure
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

662
663 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0032.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0033.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0034.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0035.0000	<Partial>

664
665 [REQ]

Identifier	REQ-07.06.05-SPR-0040.0000
Requirement	The information available shall be efficient to coordinate STAM Measure
Title	Information to coordinate STAM Measure
Status	<In Progress>
Rationale	The information available shall be efficient to coordinate STAM Measure
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

666
667 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0045.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0047.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0048.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0049.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0050.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0051.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0052.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0053.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0054.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0055.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0056.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0057.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0058.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0059.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0060.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0061.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0062.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0063.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0064.0000	<Partial>

<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0065.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0066.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0067.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0041.0000
Requirement	The information available shall allow the users to detect any STAM Measure interference
Title	Information to detect STAM Measure interference
Status	<In Progress>
Rationale	The information available shall allow the users to detect any STAM Measure interference
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0055.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0042.0000
Requirement	The DCB toolbox response time shall permit responsible DCB actors to identify hotspots and manage STAMs without undue delay.
Title	Response time
Status	<In Progress>
Rationale	The DCB toolbox response time shall permit responsible DCB actors to identify hotspots and manage STAMs without undue delay.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0098.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0043.0000
Requirement	ATCOs shall increase confidence in the Flow Management ability to protect airspace from over delivery (human factors).
Title	ATCO Confidence
Status	<In Progress>
Rationale	The ATCO confidence will be increased with a better predictability
Category	<Operational><Performance>

Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0052.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0060.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0044.0000
Requirement	Increased predictability (quality of forecast) shall reduce uncertainties and more effectively address potential ATCO overload.
Title	ATCO safety feeling
Status	<In Progress>
Rationale	Increased predictability (quality of forecast) shall reduce uncertainties and more effectively address potential ATCO overload.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0408.0001	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0422.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0045.0000
Requirement	STAM coordination shall reduce the adverse effects on downstream sectors while retaining flexibility in the measure.
Title	Adverse effects
Status	<In Progress>
Rationale	STAM coordination shall reduce the adverse effects on downstream sectors while retaining flexibility in the measure.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A

<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0055.0000	<Partial>

688
689 [REQ]

Identifier	REQ-07.06.05-SPR-0046.0000
Requirement	The procedure shall prevent the users about cut-off time (to implement STAM too late / may not be effective and regulations cannot be used to address the issue leading to sector overload).
Title	Cut-off time
Status	<In Progress>
Rationale	The provision of cut-off time will prevent LTM actor of inefficient DCB preparation and implementation
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

690
691 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0044.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0052.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0103.0000	<Partial>

692
693 [REQ]

Identifier	REQ-07.06.05-SPR-0047.0000
Requirement	STAM shall reduce the number of flights re-routed due to regulations (implementing regulations may be associated with re-routing proposals (increased route length) accepted by AUs).
Title	Environment-Route distance
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

694
695 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

696
697 [REQ]

Identifier	REQ-07.06.05-SPR-0048.0000
Requirement	Increased predictability (quality of forecast) shall reduce uncertainties and reduce - overall - the number of flights affected by e.g. re-routing in order to ensure a "planning margin".
Title	Environment-rerouting
Status	<Deleted>
Rationale	
Category	<Operational><Performance>

Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0049.0000
Requirement	STAM may allow exploitation of short term network opportunities (e.g. released airspace) and provide shorter routes.
Title	Environment-shorter route
Status	<In Progress>
Rationale	STAM may allow exploitation of short term network opportunities (e.g. released airspace) and provide shorter routes.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0050.0000
Requirement	STAM shall allow to address small imbalances leading to less re-routing and less ground delays.
Title	Environment-ground delay
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0051.0000
Requirement	STAM measures applied shall minimize any increase of fuel consumption for flights affected by lower flight levels (level capping) or re-routing.
Title	Environment-fuel consumption
Status	<In Progress>

Rationale	STAM measures applied shall minimize any increase of fuel consumption for flights affected by lower flight levels (level capping) or re-routing.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0052.0000
Requirement	ATCOs shall increase confidence in the Flow Management ability to protect airspace from over delivery (human factors) resulting in the ATCO allowing more traffic into sector (increased ratio between Sector Capacity used / declared sector Capacity).
Title	Cost-effectiveness - ATC productivity
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0053.0000
Requirement	Increased predictability (quality of forecast) shall ensure more optimal sector configurations (reduction in margins used to decide to open additional sectors).
Title	Cost-effectiveness - optimal sector configuration
Status	<Validated>
Rationale	A better predictability will ensure a better management of sector configurations
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0003.0000	<Partial>

721 [REQ]

Identifier	REQ-07.06.05-SPR-0054.0000
Requirement	The responsible DCB actors should be capable to apply STAM measures.
Title	Cost-effectiveness - responsible DCB actor skills
Status	<In Progress>
Rationale	The responsible DCB actors should be capable to apply STAM measures.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

722

723 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

724

725 [REQ]

Identifier	REQ-07.06.05-SPR-0055.0000
Requirement	Application of STAM shall require more FMP staff during high traffic load and reduce ability to re-allocate FMP work to Supervisor during low traffic load.
Title	Cost-effectiveness - FMP staffing
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

726

727 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

728

729 [REQ]

Identifier	REQ-07.06.05-SPR-0056.0000
Requirement	Increased utilisation of available capacities shall result in a reduction of the number of flights delayed due to ATFCM.
Title	Efficiency - Flight delays
Status	<Validated>
Rationale	Increased utilisation of available capacities shall result in a reduction of the number of flights delayed due to ATFCM.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

730

731 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A

<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0057.0000
Requirement	Exploration of opportunities to use airspace available through early release of segregated areas shall provide shorter routes.
Title	Efficiency - Shorter route
Status	<Validated>
Rationale	Exploration of opportunities to use airspace available through early release of segregated areas shall provide shorter routes.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0058.0000
Requirement	STAM shall increase ability to accommodate AUs preferences.
Title	Efficiency - AU preferences
Status	<Validated>
Rationale	The AU preferences will be managed based on the coordination process
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0051.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0066.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0067.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0059.0000
Requirement	An increase of fuel consumption for individual flights may be expected as a result of the application of STAM (level capping or re-routing).
Title	Efficiency - Fuel Consumption
Status	<Validated>
Rationale	An increase of fuel consumption for individual flights may be expected as a result of the application of STAM (level capping or re-routing).
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0060.0000
Requirement	ATCOs shall have increased confidence in the Flow Management ability to protect airspace from over delivery (human factors) resulting in the ATCO allowing more traffic into sector (increased ratio between available Sector Capacity / Declared Sector Capacity).
Title	Capacity - Additional capacity
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0061.0000
Requirement	STAM shall allow increased exploitation of short term network opportunities (e.g. released airspace) providing shorter routes and increased utilisation of available airspace.
Title	Capacity - Use of available capacity
Status	<Validated>
Rationale	STAM shall allow increased exploitation of short term network opportunities (e.g. released airspace) providing shorter routes and increased utilisation of available airspace.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

751 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

752

753 [REQ]

Identifier	REQ-07.06.05-SPR-0062.0000
Requirement	STAM shall increase exploitation of short term network opportunities (e.g. available capacity in neighbouring sectors of ACCs)
Title	Capacity - Network Opportunities
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

754

755 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

756

757 [REQ]

Identifier	REQ-07.06.05-SPR-0063.0000
Requirement	STAM shall allow addressing small demand/capacity imbalances leading to increased utilisation of airspace capacities and less extensive regulations.
Title	Capacity - Less extensive regulation
Status	<Validated>
Rationale	STAM shall allow addressing small demand/capacity imbalances leading to increased utilisation of airspace capacities and less extensive regulations
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

758

759 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

760

761 [REQ]

Identifier	REQ-07.06.05-SPR-0064.0000

Requirement	A decrease in the number of flights affected by ATFCM (cherry pick versus regulations) shall increase the number of flights arriving on time.
Title	Predictability - Occupancy Counts
Status	<In Progress>
Rationale	STAM Measures will allow to impact less aircraft and to support better the flights arriving on time
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0065.0000
Requirement	ATFCM measures to address an imbalance between demand and capacity shall affect a reduced number of flights and thus increase adherence to filed flight plans.
Title	Punctuality
Status	<In Progress>
Rationale	STAM Measures will allow to impact less aircraft and to support better the flights arriving on time
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0408.0001	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0422.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0102.0000
Requirement	NMOC and Airport actors shall identify which units shall be involved in the STAM coordination process using automated assistance
Title	Roles & responsibilities
Status	<In Progress>
Rationale	Automated assistance will provide the information about the concerned actors in the DCB coordination process
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0045.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0047.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0048.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0049.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0050.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0051.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0053.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0064.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0065.0000	<Partial>

771
772 [REQ]

Identifier	REQ-07.06.05-SPR-0103.0000
Requirement	Airspace Users shall now become positively aware and involved in execution of ATFCM measures.
Title	AUs participation
Status	<Validated>
Rationale	AUs will be more involved in the DCB coordination process
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

773
774 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	HotspotManagement	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<APPLIES TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>

775 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>

776
777 [REQ]

Identifier	REQ-07.06.05-SPR-0105.0000
Requirement	The procedure shall support a logical workflow (timeline, task, dependencies)
Title	Logical workflow
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

778

779 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

780
781 [REQ]

Identifier	REQ-07.06.05-SPR-0106.0000
Requirement	The procedure shall allow standardised criteria for decision-making
Title	Criteria for decision-making
Status	<Deleted>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

782
783 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

784
785 [REQ]

Identifier	REQ-07.06.05-SPR-0107.0000
Requirement	The participation of AU in the negotiation process shall increase the ability to accommodate AUs trajectory preferences improving flight efficiency.
Title	AUs participation
Status	<Validated>
Rationale	An improved AU participation will increase the ability to accommodate their business needs
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

786
787 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>

788
789 [REQ]

Identifier	REQ-07.06.05-SPR-0108.0000
Requirement	Quality of information shall facilitate analysis the traffic situation and decision making. This requirement will be assessed from responsible DCB actor's subjective feedback (questionnaire).
Title	Reduce uncertainty
Status	<In Progress>
Rationale	The predictability will be improved
Category	<Operational><Performance>
Validation Method	<Live Trial>

Verification Method	

790
791 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Network Operations Plan Management	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0500.0000	<Partial>

792
793 [REQ]

Identifier	REQ-07.06.05-SPR-0109.0000
Requirement	The DCB toolbox shall be efficient to analyse the situation, providing efficient analysis of hotspots, and to allow the user to make a decision on a solution. This requirement will be assessed from responsible DCB actor's subjective feedback (questionnaire).
Title	Tool usability
Status	<Validated>
Rationale	The DCB Toolbox usability will be efficient to manage local DCB Measures (STAM)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

794 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0217.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0218.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0219.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0301.0000	<Partial>

795
796 [REQ]

Identifier	REQ-07.06.05-SPR-0114.0000
Requirement	Increased predictability (quality of ATFCM forecast) shall reduce uncertainties and support a more effective resolution of potential ATC Hotspots to a manageable ATC workload
Title	ATC Workload
Status	<Validated>
Rationale	Increased predictability (quality of ATFCM forecast) shall reduce uncertainties and support a more effective resolution of potential ATC Hotspots to a manageable ATC workload
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

797 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0205.0000	<Partial>

798
799 [REQ]

Identifier	REQ-07.06.05-SPR-0116.0000
Requirement	The use of the same flight plan profile view between the AUs and the Network Manager and thus of consistent data shall lead to a better flight plan profile computation.
Title	Quality of Information
Status	<Validated>
Rationale	The use of the same flight plan profile view between the AUs and the Network Manager and thus of consistent data shall lead to a better flight plan profile computation.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

800
801 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Network Operations Plan Management	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0200.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0201.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0202.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0203.0000	<Partial>

802
803 [REQ]

Identifier	REQ-07.06.05-SPR-0117.0000
Requirement	Increased predictability (quality of ATFCM forecast) shall reduce uncertainties and reduce the requirement for ad-hoc air holding with a consequential reduction in environment effects.
Title	Environment effects
Status	<Validated>
Rationale	The local DCB measures will reduce the air holding for hotspots at the arrival airports
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

804
805 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A

<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0217.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0218.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0219.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0301.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0118.0000
Requirement	In some cases, low and slow trajectories increasing the environmental impact of those flights shall be expected as a result of a greater flexibility for AUs.
Title	AUs preference
Status	<In Progress>
Rationale	In some cases, low and slow trajectories increasing the environmental impact of those flights shall be expected as a result of a greater flexibility for AUs.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0221.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0119.0000
Requirement	Increased predictability (quality of ATFCM forecast) shall reduce uncertainties and improve flight efficiency
Title	Flight efficiency
Status	<Validated>
Rationale	Increased predictability (quality of ATFCM forecast) shall reduce uncertainties and improve flight efficiency
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0301.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0125.0000
Requirement	Increased ATC confidence in ATFCM ability to protect airspace from over delivery shall result in ATC allowing increased traffic throughput.
Title	Traffic throughput

Status	<In Progress>
Rationale	Increased ATC confidence in ATFCM ability to protect airspace from over delivery shall result in ATC allowing increased traffic throughput.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0212.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0220.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0126.0000
Requirement	The concept should increase the ability to accommodate AU departure punctuality preferences to depart on time whilst adhering to an arrival delay.
Title	AUs preference
Status	<In Progress>
Rationale	Flexibility will be provided to AU to allow to accommodate AU departure punctuality preferences
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0128.0000
Requirement	The reduction of air holding shall imply less flight block to block time extensions
Title	Time extensions
Status	<In Progress>
Rationale	
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0220.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0131.0000
Requirement	The eDCB concept shall contribute to a reduction of fuel burn per flight of 0,05% compared to 2005, for ECAC

Title	Environment / Fuel efficiency
Status	<Validated>
Rationale	The eDCB concept shall contribute to a reduction of fuel burn per flight of 0,05% compared to 2005, for ECAC
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

827
828 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0013	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-EAPP.1040	<Partial>

829
830 [REQ]

Identifier	REQ-07.06.05-SPR-0132.0000
Requirement	The eDCB concept shall contribute to an increase of en-route busy hour throughput of 6,50% compared to 2005, for ECAC
Title	En-route Airspace Capacity
Status	<In Progress>
Rationale	The eDCB concept shall contribute to an increase of en-route busy hour throughput of 6,50% compared to 2005, for ECAC
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

831
832 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0015	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-EAPP.1000	<Partial>

833
834 [REQ]

Identifier	REQ-07.06.05-SPR-0133.0000
Requirement	The eDCB concept shall contribute to an increase of TMA busy hour throughput of 3,00% compared to 2005, for ECAC
Title	TMA Airspace Capacity
Status	<In Progress>
Rationale	The eDCB concept shall contribute to an increase of TMA busy hour throughput of 3,00% compared to 2005, for ECAC
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

835
836 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A

<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0020	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-EAPP.1010	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0134.0000
Requirement	The eDCB concept shall contribute to an increase of controller productivity of 2,50% compared to 2005, for ECAC.
Title	Cost-effectiveness / ATCO productivity
Status	<In Progress>
Rationale	The eDCB concept shall contribute to an increase of controller productivity of 2,50% compared to 2005, for ECAC.
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0014	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-EAPP.1020	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0135.0000
Requirement	The eDCB concept shall contribute to an increase of safety (based on number of fatal accident per year to be prevented) of 1,89% compared to 2005, for ECAC.
Title	Safety
Status	<Validated>
Rationale	The eDCB concept shall contribute to an increase of safety (based on number of fatal accident per year to be prevented) of 1,89% compared to 2005, for ECAC.
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-EAPP.1030	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0136.0000
Requirement	In the frame of Network Operations, the eDCB concept shall contribute to ensure that the transition to deployment and operational use is secure.
Title	Security - Transition to Deployment
Status	<In Progress>
Rationale	In the frame of Network Operations, the eDCB concept shall contribute to ensure that the transition to deployment and operational use is secure.

Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0019	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0137.0000
Requirement	In spite of the fact that no specific target has been assigned to OFA03.01.04 in terms of predictability, the eDCB concept should contribute to an improvement in airspace predictability of 1,50% compared to predictability in 2010, for ECAC, whenever possible.
Title	Predictability
Status	<Validated>
Rationale	In spite of the fact that no specific target has been assigned to OFA03.01.04 in terms of predictability, the eDCB concept should contribute to an improvement in airspace predictability of 1,50% compared to predictability in 2010, for ECAC, whenever possible.
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0016	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0138.0000
Requirement	In the frame of the eDCB concept, the role of the human shall be consistent with human capabilities and limitations.
Title	Human Performance - Role of the Human
Status	<Validated>
Rationale	In the frame of the eDCB concept, the role of the human shall be consistent with human capabilities and limitations.
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0021	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0139.0000
Requirement	In the frame of the eDCB concept, technical systems shall support the human actors in performing their tasks.
Title	Human Performance – Technical Systems
Status	<Validated>
Rationale	In the frame of the eDCB concept, technical systems shall support the human actors in performing their tasks.
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0022	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0140.0000
Requirement	In the frame of the eDCB concept, team structures and team communication shall support the human actors in performing their tasks.
Title	Human Performance – Team and Communication
Status	<Validated>
Rationale	In the frame of the eDCB concept, team structures and team communication shall support the human actors in performing their tasks.
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0023	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0141.0000
Requirement	In the frame of the eDCB concept, Human Performance related transition factors such as training, staffing, competence and selection shall be considered.
Title	Human Performance – Transition Factors
Status	<In Progress>
Rationale	In the frame of the eDCB concept, Human Performance related transition factors such as training, staffing, competence and selection shall be considered.
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0024	<Partial>

869
870 [REQ]

Identifier	REQ-07.06.05-SPR-0142.0000
Requirement	In the frame of Network Operations, the eDCB concept shall contribute to ensure the resilience of the Network Operations performance targets (i.e. the targets defined for safety, environment, cost-effectiveness, capacity and efficiency are achieved in the event of unlawful interference).
Title	Security - Resilience
Status	<In Progress>
Rationale	In the frame of Network Operations, the eDCB concept shall contribute to ensure the resilience of the Network Operations performance targets (i.e. the targets defined for safety, environment, cost-effectiveness, capacity and efficiency are achieved in the event of unlawful interference).
Category	<Operational><Performance>
Validation Method	<Expert Group (Judgement Analysis)>
Verification Method	

871 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

872
873 [REQ]

Identifier	REQ-07.06.05-SPR-0201.0000
Requirement	The roles and responsibilities shall be clearly identified between NMOC and Airports
Title	NMOC-Airport Roles & Responsibilities
Status	<Validated>
Rationale	The roles and responsibilities shall be clearly identified between NMOC and Airports
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

874
875 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0305.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0306.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0307.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0310.0000	<Partial>

876
877 [REQ]

Identifier	REQ-07.06.05-SPR-0202.0000
Requirement	The procedure shall support a logical workflow (timeline, tasks, dependencies)
Title	NMOC-Airport Logical workflow
Status	<Validated>

Rationale	The NMOC-Airport procedures shall support a logical workflow
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

878 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0301.0000	<Partial>

879

880 [REQ]

Identifier	REQ-07.06.05-SPR-0208.0000
Requirement	The concept element should not increase the workload of the NMOC operator
Title	NMOC workload
Status	<Validated>
Rationale	The concept element should not increase the workload of the NMOC operator
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

881

882 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0305.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0306.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0307.0000	<Partial>

883

884 [REQ]

Identifier	REQ-07.06.05-SPR-0209.0000
Requirement	The NMOC should be able to change the TTA sequence according to the Airport Impact Assessment - to improve the network operations - to improve the reactionary delay - without any negative impact on the network
Title	NMOC staffing
Status	<Validated>
Rationale	The NMOC should be able to change the TTA sequence according to the Airport Impact Assessment
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

885

886 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A

<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0040.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0041.0000	<Partial>

887

888 3.1.2.2 Solution #18: CTOT and TTA - DCB-0208

889

890 [REQ]

Identifier	REQ-07.06.05-SPR-0100.0000
Requirement	Target Time deviation monitoring shall facilitate improved hotspot resolution.
Title	Hot spot resolution
Status	<Validated>
Rationale	For flights involved in a DCB hotspot, the target time deviation monitoring will allow the local units to assess and monitor the effects of the observed deviations on the hotspot resolution. Such deviations can degrade, or not, the hotspot resolution plan devised by local DCB actors, The Target time deviation monitoring will allow the local units to observe and react sufficiently in advance to guarantee safe operations.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

891

892 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0408.0001	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0422.0000	<Partial>

893

894 [REQ]

Identifier	REQ-07.06.05-SPR-0101.0000
Requirement	The compliance to DCB constraint shall be improved by the Target Time management processes and procedures
Title	Compliance to constraint
Status	<Validated>
Rationale	For flights involved in a DCB hotspot, Target Time management processes (i.e. Target Deviation Indicator, Target Time revision, hotspot monitoring…) will improve the compliance to DCB constraints.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

895 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES_TO>	<Service>	HotspotManagement	N/A
<APPLIES_TO>	<Service>	M-CDMMeasure	N/A
<APPLIES_TO>	<Service>	STAMMeasures	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0046.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0104.0000
Requirement	The TTA Management concept shall describe the direct contribution of AUs to the coordination process and how it improves the CDM processes.
Title	TTA coordination
Status	<Validated>
Rationale	A clear description of Airspace users involvment in TTA management will ensure a cooperative definition of Hotspot resolution plan.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<APPLIES TO>	<Service>	HotspotManagement	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0001.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0002.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0110.0000
Requirement	Diffusion of the TTA shall improve the schedule and the arrival throughput.
Title	Arrival throughput
Status	<In Progress>
Rationale	Dissemination of TTA in planning and execution phase will ensure a commun and shared information with all involved actors. This will improve scheduling and arrival management processes.)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0217.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0218.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0219.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0301.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0112.0000
Requirement	Increased predictability shall contribute to less deviation regarding calculated CTOT and reduce delays
Title	Deviation
Status	<In Progress>

Rationale	The expected benefits on predictability, induced by the eDCB concept, will lead to less observed deviations. The elaboration of CTOT measures will be improved and reduction in ATFCM delays are foreseen.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0217.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0218.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0219.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0301.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0113.0000
Requirement	Flight Plan adherence for regulated flights shall support better predictability at all sectors concerned.
Title	Flight adherence
Status	<Validated>
Rationale	Thanks to the flexibility introduced by the TT management mechanisms, AUs will be able to build trajectories that fit their business needs while participating to the hotspot resolution. This will allow flight crews to fly in accordance with their filing and therefore increasing the traffic loads predictability for all sectors concerned.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0217.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0218.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0219.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0301.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0115.0000
Requirement	Dissemination/distribution of the TTA shall increase flight adherence
Title	Respect of TTA
Status	<Validated>

Rationale	The TT management mechanisms associated to the DCB TT Tolerance Window introduced by the eDCB concept, will allow the AUs to build flight trajectories meeting their business needs while participating to the hotspot resolution. This will allow flight crews to fly in accordance with their filing.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0122.0000
Requirement	Workload in upstream sectors shall not be increased by TTA management process
Title	Upstream sector workload
Status	<In Progress>
Rationale	The local DCB units will use the TT deviation monitoring and revision processes to ensure the correct resolution of identified DCB hotspots. The effect of TT management (i.e. appearance of small peaks or traffic bunchs in pieces of airspace) shall not negatively impact the ATCOs workload on upstream sectors.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0219.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0124.0000
Requirement	Flight crew workload should not be increased by their contribution to flight plan and TTA management process
Title	Pilot workload
Status	<Validated>
Rationale	In pre-flight briefing and execution phases, flight crews have to manage a lot of parameters to ensure the safe execution of the flight. TTA is one, amongst other, therefore the involvement of the flight crew in the TTA management process (i.e. TTA dissemination and revision process) should not adversaly affect their workload.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A

<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0220.0000	<Partial>

921
922 [REQ]

Identifier	REQ-07.06.05-SPR-0129.0000
Requirement	The CTOT mechanism shall provide more flexibility to the AUs to adjust their flight profile while maintaining the TTA.
Title	AUs flexibility
Status	<In Progress>
Rationale	Every days, AUs need to react to unexpected events, therefore adhering to rigid constraints can have a significant impacts on AUs operations. That's why the CTOT mechanism should be improved in order to allow the network operations to keep being safe and the AUs to meet their business needs in terms of efficiency and punctuality.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

923
924 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED TO>	<Functional block>	Traffic Demand Management	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0220.0000	<Partial>

925
926 [REQ]

Identifier	REQ-07.06.05-SPR-0130.0000
Requirement	The eDCB concept should increase the flexibility for AUs.
Title	AUs flexibility
Status	<In Progress>
Rationale	Every days, AUs need to react to unexpected events, therefore adhering to rigid constraints can have a significant impacts on AUs operations. That's why the eDCB concept should provide mechanisms that allow the network operations to keep being safe and the AUs to meet their business needs in terms of efficiency and punctuality.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

927 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.02-DOD-0001.0018	Partial

928
929 [REQ]

Identifier	REQ-07.06.05-SPR-0203.0000
Requirement	The procedure shall allow standardised criteria for TTA decision-making
Title	NMOC-Airport TTA Criteria for decision-making
Status	<Validated>
Rationale	By defining common practises, the designed DCB procedures will efficiently support the eDCB concept deployment over Europe.

Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0305.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0306.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0307.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0310.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0204.0000
Requirement	The procedure shall enhance the coordination process between NMOC and Airports
Title	NMOC-Airport TTA Enhanced coordination
Status	<Validated>
Rationale	Exchanges and interactions between NMOC and Airports will significantly increase with the deployment of the eDCB concept. The need for the DCB procedures to efficiently support the coordination process between NMOC and Airports will be a key element in order to capture all the expected benefits from the eDCB concept.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0305.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0306.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0307.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0310.0000	<Partial>

[REQ]

Identifier	REQ-07.06.05-SPR-0205.0000
Requirement	The DCB toolbox usability shall support efficient TTA sequence analysis and update
Title	NMOC-Airport TTA Tool usability
Status	<Validated>
Rationale	The DCB toolbox is a support tool used by local DCB units to analyse the traffic situation and to design DCB plan that will resolve potential hotspots (i.e. cherry picked STAM measures, TTA sequence analysis).
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

939 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0305.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0306.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0307.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0308.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0309.0000	<Partial>

940

941 [REQ]

Identifier	REQ-07.06.05-SPR-0206.0000
Requirement	The information available shall support efficient analysis of the Airport Impact Assessment and efficient update of the TTA sequence
Title	NMOC-Airport TTA Information to analyse and update TTA sequence
Status	<Validated>
Rationale	The availability of the most accurate and up to date flight information (i.e. scheduling, trajectory) is a key element to ensure an efficient arrival management process. Data exchanges between NM and Airport systems, will allow the sharing of a common situation awareness and support the analysis of the Airport Impact Assessment and an efficient update of the TTA sequence.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

942

943 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0305.0000	<Partial>

944

945 [REQ]

Identifier	REQ-07.06.05-SPR-0207.0000
Requirement	The eDCB concept should decrease the reactionary delay and indirectly increase the capacity
Title	Reactionary delay
Status	<Validated>
Rationale	By applying DCB measures to cherry picked flights, as defined in the eDCB concept, the number of flights affected will be reduced and a reduction in ATFCM delays is expected. By improving the ATFCM delays, the probability for an aircraft to suffer additional ATFCM delays during the next rotation is also reduced, By minimising this knock-on effect, the reactionary delay will also be reduced.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

946 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Demand & Capacity Balancing	N/A
<ALLOCATED_TO>	<Functional block>	Performance Measurements & Monitoring	N/A
<ALLOCATED_TO>	<Functional block>	Traffic Demand Management	N/A

<APPLIES_TO>	<Operational Focus Area>	OFA05.03.04	N/A
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0305.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0306.0000	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-07.06.05-OSED-0307.0000	<Partial>

3.1.3 Deleted Requirements

For the sake of completeness and clarity, those requirements which have been deleted as a result of regular document's updates and internal and external review processes are listed in this section.

[REQ]

Identifier	REQ-07.06.05-SPR-0306.0000
Requirement	Training of responsible DCB actors shall ensure their qualification is adequate to precisely describe the STAM for the ATCO (or Supervisor): Consistent phraseology to describe a STAM
Title	Training of responsible DCB actor (7)
Status	<Deleted>
Rationale	SA Hz 006 : STAM with contrary effect on targeted sector Hz 005 : Inefficient STAM Validation Plan Questionnaire Deleted in the frame of the external review, with the rationale that guidelines for STAM description shall be first developed, so that a requirement can be established for adequate training in this regard.
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0314.0000
Requirement	DCB actors shall be able to access the Predictions of entry counts and occupancy counts with additional information concerning the traffic load severity estimates based on a comparison of predicted entry counts and occupancy counts with two alert thresholds assigned to each monitoring TV / flow (the Monitoring value sustain and the Monitoring value peak) and a comparison of the duration of predicted Monitoring value sustain excesses with a max. tolerated sustain threshold
Title	What-if
Status	<Deleted>

Rationale	SA Hz 006 : STAM with contrary effect on targeted sector Hz 005 : Inefficient STAM Hz 004 : Series of STAM is not sufficient as alternative to regulation Validation Plan Questionnaire Deleted in the frame of the external review, since this is considered to be an ops/system requirement (not a safety-related one).
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0315.0000
Requirement	A simulated EC/OC view at responsible DCB actor level shall be available, ensuring that entry/ occupancy counts reflect all STAM proposed for implementation and allow responsible DCB actor to identify hotspots not mitigated or new created
Title	Simulated OC
Status	<Deleted>
Rationale	SA Hz 006 : STAM with contrary effect on targeted sector Hz 005 : Inefficient STAM Hz 007 : STAM generating imbalance in other sectors Hz 004 : Series of STAM is not sufficient as alternative to regulation Validation Plan Questionnaire Deleted in the frame of the external review, since this is considered to be an ops/system requirement (not a safety-related one).
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0318.0000
Requirement	A simulated EC/OC view at NM level shall be available, ensuring that entry/ occupancy counts reflect all STAM proposed for implementation and allow NM operator to identify hotspots not mitigated or new created
Title	Network View
Status	<Deleted>

Rationale	SA Hz 006 : STAM with contrary effect on targeted sector Hz 005 : Inefficient STAM Hz 007 : STAM generating imbalance in other sectors Hz 004 : Series of STAM is not sufficient as alternative to regulation Validation Plan Questionnaire Deleted in the frame of the external review, since this is considered to be an ops/system requirement (not a safety-related one).
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

968
969 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

970
971 [REQ]

Identifier	REQ-07.06.05-SPR-0323.0000
Requirement	The EET limits for maximum acceptable speed or climb/descent rate, which are defined by AUs and included in Field 18 of the FPL, shall be taken into account for calculation of the 4D profile of a flight.
Title	EET min/max
Status	<Deleted>
Rationale	SA Validation Plan Questionnaire Deleted in the frame of the external review, since this is considered to be an ops/system requirement (not a safety-related one).
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

972
973 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

974
975 [REQ]

Identifier	REQ-07.06.05-SPR-0326.0000
Requirement	ATCOs training shall address facilitation of TT adherence as far as safety is not negatively affected
Title	ATCO TT handling
Status	<Deleted>

Rationale	SA Hz 010 : One aircraft is not provided or does not adhere to TT or adheres to wrong TT Validation Plan Questionnaire Deleted as ATC are not expected to faciliate TT adherence in Step 1
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0327.0000
Requirement	ATCO should be trained with respect to limits in the facilitation of TT adherence (including both TT cancellation for separation purposes and TT cancellation as a preventive means in anticipation of a complexity escalation) - subject to open safety issue
Title	TT adherence
Status	<Deleted>
Rationale	SA Hz 012 : Conflict due to speed deviation of TT aircraft without informing ATC Validation Plan Questionnaire Deleted as ATC are not expected to faciliate TT adherence in Step 1
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0328.0000
Requirement	ATC ATSU should account for TT in the measure of sector complexity (addressing sectors involved in facilitating TT adherence) - subject to open safety issue
Title	Induced complexity
Status	<Deleted>
Rationale	SA Hz013 : Multiple TT cancellations induce significant workload increase in a sector (receiving information from FMP, instruction to pilots, etc.) Validation Plan Questionnaire Deleted as ATC are not expected to facilitate TT adherence in Step 1
Category	<Operational><Safety>

Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0340.0000
Requirement	Flight crew procedures and training should require that they ask AOC or TWR ATCOs for missing TT information.
Title	Missing TT
Status	<Deleted>
Rationale	SA Hz 010 : One aircraft is not provided or does not adhere to TT or adheres to wrong TT Validation Plan Questionnaire Deleted in the frame of the external review, with the rationale that it is not clear when TT information would be missing and how the flight crew would know that the TT information was missing.
Category	<Operational><Safety>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0021.0000
Requirement	STAM coordination shall address and resolve issues with a hotspot while considering the effects on down stream sector
Title	Effects on downstream sector
Status	<Deleted>
Rationale	Deleted (duplicates 0005.0000) OPA 2.3: Coordination FMP & NM M1.05 N° of counter proposal M1.07 N° of messages M1.09 N° of accepted/rejected STAM associated to a flight 2.4: Coordination FMP & AU M02.02 M02.04 M02.05 M02.07 M1.12: Satisfactory by the way to implement STAM measures Validation Plan Questionnaire X6
Category	<Operational><Performance>

Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0022.0000
Requirement	STAM shall improve participation (AUs perception of being involved and having influence of the measure will increase).
Title	Improve AU participation
Status	<Deleted>
Rationale	Deleted (duplicates 0013.0000) OPA 4.7: AU operations M1.04: STAM concept if effective and can be used satisfactory Validation Plan Questionnaire A3
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0032.0000
Requirement	STAM shall improve the cost-effectiveness (increased controller productivity, i.e. more flights per time unit)
Title	ATC Cost-effectiveness
Status	<Deleted>
Rationale	Deleted (duplicates 0007.0000) OPA 5.3: Cost-effectiveness M1.20: Ratio between number of flight able to enter the traffic volume an the declared capacity Data from P04.07.08 Validation Plan Questionnaire S4 Z1
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0033.0000
Requirement	STAM shall maintain cost-effectiveness for the FMP (increased requirements to the competence of the FMP and increase the workload may overall increase the cost of operating the flow management)
Title	FMP Cost-effectiveness
Status	<Deleted>
Rationale	Deleted (duplicates 0008.0000) OPA 5.3: Cost-effectiveness M1.20: Ratio between number of flight able to enter the traffic volume an the declared capacity
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0047.0000
Requirement	STAM shall reduce the number of flights re-routed due to regulations (implementing regulations may be associated with re-routing proposals (increased route length) accepted by AUs).
Title	Environment-Route distance
Status	<Deleted>
Rationale	Deleted (duplicates 0028, 0063, 0050, 0048) OPA 5.2: Environment M01.06: delay versus extra mileage, fuel burn and CO2 emissions M1.18: Fuel added consumption for re routing
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0048.0000
Requirement	Increased predictability (quality of forecast) shall reduce uncertainties and reduce - overall - the number of flights affected by e.g. re-routing in order to ensure a "planning margin".
Title	Environment-rerouting
Status	<Deleted>

Rationale	Deleted (duplicates 0047.0000 and 0050.00) OPA 5.2: Environment M1.06: Calculation for specific hotspot/DTAM: ? For individual comparison between actual and reference trajectory ? Comparison between number of flights rerouted due to regulations and due to STAM for similar traffic situation
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0050.0000
Requirement	STAM shall allow to address small imbalances leading to less re-routing and less ground delays.
Title	Environment-ground delay
Status	<Deleted>
Rationale	Deleted (duplicates 0047.0000 and 0048.00) OPA 5.2: Environment M1.06: Calculation for specific hotspot/DTAM: ? Comparison between number of flights rerouted due to regulations and due to STAM for similar traffic situation
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0052.0000
Requirement	ATCOs shall increase confidence in the Flow Management ability to protect airspace from over delivery (human factors) resulting in the ATCO allowing more traffic into sector (increased ratio between Sector Capacity used / declared sector Capacity).
Title	Cost-effectiveness - ATC productivity
Status	<Deleted>

Rationale	Deleted because duplicates REQ-07.06.05-SPR-0025.0000 OPA 5.3: Cost-Effectiveness M1.20: ratio between number of flight able to enter the traffic volume and the declared capacity Validation Plan Questionnaire Z1 S10
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0055.0000
Requirement	Application of STAM shall require more FMP staff during high traffic load and reduce ability to re-allocate FMP work to Supervisor during low traffic load.
Title	Cost-effectiveness - FMP staffing
Status	<Deleted>
Rationale	Deleted because duplicates REQ-07.06.05-SPR-0033.0000 OPA 5.3: Cost-Effectiveness M2.08 Validation Plan Questionnaire S2
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0060.0000
Requirement	ATCOs shall have increased confidence in the Flow Management ability to protect airspace from over delivery (human factors) resulting in the ATCO allowing more traffic into sector (increased ratio between available Sector Capacity / Declared Sector Capacity).
Title	Capacity - Additional capacity
Status	<Deleted>

Rationale	Deleted because duplicates REQ-07.06.05-SPR-0025.0000 OPA 5.5: Airspace capacity M01.04: Flight Delay (min) M01.05: For STAM (Total no of a/c - MR) x duration M1.19: Comparison between delay from Live Trail Run versus Ref Reims Study
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0062.0000
Requirement	STAM shall increase exploitation of short term network opportunities (e.g. available capacity in neighbouring sectors of ACCs)
Title	Capacity - Network Opportunities
Status	<Deleted>
Rationale	Deleted (duplicates 0061.0000) OPA 5.5: Airspace capacity M1.05: Utilisation of available capacity Validation Plan Questionnaire Z1
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0105.0000
Requirement	The procedure shall support a logical workflow (timeline, task, dependencies)
Title	Logical workflow
Status	<Deleted>
Rationale	Deleted (duplicates 0015.0000) OPA 4.2 AUs operations M2.06 M2.18 M2.19 Validation Plan Questionnaire
Category	<Operational><Performance>
Validation Method	<Live Trial>

Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0106.0000
Requirement	The procedure shall allow standardised criteria for decision-making
Title	Criteria for decision-making
Status	<Deleted>
Rationale	Deleted (duplicates 0017.0000) OPA 4.2 AUs operations M2.18 M2.19 Validation Plan Questionnaire
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0111.0000
Requirement	Increased predictability of 4D trajectories shall reduce delays at the arrival.
Title	Arrival delay
Status	<Deleted>
Rationale	OPA 3.10 Delay M1.19 Delay Deleted in the frame of the external review, since 4D trajectories will not be available in a Step 1 context.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0120.0000
Requirement	Increased predictability shall limit the need for air holding
Title	Air holding
Status	<Deleted>

Rationale	Deleted (duplicates 0117.0000) OPA 3.8 Delta TTA M2.01 delta between ETO/TTA assigned and ATO/TTA achieved (FMS and NM ones)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0121.0000
Requirement	The adherence to TTA should prevent the AUs benefiting later ATFCM slot improvements.
Title	TTA constraint
Status	<Deleted>
Rationale	OPA 2.2 Adherence to DCB:dDCB constraints M2.01 Delta between ETO/TTA assigned and ATO/TTA achieved (FMS and NM ones) Deleted in the frame of the external review, since it is not considered to be meaningful.
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0123.0000
Requirement	Providing more flexibility to AUs should result in low and slow trajectories increasing ATC workload
Title	Trajectory profile
Status	<Deleted>
Rationale	Deleted (does not express a requirement but a possibility of occurrence of a higher workload in certain cases) OPA 3.4 ATC Workload M2.18 M2.07 Validation Plan Questionnaire
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0127.0000
Requirement	The concept should increase the ability to accommodate AU departure punctuality preferences to depart on time whilst adhering to an arrival delay.
Title	AUs preference
Status	<Deleted>
Rationale	Deleted (duplicates 0126.0000)
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-07.06.05-SPR-0200.0000
Requirement	The NMOC shall be able to change the TTA sequence according to the Airport Impact Assessment - to improve the network operations - to improve the reactionary delay - without any negative impact on the network
Title	Airport TTA sequences updated by the NMOC
Status	<Deleted>
Rationale	Deleted (duplicates 0209.0000) Validation Plan M4.02 : delta between TTA requested by airport impact assessment and TTA given by NM M4.03 : delta of the overall network delays after the first TTA delivered by NM compared to the second TTA delivered after the airport impact assessment MX.XX : Reactionary delay
Category	<Operational><Performance>
Validation Method	<Live Trial>
Verification Method	

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

3.2 Information Exchange Requirements (IER)

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0010	Get_Traffic_Volume_Description_Request	Text	Ad hoc upon hotspot detection	Major	Public	Continuously	One-way	Traffic volume where a hotspot is detected shall be properly defined to ensure hotspot resolution.
IER-13.02.03-OSED-DCB1.0020	Get_Traffic_Volume_Description_Reply	Text	Ad hoc upon traffic volume description request	Major	Public	Continuously	One-way	Description of TV with hotspot shall be communicated.
IER-13.02.03-OSED-DCB1.0030	Get_List_of_Traffic_Volumes_Request	Text	Ad hoc upon hotspot detection	Major	Public	Continuously	One-way	List of involved TVs in a hotspot shall be properly defined.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0040	Get_List_of_Traffic_Volumes_Reply	Text	Ad hoc upon traffic volumes descriptions requests	Major	Public	Continuously	One-way	Description of list of involved TVs in hotspot shall be communicated when requested.
IER-13.02.03-OSED-DCB1.0050	Get_List_of_Traffic_Volume_Sets_Request	Text	Ad hoc upon hotspot detection	Major	Public	Continuously	One-way	List of TVs sets involved in a hotspot shall be defined.
IER-13.02.03-OSED-DCB1.0060	Get_List_of_Traffic_Volume_Sets_Reply	Text	Ad hoc upon traffic volumes sets descriptions requests	Major	Public	Continuously	One-way	Description of list of involved TVs sets in hotspot shall be communicated when requested.
IER-13.02.03-OSED-DCB1.0070	Get_Flight_List_by_Topic_Request	Text	Ad hoc upon hotspot detection	Major	Public	Continuously	One-way	Flight List (by topic) shall be defined to ensure hotspot management.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0080	Get_Flight_List_by_Topic_Reply	Text	Ad hoc upon flight list request	Major	Public	Continuously	One-way	Flight List (by topic) shall be communicated when requested.
IER-13.02.03-OSED-DCB1.0090	Get_Traffic_Count_by_Topic_Request	Text	Ad hoc upon hotspot detection	Major	Public	Continuously	One-way	Traffic Count (by topic) shall be defined to to ensure hotspot resolution.
IER-13.02.03-OSED-DCB1.0100	Get_Traffic_Count_by_Topic_Reply	Text	Ad hoc upon traffic count request	Major	Public	Continuously	One-way	Traffic Count (by topic) shall be communicated when requested.
IER-13.02.03-OSED-DCB1.0110	Get_Capacities_by_Topic_Request	Text	Ad hoc upon hotspot detection	Major	Public	Continuously	One-way	Capacities (by topic) shall be defined to ensure hotspot resolution.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0120	Get_Capacities_by_Topic_Reply	Text	Ad hoc upon capacities request	Major	Public	Continuously	One-way	Capacities (by topic) shall be communicated when requested.
IER-13.02.03-OSED-DCB1.0130	Create_Hotspot_Request	Text	Ad hoc upon demand capacity imbalance detection	Major	Public	Continuously	One-way	A hotspot request shall be created when a demand capacity imbalance is detected.
IER-13.02.03-OSED-DCB1.0140	Create_Hotspot_Reply	Text	Ad hoc upon hotspot request	Major	Public	Continuously	One-way	A hotspot reply shall be delivered after a hotspot request.
IER-13.02.03-OSED-DCB1.0150	Modify_Hotspot_Request	Text	Ad hoc upon hotspot modification	Major	Public	Continuously	One-way	A hotspot request could be modified afterwards (New WEF, New UNT)

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0160	Modify_Hotspot_Reply	Text	Ad hoc upon modify hotspot request	Major	Public	Continuously	One-way	A hotspot request shall be modified after a modify request.
IER-13.02.03-OSED-DCB1.0170	Merge_Hotspot_Request	Text	Ad hoc upon two hotspots merge need	Major	Public	Continuously	One-way	Two hotspots could be merged.
IER-13.02.03-OSED-DCB1.0180	Merge_Hotspot_Reply	Text	Ad hoc upon hotspots merge request	Major	Public	Continuously	One-way	Two hotspots are merged after a merge request and the new hospot could be defined.
IER-13.02.03-OSED-DCB1.0190	Delete_Hotspot_Request	Text	Ad hoc upon hotspot deletion need	Major	Public	Continuously	One-way	A hotspot could be deleted.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0200	Delete_Hotspot_Reply	Text	Ad hoc upon hotspot deletion request	Major	Public	Continuously	One-way	The hotspot is deleted and its status = cancelled after a delete request.
IER-13.02.03-OSED-DCB1.0210	Clear_Hotspot_Request	Text	Ad hoc upon hotspot clearing need	Major	Public	Continuously	One-way	A hotspot could be cleared.
IER-13.02.03-OSED-DCB1.0220	Clear_Hotspot_Reply	Text	Ad hoc uspon hotspot clearing request	Major	Public	Continuously	One-way	The hotspot is cleared and its status = cleared after a clearing request.
IER-13.02.03-OSED-DCB1.0230	Get_Hotspot_Description_Request	Text	Ad hoc upon a hotspot appearing	Major	Public	Continuously	One-way	A hotspot should be properly defined.
IER-13.02.03-OSED-DCB1.0240	Get_Hotspot_Description_Reply	Text	Ad hoc upon a hotspot description request	Major	Public	Continuously	One-way	The hotspot description is delivered upon request.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0250	Flight_Retrieval_Request	Text	Ad hoc upon a STAM measure	Major	Public	Continuously	One-way	The FMP shall be able to select individual flights to exclude from the potential STAM or regulation.
IER-13.02.03-OSED-DCB1.0260	Flight_Retrieval_Reply	Text	Ad hoc upon a flight retrieval request	Major	Public	Continuously	One-way	A flow measure associated to a traffic volume (sub-flow) is identified as a targeted solution of the demand/capacity imbalance. The measure is prepared and defined.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0270	Measure_Definition_Request	Text	Ad hoc upon a measure creation need	Major	Public	Continuously	One-way	A measure, or a series of measures, which constitute a targeted solution to a detected demand capacity imbalanceshall be prepared.
IER-13.02.03-OSED-DCB1.0280	Measure_Definition_Reply	Text	Ad hoc upon a measure definition request	Major	Public	Continuously	One-way	The measure shall be coordinated with all parties concerned.
IER-13.02.03-OSED-DCB1.0290	Assign_Measure_Constraints_Request	Text	Ad hoc upon a measure constraint creation need	Major	Public	Continuously	One-way	Measure constraints shall be defined, such as altitude, entry/exit times, etc.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0300	Assign_Measure_Constraints_Reply	Text	Ad hoc upon a meausre constraints assignment request	Major	Public	Continuously	One-way	Measure constraints shall be coordinated and announced to AUs
IER-13.02.03-OSED-DCB1.0310	Add_Flight_to_Measure_Request	Text	Ad hoc upon adding flight to measure need	Major	Public	Continuously	One-way	FMP shall be able to select flights to include in the STAM.
IER-13.02.03-OSED-DCB1.0320	Add_Flight_to_Measure_Reply	Text	Ad hoc uspon adding flight to measure request	Major	Public	Continuously	One-way	Selected flights shall be added to the measure and be clearly identified.
IER-13.02.03-OSED-DCB1.0330	Remove_Flight_to_Measure_Request	Text	Ad hoc upon removing flight from measure need	Major	Public	Continuously	One-way	DCB units shall have the ability to remove a flight from a measure.
IER-13.02.03-OSED-DCB1.0340	Remove_Flight_to_Measure_Reply	Text	Ad hoc upon removing flight from measure request	Major	Public	Continuously	One-way	AU, NMf shall have the ability to remove flights from a measure

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0350	Measure_Impact_per_Flight_Request	Text	Ad hoc upon a meaure impact assessment per flight need	Major	Public	Continuously	One-way	The impact of each measure shall be clearly assessed.
IER-13.02.03-OSED-DCB1.0360	Measure_Impact_per_Flight_Reply	Text	Ad hoc upon a meausre impact assessment per flight request	Major	Public	Continuously	One-way	This shall return the results of the measue on the flight
IER-13.02.03-OSED-DCB1.0370	Force_CTOT_Request	Text	Ad hoc upon force CTOT action need	Major	Public	Continuously	One-way	The force CTOT action shall allow the the FMP to impose initial time shift figure to selected flights.
IER-13.02.03-OSED-DCB1.0380	Force_CTOT_Reply	Text	Ad hoc upon force CTOT request	Major	Public	Continuously	One-way	The Force CTOT reply action shall return the result of the Force CTOT Request

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0390	MCDM_List_per_Actor_Request	Text	Ad hoc upon MCDM list per actor definition need	Major	Public	Continuously	One-way	The AU/NMf shall provide NIMS with a list of summaries of measures coordination
IER-13.02.03-OSED-DCB1.0400	MCDM_List_per_Actor_Reply	Text	Ad hoc upon MCDM list per actor definition request	Major	Public	Continuously	One-way	NIMS shall provide the AU/NMf with a list of summaries of measures coordination containing hotspots, flights, etc.
IER-13.02.03-OSED-DCB1.0410	MCDM_List_per_Flight_Request	Text	Ad hoc upon MCDM list per flight definition need	Major	Public	Continuously	One-way	AU/NMf shall request a list of summaries coordination for a selected actor.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0420	MCDM_List_per_Flight_Reply	Text	Ad hoc upon MCDM list per flight definition request	Major	Public	Continuously	One-way	The STAM solution shall be successfully coordinated and negotiated with all relevant actors.
IER-13.02.03-OSED-DCB1.0430	MCDM_Topic_Request	Text	Ad hoc upon MCDM topic definition need	Major	Public	Continuously	One-way	The Request shall include all the details currently maintained by NM system about a specific M-CDM topic

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0440	MCDM_Topic_Reply	Text	Ad hoc upon MCDM topic request	Major	Public	Continuously	One-way	NIMS shall provide the AU/NMf with all details currently maintained by NM system about a specific M-CDM topic
IER-13.02.03-OSED-DCB1.0450	Cast_of_Vote_Request	Text	Ad hoc upon a cast of measure vote need	Major	Public	Continuously	One-way	The service shall permit the user to vote for the measure proposed by the Initiator
IER-13.02.03-OSED-DCB1.0460	Cast_of_Vote_Reply	Text	Ad hoc upon a cast of measure vote request	Major	Public	Continuously	One-way	The service shall return the result of the vote
IER-13.02.03-OSED-DCB1.0470	Update_MCDM_StateRequest	Text	Ad hoc upon MCDM state update need	Major	Public	Continuously	One-way	The initiator shall be able to update the M-CDM state based on the results of the votes.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0480	Update_MCDM_StateReply	Text	Ad hoc upon MCDM state update request	Major	Public	Continuously	One-way	The service shall return the result of the M-CDM State change
IER-13.02.03-OSED-DCB1.0490	Get_MCDM_Topic_Actor_Roles_Request	Text	Ad hoc upon getting MCDM topic's actors and roles need	Major	Public	Continuously	One-way	The service shall provide the actors and roles for a selected M-CDM topic (Hotspot, Measure or flight)
IER-13.02.03-OSED-DCB1.0500	Get_MCDM_Topic_Actor_Roles_Reply	Text	Ad hoc upon getting MCDM topic's actors and roles request	Major	Public	Continuously	One-way	The service shall return the actors and roles for a selected M-CDM topic (Hotspot, Measure or flight)

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0510	Edit_MCDM_Topic_Actor_Roles_Request	Text	Ad hoc upon editing MCDM topic's actors and roles need	Major	Public	Continuously	One-way	The service shall allow the user, if initiator, to modify the actors and roles for a selected M-CDM topic (hotspot, measure, flight)
IER-13.02.03-OSED-DCB1.0520	Edit_MCDM_Topic_Actor_Roles_Reply	Text	Ad hoc upon editing MCDM topic's actors and roles request	Major	Public	Continuously	One-way	The service shall return the modified list of ac tors and corresponding role for a selected M-CDM topic
IER-13.02.03-OSED-DCB1.0530	Add_Comments_Request	Text	Ad hoc upon adding comments need	Major	Public	Continuously	One-way	Users shall be able to type free text in the text box in the M-CDM view

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0540	Add_Comments_Reply	Text	Ad hoc upon adding comments request	Major	Public	Continuously	One-way	The service shall return the result of the free text insertion
IER-13.02.03-OSED-DCB1.0550	Get_Remaining_Tasks_Request	Text	Ad hoc upon getting remaining tasks need	Major	Public	Continuously	One-way	The user shall be able to request the list of actions that he/she must perform on M-CDM elements
IER-13.02.03-OSED-DCB1.0560	Get_Remaining_Tasks_Reply	Text	Ad hoc upon getting remaining tasks request	Major	Public	Continuously	One-way	The service shall return the list of actions that the user must perform on M-CDM elements

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0570	Edit_Measure_Deadlines_Request	Text	Ad hoc upon editing meausre deadlines need	Major	Public	Continuously	One-way	The service shall allow the user, only if he is the initiator or implementor, to modify the deadlines of a selected measure. Only deadlines provided by the service shall be updated.
IER-13.02.03-OSED-DCB1.0580	Edit_Measure_Deadlines_Reply	Text	Ad hoc upon editing meausre deadlines request	Major	Public	Continuously	One-way	The service shall return the modified list of actors and corresponding role for a selected M-CDM topic

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0590	Edit_Target_Time_Request	Text	Ad hoc upon editing target time need	Major	Public	Continuously	One-way	The user shall be able to edit the target time request
IER-13.02.03-OSED-DCB1.0600	Edit_Target_Time_Reply	Text	Ad hoc upon editing target time request	Major	Public	Continuously	One-way	The system shall return the modified target time
IER-13.02.03-OSED-DCB1.0610	Get_target_Time_Deviation_Request	Text	Ad hoc upon getting target time deviation need	Major	Public	Continuously	One-way	The user/NMf shall be able to request a TTA deviation
IER-13.02.03-OSED-DCB1.0620	Get_target_Time_Deviation_Reply	Text	Ad hoc upon getting target time deviation request	Major	Public	Continuously	One-way	NIMS shall returne the TTA deviation to the user
IER-13.02.03-OSED-DCB1.0630	Get_Target_Time_Request	Text	Ad hoc upon getting target time need	Major	Public	Continuously	One-way	The user/NMf shall be able to request a TTA at any time.

Identifier	Name	Content Type	Frequency	Safety Criticality	Confidentiality	Maximum Time of Delivery	Interaction Type	Free
IER-13.02.03-OSED-DCB1.0640	Get_Target_Time_Reply	Text	Ad hoc upon getting target time request	Major	Public	Continuously	One-way	The system shall return the target time to the user

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4 References and Applicable Documents

4.1 Applicable Documents

[1] Template Toolbox 03.01.03

[2] Requirements and V&V Guidelines 03.01.00

[3] Templates and Toolbox User Manual 03.01.01

[4] EUROCONTROL ATM Lexicon
https://extranet.eurocontrol.int/http://atmlexicon.eurocontrol.int/en/index.php/SESAR

4.2 Reference Documents

[5] ED-78A GUIDELINES FOR APPROVAL OF THE PROVISION AND USE OF AIR TRAFFIC SERVICES SUPPORTED BY DATA COMMUNICATIONS.[7]

[6] SESAR B.04.01 D41, SESAR Performance Framework (Edition 2)

[7] SESAR Safety Reference Material
https://extranet.sesarju.eu/Programme%20Library/Forms/Procedures%20and%20Guidelines.aspx

[8] SESAR Security Reference Material
https://extranet.sesarju.eu/Programme%20Library/Forms/Procedures%20and%20Guidelines.aspx

[9] SESAR Environment Reference Material
https://extranet.sesarju.eu/Programme%20Library/Forms/Procedures%20and%20Guidelines.aspx

[10] SESAR Human Performance Reference Material
https://extranet.sesarju.eu/Programme%20Library/Forms/Procedures%20and%20Guidelines.aspx

[11] SESAR Business Case Reference Material
https://extranet.sesarju.eu/Programme%20Library/Forms/Procedures%20and%20Guidelines.aspx

[12] SESAR P13.02.03 D303, Enhanced DCB OSED for Step1; Edition 00.04.03, 14th June 2016

[13] SESAR P13.02.03 D342, Validation Plan Step 1 Release 5 (VALP), Edition 00.01.03, 24th February 2016

[14] SESAR P13.02.03 D383, Validation Report Step 1 Release 5 V3 Final (VALR), Edition 00.01.00, 12th September 2016

[15] SESAR B.01 Integrated Roadmap Dataset DS15

[16] SESAR P07.02 D29, Step 1 Release 5 Detailed Operational Description (DOD), Edition 00.04.01, 02nd May 2016

[17] SESAR P07.02 D42, Step 1 Network Operations Sub-systems Technical Architecture Description (TAD). Edition 00.01.14, 01st April 2016

[7] The EUROCAE ED-78A has been used as an initial guidance material. ED-78A is useful, but is not an applicable document, because it mostly addresses the V4-V5 phases, whilst the SESAR R&D programme is focussed on development (V1-V2-V3, and because of its partial compliance with safety regulatory requirements).

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