SESAR Solution #118 - TS IRS

Basic Extended ATC Planning Function

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Name/Beneficiary	Position/Title	Date

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BASIC EXTENDED ATC PLANNING FUNCTION

Abstract

This document is the final version of the Technical Specification (TS) for **Solution #118 - Basic EAP (Extended ATC Planning) function** at V3 level.

The basic EAP (*b*EAP) function concept describes an **automated tool supporting the basic communication** between the Local DCB position and the Controllers' Work Positions to be deployed in En-route operating environments of **Medium** and **High complexity**.

The basic EAP function is expected to facilitate the implementation of ATFCM measures to better match capacity to predicted demand and to reduce the complexity of traffic presentation in order to suit available capacity.

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1 Executive summary

This document provides the Technical Specification (TS) functional related to **Solution #118**: **Basic EAP (Extended ATC Planning) function.**

The basic EAP function is expected to facilitate the implementation of ATFCM measures to better match capacity to predicted demand and to reduce the complexity of traffic presentation in order to suit the available capacity.

The Basic EAP (Extended ATC Planning) concept consists in the definition of an automated tool supporting the basic communication between the Local DCB position and the Controllers' Work Positions to be deployed in En-route operating environments of Medium and High complexity.

The technical support systems impacted by the Solution #118 - Basic EAP (Extended ATC Planning) function are those deployed at the ACCs. En-Route ACCs need specific ATC tools and capabilities in targeted Operating Environment in order to enable the basic EAP (Extended ATC Planning) function.

En-Route ATC – EAP role support function will allow:

- To monitor the hotspots evolution;
- To elaborate appropriate ATFCM measures (STAM) or to initiate short term actions on the traffic to be coordinated with the Planning Controller, and
- To monitor the implementation until the concerned flight has conformed to the measure.
- To communicate with the ATC Sector Planning and Tactical controllers' support function.

En-Route ATC – ATC Sector Planning and Tactical controllers' support function will allow:

- To display the proposed measures from the EAP to the Planning Controller;
- To support a negotiation dialogue with the EAP;
- To inform back the EAP on the implementation of the proposed measures;
- To communicate with the EAP role support function.

2 Introduction

2.1 Purpose of the document

This document provides the Technical Specification (TS) functional related to **Solution #118**: **Basic EAP (Extended ATC Planning).** It includes

- The identification of Functional Blocks impacted by the solution.
- The system requirements and the interface(s) related requirements (IRS) which satisfy requirements captured at SPR-INTEROP/OSED level (see [1]) and are associated with Functional blocks and Enablers (ENs) available in EATMA applicable version.

This TS/IRS is intended to provide the appropriate level of information so as to allow the functional block to be designed and implemented **for industrialization and deployment**:
1) Either as **separate functional block**; or
2) As part of an **integrated system**.

The implementation options described is section 5 correspond to the **first choice**.

2.2 Scope

This document is the TS/IRS for Solution #118 - Basic EAP (Extended ATC Planning) function at V3 level at V3 level **as described in the SPR-INTEROP/OSED [1].**

Note:

It is important to note that this TS/IRS is **only** building on the Technical Requirements present in the **SESAR 2020 EAP concept Transition OSED ([4])** published in October 2016 by project P04.07.08. **No further technical analysis** has been performed for the basic EAP function since the full EAP concept is currently studied within SESAR 2020 PJ09.02 Project.

The Technical requirements presented in this TS/IRS are in line with the relevant EATMA elements defined in the applicable version of EATMA (Dataset 18).

2.3 Intended readership

The intended audience for this TS/IRS is:

- The key stakeholders targeted by the Solution, i.e.

  o Airspace Users who will be directly impacted by the deployment of the *basic* EAP function in En-Route airspace;

  o Air Traffic Controllers who will benefit from a smoothed workload and less complex traffic situations thanks to the STAM or decomplexification measures enabled by the *basic* EAP function, especially in hotspot areas;

- SESAR 2020 PJ09.02 members developing the full EAP function;

- SESAR 2020 Projects developing solutions that can benefit from the deployment of the *basic* EAP function.

2.4 Background

In 2006, DSNA started to work on the concept of a complementary role to the existing Flow Manager to fill the gap between the ATFCM and the ATC. This concept was deemed to be much promising in terms of safety and capacity and moreover, the R&D work to be done was estimated compliant with the SESAR timeframe.

In 2013, the Integrated Network and extended ATC Planning concept (INAP) emerged from projects P04.02 and P07.02. This concept is introducing a new role, the Extended ATC Planning (EAP) role, which is intended to fill the gap between ATFCM and ATC.

The safety and performance requirements developed in this SPR build upon the above-mentioned background information and on the work conducted within SESAR 1 in the project P04.07.08.
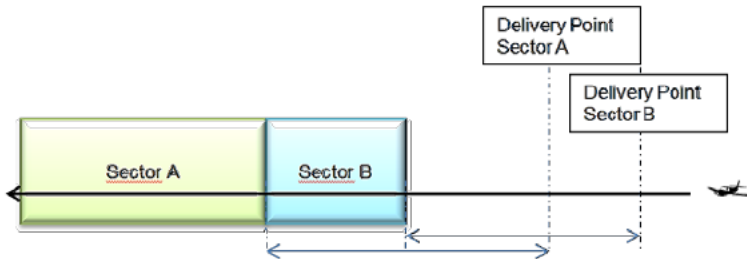
2.5 Structure of the document

This Technical Specification is composed of seven chapters:

- Chapter 1 is an Executive Summary of the document scope and content.
- Chapter 2 is presenting the document purpose, scope and intended readership.
- Chapter 3 is describing the impact of the *basic* EAP on the architecture;
- Chapter 4 describes the functions needed to realise the Solution #118 including the relevant technical requirements;
- Chapter 5 presents the implementation options;
- Chapter 6 contains the assumptions;
- Chapter 7 provides the list of references and applicable documents.

2.6 Glossary of terms

Term	Definition	Source of the definition
Capability	Capability is the ability of one or more of the enterprise's resources to deliver a specified type of effect or a specified course of action to the enterprise stakeholders.	EATMA Guidance Material
Capability Configuration	A Capability Configuration is a combination of Roles and Systems configured to provide a Capability derived from operational and/or business need(s) of a stakeholder type.	EATMA Guidance Material
Communication	The management of the air/ground communication. .	

Term	Definition	Source of the definition
Management	(Reference STA chap 2.1.1)	
Complex Hotspot	A Complex Hotspot is a Hotspot where the workload is mainly due to a complex air situation at the present or in the future. The workload can therefore be lowered by mean of a decomplexification measure instead of a traditional airborne STAM or a mix of both measures.	
Complexity Management	Traffic management to maintain the level of workload that would guarantee safety	
Decomplexification	This process has been defined within EAP concept by the Project 04.07.08. It designs the EAP activity to decrease the complexity of a given sector / area through appropriate measures, called **decomplexification measures** or solution in this document. It can be through a flight level change request. The main difference between a STAM and a decomplexification measure is that with the latter, the flight will continue crossing the same sectors list (no off-loaded / on-loaded sector involved in this process).	
Delivery Time	When a flight is going to enter a new sector, this sector will receive the flight information *x* minutes before the flight enters the sector thanks to an FDPS. This delivery time might be specific to each sector, i.e. depending on its configuration or ACC specificities. In the context of *bEAP*, it is used to compute the answer time out for an implementing sector when receiving a STAM or a decomplexification measure from EAP. 	

Term	Definition	Source of the definition
En-Route	The period from reaching the initial cruise level to the top of descent.	High Level Model Process [3] (chapter 5.2.1.)
Hotspot	A hotspot is a traffic volume which requires a high workload for the sector team during a period of time. A hotspot has to be solved to lower the sector team workload. • A public Hotspot is shared at NM level • A Local Hotspot is kept at ATSU level.	
Implementing Sector	It is the sector in charge of the TFV where the STAM or the decomplexification measure has to be implemented, e.g. where the MOD and Clearance have to be done. The Implementing TFV should be upstream from the impacted or the off-loaded and on-loaded sectors	
INAP	Integrated Network management and extended ATC Planning is a function assisted by automation that plans and organises air traffic within an area of operation (Sector Family) such that situations of excessive complexity and air traffic controller workload can be avoided. It also balances workload between the sector families if required. (The INAP context is further described in DOD 04.02)	

Term	Definition	Source of the definition
Late STAM	A Late STAM is a concept defined within EAP concept. It is a non-implemented STAM for which the off-loaded sector has already received the flight information. The late STAM is computed by the system and depends on the flight entry time of the off-loaded sector. Any non-implemented STAM can therefore become a Late STAM when the system detects the flight entry time of the off-loaded sector becomes too short to prevent the off-loaded sector from receiving the flight information.	
Node	A logical entity that performs Activities. Note: nodes are specified independently of any physical realisation.	EATMA Guidance Material
Off-Loaded Sector	It is the sector in charge of the TFV which the flight impacted by a STAM should have crossed but will not due to the STAM (and will instead cross the On-Loaded CWP).	
On-Loaded Sector	It is the sector in charge of the Traffic Volume which the flight impacted by a STAM would cross while it was not planned, instead of crossing the off-Loaded sector.	
Service	The contractual provision of something (a non-physical object), by one, for the use of one or more others. Services involve interactions between providers and consumers, which may be performed in a digital form (data exchanges) or through voice communication or written processes and procedures.	EATMA Guidance Material
Service function	A type of activity describing the functionality of a Service.	EATMA Guidance Material
Service interface	The mechanism by which a service communicates	EATMA Guidance Material

Table 1: Glossary of terms

2.7 Acronyms and Terminology

Term	Definition
ADD	Architecture Description Document
ATM	Air Traffic Management

Term	Definition
CC	Capability Configuration
EATMA	European ATM Architecture
E-ATMS	European Air Traffic Management System
FAA	Federal Aviation Administration
IER	Information Exchange Requirement
INTEROP	Interoperability Requirements
IRS	Interface Requirements Specification
ISRM	Information Services Reference Model
NAF	NATO Architecture Framework
NOV	NAF Operational View
OSED	Operational Service and Environment Definition
SDD	Service Description Document
SESAR	Single European Sky ATM Research Programme
SJU	SESAR Joint Undertaking (Agency of the European Commission)
SPR	Safety and Performance Requirements
SWIM	System Wide Information Model
TFV	Traffic Volume
TRL	Technology Readiness Level
TS	Technical Specification
V&V	Validation and Verification

Table 2: Acronyms and terminology

3 SESAR Solution Impacts on Architecture

3.1 Target Solution Architecture

3.1.1 SESAR Solution(s) Overview

This section provides the general context briefly introducing the scope of the Technical specification for the SESAR Solution #118.

Operational Concept Elements in the scope of the Solution

The SESAR **Solution #118 - Basic EAP (Extended ATC Planning) function** is defined in the applicable version of EATMA (Dataset 18) as follows:

> **Solution #118 — Basic EAP (Extended ATC Planning) function**
>
> The basic Extended ATC Planner aims at bridging the gap between Air Traffic Flow and Capacity Management (ATFCM) and Air Traffic Control (ATC) providing real-time and fine-tuning measures to solve ATFCM hotspots and to perform early measures to alleviate complexity closest to ATC activities.
>
> The solution consists of an automated tool and associated procedures supporting the basic communication between the Local DCB position and the Controllers' Work Positions allowing the EAP and the ATC team in identifying, assessing and resolving local complexity situations. The basic EAP relies on a real time integrated process for managing the complexity of the traffic with capability to reduce traffic peaks through early implementation of fine-tuned solutions to solve workload imbalances at the local level, compatible with the short term timeframe of execution phase of the flights.

The basic EAP function is part of the INAP (*Integrated Network management and extended ATC Planning*) management.

The basic EAP (Extended ATC Planning) function introduces an **initial automated interface** together with the related procedures that will facilitate the communication between the local DCB position and the Controllers' Work Positions through the provision of optimised solutions to solve workload imbalances compatible with the short term timeframe of execution phase of the flights.

The basic EAP concept introduces also a **new role** (not necessarily an additional staff), the **EAP role** (Extended ATC Planning), which is intended to fill the gap between ATFCM and ATC.

Functional Blocks and enablers under the scope of Solution #118

Table 3 below summarizes the relevant **Functional Block** and enablers under the scope of the **Solution #118** as defined in the applicable version of EATMA.

SESAR Solution ID and Title	Functional Blocks/Role impacted by the SESAR Solution (from EATMA)	Enabler ID (from EATMA)	Enabler Title (from EATMA)	Enabler coverage
Solution #118: Basic EAP (Extended ATC Planning) function	Local Air Traffic Complexity Management	ER-ATC-164	ATC tools to re-organize traffic flows to reduce complexity in the execution phase	Fully

Table 3: SESAR Solution 118 Scope and related Functional Blocks/roles & Enablers

As defined in the applicable version of EATMA, *the Local Traffic Complexity Management functional block calculates traffic complexity within predefined airspace volumes and derives the constituent factors contributing to complexity to facilitate the identification of measures that could be taken to adjust either traffic flows or the airspace sectorisation to optimise the efficiency of the ATC/ATM services of En-route/Approach ATC Centres in high traffic density airspace. Additionally, What-if sector configurations can also be submitted to determine their effect on traffic complexity.*

Figure 1 and Table 4 below illustrates the **activities and the related capabilities** linked to Solution #118, as currently defined in the applicable version of EATMA (Dataset 18).
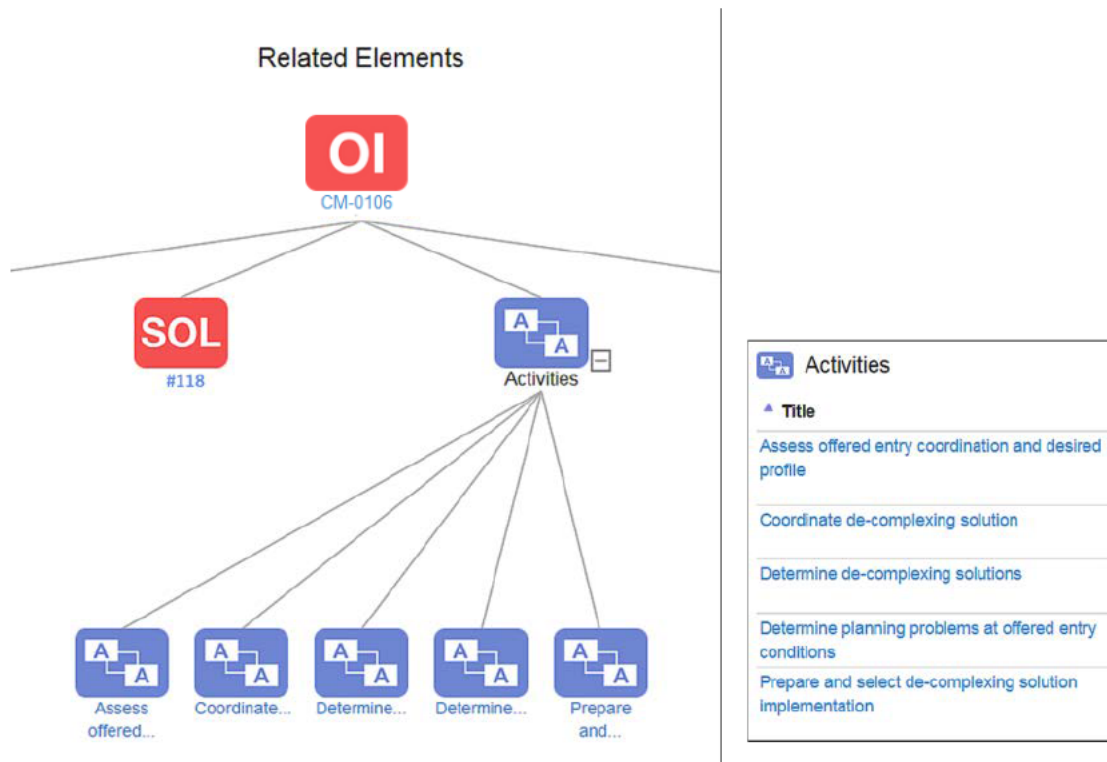
Figure 1: Solution 118 - Related OI Step and Activities

SESAR Solution ID and Title	OI Step (from EATMA)	Activity Title(from EATMA)	Capabilities
Solution #118: Basic EAP (Extended ATC Planning) function	CM-0106 Initial support to INAP: basic EAP (Extended ATC Planning) function	Assess offered entry coordination and desired profile	Conflict Management Information Management
		Coordinate de-complexing solution	Demand and Capacity Balancing
		Determine de-complexing solutions	Demand and Capacity Balancing
		Determine planning problems at offered entry conditions	Conflict Management
		Prepare and select de-complexing solution implementation	Demand and Capacity Balancing

Table 4: SESAR Solution 118 - Scope and related activities & capabilities

Table 5 hereafter indicates how the **activities** linked to Solution #118 are connected **to functional processes**, as currently defined in the applicable version of EATMA (Dataset 18).

SESAR Solution ID and Title	OI Step (from EATMA)	Activity Title(from EATMA)	Functional Processes
Solution #118: Basic EAP (Extended ATC Planning) function	CM-0106 Initial support to INAP: basic EAP (Extended ATC Planning) function	Assess offered entry coordination and desired profile	Provide Planning Separation Assurance
		Coordinate de-complexing solution	Perform extended ATC planning
		Determine de-complexing solutions	Perform extended ATC planning
		Determine planning problems at offered entry conditions	Provide Planning Separation Assurance
		Prepare and select de-complexing solution implementation	Perform extended ATC planning

Table 5: SESAR Solution 118 - Related activities & Functional Processes

The changes introduced by the Solution #118 will impact the **En-Route / Approach ATC systems** deployed at the **En-Route ATC Centres**, to support the air traffic controllers in the provision of Air Traffic Services.

The impact on the **En-Route / Approach ATC system**s will be twofold:

1. The bEAP function will require appropriate tool to **support the actions of the EAP role**, namely:

   - Monitoring the hotspots evolution;
   - Elaborating appropriate ATFCM measures (STAM) or to initiate short term actions on the traffic to be coordinated with the Planning Controller,
   - Monitoring the implementation until the concerned flight has conformed to the measure, and
   - Communicating with the ATC Sector Planning and Tactical controllers' CWP.

2. On the **ATCO team's side**, the bEAP function will require appropriate support too for:

   - Communicating with the EAP role work position;
   - Displaying the proposed measures from the EAP to the Planning Controller;
   - Supporting a negotiation dialogue with the EAP; and
   - Informing back the EAP on the implementation of the proposed measures.

3.1.1.1 Deviations with respect to the SESAR Solution(s) definition

Note on the OIs and Enablers linked to the Solution #118

The EAP concept has been initially developed by DSNA within SESAR 1 P04.07.08 (OIS CM-0104-A) and validated through the exercise VP-687 in Reims ACC in June 2015 as part of **Solution #19** in **R5**.

However, the R5 review has stated that the OIS **CM-0104-A** has only been **partly addressed** in Solution #19 in R5, and that consequently there was *"a need to submit a CR in Dataset 18 in order to review the scope of CM-0104-A, PRO-220a and PRO-220b (i.e. only address Traffic complexity resolution in the planning phase). The backlog of CM-0104-A, PRO-220a and PRO-220b should also be addressed by a CR in DS17."* The OIS **CM-0104-B** addresses the full EAP concept which is currently developed by **PJ9.02** in which DSNA is involved. In this context, DSNA has discussed with SJU the possible solutions to follow the recommendations of R5 review regarding the OIS CM-0104-A.

The following updates of the EATMA have therefore been decided:

- The creation of a specific solution (#118) to cover the part not covered by solution #19;
- The creation of a specific OIS, **CM-0106**, to cover the part of OIS CM-0104-A not properly addressed in solution #19 and
- The creation of a specific enabler **ER-ATC-164** attached to **CM-0106**.

3.1.1.2 Relevant Use Cases

Two different use cases are defined for the basic EAP concept within the SPR/INTEROP/OSED (see section 3 of [1]):

- **Use Case 1**: Implementation of DCB EAP measure (i.e. STAM or decomplexification measure) required by the LTM. Within this use case, the EAP receive a request of DCB EAP measure from the LTM and is in charge of the implementation of the appropriate DCB EAP measure (i.e. STAM or decomplexification measure) to meet the request from the LTM.

- **Use Case 2**: Implementation of decomplexification measure at EAP level (with no LTP supervision). Within this use case, the EAP is not triggered by the LTM. EAP identify a hotspot within its area of responsibility and within the time-horizon under its responsibility. He is then in charge of the implementation of the appropriate decomplexification measure to solve the hotspot.

3.1.1.3 Applicable standards and regulations

N/A

3.1.2 Capability Configurations required for the SESAR Solution

Table 6 below provides the list of Capability Configurations (CCs) required by Solution #118 together with the relevant Sub-Operating Environments where the CCs operate, and the links between CCs and Capabilities, Nodes and Stakeholders.

SESAR Solution ID and Title	Capability Configurations (CCs)	Sub-Operating Environment(s) where the CCs operate	Capabilities	Nodes	Stakeholders
Solution #118: Basic EAP (Extended ATC Planning) function	ER ACC	En-Route High-Complexity En-Route Medium-Complexity	Conflict Management	En-Route/ Approach ATS	ANSP
			Information Management	Air Traffic Flow and Capacity Management	
			Demand and Capacity Balancing		

Table 6: List of Capability Configuration required for the SESAR Solution

3.2 Changes imposed by the SESAR Solution on the baseline Architecture

This section describes the system changes required from Solution #118 on the architecture baseline in EATMA to realise the Capabilities. The technical support systems impacted by the Solution #118 - Basic EAP (Extended ATC Planning) function are those deployed at the ACCs.

As mentioned in section 3.1.1 and as per the SESAR 2020 EAP concept Transition OSED ([41]), the main activities related to the management of the traffic complexity in En Route ATSUs corresponding to Solution #118 (complexity assessment, determination of de-complexing measures and their application and monitoring) are covered by a single **functional process**, namely: **Perform extended ATC planning** which is illustrated on Figure 2 below.
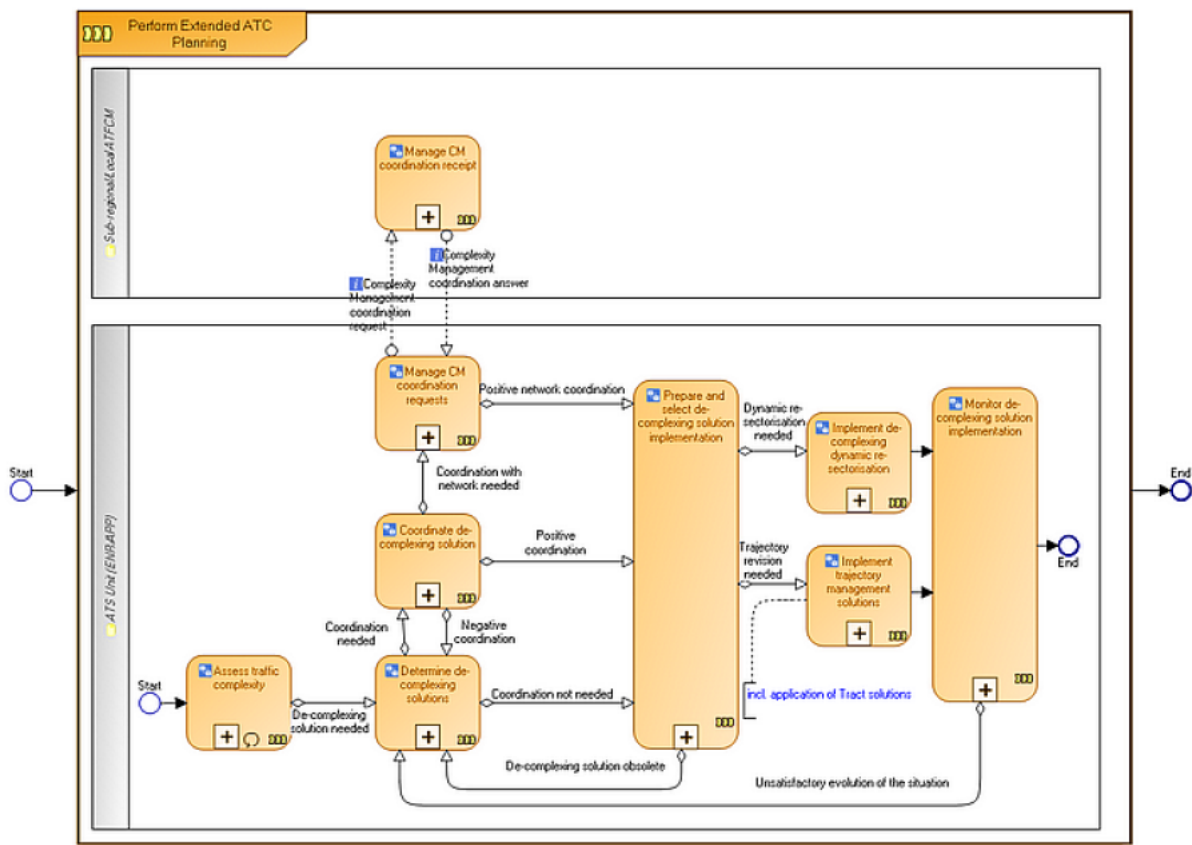
Figure 2: Perform extended ATC planning Process

For the purpose of Solution #118, two services have been identified as follows:

- Assistance to the LTM; and
- Assistance to the ATCO.

SERVICE "ASSISTANCE TO THE LTM"

This service relates to the assistance the EAP provides to the LTM in the STAM implementation process. This may be to:

- Detect and identify local hotspots or late hotspots (only visible in the time horizon of the EAP);
- Select (cherry picking) flights candidate for STAMs or other dDCB measures to solve a given hotspot;
- Monitor the STAMs or other dDCB measures implementation by the ATCO;
- Propose alternate solution based on the EAP situation awareness; and
- Provide situation awareness to LTM regarding ATCO's workload.

SERVICE "ASSISTANCE TO THE ATCO"

This service relates to the interface role of the EAP, between the network and the ATCO. This may be to:

- Provide Situation Awareness to ATCO regarding the hotspots and STAMs; and
- Provide ATCO with traffic volume early decomplexification mainly through change level requests.

The implementation of these two services is foreseen via two **Service functions** as summarized in Table 7 below .

Enabler ID	Enabler Title	Changes
ER-ATC-164	ATC tools to re-organize traffic flows to reduce complexity **in the execution phase**	• *EAP Terminal* function • *CWP Comm Tool* function

Table 7: List of changes due to the Solution #118

4 Technical Specifications

4.1 Functional architecture overview

As illustrated on Figure 3 below, the activities related to the management of the traffic complexity in En Route ATSUs corresponding to Solution #118 are supported by **two Service functions**, namely:

- **EAP Terminal**; and
- **CWP Comm Tool**.
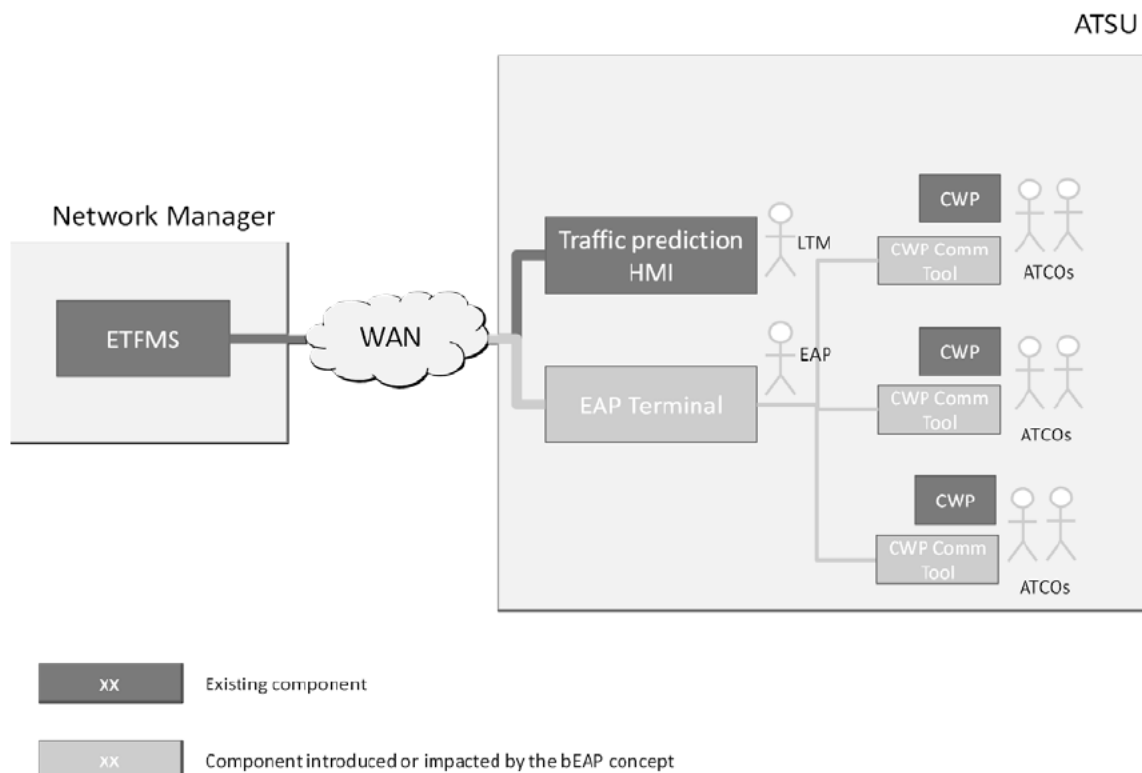
Figure 3: Solution #11_ - Architecture overview

- The **EAP Terminal** function is provided through a position connected to the Network Manager B2B (NM B2B) Web Service the interface provided by the EUROCONTROL Network Manager (NM) for accessing its services and sharing information.

  The EAP Terminal function allows the following actions to the EAP role:

  - Visualizing flight data (Entry Time, ARCID, Aircraft Time, Departure, Destination, RFL, EOBT, ETOT/CTOT, ATOT…) of the selected time frame within the hotspot;
  - Sorting flights per data content according to priority criteria;
  - Sending request for STAM implementation to the relevant CWP; and
  - Monitoring STAMS requests in progress, the delays and the answers.

- **CWP Comm Tool:** In the solution validated in the exercise VP-687 (and later on implemented in the Reims ACC via the **4ME system**) the CWP Comm Tool consists in **tactile tablets** installed at the CWPs, connected to the EAP position via **Wi-Fi**[1], allowing thus the controllers to receive the STAMS requests sent by the EAP role.

4.2 Functional and non-Functional Requirements

This section contains the technical requirements **for V3 phase** relevant for the **SESAR Solution #118 -** *basic* EAP that has been validated during SESAR 1 validation exercise VP-687.

4.2.1 Notation

Requirements' identifiers naming rule follows the following pattern:

REQ-SOL.118-TS-UUij.wxyz where

'**UU**' is set to:

- '**SY**' for system requirements;
- '**IT**' for interface requirements;

'**ij**' is set to set to '**01**' for system requirements and interface requirements; and

'**wxyz**' is a sequence number ranging from 0010 to 9990 with a step of 10.

4.2.2 System Requirements

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0010
Title	DCB EAP measure status
Requirement	A DCB EAP measure shall have the following status: • CREATED (on EAP side only) • PREPARED (on EAP side only) • SENT BUT NOT YET DISPLAYED ON CWP COM TOOL • PROPOSED • ACCEPTED • IMPLEMENTED (on EAP side only) • REJECTED • TERMINATED • CANCELLED (on EAP side only)
Status	\<Validated\>
Rationale	The listed status correspond to the requests' workflow established through workshops with users to prepare the VP-687 exercise in Reims in June 15 and updated with their feedback after the exercise completion
Category	\<Functional\>

[REQ Trace]

Relationship	Linked Element Type	Identifier
\<SATISFIES\>	\<SESAR Solution\>	Solution #118
\<SATISFIES\>	\<ATMS Requirement\>	SPR-INTEROP/OSED

---

[1] An integrated solution is being studied by PJ-09.02 for the Full EAP concept.

<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0020
Requirement	At its creation on the EAP terminal, a DCB EAP measure shall be automatically initiated to status CREATED.
Title	CREATED status - initialization
Status	<Validated>
Rationale	This status description is consistent with the requests' workflow established through workshops with users to prepare the VP-687 exercise in Reims in June 15
Category	<HMI>

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0030
Title	CREATED status – Off loaded actor field initialization
Requirement	At the DCB EAP measure creation, the Off-Loaded actor field shall be initiated with the Hotspot or TFV if any, else it is left empty.
Status	<Validated>
Rationale	This status description is consistent with the requests' workflow established through workshops with users. The fields of the CREATED DCB EAP measure, other than Flight ID, Hotspot or TFV, Status and Off-loaded actor if determined as described here should be left empty by default.
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
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<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0040
Requirement	The status of a DCB EAP measure shall move from CREATED to PREPARED when all the following attributes are filled: Off-Loaded sector; Implementing sector; Type; Value.
Title	PREPARED status (1)
Status	<Validated>
Rationale	This status description is consistent with the requests' workflow established through workshops with users to prepare the VP-687 exercise in Reims in June 15 and updated with their feedback after the exercise completion
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
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<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0050
Title	PROPOSED status (2)
Requirement	The status of a DCB EAP measure shall move from PREPARED to PROPOSED when the DCB EAP measure is sent by EAP to the defined "Implementing sector".
Status	<Validated>
Rationale	The DCB EAP Measure is proposed to the Implementing actor after a "Send" action
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0060
Title	ACCEPTED status
Requirement	The status of a DCB EAP measure shall move from PROPOSED to ACCEPTED when the ATCO of the Implementing sector accepts the measure.

Status	\<Validated\>
Rationale	The DCB EAP measure is considered accepted by the Implementing sector after the "Accepted" action
Category	\<Functional \>

[REQ Trace]

Relationship	Linked Element Type	Identifier
\<SATISFIES\>	\<SESAR Solution\>	Solution #118
\<SATISFIES\>	\<ATMS Requirement\>	SPR-INTEROP/OSED
\<SATISFIES\>	\<Enabler\>	ER-ATC-164
\<ALLOCATED TO\>	\<Functional block\>	Local Air Traffic Complexity Management
\<ALLOCATED TO\>	\<Role\>	EAP
\<ALLOCATED TO\>	\<Role\>	ATC Sector Planning Controller
\<ALLOCATED TO\>	\<Role\>	ATC Sector Executive Controller
\<ALLOCATED TO\>	\<Function\>	EAP Terminal function
\<ALLOCATED TO\>	\<Function\>	CWP Comm Tool Function
\<ALLOCATED TO\>	\<Service\>	Service Identifier
\<ALLOCATED TO\>	\<Information exchange\>	Information Exchange Identifier
\<ALLOCATED TO\>	\<Data\>	Data Identifier
\<ALLOCATED TO\>	\<System Port\>	System Port Identifier

[REQ]

Identifier	**REQ-SOL.118-TS-SY00.0070**
Title	REJECTED status
Requirement	The status of a DCB EAP measure shall move from PROPOSED to REJECTED when the ATCO of the Implementing sector rejects it.
Status	\<Validated\>
Rationale	The DCB EAP Measure is considered rejected by the Implementing sector after the "Rejected" action
Category	\<Functional \>

[REQ Trace]

Relationship	Linked Element Type	Identifier
\<SATISFIES\>	\<SESAR Solution\>	Solution #118
\<SATISFIES\>	\<ATMS Requirement\>	SPR-INTEROP/OSED
\<SATISFIES\>	\<Enabler\>	ER-ATC-164
\<ALLOCATED TO\>	\<Functional block\>	Local Air Traffic Complexity Management
\<ALLOCATED TO\>	\<Role\>	EAP
\<ALLOCATED TO\>	\<Role\>	ATC Sector Planning Controller
\<ALLOCATED TO\>	\<Role\>	ATC Sector Executive Controller
\<ALLOCATED TO\>	\<Function\>	EAP Terminal function
\<ALLOCATED TO\>	\<Function\>	CWP Comm Tool Function
\<ALLOCATED TO\>	\<Service\>	Service Identifier
\<ALLOCATED TO\>	\<Information exchange\>	Information Exchange Identifier
\<ALLOCATED TO\>	\<Data\>	Data Identifier
\<ALLOCATED TO\>	\<System Port\>	System Port Identifier

[REQ]

Identifier	**REQ-SOL.118-TS-SY00.0080**
Title	IMPLEMENTED status (1)
Requirement	The status of a DCB EAP measure shall move from PROPOSED to IMPLEMENTED when the EAP terminal receives the information of its implementation.
Status	\<Validated\>
Rationale	The DCB EAP measure can be implemented by the Implementing actor without a first reply (ACCEPTED). In which case the status shall move directly from PROPOSED to IMPLEMENTED on EAP Terminal. Based on available systems, implementation information can be through a specific action by ATCO or through flight information systems update.
Category	\<Functional \>

[REQ Trace]

Relationship	Linked Element Type	Identifier
\<SATISFIES\>	\<SESAR Solution\>	Solution #118
\<SATISFIES\>	\<ATMS Requirement\>	SPR-INTEROP/OSED
\<SATISFIES\>	\<Enabler\>	ER-ATC-164
\<ALLOCATED TO\>	\<Functional block\>	Local Air Traffic Complexity Management
\<ALLOCATED TO\>	\<Role\>	EAP

<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0090
Title	IMPLEMENTED status (2)
Requirement	The status of a DCB EAP measure shall move from ACCEPTED to IMPLEMENTED when the EAP terminal receives the information of its implementation.
Status	<Validated>
Rationale	The DCB EAP Measure is considered implemented by the Implementing sector on the EAP terminal after confirmation of the implementation. Based on available systems, it can be through a specific action by ATCO or through flight information systems update.
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0100
Title	EAP Measure PREPARED status (2)
Requirement	The status of a DCB EAP measure shall move from REJECTED to PREPARED when the EAP changes at least one of the following attributes: • Off-Loaded /Complex actor • Implementing actor • Type • Value
Status	<Validated>
Rationale	The EAP may be able to change its proposed solution after a rejection in order to propose another one which might be more in adequation with traffic and more likely to be accepted.
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier

| <ALLOCATED TO> | <Data> | Data Identifier |
| <ALLOCATED TO> | <System Port> | System Port Identifier |

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0110
Title	CANCELLED status (1)
Requirement	The status of a DCB EAP measure shall move from CREATED, PREPARED, PROPOSED, SENT BUT NOT YET DISPLAYED or REJECTED to CANCELLED when the EAP cancels it.
Status	<Validated>
Rationale	The DCB EAP Measure should be cancelled by the EAP when it no longer solves a DCB issue. The Cancel action shall be not possible on an accepted DCB EAP Measure (considered as too late) as long as there is no reliable mean to retrieve the flight information update in real time. The Cancel action should be disabled for terminated DCB EAP Measure.
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0120
Title	TERMINATED status
Requirement	The status of a DCB EAP Measure shall move from IMPLEMENTED to TERMINATED when the flight has entered an On-Loaded sector or the Complex sector.
Status	<Validated>
Rationale	When the flight enters the On-Loaded or complex sector, it means the DCB EAP Measure has been implemented some time ago and it is no longer of interest.
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0130
Title	EAP Measure Management Interface – Answer Timeout Computation
Requirement	Once the Implementing sector field is filled, the "answer timeout" of an EAP measure shall be computed by the system following the current time and the delivery time of the off-loaded or complex sector

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Status	<Validated>
Rationale	The Implementing Sector has to answer to the EAP measure sent by the EAP in the time limit defined. The time limit is required to avoid a too late MOD and clearance. 13 mins was a customised value, used for VP-687 exercise in Reims in June 15 according to the ACC specificities and after its completion it has been reduced to 11 mins. NB: Time limit only applies to DCB EAP measures in PROPOSED status. (see §1.7 Acronyms & Terminology)
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Role>	ATC Sector Planning Controller
<ALLOCATED TO>	<Role>	ATC Sector Executive Controller
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Function>	CWP Comm Tool Function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-SY00.0140
Title	STAM Management Interface – Late concept
Requirement	In case the off-loaded sector of a given CREATED, PREPARED, SENT BUT NOT YET DISPLAYED, PROPOSED or ACCEPTED STAM receives the flight information , then the STAM should be identified as a Late STAM on EAP terminal
Status	<Validated>
Rationale	The Concept of LATE STAM shall exist only for the EAP for monitoring purpose and situation awareness. The EAP shall therefore be informed by the system Once the off-loaded sector has received the information of the flight, the STAM is considered late. The consequence is that the off-loaded sector has to deal with the flight even if it will not cross it because of the STAM future implementation.
Category	<Functional >

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

4.2.3 Interface Requirements

A placer dans la TS et créer éventuellement ce qui est de niveau opérationnel.

EAP working position in this chapter refers to the EAP technical interface required in order to allow him/her perform his/her tasks. This section does not describe Human Machine Interface (this is done

in 6.6 paragraph) but the technical interfaces and connections between external systems involved and the EAP working position.

[REQ]

Identifier	REQ-SOL.118-TS-IT00.0010
Title	Hardware – EAP/Network communication
Requirement	The EAP working position shall be connected with the network services in read mode
Status	<Validated>
Rationale	To retrieve information provided by services (Airspace services, Flights services) NOP for Europe
Category	<Interface>

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	REQ-SOL.118-TS-IT00.0020
Title	EAP/PC communication
Requirement	The EAP working position shall be connected with the CWP in read/write mode
Status	<Validated>
Rationale	To send sector configuration, DCB EAP measures to PCs and exchange status and information on in progress solutions s
Category	<Interface>

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management
<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

[REQ]

Identifier	fREQ-SOL.118-TS-IT00.0030
Title	Hardware – Room Configuration
Requirement	The EAP working position shall be able to take into account at any time the current sectors configuration
Status	<Validated>
Rationale	To make sure the link PCs/sectors is correct and address the correct PCs for the solution implementing, off-loaded, complex and on-loaded sectors
Category	<Interface>

[REQ Trace]

Relationship	Linked Element Type	Identifier
<SATISFIES>	<SESAR Solution>	Solution #118
<SATISFIES>	<ATMS Requirement>	SPR-INTEROP/OSED
<SATISFIES>	<Enabler>	ER-ATC-164
<ALLOCATED TO>	<Functional block>	Local Air Traffic Complexity Management

<ALLOCATED TO>	<Role>	EAP
<ALLOCATED TO>	<Function>	EAP Terminal function
<ALLOCATED TO>	<Service>	Service Identifier
<ALLOCATED TO>	<Information exchange>	Information Exchange Identifier
<ALLOCATED TO>	<Data>	Data Identifier
<ALLOCATED TO>	<System Port>	System Port Identifier

5 Implementation Options

N/A.

6 Assumptions

N/A.

7 References and Applicable Documents

This section identifies the documents (name, reference, source project) the TS has to comply to or to be used as additional inputs.

7.1 Applicable Documents

Content Integration

[1] B.04.01 D138 EATMA Guidance Material

[2] EATMA Community pages

[3] SESAR ATM Lexicon

Content Development

[4] B4.2 D106 Transition Concept of Operations SESAR 2020

System and Service Development

[5] 08.01.01 D52: SWIM Foundation v2

[6] 08.01.01 D49: SWIM Compliance Criteria

[7] 08.01.03 D47: AIRM v4.1.0

[8] 08.03.10 D45: ISRM Foundation v00.08.00

[9] B.04.03 D102 SESAR Working Method on Services

[10] B.04.03 D128 ADD SESAR1

[11] B.04.05 Common Service Foundation Method

Performance Management

[12] B.04.01 D108 SESAR 2020 Transition Performance Framework

[13] B.04.01 D42 SESAR2020 Transition Validation

[14] B.05 D86 Guidance on KPIs and Data Collection support to SESAR 2020 transition.

[15] 16.06.06-D68 Part 1 –SESAR Cost Benefit Analysis – Integrated Model

[16] 16.06.06-D51-SESAR_1 Business Case Consolidated_Deliverable-00.01.00 and CBA

[17] Method to assess cost of European ATM improvements and technologies, EUROCONTROL (2014)

[18] ATM Cost Breakdown Structure_ed02_2014

[19]Standard Inputs for EUROCONTROL Cost Benefit Analyses

[20]16.06.06_D26-08 ATM CBA Quality Checklist

[21]16.06.06_D26_04_Guidelines_for_Producing_Benefit_and_Impact_Mechanisms

Validation

[22]03.00 D16 WP3 Engineering methodology

[23]Transition VALS SESAR 2020 - Consolidated deliverable with contribution from Operational Federating Projects

[24]European Operational Concept Validation Methodology (E-OCVM) - 3.0 [February 2010]

System Engineering

[25]SESAR Requirements and V&V guidelines

Safety

[26]SESAR, Safety Reference Material, Edition 4.0, April 2016

[27]SESAR, Guidance to Apply the Safety Reference Material, Edition 3.0, April 2016

[28]SESAR, Final Guidance Material to Execute Proof of Concept, Ed00.04.00, August 2015

[29]SESAR, Resilience Engineering Guidance, May 2016

Human Performance

[30]16.06.05 D 27 HP Reference Material D27

[31]16.04.02 D04 e-HP Repository - Release note

Environment Assessment

[32]SESAR, Environment Reference Material, alias, "Environmental impact assessment as part of the global SESAR validation", Project 16.06.03, Deliverable D26, 2014.

[33]ICAO CAEP – "Guidance on Environmental Assessment of Proposed Air Traffic Management Operational Changes" document, Doc 10031.

Security

[34]16.06.02 D103 SESAR Security Ref Material Level

[35]16.06.02 D137 Minimum Set of Security Controls (MSSCs).

[36]16.06.02 D131 Security Database Application (CTRL_S)

7.2 Reference Documents

[1] SESAR Solution#118 – SPR/INTEROP/OSED V3 - Basic Extended ATC Planning - Edition 01.00.01, 15/05/2018

[2] SESAR Solution#118 – Validation Report V3 - Basic Extended ATC Planning – Edition 01.00.00, 28/02/2018

[3] B.04.02 - High Level Process Models 00 02 00 draft edition, 20101202, D08 Step 1 Operational View

[4] 04.07.08 SESAR 2020 Transition OSED (Extended ATC Planning), Edition 00.01.02, 07/10/2016

Appendix A   Service Description Document (SDD)

N/A

Appendix B   Service Technical Design Document (STDD)

N/A.

Appendix C   Requirements Traceability Towards System requirements defined in SESAR 1 Transition OSED

This section provides the traceability between the requirements presented in **chapter 4.2** of this document and the requirements presented in the SESAR 2020 Transition OSED [4]. From this Transition OSED, only the requirements for which the *Expected coverage* field was set to **"VP-687 and seq"** have been kept.

To comply with SESAR 2020 rules, all these requirements have received a new identifier based on the pattern indicated in section **4.2.1** of this document, other fields have been kept as is.

Table 8 below provides the correspondence between the former identifiers and the requirements 'identifiers used in this TS/IRS.

P04.07.08 SESAR 2020 Transition OSED Requirement ID	Solution #118 TS Requirement ID
System Requirements	
REQ-04.07.08-OSED-0001.0026	REQ-SOL.118-TS-SY00.0010
REQ-04.07.08-OSED-0001.0255	REQ-SOL.118-TS-SY00.0020
REQ-04.07.08-OSED-0001.0027	REQ-SOL.118-TS-SY00.0030
REQ-04.07.08-OSED-0001.0028	REQ-SOL.118-TS-SY00.0040
REQ-04.07.08-OSED-0001.0029	REQ-SOL.118-TS-SY00.0050
REQ-04.07.08-OSED-0001.0031	REQ-SOL.118-TS-SY00.0060
REQ-04.07.08-OSED-0001.0033	REQ-SOL.118-TS-SY00.0070
REQ-04.07.08-OSED-0001.0042	REQ-SOL.118-TS-SY00.0080
REQ-04.07.08-OSED-0001.0034	REQ-SOL.118-TS-SY00.0090
REQ-04.07.08-OSED-0001.0037	REQ-SOL.118-TS-SY00.0100
REQ-04.07.08-OSED-0001.0035	REQ-SOL.118-TS-SY00.0110
REQ-04.07.08-OSED-0001.0036	REQ-SOL.118-TS-SY00.0120
REQ-04.07.08-OSED-0001.0038	REQ-SOL.118-TS-SY00.0130
REQ-04.07.08-OSED-0001.0039	REQ-SOL.118-TS-SY00.0140
Interface Requirements	
REQ-04.07.08-OSED-0001.0125	REQ-SOL.118-TS-IT00.0010
REQ-04.07.08-OSED-0001.0135	REQ-SOL.118-TS-IT00.0020
REQ-04.07.08-OSED-0001.0140	REQ-SOL.118-TS-IT00.0030

Table 8: Link to SESAR1 P04.07.08 requirements

-END OF DOCUMENT-