



Aeronautical Information Management System Description (TS) - Digital Integrated Briefing - Final Version

Document information

Project Title	Aeronautical Information Management
Project Number	13.02.02
Project Manager	Frequentis
Deliverable Name	Aeronautical Information Management System Description (TS) - Digital Integrated Briefing - Final Version
Deliverable ID	D120
Edition	00.01.02
Template Version	03.00.00

Task contributors

FREQUENTIS, EUROCONTROL, ENAV, NORACON THALES.

Abstract

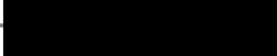
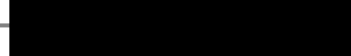
The goal of the 13.02.02 Project is to apply the SESAR concept of distributive, collaborative, and service oriented architecture to prototype the future AIM sub-system. The focus is on the evolution of the EAD elements in respect to the Digital NOTAM and Digital Integrated Briefing including MET information.

This document provides system technical requirements for implementing services and applications that cover Solution #34 - Digital Integrated Briefing. The concept is based on the consumption of digital aeronautical and MET data.

This document is a milestone deliverable for Release 5 / EXE-13.02.02-VP-461 as part of OFA ENB 02.01.02 AIM/MET.

2 Authoring & Approval

Prepared By - <i>Authors of the document.</i>		
Name & Company	Position & Title	Date
[REDACTED]	[REDACTED]	24/06/2016

Reviewed By - Reviewers internal to the project.			
Name & Company		Position & Title	Date
			24/06/2016
			24/06/2016
			24/06/2016
			24/06/2016
			24/06/2016
			24/06/2016

[illegible]

Approved for submission to the SJU By - <i>Representatives of the company involved in the project.</i>		
Name & Company	Position & Title	Date
[REDACTED]	[REDACTED]	24/06/2016
[REDACTED]	[REDACTED]	24/06/2016

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

			24/06/2016
			24/06/2016
			24/06/2016
			24/06/2016

6

Rejected By - *Representatives of the company involved in the project.*

Name & Company	Position & Title	Date

7

Rational for rejection

None.

8 Document History

Edition	Date	Status	Author	Justification
00.00.01	21/06/2016	Draft		New Document, ready for reviews.
00.01.00	22/06/2016	Final Draft		Changed edition number so it can be handed over for pre-assessment by SJU in order to progress, reviews, assessment and approval process in parallel. Will be updated to 01.00.00 once all findings are addressed.
00.01.01	30/06/2016	Final Draft		Handover to SJU after collecting all known issues
00.01.02	06/07/2016	Final		Updated to include requirements for SWIM enabled systems.

9 Intellectual Property Rights (Foreground)

10 This document is SJU Foreground.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Table of Contents

11	Table of Contents		
12	EXECUTIVE SUMMARY	7	
13	1 INTRODUCTION.....	8	
14	1.1 PURPOSE OF THE DOCUMENT.....	8	
15	1.2 INTENDED READERSHIP.....	9	
16	1.3 INPUTS FROM OTHER PROJECTS.....	10	
17	1.4 STRUCTURE OF THE DOCUMENT.....	10	
18	1.5 FUNCTIONAL BLOCK PURPOSE	11	
19	1.5.1 FB-2.11 Aeronautical Data Collection.....	11	
20	1.5.2 FB-2.12 Aeronautical Data Validation and Verification	11	
21	1.5.3 FB-2.13 Aeronautical Data Storage and Maintenance.....	11	
22	1.5.4 FB-2.14 AIM Product Assembling.....	11	
23	1.5.5 FB-2.15 Aeronautical Information Distribution.....	11	
24	1.5.6 FB-2.16 AIM System Management.....	12	
25	1.6 GLOSSARY OF TERMS.....	12	
26	1.6.1 AIXM 5.1 [11].....	12	
27	1.6.2 Digital NOTAM Error! Reference source not found.	12	
28	1.6.3 iWXXM [13].....	12	
29	1.7 ACRONYMS AND TERMINOLOGY	13	
30	2 GENERAL FUNCTIONAL BLOCK DESCRIPTION	16	
31	2.1 CONTEXT.....	16	
32	2.2 FUNCTIONAL BLOCK MODES AND STATES.....	16	
33	2.3 MAJOR FUNCTIONAL BLOCK CAPABILITIES.....	17	
34	2.4 USER CHARACTERISTICS.....	17	
35	2.4.1 Airspace Users.....	17	
36	2.5 OPERATIONAL SCENARIOS	17	
37	2.5.1 Pilot briefing.....	18	
38	2.5.2 Dispatcher / ARO briefing.....	19	
39	2.5.3 On-board Briefing Device (EFB).....	20	
40	2.6 FUNCTIONAL DECOMPOSITION AND ANALYSIS.....	21	
41	2.7 SERVICE VIEW	21	
42	2.7.1 Digital NOTAM.....	22	
43	2.7.2 Integrated Digital Briefing Service.....	22	
44	3 FUNCTIONAL BLOCK FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS	23	
45	3.1 CAPABILITIES.....	23	
46	3.1.1 Digital NOTAM.....	23	
47	3.1.2 Integrated Digital Briefing.....	39	
48	4 ASSUMPTIONS.....	86	
49	4.1 FLIGHT PLANS	86	
50	5 REFERENCES.....	87	
51	5.1 USE OF COPYRIGHT / PATENT MATERIAL /CLASSIFIED MATERIAL.....	87	
52	5.1.1 Classified Material.....	87	
53	APPENDIX A INTEGRATED DIGITAL BRIEFING HMI EXAMPLES	88	
54	A.1 EPIB HMI EXAMPLES	88	
55	A.1.1 Overview.....	88	
56	A.1.2 Airport View.....	89	
57	A.1.3 En-route View.....	90	
58	A.2 EFB HMI EXAMPLES	91	
59	A.2.1 EFB - Map View	91	

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

60	A.2.2 EFB - Airport NOTAM and MET.....	92
61	APPENDIX B DELETED REQUIREMENTS.....	93
62		

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles

www.sesarju.eu

63 **List of tables**64 **No table of figures entries found.**65 **List of figures**

66	Figure 1: This TS document's relationship to other SESAR deliverables.....	9
67	Figure 2: ePIB context.....	16
68	Figure 3: Pilot Briefing Scenario	18
69	Figure 4: Dispatcher Briefing Scenario	19
70	Figure 5: On-board Briefing Scenario	20
71	Figure 6: Solution #34 Digital Integrated Briefing - Service Landscape	21
72	Figure 7: HMI Example: ePIB Overview	88
73	Figure 8: HMI Example: Airport Digital NOTAM View.....	89
74	Figure 9: HMI Example: Airport MET View	89
75	Figure 10: HMI Example: En-route Digital NOTAM	90
76	Figure 11: HMI Example: En-route SIGMET/AIRMET View	90
77	Figure 12: HMI Example: Map View	91
78	Figure 13: HMI Example: Airport NOTAM and MET	92

79

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles

www.sesarju.eu

Executive summary

This document contains the Technical Specification for the Integrated Digital Briefing application and supporting services, part of Solution #34, and which was used to support the execution of validation exercise EXE-13.02.02-VP-461 in SESAR Release 5, governed by OFA ENB 02.01.02 AIM/MET.

The Technical Specification is comprised of the operational and architectural contexts description of the solution addressed, the supporting services involved and the technical requirements for implementing the software and systems to support the solution.

The SWIM compliancy aspects of the implementation of the solution addressed are primarily covered by the services involved in the implementation. The services are defined in ISRM and the exchanged data payloads in AIRM, both maintained by SESAR WP 8. The technical infrastructure aspects are addressed in conformity with the SWIM Yellow Profile Technical Specification maintained by SESAR 14.01.04.

To better understand the contents of this document, an *a priori* familiarization with the SESAR 13.02.02 D118 OSED[10] is recommended.

NOTE: SESAR 13.02.02 is/was executed as a mixed operations and systems project and as such it produced deliverables characteristic for both types of projects. This Technical Specification directly tracks the OSED[10] as there is no INTEROP or SPR document produced in the scope of the project. The SESAR 07.02 D42 TAD[9] governs both the 13.02.02 OSED and this Technical Specification.

NOTE: The notions of Digital Integrated Briefing and Integrated Digital Briefing can be used interchangeably, with the first form used mostly in connection with the Solution #34, while the second is used mostly in connection with the actual implementation of the application/service that was implemented. Semantically these are the same.

1 Introduction

The ATM world is increasingly relying on automated systems at all levels, which depend on correct and up-to-date information in order to perform their functions. For that, extensive databases were designed and deployed and services to maintain and serve the contained information were implemented. Yet static aeronautical information such as published in AIRAC cycles, can be overridden by information covering continuous/dynamical operational environment changes such as advertised by NOTAM and their respective machine understandable form Digital NOTAM.

The task of remembering which static information is overridden by dynamic one becomes the human operator's burden, be them the Pilot, Dispatcher, ARO and so on.

Currently the pre-flight briefing is mainly done in the form of a 'bulletin' or PIB given to the pilot, and containing the list of text based NOTAM in effect that could/may be relevant for the flight. The automatic filtering capabilities of such information is limited because the free text of the NOTAM, where the key information is provided, is not suitable for querying and filtering by classical implementations of briefing systems. The graphical representation of NOTAM information is quite limited, typically in the form of a circle with centre-point and radius representing the "area of possible influence". Identifying possible critical areas and situations as well as memorizing the related information put a significant workload on the operators.

Solution #34, Digital Integrated Briefing attempts to improve the assimilation and retention of such information by the human operator.

The main solution to this problem is the replacement of the current text based NOTAM and MET information with data that is provided in a "digital" form, i.e. understandable and capable of being processed by automated services.

For that, the implementation of the Solution has been divided in two main areas:

- The Integrated Digital Briefing application/service to collect all necessary data (Digital NOTAM and MET) needed and to prepare a compelling, graphically enhanced, better filtered ePIB package.
- The Digital NOTAM application/service needed for encoding classical NOTAM information in according to the Digital NOTAM specification **Error! Reference source not found..** The service is essential for implementing the Integrated Digital Briefing application/service.

Commercial as well as general aviation aircraft are expected to be increasingly equipped with Electronic Flight Bag (EFB) devices that support the pilot in flight and on the ground with flight documentation and situational awareness applications. With Digital NOTAM and MET information in suitable format, situations such as work area, temporary closed taxiway, closed runway, temporary obstacle, weather related situations and so on become visible on the electronic maps/charts of the EFB. The Integrated Digital Briefing Service is designed to tend the needs of providing ePIB and updates to it for EFB devices.

In the initial SESAR execution phase (up to and including Release 4), Project 13.02.02 did not have a counterpart operational package. Therefore, no Digital Integrated Briefing operational concept definition was available in a Detailed Operational Description (DOD) document. This situation has been partially improved later. Most requirements in this document can now be traced to the technical architecture described in SESAR 07.02 D42 TAD[9] – "*Step 1 Network Operations Sub-systems Technical Architecture Description*", in the scope of the Operational Focus Area (OFA) ENB02.01.02 AIM/MET.

1.1 Purpose of the document

The purpose of this document is to specify the implementation of the Integrated Digital Briefing and the Digital NOTAM application/services, the requirements these need to fulfil, the functional blocks these must cover, and the service architecture and interaction with/between consumer and consumed services.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

The document is a milestone deliverable part of Release 5 / EXE-13.02.02-VP-461, and as such it is to be used as:

- Input for reviewers, which will confirm the validation of the exercise's objectives.
- Documentation of the technical requirements an industrial software manufacturer must abide by when implementing software complying with Solution #34.

NOTE: In order to improve the understanding of this document it is important for the reader to become familiarized with the topics addressed here by first reading the final 13.02.02 D118 OSED[10].

The following figure gives a standardized picture of the document's relation to other deliverables, however, due to the above already mentioned exception, that project SESAR 13.02.02 is a mixed operational and systems project, the current Technical Specification traces the 13.02.02 D118 OSED[10] and indirectly the SESAR 07.02 D42 TAD[9].

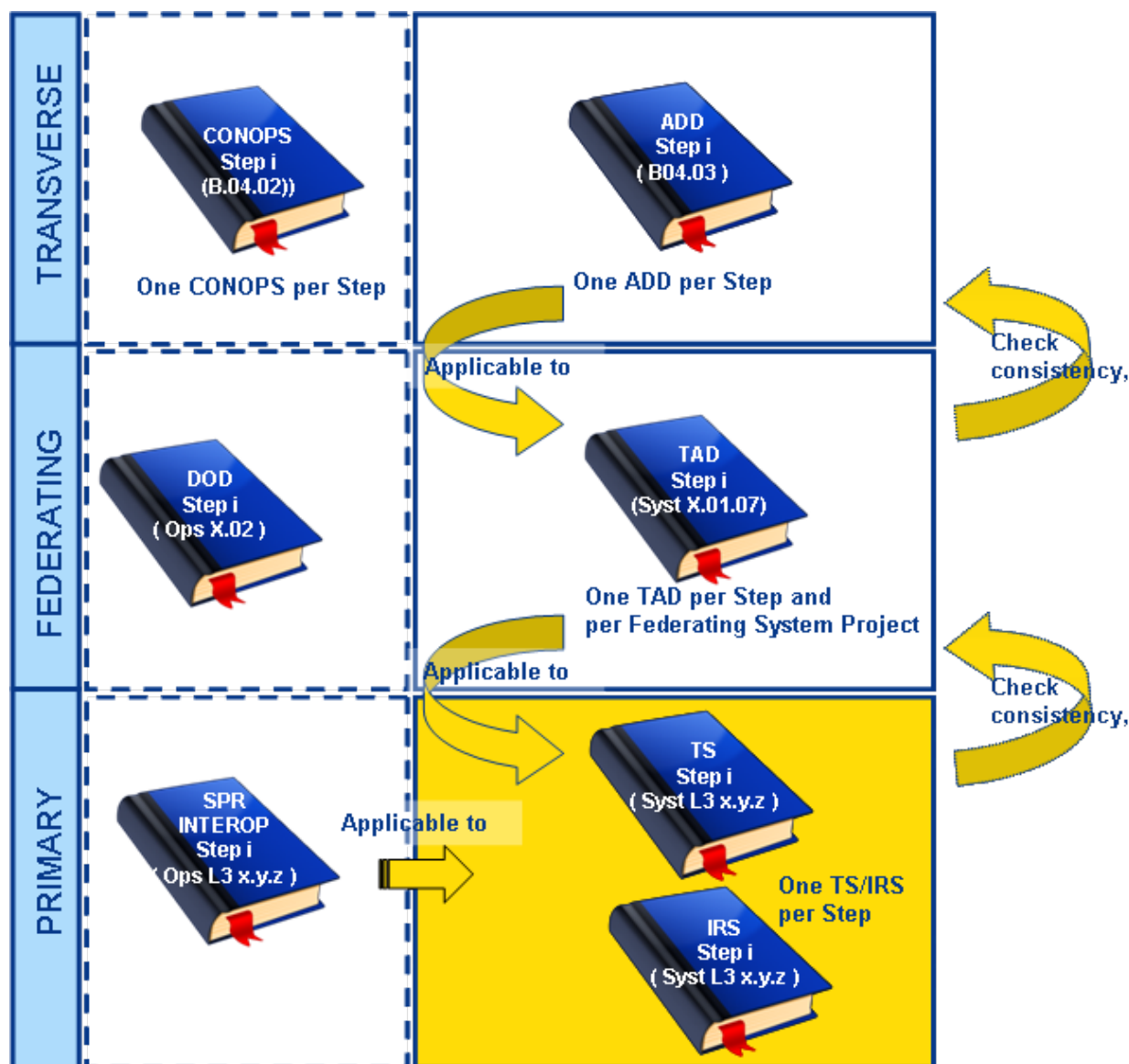


Figure 1: This TS document's relationship to other SESAR deliverables

1.2 Intended readership

- SJU

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

- The SESAR Technical Architect [WPB4.3]
- The federating project 07.02
- Airspace Users
- Contributors to SESAR Project 13.02.02
- Contributors to OFA ENB 02.01.02 AIM
- SWIM compliancy reviewers
- All external reviewers listed

1.3 Inputs from other projects

Validation exercise EXE-13.02.02-VP-461 used inputs from the following projects:

- 07.02 TAD
- 14.01.04 Interface specifications and Services Technical requirements
- 08.03.10 Service Specifications
- 08.01.03 Data Exchange Models Specifications
- Projects involved in OFA ENB 02.01.02 AIM

This Technical Specification is tailored to facilitate traceability to said input. E.g. the TAD is traced indirectly by tracing the technical requirements to the OSED[10] requirements and directly by links to functional blocks. The service definitions from 08.03.10 are traced by links to the respective services.

1.4 Structure of the document

NOTE: In order to improve the understanding of this document it is important for the reader to become familiarized with the topics addressed here by first reading the final 13.02.02 D118 OSED[10].

This document is structured according to the Technical Specification template v03.00.00 available in SESAR Extranet/Programme Library, with some adaptations to the scope of the solution addressed.

As such, it contains the information on the following aspects:

- Functional Block related:
 - o Coverage
 - o Decomposition
 - o Analysis
 - o Requirements
- Explanation of technical terms
- Description of operational scenarios
- Description of targeted users and their characteristics
- References to other sources
- Annexed Information
 - o HMI Examples
 - o Deleted requirements

1.5 Functional block Purpose

The functional blocks addressed by EXE-13.02.02-VP-461 are described in detail in [9](07.02. TAD) Section 2.3.2.1 as part of section 2.3 "AIM – Aeronautical Information Management".

In general all configuration items used in this document are referencing the Integrated Roadmap DS-15[7].

1.5.1 FB-2.11 Aeronautical Data Collection

This functional block provides following functionalities:

- **Data collection** which ensures that the required up-to-date information is received from the appropriate authorised originating sources, e.g. Government Agencies, ANSPs, Airport Operators, CNS providers, METEO providers, etc.

1.5.2 FB-2.12 Aeronautical Data Validation and Verification

This functional block represents.

- **Data Quality Management** which ensures that the data received from the data originators is verified against the quality requirements (i.e. accuracy, resolution, integrity, traceability, timeliness, completeness and format) before being committed (validation) into the database. Data Quality Management in this functional block includes all the processes and actions necessary to ensure that the delivered data meets the relevant data quality criteria.

1.5.3 FB-2.13 Aeronautical Data Storage and Maintenance

This functional block represents functionalities ensuring the completeness, coherence and up-to-date of the Aeronautical Information data base.

1.5.4 FB-2.14 AIM Product Assembling

This functional block represents the data assembly into a product ensuring the quality aspects of aeronautical data within the various products. To reflect the difference in the production of the various types of aeronautical data, following functionalities have been identified:

- **Production of Static Data** (e.g. those used in AIP, AIC, SUP, Charts and Digital Data sets);
- **Production of Dynamic Data** (e.g. NOTAM and Digital NOTAM);

The data covered are the aeronautical data (i.e. those specified by Annex 15 and related ICAO SARPS, Guidance Documents and Procedures). Depending on local implementation it may include datasets (e.g. Terrain, Obstacles, Airspace, Aerodrome Mapping). This breakdown does not address the granularity in which the data are established (raw / integrated), nor the form (Digital / paper / semi-digital) in which they are produced / published.

1.5.5 FB-2.15 Aeronautical Information Distribution

In the scope of this Functional block the term "product" represents the information delivered to the end user. It can be in printed or electronic form, being the result of a standard or customised query.

The Functional block covers the activities necessary to make the required aeronautical information available to the end user in different form and formats (i.e. paper, file format (e.g. PDF file), text or digital message and dataset).

It provides following functionalities:

- **Information Delivery** which retrieves the data to deliver the required product (e.g. AIP in paper or electronic form, result of database query) containing the most up-to-date

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

information. This sub-function is responsible for updating the products according either to required production cycle timeframe (e.g. AIRAC cycle) or to evolution in the production tools (e.g. maintenance of standard queries in relation with database evolution).

- **Quality Management** which ensures that the data produced meets the relevant data quality standards

1.5.6 FB-2.16 AIM System Management

This functional block represents following functionalities:

- **Technical Monitoring and Control** which ensure that the tools used in the data production chain, as well as in the AIS Provision chain are working properly in accordance with user requirements and service level agreement specifications.
- **User Management**
- **Source Management**
- **Quality Management System** which is a collection of business processes focused on achieving the policy and quality objectives in order to meet customer requirements expressed in various international standards regulating the provision of aeronautical data/information. It is expressed as the organizational structure, policies, procedures, processes and resources needed to implement quality management.

1.6 Glossary of terms

1.6.1 AIXM 5.1 [11]

An XML based exchange model of aeronautical information. It covers all encountered aeronautical features known today, including (but not limited to) details such as:

- Geographical location
- Geometry
- Identifiers
- Specifics (such as radio frequency for NAVAIDs, and so on)
- Temporality aspects

1.6.2 Digital NOTAM Error! Reference source not found.

Based on AIXM 5.1[11], it is an XML extension thereof, which also extends the information provided by a classical text based NOTAM by enriching it with (but not limited to) the following information:

- Reference to the AIXM 5.1 data describing the affected aeronautical feature and affected properties thereof
- Precise geographical location and/or
- Geometry (if available and necessary)
- Very detailed temporality aspects data
- Metadata

1.6.3 IWXXM [13]

IWXXM (ICAO Meteorological Information Exchange Model) is a format for reporting weather information in XML. IWXXM includes XML-based representations for products standardized in International Civil Aviation Organization (ICAO) Annex III and World Meteorological Organization (WMO) No. 49, Vol II, such as METAR, SPECI, TAF, and SIGMET. IWXXM products are used for operational exchanges of meteorological information for use in aviation.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

283 Unlike the traditional forms of the ICAO Annex III / WMO No. 49 products, IWXXM is not intended to
 284 be directly used by pilots. IWXXM is designed to be consumed by software acting on behalf of pilots,
 285 such as display software.

286 1.7 Acronyms and Terminology

Term	Definition
ADD	Architecture Definition Document
AIM	Aeronautical Information Management
AIRM	Aeronautical Information Reference Model
AIRMET	Airmen's Meteorological Information
AIXM	Aeronautical Information eXchange Model
AIFS	Aeronautical Information Feature Service
AIMS	Aeronautical Information Mapping Service
AMDB	Aerodrome Mapping Data Base
AMIS	Aerodrome Mapping Information Service
AMXM	Aerodrome Mapping eXchange Model
ARO	Airport Reporting Office(Officer)
ATM	Air Traffic Management
CQL	Contextual Query Language
DOD	Detailed Operational Description
EAD	European Aeronautical Database
E-ATMS	European Air Traffic Management System
EFB	Electronic Flight Bag
ePIB	Digitally enhanced PIB / electronic PIB
FPL	Flight Plan
HMI	Human-Machine Interface
HTTP	HyperText Transfer Protocol
IRS	Interface Requirements Specification
INTEROP	Interoperability Requirements

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Term	Definition
ISRM	Information Service Reference Model
iWXXM	ICAO Meteorological Information Exchange Model
MET	METeorological information/data
METAR	Aerodrome Meteorological Routine Report / Meteorological Aerodrome Report
NOF	NOTAM Office
NOTAM	NOtice To AirMen
OFA	Operational Focus Area
OGC	Open Geographical Consortium
OSD	Operational Service and Environment Definition
PIB	Pre-flight Information Bulletin
SESAR	Single European Sky ATM Research Programme
SIGMET	Significant Meteorological Information
SJU	SESAR Joint Undertaking (Agency of the European Commission)
SJU Work Programme	The programme which addresses all activities of the SESAR Joint Undertaking Agency.
SESAR Programme	The programme which defines the Research and Development activities and Projects for the SJU.
SOA	Service Oriented Architecture
SWIM	System Wide Information Management
SWIM TI	SWIM Technical Infrastructure
SPR	Safety and Performance Requirements
TAF	Terminal Aerodrome Forecast
TS	Technical Specification
TAD	Technical Architecture Description
VAMC	Volcanic Ash Mass Concentration
WFS	Web Feature Service (OGC)
WMS	Web Map Service (OGC)

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

founding members



EUROPEAN UNION



EUROCONTROL

Avenue de Cortenbergh 100 | B -1000 Bruxelles

www.sesarju.eu

2 General Functional block Description

2.1 Context

The main context of the validation exercise EXE-13.02.02-VP-461 is the production of ePIB for the End User (see section Airspace Users).

The following figure depicts the complete contextual architecture of the Integrated Digital Briefing Solution including supporting services as planned for use in validation exercise EXE-13.02.02-VP-461.

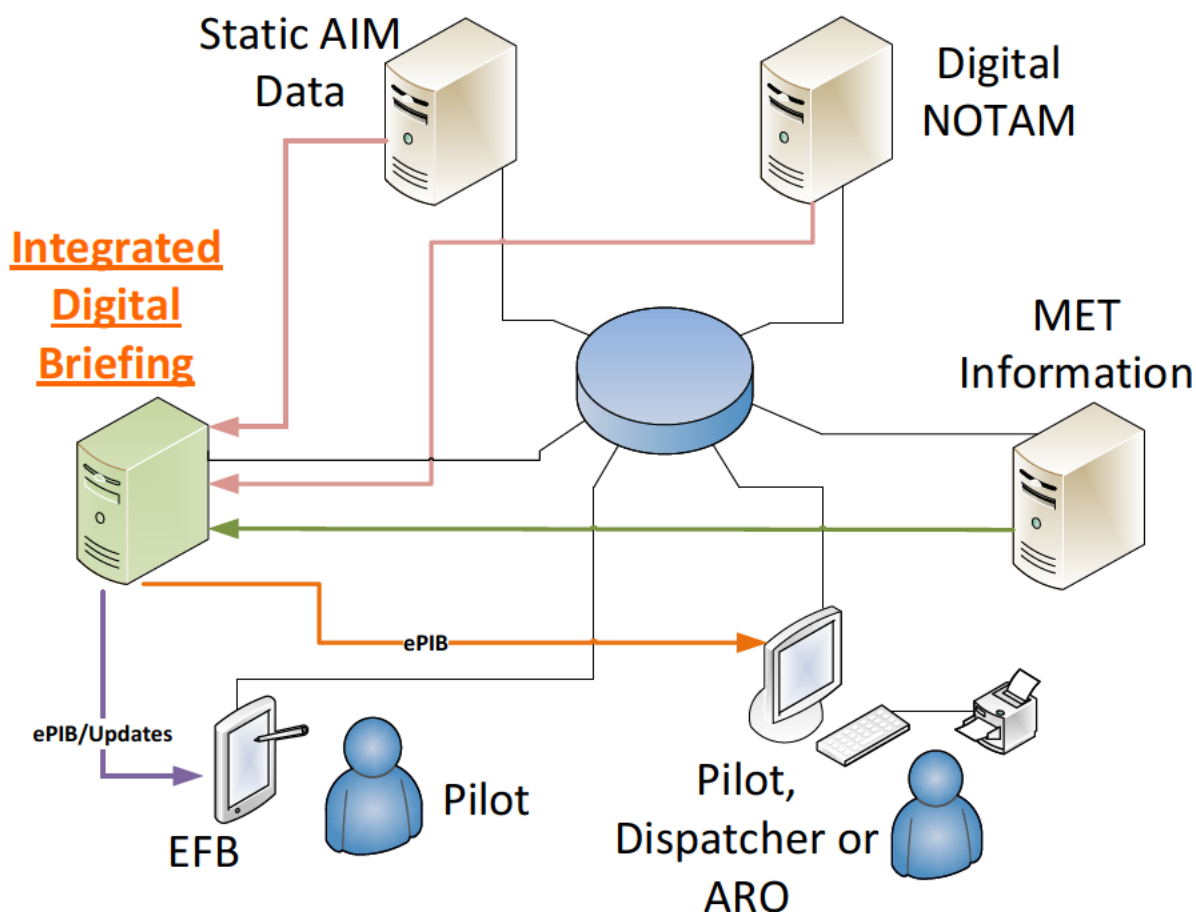


Figure 2: ePIB context

The ePIB consists of a graphical and text representation of all circumstances in effect for the duration of the flight including a margin of a few hours to accommodate for possible delays.

The ePIB is produced by the Integrated Digital Briefing Prototype Application which provides the HMI for the End User (i.e. a Pilot with access to, or a proprietary device, EFB featuring a web browser with Internet connection) as the consumer.

2.2 Functional block Modes and States

Due to the nature of pilot briefing no differentiable modes and states of operation of the Integrated Digital Briefing application/service can be isolated.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Under normal operational circumstances, the application/services will operate using real-world data available at the time it is used. No simulated situations are necessary for training purposes.

For training, validation and testing purposes, the Integrated Digital Briefing service/application can be configured to consume services that feed it with data carefully prepared in advance. This is made possible because of the SWIM approach used to design and implement the services. This has been demonstrated during the execution of validation exercise EXE-13.02.02-VP-461 as well as at the SWIM Global Demo 2016. In both cases, predefined scenarios have been used to support the validation of the targeted concepts and/or to demonstrate the capabilities of the implemented solution.

Necessary updates to the software can be done during operation by using parallel deployments of service instances which would facilitate a seamless switching from an older version of the software to a newer one, thus removing the necessity of operating in maintenance mode and so on.

Major outages can be overcome by deploying multiple service instances at various locations and through the use of load balancers, clustering and cloud technologies. If the afferent databases are to be regarded as separate entities from services, these can also be made highly available through the same approach mentioned afore.

2.3 Major Functional block Capabilities

The major functional block capabilities are described in section 1.5 of this document.

2.4 User Characteristics

All users of the Integrated Digital Briefing system are using it to prepare the briefing package referred to as the ePIB for a given flight described by the data contained in a FPL.

2.4.1 Airspace Users

2.4.1.1 Pilot

The Pilot is the final user of the ePIB, as the user to actually perform a flight. As such, the Pilot is the actual final user of the ePIB information.

The Pilot can also make use of an EFB appliance/device that has a data connection to the Integrated Digital Briefing system. The EFB can request a full ePIB or updates to it.

2.4.1.2 Dispatcher / ARO

The Dispatcher and ARO are users that prepare the briefing information for a Pilot. As such, they act as an intermediary in situation where the Pilot does not have direct access to the Integrated Digital Briefing system.

2.5 Operational Scenarios

There are several operational scenarios or use cases covered by this technical specification. All of them address the preparation and provision of a briefing package known as ePIB to the final user, the Pilot.

See [10] OSED, section 5 for a more detailed description of all operational scenarios or use cases.

2.5.1 Pilot briefing

The first operational scenario is the one where the Pilot is using the briefing application to prepare and obtain the ePIB to be used for a given flight.

See [10] OSED, section 5.1 for a more detailed description.

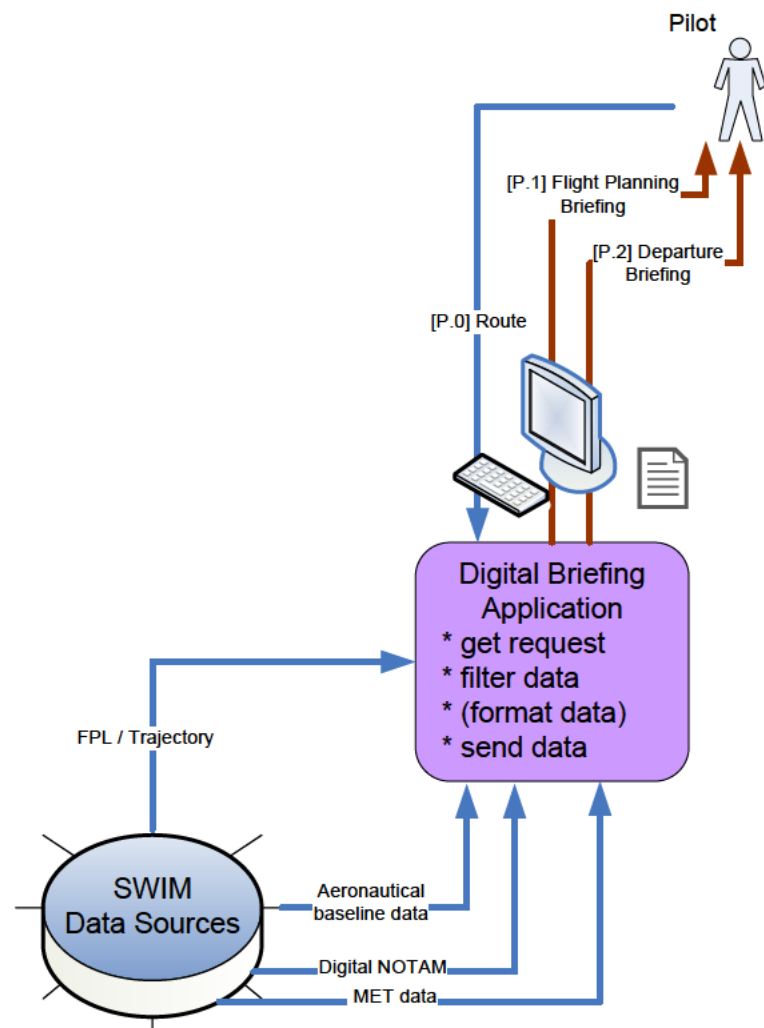


Figure 3: Pilot Briefing Scenario

2.5.2 Dispatcher / ARO briefing

In this operational scenario, the Dispatcher or ARO is acting as an intermediary for the Pilot and is preparing the ePIB package to be handed over to the Pilot. The actions performed by the Dispatcher / ARO in this regard are almost identical all the way to the point where the actual hand-over takes place.

See [10] OSED section 5.2 for a more detailed description.

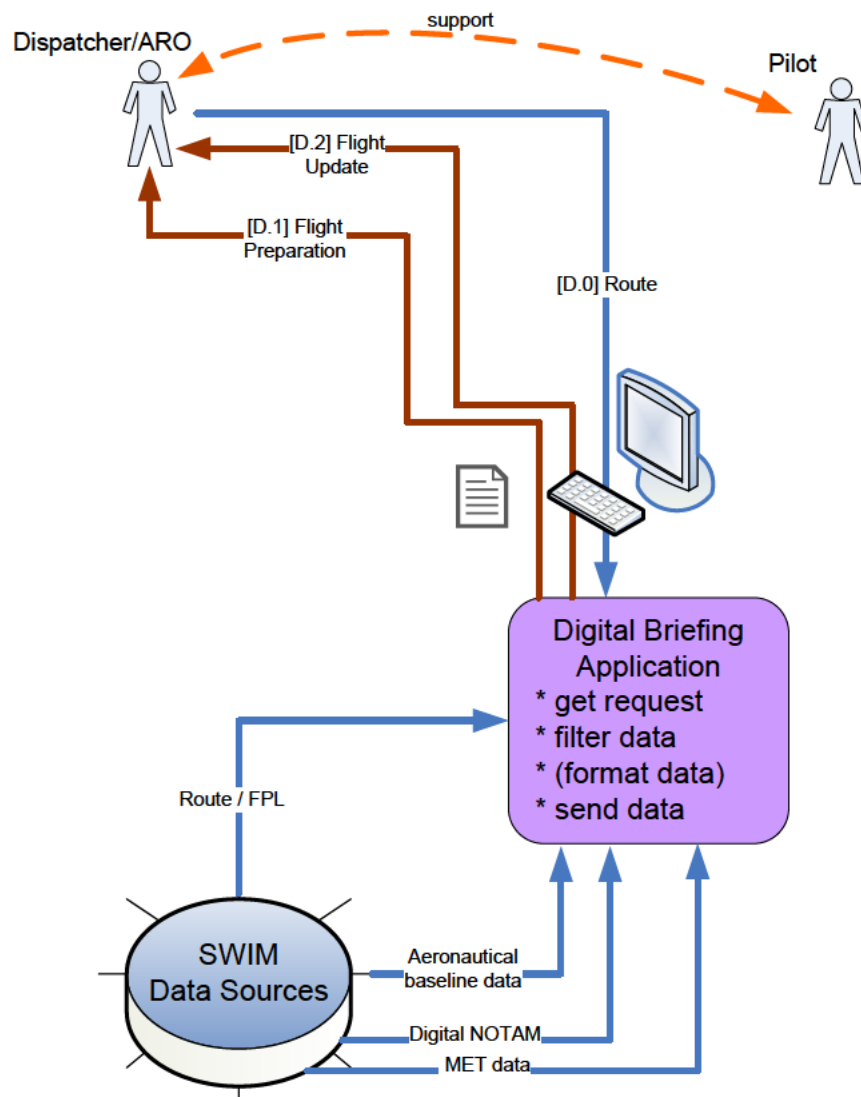


Figure 4: Dispatcher Briefing Scenario

2.5.3 On-board Briefing Device (EFB)

In the event the Pilot owns an EFB device capable of connecting to the Integrated Digital Briefing system, the ePIB preparation can be done using the EFB device if it possesses the capabilities of a fully implemented web browser application (available as OTS from commercial/ sources)

See [10] OSED section 5.3 for a more detailed description.

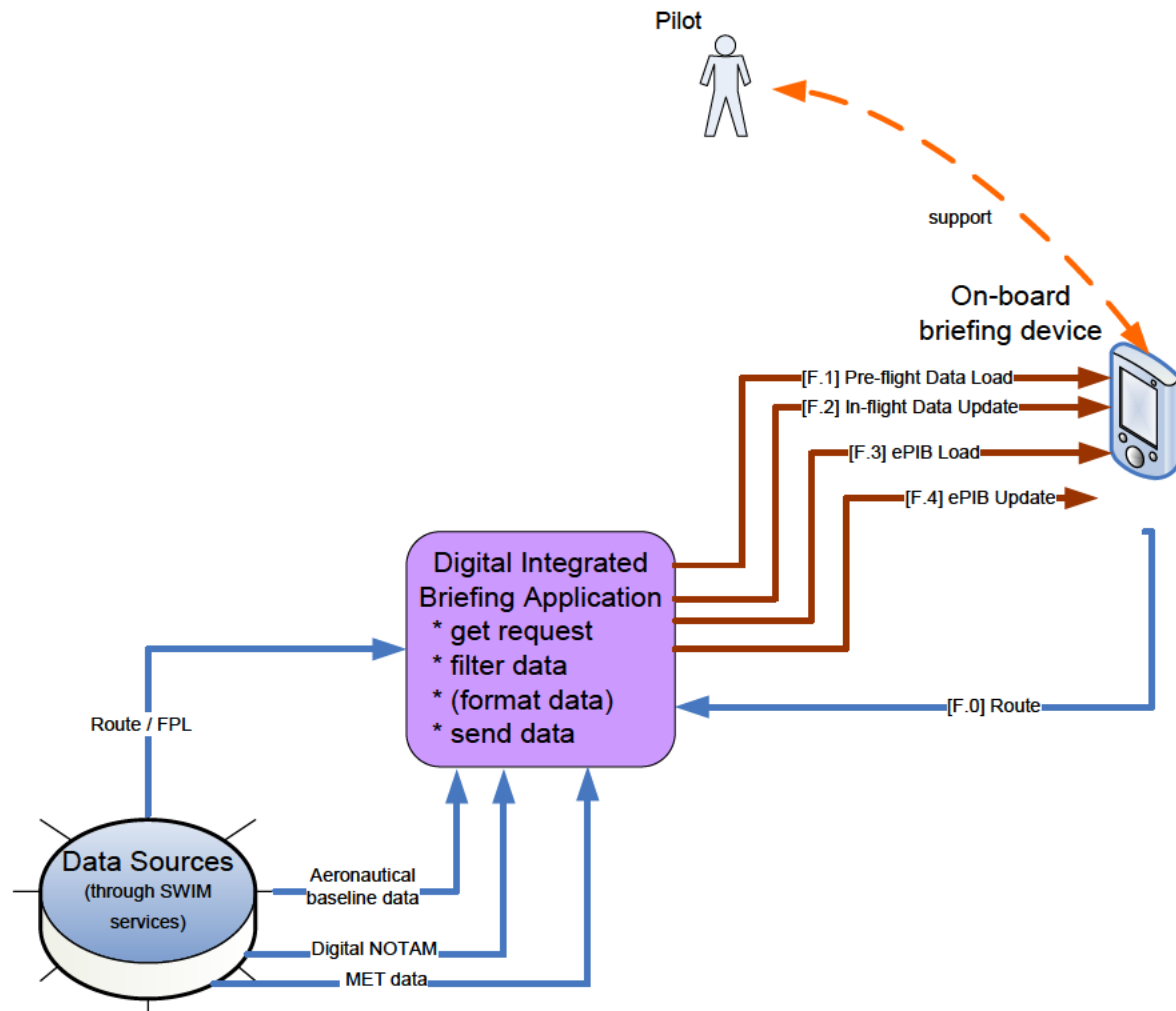


Figure 5: On-board Briefing Scenario

2.6 Functional decomposition and analysis

Refer to section 1.5 of this document.

Also refer to [9] 07.02 D42 TAD Section 2.3.2.1.

2.7 Service View

The Integrated Digital Briefing solution is implemented as a consumer of several SWIM compliant services and their provided data, as well as a provide service of ePIB and briefing updates data.

The SWIM compliant services contributing as data providers for the solution are:

- Aeronautical Information Feature – AIFS
- METAR, TAF
- METHazardObservation
- METHazardEnrouteForecast
- AirportMETALert
- VAMCInformation

The IntegratedDigitalBriefing service is the main beneficiary/consumer of the services mentioned afore, and in turn it is itself a SWIM compliant provider for its beneficiaries, the end-users HMI and/or EFB devices that can be alternatively used with properly implemented client applications running on them.

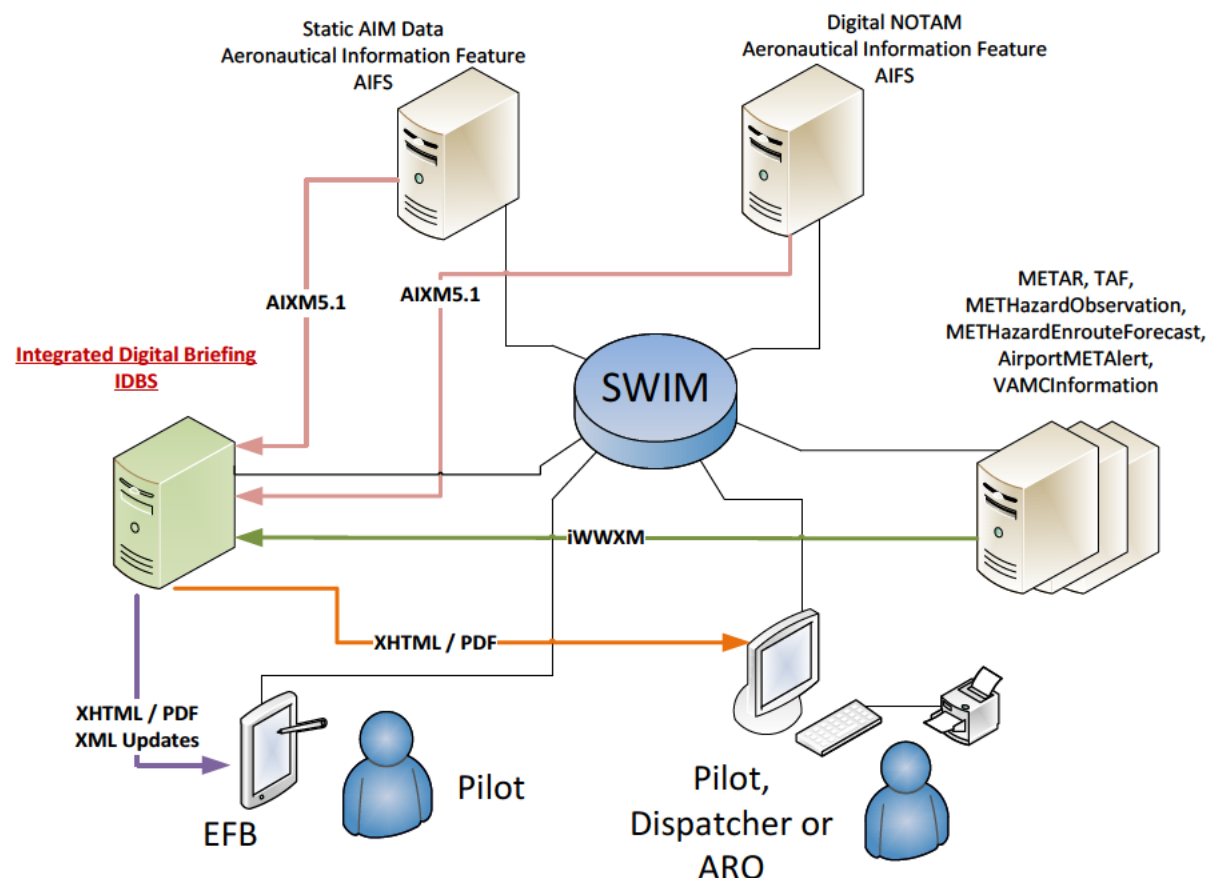


Figure 6: Solution #34 Digital Integrated Briefing - Service Landscape

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

2.7.1 Digital NOTAM

The supporting service “Aeronautical Information Feature – Digital NOTAM” is a primary source of briefing data for the Integrated Digital Briefing service/application. The service name is abbreviated as AIFS and is defined in the latest version of ISRM (currently 2.0).

The service is providing AIXM 5.1 Digital NOTAM data in a SWIM compliant way and is covering IER-13.02.02-OSD-0001.0009.

A prerequisite for the service is the Digital NOTAM encoding system/application which covers the following functional blocks(FB) and their respective functions:

- FB: Aeronautical Data Collection
 - o Data Collection
- FB: Aeronautical Data Validation and Verification
 - o Data Quality Management
- FB: AIM Product Assembly
 - o Production of Dynamic Data
- FB: Aeronautical Information Distribution
 - o Information Delivery
 - o Quality Management

2.7.2 Integrated Digital Briefing Service

The solution implementation addressed by this Technical Specification and demonstrated in EXE-13.02.02-VP-461 as well as at the SWIM Global Demonstration 2016 in Rome, is providing a service to consumers, which is now defined in ISRM 2.0 under the name “Integrated Digital Briefing”.

This service covers the functional block FB-2.15 “Aeronautical Information Distribution” service, fulfilling both its function “Information Delivery” and “Quality Management”.

Project SESAR 08.03.10 already adopted the service as “proposed” and scheduled it for inclusion into ISRM 2.0.

3 Functional block Functional and non-Functional Requirements

3.1 Capabilities

3.1.1 Digital NOTAM

[REQ]

Identifier	REQ-13.02.02-TS-0101.0003
Requirement	<p>When encoding a Digital NOTAM data, the operator shall not be required to manually input values that are already available as pre-defined lists or that are the result of defined consistency rules.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data.</p> <p>Post-conditions: All values that are pre-defined have to be filled automatically based on consistency rules.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Input NOTAM Data List
Status	<In Progress>
Rationale	The actor has to have access to an easy to use HMI where he is able to encode a digital NOTAM and where the required input data are pre-defined in list/dropdown boxes.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0010	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0101.0004
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The application shall automatically generate and present to the operator the equivalent Text NOTAM, applying the decoding rules contained in the Digital NOTAM Event Specification.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data.</p> <p>Post-conditions: After finishing the encoding, the textual presentation of the Digital NOTAM should be displayed.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Generate ICAO NOTAM Text
Status	<In Progress>
Rationale	The actor has to have access to an easy to use HMI where he is able to encode a digital NOTAM and during NOTAM encoding the ICAO NOTAM text will be presented in a separate Edit box.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0012	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0102.0002
Requirement	<p>At the end of the encoding process, the application shall automatically execute checks that detect the violation of defined business rules (data consistency checks) or data which is statistically out of range (data plausibility checks). As a minimum, the data validation rules specified for the relevant event in the Digital NOTAM Event Specification shall be applied.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data.</p> <p>Post-conditions: Violation checks are automatically started after the encoding was done by the Actor.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Validation Checks Execution

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Status	<In Progress>
Rationale	After the action has entered a digital NOTAM, an automatical check against defined business rules is performed.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Validation and Verification	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0015	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0103.0001
Requirement	<p>The partial or total failure of a data validation check shall be notified to the operator.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data.</p> <p>Post-conditions: After the encoding the validation checks are done, and all errors and warnings are presented to the Actor.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Validation Error Notification
Status	<In Progress>
Rationale	After all checks are performed the result of all failed checks has to be presented.
Category	<Safety>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Validation and Verification	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0016	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0103.0002
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The data verification shall always be executed and the result shall be communicated to the operator ahead of any attempt for sending the Digital NOTAM encoded data to the next intended user.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data.</p> <p>Post-conditions: After encoding Digital NOTAM a validation check is performed and the result is communicated to the operator.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Mandatory Validation Execution Result Communication to Operator
Status	<In Progress>
Rationale	After the checks / validations are performed the errors/warnings are displayed, the action has to have the possibility to confirm sending also with this check faults.
Category	<Safety>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Validation and Verification	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0017	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0103.0007
Requirement	<p>The application shall enable the operator to dismiss particular error or warning messages that are considered not applicable in a particular data encoding situation.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data and to see the particular error and warning.</p> <p>Post-conditions: Some warnings or errors are dismissed.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Validation Error Dismissible by Operator
Status	<In Progress>
Rationale	After the checks / validations are performed the errors/warnings are displayed, the actor has the possibility to dismiss some error/warnings.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Validation and Verification	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0018	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0103.0008
Requirement	<p>The application shall enable the operator to send the Digital NOTAM proposal to the next intended user (could be another level of the Data Origination chain or the NOTAM Provider) through a direct digital connection.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data and send them as proposals.</p> <p>Post-conditions: After encoding the Digital NOTAM it is send as proposal.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Send Proposal
Status	<In Progress>
Rationale	After the encoding of a DIGITAL NOTAM the actor has to have the possibility to send this as a proposal.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0019	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0101.0009
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The application should enable the operator to check if the Digital NOTAM proposal reception was acknowledged by the recipient system.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data and send them as proposals.</p> <p>Post-conditions: After encoding the Digital NOTAM it is sent as proposal and the system receives an acknowledgement and displays it on the HMI.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Recipient System Acknowledgement
Status	<In Progress>
Rationale	The actor has to have the possibility to get the information of the status of the encoded NOTAM if it was received by the recipient recipient recipient system.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0020	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0101.0010
Requirement	<p>The application shall enable the operator to receive a Digital NOTAM proposal provided by a Data Originator through a direct digital connection.</p> <p>Pre-conditions: The System has a Service for receiving Digital NOTAM proposal.</p> <p>Post-conditions: The Digital NOTAM proposal is received by the Service of the application.</p> <p>Actors: Operator external system</p>
Title	Digital NOTAM Receive Proposal From Data Originator
Status	<In Progress>
Rationale	The actor has to have the possibility to get also NOTAM data send by another system.
Category	<Functional>
Validation Method	
Verification Method	<Test>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0021	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0101.0011
Requirement	<p>The application shall enable the operator to annotate a Digital NOTAM proposal.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to annotate Digital NOTAM proposal.</p> <p>Post-conditions: The Digital NOTAM proposal is annotated.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Proposal Annotation
Status	<In Progress>
Rationale	The actor has to have the possibility to annotate a digital NOTAM proposal via the HMI.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0022	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0101.0012
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The application shall enable the operator to send feed-back to the originator of a Digital NOTAM proposal. This could be in the form of:</p> <ul style="list-style-type: none"> - requests for clarification; - an improved Digital NOTAM proposal; - a proposal to abandon the issuing of a NOTAM (because it does not qualify as a NOTAM); - the final published Digital NOTAM. <p>Pre-conditions: The Actor has access to the HMI where he is allowed to send feedback to Digital NOTAM proposal.</p> <p>Post-conditions: The feedback is send to the originator of the Digital NOTAM proposal.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Operator Feedback to Originator
Status	<In Progress>
Rationale	The actor has to have the possibility to use the HMI as communication base with the originator of the NOTAM proposal to send feedback or to extend/change data.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0023	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0102.0003
Requirement	<p>The application shall enable the operator to visualise the feedback received from the next intended user on a Digital NOTAM proposal.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to see Digital NOTAM proposal feedback.</p> <p>Post-conditions: The feedback for a Digital NOTAM proposal is displayed.</p> <p>Actors: Operator</p>
Title	Digital NOTAM Display NOTAM Proposal Feedback Text
Status	<In Progress>
Rationale	The actor has to get the information if the operator has changed/extend data of a NOTAM proposal.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0024	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0103.0003
Requirement	<p>The application shall perform legal recording actions of all steps performed during the date encoding and transmission: input from the responsible authority, data sent out, acknowledgement / feed-back received.</p> <p>Pre-conditions: All actions in the application have to be recorded.</p> <p>Post-conditions: For all actions in the application, a log record is generated.</p> <p>Actors: application</p>
Title	Digital NOTAM Legal Recording
Status	<In Progress>
Rationale	All actions done by any user has to be recorded.
Category	<Safety>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Validation and Verification	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0026	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0103.0004
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	The application shall enable retrieving the legal recording data, on request. Pre-conditions: For all actions in the application, a log record is generated. Post-conditions: The records are sent to the requesting application. Actors: Operator
Title	Digital NOTAM Legal Recording Data Retrieval
Status	<In Progress>
Rationale	All actions done by any user has to be recorded and on request this records have to be submitted.
Category	<Safety>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Validation and Verification	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0027	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0003
Requirement	A graphical presentation of the airport/airspace context should include the possibility for the Data Originator and the NOTAM Provider to visualise graphically and/or as text annotations the information about the operational status of the features in the viewport.
Title	View of features operational status
Status	<In Progress>
Rationale	The operational status of airport/airspace is of high importance and should be made available through easy access and a graphical display for enhanced situational awareness. Note that there may be situations where it would be desirable to view the information as text annotations even if it's possible to present it graphically. (Intended Function O.1, N.1)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0003	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Enabler>	AIMS-19a	<Partial>
-------------	-----------	----------	-----------

[REQ]

Identifier	REQ-13.02.02-TS-0201.0005
Requirement	For those aeronautical information elements that can be presented graphically, the human-machine interface should enable the Data Originator to graphically select the feature(s) that are affected by the Digital NOTAM encoding.
Title	Encoding through graphical interface
Status	<In Progress>
Rationale	Graphically selecting a feature is much faster and more user friendly than having to search in the database for a feature, using keywords. However, this might be limited to only those features that can be represented graphically. (Intended Function O.2)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0005	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0006
Requirement	If the Digital NOTAM encoding by the Data Originator modifies the shape, size or another element that is visible in the graphical view for a feature, the graphical view should be updated as necessary.
Title	Updated graphical view
Status	<In Progress>
Rationale	The Data Originator shall be able to rely on that the graphical view of the information is according to the valid NOTAM encoding. This can help identifying certain typing errors (such as a mistyped airspace border coordinate). (Intended Function O.3)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0006	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Identifier	REQ-13.02.02-TS-0201.0011
Requirement	Where allowed by data accuracy/data resolution requirements, for geometrical and geographical data, the Data Originator should be enabled to graphically define the shape or position of an element that is needed for the Digital NOTAM encoding, for example by drawing on a map the borders of a temporary restricted area that is being designed with the application.
Title	Graphical definition of shapes and positions
Status	<In Progress>
Rationale	A graphical tool enables a visual check while designing shapes and positions, which reduces the risk for large errors. However, this is not possible for those geographical/geometrical elements that are the result of a computational process. (Intended Function O.2, O.6)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0011	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0077
Requirement	The Data Originator and NOTAM Provider should be able to create and store templates for frequently occurring digital NOTAM event types.
Title	Digital NOTAM Templates
Status	<In Progress>
Rationale	This will make it easier and faster for the operator to encode events that occur frequently and which require the input of a significant amount of identical data. This is particularly expected to occur for ad-hoc airspace reservations, airport / runway usage restrictions, etc. It is less required for simpler events, such as navaid outages, airport closures, etc. when the amount of data input is less important. (Intended Functions O.2, N3)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Storage and Maintenance	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0077	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

[REQ]

Identifier	REQ-13.02.02-TS-0201.0079
Requirement	The Data Originator shall be able to send a message to the NOTAM Provider requesting an update to a NOTAM Proposal.
Title	Update NOTAM Proposal Request
Status	<In Progress>
Rationale	This will enable the NOTAM Originator to alert the NOTAM Provider that an update to a NOTAM proposal is under preparation, in order for the NOTAM Provider to consider the publication process of the previously sent NOTAM proposal. The previously sent NOTAM Proposal could by the time of the update request in the publication process still be subject to modification, whereas the publication process would be stopped, pending the update to be sent. The update request could also include the request for "replacement" or "cancel" of a Digital NOTAM proposal, for an Event that was already officially published (Intended Function O.4, N.2)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0079	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0080
Requirement	The Data Originator shall be able to send an update to a NOTAM Proposal previously sent to the NOTAM Provider.
Title	Send Update NOTAM Proposal
Status	<In Progress>
Rationale	This will enable the Originator to update a previously sent NOTAM proposal, in response to the NOTAM Providers feed back or based on the Originators own request to update the proposal. (Intended Function O.6)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0080	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

499

[REQ]

Identifier	REQ-13.02.02-TS-0101.0001
Requirement	<p>The application shall be able to retrieve and present to the operator the baseline data that is valid at the start of validity of the Digital NOTAM that is currently encoded.</p> <p>Pre-conditions: The Actor has access to the HMI were the Baseline data will be presented.</p> <p>Post-conditions: After the encoding only valid baseline data are stored.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Display Baseline Data
Status	<Validated>
Rationale	The actor has to have access to an easy to use HMI where he is able to encode a digital NOTAM Event.
Category	<Functional>
Validation Method	
Verification Method	<Test>

500

501

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Collection	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0007	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

502

503

[REQ]

Identifier	REQ-13.02.02-TS-0101.0002
Requirement	<p>The application shall enable an operator to encode the Digital NOTAM data in accordance with the relevant scenario of the Digital NOTAM Event Specification. This is an interoperability requirement.</p> <p>Pre-conditions: The Actor has access to the HMI were the Baseline data will be presented.</p> <p>Post-conditions: The Digital NOTAM is encoded regarding the Event specification.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM ICAO NOTAM Encoding
Status	<Validated>
Rationale	The actor has to have access to an easy to use HMI where he is able to encode a digital NOTAM Event according the Event specification.
Category	<Functional>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Collection	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0008	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0102.0001
Requirement	<p>When encoding Digital NOTAM data, the operator shall not be required to manually input baseline data that is necessary for the completeness of the Event encoding. Such data shall be automatically retrieved and used by the application.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data.</p> <p>Post-conditions: During the encoding of digital NOTAM data, some baseline data have to be filled automatically according rules.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Input Baseline Data
Status	<Validated>
Rationale	The actor has to have access to an easy to use HMI where he is able to encode a digital NOTAM.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Collection	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0009	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0002
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	If the Digital NOTAM to be encoded concerns an airspace related feature, the Data Originator and NOTAM Provider should be supported by a graphically display of the route and airspace structure within the FIR(s), CTR(s) or TMA(s) concerned. As a minimum, this shall contain the outer boundary and the identification of the airspace, the international airports locations and identifications and any airspace and route data that is critical for assessing the impact of the event on the existing route/airspace structure.
Title	Graphical display Airspace features for encoding
Status	<Validated>
Rationale	The displayed graphical airspace features (such as a restricted area, a route segment, a navaid etc) provides the means for the Data Originator and NOTAM Provider to understand the airspace context in which the Digital NOTAM is provided. This awareness combined with the expertise of the operator can help avoiding certain information errors. (Intended Function O.1, N.1) Validated through EXE-13.02.02-VP-460
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0002	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0004
Requirement	The feature affected by the Digital NOTAM that is being currently encoded shall be visibly highlighted to the Data Originator and NOTAM Provider.
Title	Visual highlight of affected encoded feature
Status	<Validated>
Rationale	The highlighted feature will enable the Data Originator and NOTAM Provider to easily spot the subject that is affected by the change. This can prevent certain data encoding errors, such as using a wrong feature. (Intended Function O.2, O.3, N.4) Validated through EXE-13.02.02-VP-460
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0004	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0101
Requirement	If the Digital NOTAM to be encoded concerns an airport related feature, the Data Originator and NOTAM Provider should be supported by a graphically displayed layout of the airport concerned. As a minimum, this shall contain the layout of the runways, the identification of their thresholds, the airport reference point and the layout of the terminal area
Title	Graphical display Airport features for encoding
Status	<Validated>
Rationale	The displayed graphical airport features (such as a RWY, TWY, etc.) provides the means for the Data Originator and NOTAM Provider to understand the airport context in which the Digital NOTAM is provided. This awareness combined with the expertise of the operator can help identifying certain information errors. (Intended Function O.1, N.1) Validated through EXE-13.02.02-VP-460
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	AIM Product Assembling	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0001	<Partial>
<SATISFIES>	<Enabler>	AIMS-19a	<Partial>

3.1.2 Integrated Digital Briefing

[REQ]

Identifier	REQ-13.02.02-TS-0201.1006
Requirement	The application shall enable the end user to manage briefing profiles that can be re-used for repetitive flights. This includes data such as: - preferred routes; - aircraft type(s); - aircraft equipment (could be retrieved through registration number); - pilot qualification(s); - information prioritisation preferences (business rules that are the result of a risk assessment approach, which could be linked to a company Safety Management System)
Title	User profile
Status	<In Progress>
Rationale	The actor has to have access to an easy to use HMI where he is able to store briefing profiles
Category	<Functional>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0049	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0008
Requirement	The application shall enable the end user to request a briefing update.
Title	Request Briefing updates
Status	<In Progress>
Rationale	A simple means of acquiring the differences between a previously generated full briefing and the equivalent briefing that would be created if the same request were made now. This allows the user to identify the amendments and act accordingly. The Actor is able to request also only changes/updates for an already stored briefing report. SWIM-TI binding: REQ-14.01.04-TS-0901.0302
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0051	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0220
Requirement	Briefing end users should be able to look at synthetic/integrated view containing along the procedure's waypoints the following forecasts: <ul style="list-style-type: none"> • upper wind; • upper-air temperature and humidity; • geopotential altitude of flight levels; • flight level and temperature of tropopause; • direction, speed and flight level of maximum wind; • SIGWX phenomena Including: <ul style="list-style-type: none"> • vertical flight profile; • orography profile.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Title	Synthetic/integrated view containing along the procedure's waypoints relevant meteorological information for the flight.
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) consider beneficial to have a synthetic/integrated view of relevant meteorological information for the flight including, in the same picture, vertical flight profile and orography profile.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0220	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0410
Requirement	Prior to the start of the flight, an on-board briefing device shall enable the flight crew to become aware of the current status and of the known or forecasted changes in the aeronautical infrastructure, airspace, route network and meteorological situation, which are relevant for the planned flight trajectory or in the event of a re-routing.
Title	On-board device initial briefing
Status	<In Progress>
Rationale	An on-board briefing device should enable the flight crew, prior to the start of the flight, to consult the relevant aeronautical and meteorological data, including both actual and forecast, as relevant for their intended flight trajectory.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0410	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0420
Requirement	During the flight execution, an on-board briefing device shall enable the flight crew to become aware of the current status of the aeronautical infrastructure, airspace, route network and meteorological situation, which are relevant for actual location of aircraft.
Title	On-board device actual position briefing
Status	<In Progress>
Rationale	An on-board briefing device shall adapt the information presented to the flight crew to the current phase of flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0420	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0430
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	During the flight phase, an on-board briefing device shall enable the flight crew to become aware of live updates to the status of the aeronautical infrastructure, airspace, route network and meteorological situation, which are relevant for the remaining of the flight.
Title	On-Board device in-flight updates
Status	<In Progress>
Rationale	AN on-board briefing device should be able to receive in-flight updates and to integrate the new information in the ePIB presented to the flight crew.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0430	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Observation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0450
Requirement	A Digital Integrated Briefing service should provide all aeronautical data updates that occur during the flight time (with respect to an observation time window to be specified by the user).
Title	Use in-flight aeronautical data updates
Status	<In Progress>
Rationale	Optionally, in order to maintain the accuracy of the briefing service during the whole flight, the ePIB should also use data updates received after the start of the flight. This is optional because there might exist technical limitations that prevent in-flight data updates from being provided. If this is not possible, it is assumed that the information will be received by the pilot through other channels (voice communication, notification messages not integrated in the briefing service, etc.)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0450	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0470
Requirement	Requirement A Digital Integrated Briefing service should provide all MET data updates that occur during the time of the flight (with respect to an observation time window to be specified by the user).
Title	Use in-flight weather data updates
Status	<In Progress>
Rationale	Optionally, in order to maintain the accuracy of the briefing service during the whole flight, the ePIB should also use data updates received after the start of the flight. This is optional because there might exist technical limitations that prevent in-flight data updates from being provided. If this is not possible, it is assumed that the information will be received by the pilot through other channels (voice communication, notification messages not integrated in the briefing service, etc.)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0470	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Observation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0280
Requirement	Pilots shall be enabled to retrieve and display on the on-board briefing device air-reports (Routine air-reports and Special air-reports) produced by other aircraft.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Title	Air-reports for On-Board Briefing Device
Status	<In Progress>
Rationale	Pilots and crew members should receive and visualize the air-reports on local meteorological phenomena produced other aircraft that have just flown close to the same area. The reports are used to enhance pilot awareness on the phenomena that have been just occurring in the same area and might affect the flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0280	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Observation	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0040
Requirement	The application shall enable end users to find AIRMET messages, if available, containing warnings in abbreviated plain language for low-level flights for FIR or sub-area affected by the flight in the enhanced Pre-flight Information Bulletin (ePIB).
Title	AIRMET messages
Status	<In Progress>
Rationale	Graphical representation of the AIRMET information shall be easily recognizable.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0040	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0100
Requirement	The application shall provide end users a synthetic view of TAF showing the worst case of meteorological conditions that are forecasted in the aerodrome, using the following classification: <ul style="list-style-type: none"> • VMC (Visual Meteorological Conditions): Ceiling: >=1500 ft AGL, Visibility: >=5 km • MVMC (Marginal Visual Meteorological Conditions): Ceiling: 1000 to 1500 ft AGL, Visibility: 1.5 km to 5 km • IMC (Instrument Meteorological Conditions): Ceiling: 500 to 1000 ft AGL, Visibility: 800 m to 1.5 km • LIMC (Low Instrument Meteorological Conditions): Ceiling: <500 ft AGL, Visibility: <800 m Comment: would be good to see a representation of TAF values on the airport thresholds for LVP and or Cross-wind operations. So don't apply the generic thresholds but use the published ones
Title	Graphical synthetic view of TAF
Status	<In Progress>
Rationale	The TAF information shall be graphically decoded and represented as a time bar containing coloured sections according to description. This is a subject of discussion as various airspace users have different opinions on the colour coding and significance. Some suggest equipment characteristics to be used to decide on the colour coding strategy used.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0100	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0110
Requirement	The application shall provide end users significant weather charts (SIGWX) including the overlapped path of the whole flight route.
Title	Graphical view of significant weather chart including the whole route
Status	<In Progress>
Rationale	Graphical SIGMET information shall be rendered using geographical information at hand if provided and made visible as polygon(s) intersecting the flight trajectory.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0110	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0130
Requirement	The application shall provide end users AIRMET charts including the overlapped path of the whole flight route.
Title	Graphical view of AIRMET
Status	<In Progress>
Rationale	Graphical AIRMET information shall be rendered using geographical information at hand if provided and made visible as polygon(s) intersecting the flight trajectory.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0130	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0460
Requirement	The Digital Integrated Briefing application shall use MET data that is up-to-date at the start of the flight, covering both the current status and forecast information for the entire flight time (with a time buffer to be specified by the user).
Title	Use up-to-date weather data at departure
Status	<In Progress>
Rationale	MET data used for producing an ePIB shall be up-to-date.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Category	<Operational>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0460	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0501.0011
Requirement	The Integrated Digital Briefing application shall enable the end-user to request briefing data based on a FPL
Title	Request Flight Planning Briefing
Status	<In Progress>
Rationale	The integrated digital briefing application enables the end user to use FPL data to request the production of an ePIB.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0046	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0059
Requirement	The End Users shall be able to create a Pre-Flight Information Bulletin (PIB) as defined by ICAO Annex 15 and enhanced by regional specifications, such as the Integrated Briefing concept developed by Eurocontrol.
Title	Traditional Pre-flight Information Bulletin
Status	<In Progress>
Rationale	The traditional PIB in text format is current ICAO SARPS, which is why the End Users' (Pilots, Dispatcher/ARO operator, On-board briefing devices, ATC/ATM operators) application shall be able to generate it. (Intended Function P.1, P.2, D.1, D.2, C.1)
Category	<Functional>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0059	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0490
Requirement	When data non-complying with the stated quality requirements is identified, the Digital Briefing Service provider shall inform the data provider.
Title	Notify uncompliant data to the provider
Status	<In Progress>
Rationale	This will ensure that the data provider and the data originator are made aware of the situation, so that they can take corrective action or at least to provide complementary information that would allow the Digital Briefing Service provider to use the data under certain circumstances instead of just discarding it.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0490	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Service>	VAMCInformation	<Partial>
-------------	-----------	-----------------	-----------

[REQ]

Identifier	REQ-13.02.02-TS-0201.0040
Requirement	The Digital Integrated Briefing Service Provider shall record and be able to provide on request information about all actions performed during the reception and processing of aeronautical and MET data: acknowledgement / verification results / annotation / feed-back sent, etc.
Title	Legal recording actions
Status	<In Progress>
Rationale	The application shall support the Service Provider through legal recording for traceability the processes performed. (Intended Function S.3)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0040	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0065
Requirement	The ePIB application end users shall be enabled to find local aerodrome warnings in the enhanced Pre-flight Information Bulletin (ePIB).
Title	Local aerodrome warnings
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need the latest available local aerodrome warnings related to the selected query parameters relevant for the selected aerodrome. Note that this info today is not available on 'public' networks per se.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0050	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

601 [REQ]

Identifier	REQ-13.02.02-TS-0401.0060
Requirement	The ePIB application end users shall be enabled to find wind-shear warnings in the enhanced Pre-flight Information Bulletin (ePIB).
Title	Title Wind shear warnings
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need the wind shear warnings related to the selected query parameters. Note that this info today is not available on 'public' networks per se.
Category	<Functional>
Validation Method	
Verification Method	<Test>

602 [REQ Trace]
603

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0060	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

604 [REQ]
605

Identifier	REQ-13.02.02-TS-0401.0070
Requirement	The ePIB application end users shall be enabled to find volcanic ash cloud advisory information in the enhanced Pre-flight Information Bulletin (ePIB).
Title	Volcanic ash cloud advisory information
Status	<In Progress>
Rationale	Rationale End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need the volcanic ash cloud advisory information impacting the safety of the specific flight trajectory.
Category	<Functional>
Validation Method	
Verification Method	<Test>

606 [REQ Trace]
607

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0070	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

608 founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

609

[REQ]

Identifier	REQ-13.02.02-TS-0401.0080
Requirement	The ePIB application end users shall be enabled to find tropical cyclones advisory information in the enhanced Pre-flight Information Bulletin (ePIB).
Title	Tropical cyclones advisory information
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need the the tropical cyclones advisory information impacting the safety of the specific flight trajectory.
Category	<Functional>
Validation Method	
Verification Method	<Test>

610

611

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0080	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>

612

613

[REQ]

Identifier	REQ-13.02.02-TS-0401.0090
Requirement	The ePIB application end users shall be enabled to find SIGWX forecasts information concerning the accidental release of radioactive materials into the atmosphere, if any, impacting the flight trajectory in the enhanced Pre-flight Information Bulletin (ePIB).
Title	Information on accidental release of radioactive materials
Status	<In Progress>
Rationale	End users (Pilots, Dispatchers/ARO operators, On-board briefing devices, ATC/ATM operators) might require SIGWX forecasts information concerning the accidental release of radioactive materials into the atmosphere, if any, in the area(s) impacting the flight trajectory.
Category	<Functional>
Validation Method	
Verification Method	<Test>

614

615

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0090	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0150
Requirement	The ePIB application end users shall be enabled to look at local aerodrome warnings, overlayed on the airport map, if available at the aerodrome concerned.
Title	Graphical view of local aerodrome warnings
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) might need a graphical representation of local aerodrome warnings, if available at the aerodrome concerned, to support the assessment of the impacted areas and improve awareness.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0150	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0160
Requirement	The ePIB application end users shall be enabled to look at wind shear warnings related to landing and take off portions of the flight route, overlaid on the map.
Title	Graphical view of wind shear warnings
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need a graphical representation of wind shear warnings to support the assessment of the impact on the landing/take off phases and to improve awareness.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0160	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0170
Requirement	The ePIB application end users shall be enabled to look at volcanic ash cloud charts, including the display of the flight trajectory.
Title	Graphical view of volcanic ash cloud.
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need a graphical representation of volcanic ash cloud to support the assessment of the impact on the flight and improve awareness.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0170	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0180
Requirement	The ePIB application end users shall be enabled to look at tropical cyclones charts, including the display of the flight trajectory.
Title	Graphical view of the tropical cyclones
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need a graphical representation of tropical cyclones to support the assessment of the impact on the flight and improve awareness.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<ALLOCATED_TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0180	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0200
Requirement	The ePIB application end users shall be enabled to look at meteorological satellite images, with an overlay of the flight route.
Title	Graphical view of meteorological satellite images
Status	<In Progress>
Rationale	Pilots might use meteorological satellite images related to the selected query parameters, including the flight route path.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0200	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0210
Requirement	The ePIB application end users shall be enabled to look at ground-based weather radar information, with an overlay of the flight route.
Title	Graphical view of ground-based weather radar information.
Status	<In Progress>
Rationale	Pilots might use ground-based weather radar information related to the selected query parameters, including the flight route path.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Functional block>	MET-GATE	N/A

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0210	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0250
Requirement	The ePIB application end users shall be enabled to retrieve and display the following standard meteorological forecasts: <ul style="list-style-type: none"> • Aerodrome forecasts (TAF, 9 - 30 hrs) • Landing forecasts (TREND, 2 hrs) • Forecasts for take-off • Area forecasts for low-level flights
Title	Meteorological forecasts
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) might need to receive the following forecasts: Aerodrome forecasts, Landing forecasts, Forecasts for take-off and Area forecasts for low-level flights.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0250	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0260
Requirement	The ePIB application end users shall be enabled to retrieve and display the following reports: <ul style="list-style-type: none"> • Local routine report (MET REPORT) • Local special reports (SPECIAL)
Title	Meteorological forecasts
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) might need to receive the local routine and special reports related to the selected query parameters.
Category	<Functional>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0260	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0052
Requirement	The ePIB application end users shall be enabled to specify comparison rules for a The ePIB application update: *) comparison with the original The ePIB application; *) comparison with the latest The ePIB application.
Title	Rules for briefing updates
Status	<In Progress>
Rationale	This allows the End User (Pilots, Dispatcher/ARO operator, On-board briefing devices, ATC/ATM operators) to quickly view the amendments from the previous briefing. (Intended Function P.2, D.1, D.2, F.1, F.2, C.1)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0052	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0053
Requirement	The ePIB application end users shall be enabled to specify the frequency of the The ePIB application update: *) Ad hoc request based on a previous full or update The ePIB application; *) At a specified time interval, e.g. hourly - meaning that update is sent every hour, even if the generated The ePIB application does not contain changes; *) On event - meaning that a The ePIB application update is sent every time that a new Digital NOTAM is received and it matches the selection criteria specified by user (this applies in particular for on-board The ePIB application devices) *) The user shall also be enabled to specify the time at which the The ePIB application update will cease to be provided.
Title	Frequency of briefing updates
Status	<In Progress>
Rationale	This allows the End Users (Pilots, Dispatcher/ARO operator, On-board briefing devices, ATC/ATM operators) to retrieve only the required data, to customize and eliminate irrelevant information in the briefing, and only view amendments from the previous briefing. (Intended Function P.2, D.1, D.2, F.1, F.2, C.1)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0053	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0050
Requirement	The ePIB application end users shall be enabled to find in the enhanced Pre-flight Information Bulletin (ePIB) local aerodrome warnings.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Title	Local aerodrome warnings
Status	<In Progress>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need the latest available local aerodrome warnings related to the selected query parameters relevant for the selected aerodrome. Note that this info today is not available on 'public' networks per se. Post-validation note: similar to REQ-13.02.02-OSED-0401.0020, but for other type of MET message. To be considered during industrialisation.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0050	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1102
Requirement	G/G Digital Integrated Briefing / ePIB data shall be disseminated using the IntegratedDigitalBriefing service.
Title	Integrated Digital Briefing dissemination (G/G)
Status	<In Progress>
Rationale	Ahead of performing a specific flight End Users (Pilots, Dispatchers/ARO operators) need to obtain briefing data that describes the aeronautical and meteorological situations encountered during the duration of the flight.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSED-0001.0010	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSED-0001.0011	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSED-0001.0012	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0013	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0014	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0025	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0027	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1103
Requirement	A/G Digital Integrated Briefing / ePIB data shall be disseminated using the IntegratedDigitalBriefing service.
Title	Integrated Digital Briefing dissemination (A/G)
Status	<In Progress>
Rationale	During the performing a specific flight End Users (Pilots) need to obtain briefing data that describes changes to the aeronautical and meteorological situations data obtain in the pre-flight briefing phase.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0015	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0016	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1105
Requirement	When MET parameters exceed a certain threshold, alerts and warnings shall be disseminated using the AirportMETAlert service.
Title	Airport MET alert dissemination
Status	<In Progress>
Rationale	In the briefing package for a given flight End Users (Pilots, Dispatchers/ARO operators) need the meteorological alerts and warnings related to the take-off and landing airports.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0035	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0036	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0042	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0043	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1106
Requirement	METAR information for a given airport shall be disseminated using the METAR service.
Title	METAR dissemination
Status	<In Progress>
Rationale	In the briefing package for a given flight End Users (Pilots, Dispatchers/ARO operators) need the METAR for a given airport used for that flight.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0025	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0028	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1107
Requirement	En-route MET Hazard information that may be encountered during a flight shall be disseminated using the METHazardEnrouteForecast service.
Title	En-route MET Hazard Forecast dissemination
Status	<In Progress>
Rationale	In the briefing package for a given flight End Users (Pilots, Dispatchers/ARO operators) need the en-route MET hazards information that may be encountered during the flight.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0030	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0031	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0032	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1108
Requirement	En-route MET Hazard information that has been observed and lays on the flown trajectory during a flight shall be disseminated using the METHazardEnrouteForecast service.
Title	En-route MET Hazard Observation dissemination
Status	<In Progress>
Rationale	In the briefing package for a given flight End Users (Pilots, Dispatchers/ARO operators) need the en-route MET hazards information that may be encountered during the flight.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0038	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0041	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1109
Requirement	TAF information for a given airport shall be disseminated using the TAF service.
Title	TAF dissemination
Status	<In Progress>
Rationale	In the briefing package for a given flight End Users (Pilots, Dispatchers/ARO operators) need the TAF for a given airport used for that flight.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0025	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0028	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0029	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1110
Requirement	VAMC information shall be disseminated using the VAMCInformation service.
Title	VAMC Information dissemination
Status	<In Progress>
Rationale	In the briefing package for a given flight End Users (Pilots, Dispatchers/ARO operators) need to be informed on any Volcanic Ash Mass Concentration advertized that may affect their flight.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0037	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1002
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The service IntegratedDigitalBriefing must provide the following interface binding:</p> <p>Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM
Title	Service interface binding: IntegratedDigitalBriefing (G/G)
Status	<In Progress>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1102	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1003
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	MQbPS Interface shall be instantiated using the following binding: + Protocol stack: - XML over AMQP 0-9-1 over TLS over TCP + MEP: - PSPUSH-MEP, PSPULL-MEP, AFF-MEP + Fault handling: as defined per standard + Encoding: - IANA registered MIME Media Type application/xml + Security: - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: none - Non-repudiation: none + Contract: - formalism of contract description: XSD, contract parameters for MQbPS interface bindings as per Purple Profile Technical Specification - minimum: not applicable - reference: Purple Profile Technical Specification, ISRM + Interoperability: - the session initiation at TCP level is unidirectional from aircraft to ground only.
Title	Service interface binding: IntegratedDigitalBriefing (A/G)
Status	<In Progress>
Rationale	In order to support AMQP based service provision for A/G data exchange the service must implement the SWIM-TI binding specified by: REQ-14.01.04-TS-0901.0804
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1103	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1005
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The service AirportMETAlert must provide the following interface binding: Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM
Title	Service interface binding: AirportMETAlert
Status	<In Progress>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1105	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1006
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The service METAR must provide the following interface binding: Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM
Title	Service interface binding: METAR
Status	<In Progress>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1106	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1007
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The service METHazardEnrouteForecast must provide the following interface binding: Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract:: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM
Title	Service interface binding: METHazardEnrouteForecast
Status	<In Progress>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1107	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1008
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The service METHazardEnrouteObservation must provide the following interface binding: Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM
Title	Service interface binding: METHazardEnrouteObservation
Status	<In Progress>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1108	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1009
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The service TAF must provide the following interface binding: Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract:: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM
Title	Service interface binding: TAF
Status	<In Progress>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1109	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1010
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The service VAMCInformation must provide the following interface binding: Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract:: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM
Title	Service Interface binding: VAMCInformation
Status	<In Progress>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1110	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.1004
Requirement	The application shall enable the end user to retrieve FPL from the SWIM Data Pool, to be used as query parameter for selecting the briefing data.
Title	Query parameter-FPL
Status	<Validated>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Rationale	The actor has to have access to an easy to use HMI where he is able to specify filter criteria based on FPL data retrieved from the SWIM Data Pool to retrieve briefing data. SWIM-TI binding: REQ-14.01.04-TS-0901.0303
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0046	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0009
Requirement	The application shall enable the end user to organise the information in the enhanced Pre-Flight Bulletin (ePIB) per phase of flight, based on a specified route trajectory, displaying information for the following phases: - Aerodrome of departure - En-route phase - Aerodrome of destination - Alternative aerodromes - Emergency aerodromes (if available)
Title	ePIB organisation for information
Status	<Validated>
Rationale	The application shall enable the end user to organise the information in the enhanced Pre-Flight Bulletin (ePIB) per phase of flight.
Category	<Design>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0060	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0010
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	The application shall enable the end user to organise the aerodrome information in the ePIB by phases related to departure and approach/landing: - Stands/push-back - Taxiing - Take-off/aborted take-off - Emergency return - Climb Approach/landing
Title	Organisation of aerodrome information
Status	<Validated>
Rationale	The application shall enable the end user to organise the aerodrome information in the ePIB by phases related to departure and approach/landin
Category	<Design>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0061	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0011
Requirement	The ePIB shall include an aerodrome map for each aerodrome phase, displaying graphically NOTAM information concerning: - Stands/push-back/parking - Taxiways - Runways - Obstacles
Title	Graphical display of aerodrome data
Status	<Validated>
Rationale	The ePIB shall include an aerodrome map for each aerodrome phase, displaying graphically NOTAM information.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0062	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

[REQ]

Identifier	REQ-13.02.02-TS-0201.0016
Requirement	The application shall represent and display meteorological data in the ePIB graphically , per phase of flight.
Title	Graphical view of MET data
Status	<Validated>
Rationale	The application shall be able to graphically represent and display meteorological data in the ePIB, per phase of flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0068	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0017
Requirement	The ePIB shall display in the header the selected query parameters generating the information.
Title	Display of ePIB query parameters
Status	<Validated>
Rationale	The ePIB shall display in the header the selected query parameters generating the information.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0069	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	Aeronautical Information Feature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

749

[REQ]

Identifier	REQ-13.02.02-TS-0201.0018
Requirement	The ePIB shall include at its end the list of the acronyms & abbreviations that have been used.
Title	Acronyms and Abbreviations
Status	<Validated>
Rationale	The ePIB should include at its end the list of the acronyms & abbreviations that have been used.
Category	<Functional>
Validation Method	
Verification Method	<Test>

750

751

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0070	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

752

753

[REQ]

Identifier	REQ-13.02.02-TS-0201.0073
Requirement	The End Users shall be able to use the interactive application on a computer to retrieve and analyze the information (AIS, MET, ATFM data) that in order to decide on the feasibility of an intended flight.
Title	Flight-Planning Briefing
Status	<Validated>
Rationale	The End Users (Pilot, Dispatcher/ARO operator) shall be enabled to retrieve from a designated interface access to the necessary AIS, MET and ATFM data in order to decide on the feasibility of an intended flight. (Intended Function P.1, D.1, D.2)
Category	<Functional>
Validation Method	
Verification Method	<Test>

754

755

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0073	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0074
Requirement	The application shall inform end users of the baseline capabilities/organisation and current status of the aeronautical infrastructure, airspace, route network and meteorological situation that is relevant for the planned flight trajectory or in an area of interest.
Title	Departure Briefing
Status	<Validated>
Rationale	An end user will expect to be served the baseline information on the complete collection of features involved in the course of a pending flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0074	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0075
Requirement	The information presented by an Interactive Briefing application should be graphical (maps/charts, diagrams, video) to the maximum extent possible.
Title	Graphical information by Interactive Briefing
Status	<Validated>
Rationale	The graphical view of the information increases the situational awareness for the End Users (Pilots, Dispatcher/ARO Operator, ATC/ATM operator). (Intended Function P.1, P.2, D.1, D.2, C.1)
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0075	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	AirportMETAlert	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteObservation	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>
<SATISFIES>	<Service>	VAMCInformation	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0201.0078
Requirement	The application shall present Digital NOTAM information graphically. The graphical representation shall follow the specifications developed by the SAE International, Committee G-10A Aeronautical Information System, for the Digital NOTAM event types for which such specifications exist.
Title	Graphical NOTAM visualisation standard (SAE-G10)
Status	<Validated>
Rationale	Graphical representation of briefing information shall use symbols specified by international authorities on the condition that such specifications exist. Otherwise, the implementor can choose to use its own symbols and replace them as specifications become available.
Category	<Operational>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0201.0078	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0010
Requirement	The application shall enable end users to find in the enhanced Pre-flight Information Bulletin (ePIB) the following messages: • METAR/SPECI (including trend forecasts as issued in accordance with regional air navigation agreement) • TAF for departure, en-route, destination and alternative aerodrome(s) of the flight.
Title	METAR/SPECI and TAF messages
Status	<Validated>
Rationale	Graphical representation of the METAR/SPECI and TAF information shall be easily recognizable.
Category	<Functional>
Validation Method	

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Verification Method	<Test>
---------------------	--------

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0010	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0020
Requirement	The application shall enable end users to find SIGMET messages containing information concerning the occurrence or expected occurrence of specified en-route weather phenomena in the enhanced Pre-flight Information Bulletin (ePIB).
Title	SIGMET messages
Status	<Validated>
Rationale	Graphical representation of the SIGMET information shall be easily recognizable.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0020	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0440
Requirement	The Digital Integrated Briefing application shall use aeronautical data that is up-to-date at the start of the flight, covering both the current status and the known changes for the entire flight time (with a time buffer to be specified by the user).
Title	Use up-to-date aeronautical data at departure
Status	<Validated>
Rationale	Aeronautical data used for producing an ePIB shall be up-to-date.
Category	<Operational>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0440	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0500
Requirement	When data non-complying with the stated quality requirements needs to be used (because no other data is available), the concerned data items shall be flagged as such in the ePIB.
Title	Identify uncompliant data
Status	<Validated>
Rationale	Data that does not comply with quality requirements shall be visibly flagged in the ePIB in order to inform the end-user about this.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Data Validation and Verification	N/A
<ALLOCATED_TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSED-0401.0500	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0501.0010
Requirement	The Integrated Digital Briefing application shall enable the end-user to request the production of an ePIB package.
Title	Request Briefing
Status	<Validated>
Rationale	The integrated digital briefing application enables the end user to request the production of an ePIB.
Category	<Functional>
Validation Method	
Verification Method	<Test>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0073	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0501.0024
Requirement	The Integrated Digital Briefing application shall enable the end-user to request all AIS data needed for an ePIB.
Title	Request Aeronautical Info Data
Status	<Validated>
Rationale	The integrated digital briefing application uses filter data to retrieve all needed Aeronautical Information from various AIS providers.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0073	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0501.0028
Requirement	The Integrated Digital Briefing application shall enable the end-user to request METAR data for an Airport
Title	Filter data for METAR / SPECI provision
Status	<Validated>
Rationale	The integrated digital briefing uses filter data to retrieve all needed METAR data from available providers
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0010	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METAR	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0501.0029
Requirement	The Integrated Digital Briefing application shall enable the end-user to request TAF data for an Airport
Title	Filter data for TAF provision
Status	<Validated>
Rationale	The integrated digital briefing uses filter data to retrieve all needed TAF data from available providers
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0010	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	TAF	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0501.0030
Requirement	The Integrated Digital Briefing application shall enable the end-user to request SIGMET data for an FIR
Title	Filter data for SIGMET provision
Status	<Validated>
Rationale	The integrated digital briefing uses filter data to retrieve all needed SIGMET data from available providers
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0020	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0501.0032
Requirement	The Integrated Digital Briefing application shall enable the end-user to request AIRMET data for an FIR
Title	Filter data for AIRMET provision
Status	<Validated>
Rationale	The integrated digital briefing uses filter data to retrieve all needed AIRMET data from available providers
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0040	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	METHazardEnrouteForecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0502.0001
Requirement	The Integrated Digital Briefing application shall enable the end-user to request end-user registration/login to system.
Title	User Credentials
Status	<Validated>
Rationale	The integrated digital briefing application requests the end user to login/register before use.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	AIM System Management	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0073	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Identifier	REQ-13.02.02-TS-0502.0002
Requirement	The application shall provide/make use of filters that allow one or more Digital NOTAM to be identified/selected.
Title	Filter data for Digital NOTAM provision
Status	<Validated>
Rationale	The integrated digital briefing application uses filter data to request Digital NOTAM data from available providers.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0073	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0502.0003
Requirement	The Integrated Digital Briefing application shall enable the end-user to produce an ePIB formatted as XHTML and/or PDF
Title	Briefing (ePIB) Data
Status	<Validated>
Rationale	The integrated digital briefing application produces an ePIB and delivers it as XHTML and/or PDF.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0201.0073	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0401.0140
Requirement	The ePIB application end users shall be provided wind and temperature charts for specific flight levels, including the representation of the flight route in the ePIB.
Title	Title Graphical view of the high-level wind and temperature charts including the whole route

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Status	<Validated>
Rationale	End Users (Pilots, Dispatchers/ARO operators, ATC/ATM operators) need to visualize the latest available high-level wind and temperature charts related to the selected query parameters, including the flight route as reference for the specific flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED TO>	<Functional block>	MET-GATE	N/A
<ALLOCATED TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-OSD-0401.0140	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>
<SATISFIES>	<Enabler>	METEO-05b	<Partial>
<SATISFIES>	<Service>	IntegratedDigitalBriefing	<Partial>
<SATISFIES>	<Service>	MET Hazard Enroute Forecast	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1001
Requirement	<p>The service AeronauticalInformationFeature must provide the following interface binding: Generic service instantiation shall be supported on the following interface binding.</p> <ul style="list-style-type: none"> + Protocol stack: Plain Old XML (POX) over HTTPS POST over TCP. + MEP: SRR-MEP + Fault handling: the service shall be able to determine the content of the HTTP status code and HTTP reason phrase + Encoding: <ul style="list-style-type: none"> - HTTP POST: application/xml; charset=UTF-8 + Security: <ul style="list-style-type: none"> - Confidentiality: transport - Integrity: transport - Authenticity: transport mutual - Authorization: transport - Non-repudiation: none + Contract:: <ul style="list-style-type: none"> - existing: described in XSD - future: described in XSD + Contract: <ul style="list-style-type: none"> - formalism of contract description: described in XSD - minimum: not applicable - reference: ISRM

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Title	Service interface binding: AeronauticalInformationFeature
Status	<Validated>
Rationale	In order for the service to support REST style binding it must comply with the SWIM-TI Yellow Profile interface binding specified by: REQ-14.01.04-TS-0901.0303
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<ATMS Requirement>	REQ-13.02.02-TS-0901.1101	<Partial>
<SATISFIES>	<Enabler>	AIMS-07a	<Partial>

[REQ]

Identifier	REQ-13.02.02-TS-0901.1101
Requirement	Aeronautical feature (static) data and Digital NOTAM information shall be disseminated using the AeronauticalInformationFeature service.
Title	Aeronautical Information Feature dissemination
Status	<Validated>
Rationale	In the briefing package for a given flight End Users (Pilots, Dispatchers/ARO operators) need the information on aeronautical features and Digital NOTAM relevant for a specific flight including features such as, but not limited to airports, runways, FIRs, routes, NAVAIDs, and so on.
Category	<Interface>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<ALLOCATED TO>	<Functional block>	Aeronautical Information Distribution	N/A
<ALLOCATED_TO>	<Project>	13.02.02	N/A
<APPLIES_TO>	<Operational Focus Area>	ENB02.01.02	N/A
<SATISFIES>	<Enabler>	METEO-04b	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0008	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0009	<Partial>
<SATISFIES>	<Information Exchange Requirement>	IER-13.02.02-OSD-0001.0024	<Partial>
<SATISFIES>	<Service>	AeronauticalInformationFeature	<Partial>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

833 4 Assumptions

834 4.1 Flight plans

835 The major assumption made in EXE-13.02.02-VP-461 is the availability of flight plans (FPL) from an
836 external source.

837 The FPLs used in the validation exercise were obtained from Eurocontrol and were preconfigured in
838 the application.

founding members



EUROPEAN UNION



EUROCONTROL

Avenue de Cortenbergh 100 | B -1000 Bruxelles

www.sesarju.eu

5 References

- [1] Template Toolbox 03.01.03
<https://extranet.sesarju.eu/Programme%20Library/SESAR%20Template%20Toolbox.dot>
- [2] Requirements and V&V Guidelines 03.01.00
<https://extranet.sesarju.eu/Programme%20Library/Requirements%20and%20VV%20Guidelines.doc>
- [3] Templates and Toolbox User Manual 03.01.01
<https://extranet.sesarju.eu/Programme%20Library/Templates%20and%20Toolbox%20User%20Manual.doc>
- [4] SESAR System Thread Guidance Ed 04.00.00
- [5] EUROCONTROL ATM Lexicon
<https://extranet.eurocontrol.int/http://atmlexicon.eurocontrol.int/en/index.php/SESAR>
- [6] SESAR B04.03 - ADD Step 1 (2014 edition)
https://extranet.sesarju.eu/WP_B/Project_B.04.03/Project%20Plan/ADD%20Step%201%20Edition%202014/B.04.03-D95-ADD%20Step%201%20V00.02.02.doc
- [7] Integrated Roadmap DS-15
- [8] IEEE / MIL Standards
- [9] SESAR 07.02 D42 TAD - Step 1 Network Operations Sub-systems Technical Architecture Description
https://extranet.sesarju.eu/WP_07/Project_07.02/Project%20Plan/Step1/07.02-D42-Step%201%20TAD.docx
- [10] SESAR 13.02.02 D118 - Operational Service and Environment Definition (OSD) - Digital Integrated Briefing - Final Version 01.01.00
https://extranet.sesarju.eu/WP_13/Project_13.02.02/Project%20Plan/Step1_R5_EXE461/Deliverables/DEL_13.02.02_D118_OSED_Final.doc
- [11] AIXM 5.1 Specification
http://www.aixm.aero/public/standard_page/download.html
- [12] Digital NOTAM Event Specification version 1.0, 15/09/2009,
http://www.aixm.aero/sites/aixm.aero/files/imce/library/Digital_NOTAM_Spec/digital_notam_event_specification_1.0.doc
- [13] ICAO iWXXM 1.1
<http://schemas.wmo.int/iwxxm/1.1/>
- [14] SESAR 14.01.04 D42 004 - SWIM-TI Yellow Profile Technical Specification 3.0
https://extranet.sesarju.eu/WP_14/Project_14.01.04/Project%20Plan/14.01.04.D42-004-SWIM-TI%20Yellow%20Profile%20Technical%20Specification%203.0.doc

5.1 Use of copyright / patent material /classified material

No copyrighted or patented material used.

5.1.1 Classified Material

No classified material used.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Appendix A Integrated Digital Briefing HMI Examples

A.1 ePIB HMI Examples

The following screenshot images are used with permission from Frequentis.

A.1.1 Overview

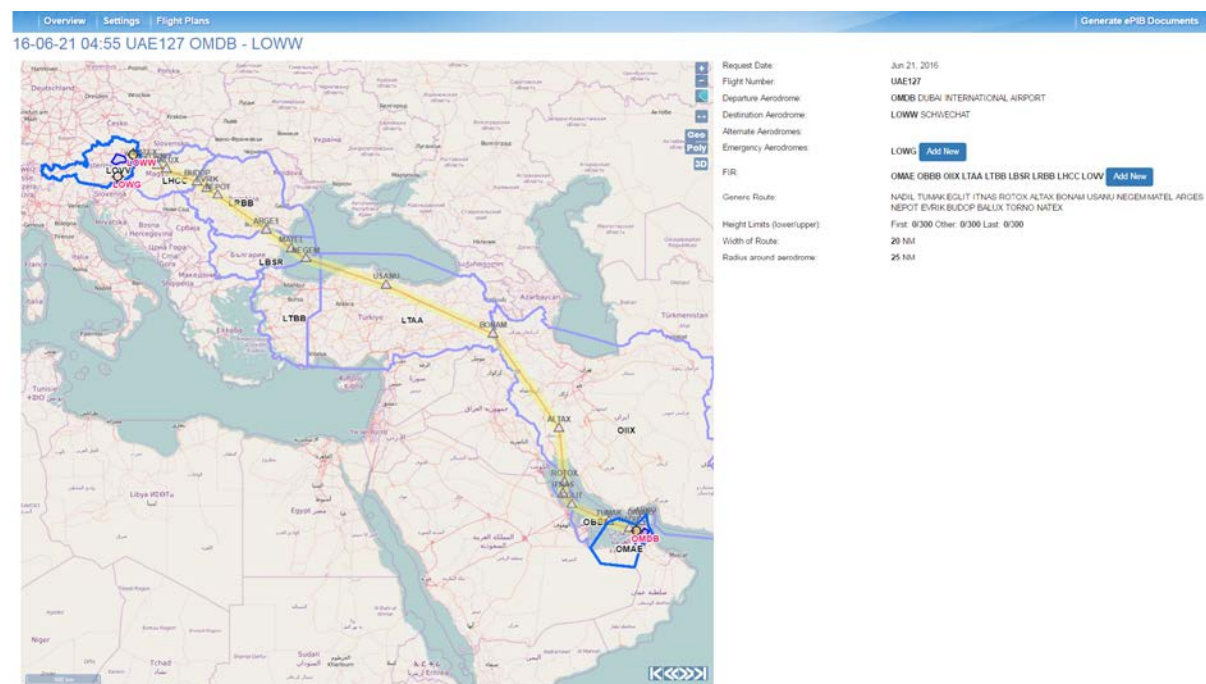


Figure 7: HMI Example: ePIB Overview

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

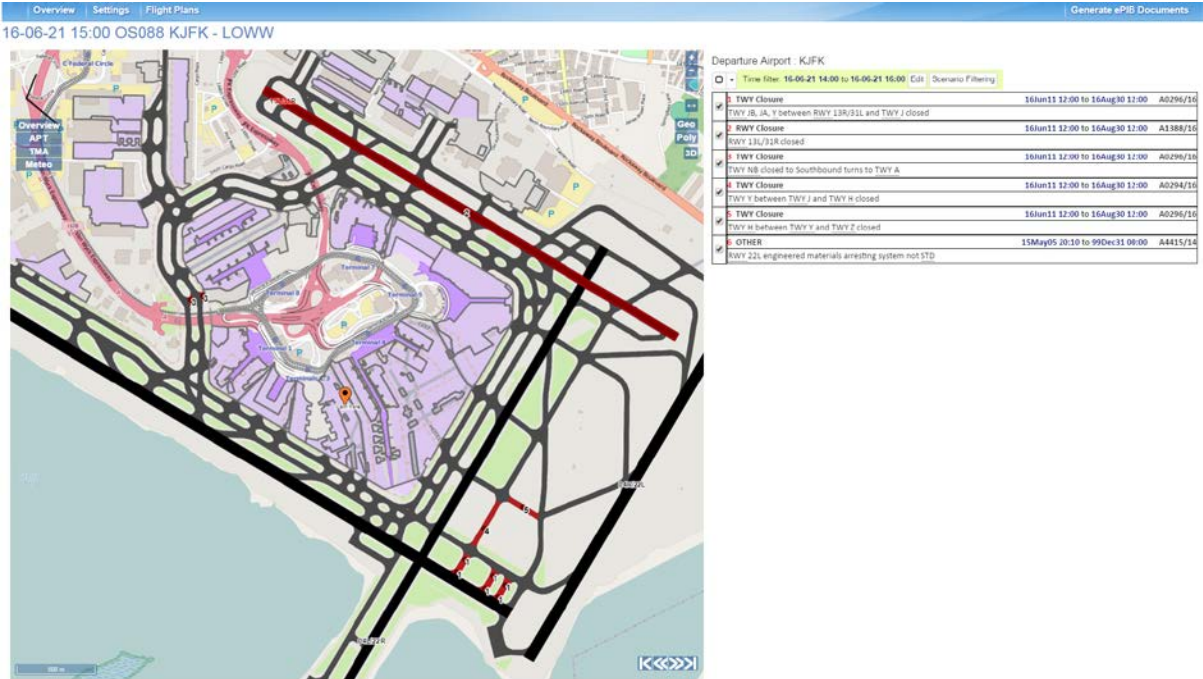


Figure 8: HMI Example: Airport Digital NOTAM View

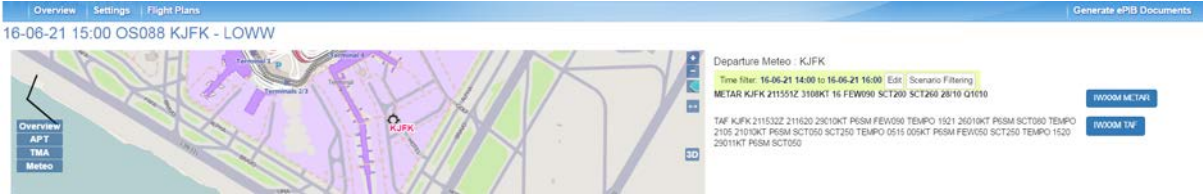


Figure 9: HMI Example: Airport MET View

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

A.1.3 En-route View

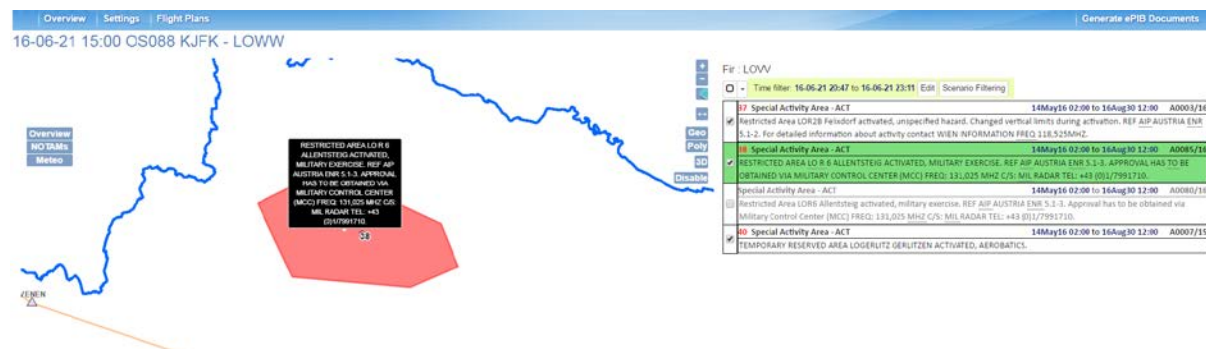
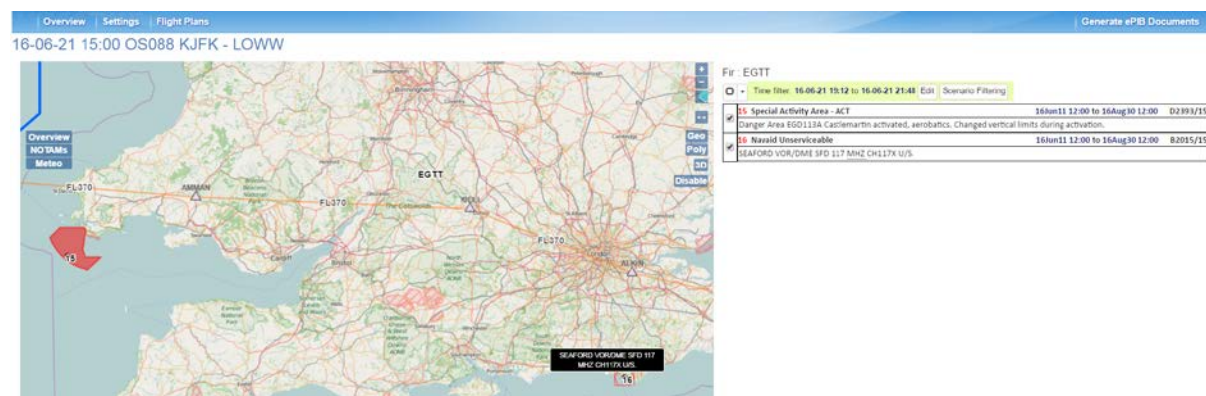


Figure 10: HMI Example: En-route Digital NOTAM

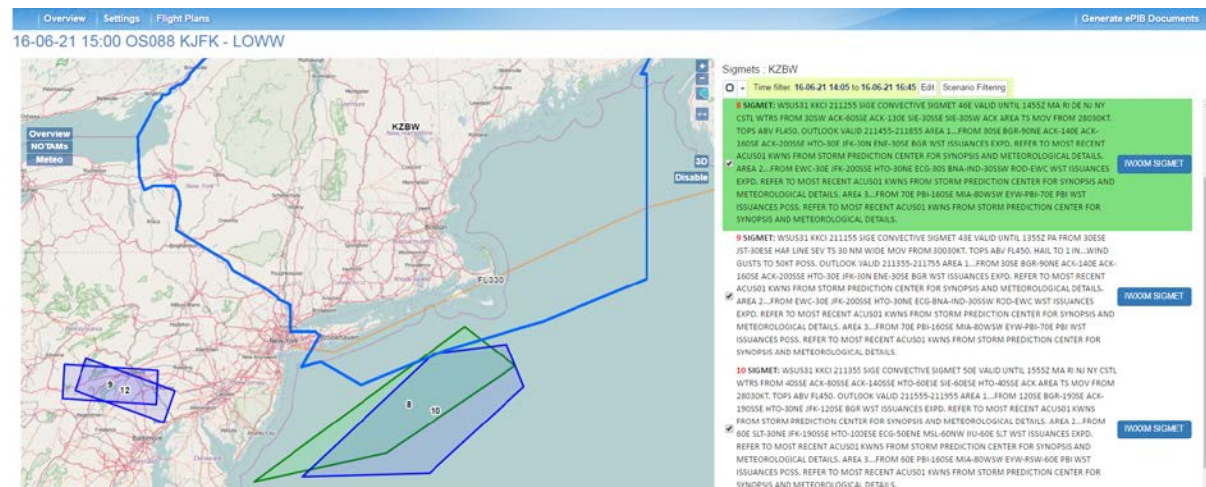


Figure 11: HMI Example: En-route SIGMET/AIRMET View

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

899

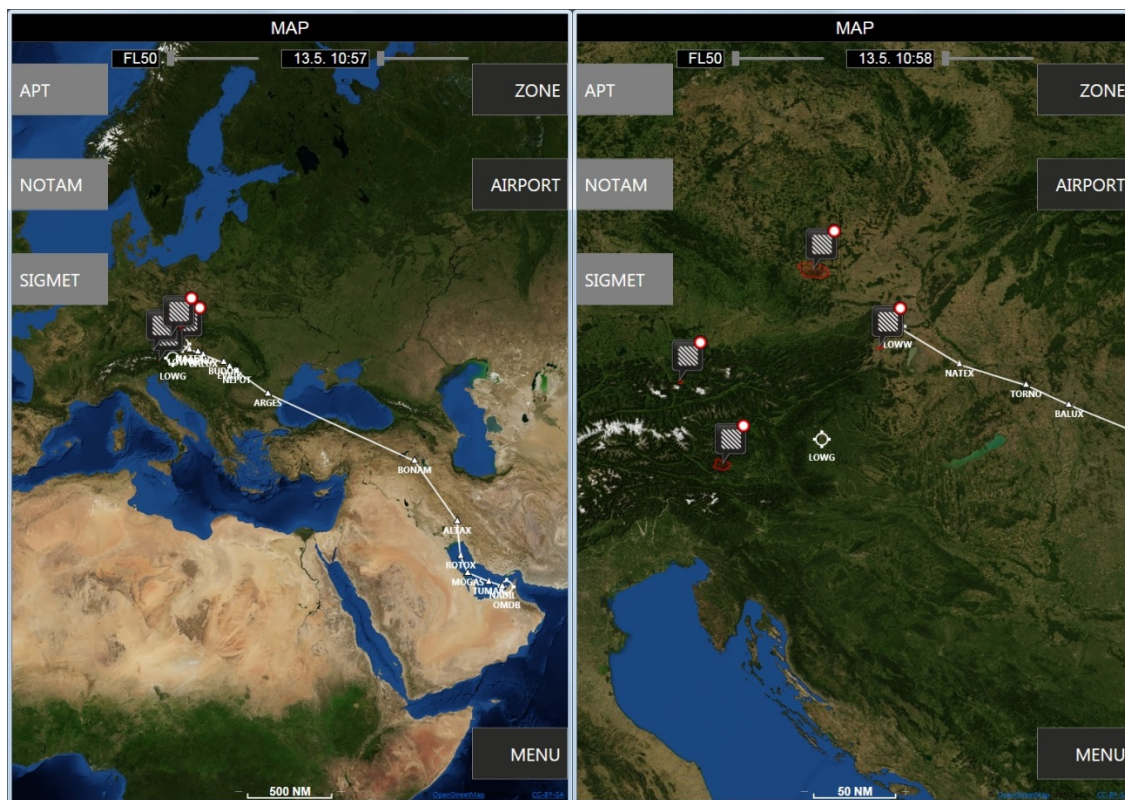
900

A.2 EFB HMI Examples

901 The following screenshot images are used with permission from Honeywell, project SESAR 9.19.

902

A.2.1 EFB - Map View



903

904 Figure 12: HMI Example: Map View

905 Also see appendix A.1.1 for correlation.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu


91 of 109


A.2.2 EFB - Airport NOTAM and MET


AIRPORT


LOWG: Graz Thalerhof


METAR METAR LOWG 130850Z 02KT 10 FEW012 SCT066 BKN150 15/12


 Runway 17C - Water_WetSnow(2mm)/Water_WetSnow(2mm)/Water_WetSnow(2mm) Medium/Medium/Medium. Contamination RWY 17C 100%/100%/100% Dampness due to chemicals. Taxiways: Water_WetSnow Aprons: Water_WetSnow


 TWY S, S1 - S4 aerodrome operator may, if necessary, limited or extend operations for unpaved movement areas to specified ACFT types: details at aerodrome operations +43 (0) 316 2902 120. ICAO marking may be not visible on grass TWY S, S1 - S4.

 TWR must be notified during start-up request of any requirement to use cross-bleed start procedure. Engine test runs have to be coordinated with the airport duty officer in advance. TWR approval must be obtained during start-up request. Minimum power is to be used when taxiing away from stand.

 Apron west aerodrome operator may, if necessary, limited or extend operations for unpaved movement areas to specified ACFT types details at aerodrome operations +43 (0) 316 2902 120. ICAO marking MAY be not visible on apron west

 Grass RWY 17R/35L aerodrome operator may, if necessary, limited or extend operations for unpaved movement areas to specified ACFT types: details at aerodrome operations +43 (0) 316 2902 120. ICAO marking MAY be not visible on grass RWY 17R/35L

 Apron west closed for fix-wing ACFT.

 Ground handling will be stopped in case of lightning activity. Information to the crew will be provided by the traffic handling agent. Follow me to the parking position is available.

BACK

Figure 13: HMI Example: Airport NOTAM and MET

Appendix B Deleted Requirements

Digital NOTAM

[REQ]

B Requirement	<p>The application shall enable the operator to manually modify the Text NOTAM that was automatically generated.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to encode Digital NOTAM data and manipulate Text NOTAM.</p> <p>Post-conditions: The Text NOTAM is modified according the user Actor inputs.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Generated ICAO Text Modification by Operator
Status	<Deleted>
Rationale	The actor needs to have access to an easy to use HMI where he is able to change the automatically generated ICAO NOTAM text.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0101.0006
Requirement	<p>If the automatically generated Text NOTAM was modified by the operator, the application shall visibly display a warning whenever it is presented to the operator.</p> <p>Pre-conditions: The Actor has access to the HMI where he is allowed to display Text NOTAM.</p> <p>Post-conditions: When the Text NOTAM is modified, a visual warning should be displayed.</p> <p>Actors: Operator NOF User</p>
Title	Digital NOTAM Display Warning Modified ICAO NOTAM
Status	<Deleted>
Rationale	If the actor has modified an automatically generated ICAO NOTAM, he has to be visually informed that this NOTAM was modified after being automatically generated.
Category	<Functional>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0101.0013
Requirement	The application shall enable the operator to publish a Digital NOTAM and to make it available in the SWIM data pool. Pre-conditions: The Actor has access to the HMI where he is allowed to publish Digital NOTAM. Post-conditions: The Digital NOTAM is published and available in the SIM Pool. Actors: Operator
Title	Digital NOTAM SWIM Publishing
Status	<Deleted>
Rationale	The Actor has to have the possibility to publish the NOTAM via the HMI so that it is available in the SWIM pool.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

Integrated Digital Briefing

[REQ]

Identifier	REQ-13.02.02-TS-0201.0001
Requirement	The application shall enable the end user to specify a combination of one or more airspace (FIR, TMA, etc.) and/or Airports/Heliports to be used as query parameters for selecting the briefing data.
Title	Query parameter-Airspace/Airport/Heliport
Status	<Deleted>
Rationale	The actor has to have access to an easy to use HMI where he is able to specify filter criteria to retrieve briefing data.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
--------------	---------------------	------------	------------

[REQ]

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Identifier	REQ-13.02.02-TS-0201.9002
Requirement	The application shall enable the end user to input a precise route defined as "ADEP, SID (optional), point-route-point-route-...-point, STAR (optional), ADES, ALTN, ALTN, ALTN..." to be used as query parameter for selecting the briefing data
Title	Query parameter-Routes
Status	<Deleted>
Rationale	The actor has to have access to an easy to use HMI where he is able to specify filter criteria to retrieve briefing data.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0202.0003
Requirement	The application shall enable the end user to specify an arbitrary area to be used as query parameter for selecting the briefing data.
Title	Query parameter-Area
Status	<Deleted>
Rationale	The actor has to have access to an easy to use HMI where he is able to specify filter criteria to retrieve briefing data.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.9005
Requirement	The application shall enable the end user to input time parameters for selecting the briefing data, retrieving data within a specified information validity time span.
Title	Query parameter-Time
Status	<Deleted>
Rationale	The actor has to have access to an easy to use HMI where he is able to specify filter criteria to define the time window of interest. SWIM-TI binding: REQ-14.01.04-TS-0901.0303
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
--------------	---------------------	------------	------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

--	--	--	--

[REQ]

Identifier	REQ-13.02.02-TS-0201.0007
Requirement	The application shall enable the end user to specify parameters for the generation of the briefing: - Ad-hoc values; - Values stored in a company profile; - Values stored in a briefing profile; - Values which are part of the FPL associated with the briefing; - A combination of above possibilities.
Title	Query parameter
Status	<Deleted>
Rationale	The actor has to have access to an easy to use HMI where he is able to specify specific filter criterias.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0203.0001
Requirement	The application shall perform legal recording actions of all steps performed during the date encoding and transmission: input from the responsible authority, data sent out, acknowledgement / feed-back received. Pre-conditions: All actions in the application have to be recorded. Post-conditions: For all actions in the application, a log recorded is generated. Actors: application
Title	SR:DIGITAL_BRIEFING:LEGAL_RECORDING
Status	<Deleted>
Rationale	All actions done by any user has to be recorded.
Category	<Safety>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0203.0002
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	<p>The application shall enable retrieving the legal recording data, on request.</p> <p>Pre-conditions: For all actions in the application, a log record is generated.</p> <p>Post-conditions: The records are sent to the requesting application.</p> <p>Actors: Operator</p>
Title	SR:DIGITAL_BRIEFING:LEGAL_RECORDING_RETRIEVAL
Status	<Deleted>
Rationale	All actions done by any user has to be recorded and on request this records have to be submitted.
Category	<Safety>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0012
Requirement	<p>The ePIB shall include an interactive table of content referring to the different sections of information.</p> <p>Pre-conditions: The Actor has access to the HMI for defining filter criteria to retrieve filter criteria.</p> <p>Post-conditions: An interactive table which includes the content referring to the different sections of information is included in the ePIB.</p> <p>Actors: Pilot Dispatcher</p>
Title	FR:DIGITAL_BRIEFING:PIB_INTERACTIVE_TABLE
Status	<Deleted>
Rationale	The ePIB shall include an interactive table of content referring to the different sections of information.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Identifier	REQ-13.02.02-TS-0201.0013
Requirement	<p>The application shall enable the NOTAM text in the ePIB to be displayed using both upper and lower case as appropriate.</p> <p>Pre-conditions: The Actor has access to the HMI for defining filter criteria to retrieve filter criteria.</p> <p>Post-conditions: NOTAM data will be displayed in upper and lower case as appropriate.</p> <p>Actors: Pilot Dispatcher</p>
Title	FR:DIGITAL_BRIEFING:DISPLAY_NOTAM_TEXT
Status	<Deleted>
Rationale	The application shall enable the NOTAM text in the ePIB to be displayed using both upper and lower case as appropriate.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0014
Requirement	<p>The ePIB shall include NOTAM data that is valid within a specified time span, plus/minus a specified buffer which will enable the user to also retrieve NOTAM data that have a start or end validity close to the prescribed time window.</p> <p>Pre-conditions: The Actor has access to the HMI for defining filter criteria to retrieve filter criteria.</p> <p>Post-conditions: NOTAM data that is valid within a specified time span, plus/minus a specified buffer which are closed to the prescribed time window are visible in the ePIB.</p> <p>Actors: Pilot Dispatcher</p>
Title	FR:DIGITAL_BRIEFING:DISPLAY_NOTAM_IN_VALID_TIMESPAN
Status	<Deleted>
Rationale	The ePIB shall include NOTAM data that is valid within a specified time span.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
--------------	---------------------	------------	------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

--	--	--	--

[REQ]

Identifier	REQ-13.02.02-TS-0201.0015
Requirement	<p>The ePIB shall only display the validity period of the NOTAM data in the following cases:</p> <ul style="list-style-type: none"> - A scheduled event - The NOTAM ends or starts within the selected time window - The NOTAM ends close to the selected time window (24 hours before and after) - The NOTAM validity shall not be displayed if the information is valid for the complete selected time period, including the buffer <p>Pre-conditions: The Actor has access to the HMI for defining filter criteria to retrieve filter criteria.</p> <p>Post-conditions: Only NOTAM data which are valid in the validity periode will be displayed in the ePIB.</p> <p>Actors: Pilot Dispatcher</p>
Title	FR:DIGITAL_BRIEFING:DISPLAY_NOTAM_VALIDITY
Status	<Deleted>
Rationale	The ePIB shall only display the validity period of the NOTAM data.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0019
Requirement	<p>The ePIB should include at its end the list of the acronyms & abbreviations that have been used.</p> <p>Pre-conditions: The Actor has access to the HMI for defining filter criteria to retrieve filter criteria.</p> <p>Post-conditions: The used acronyms & abbreviations will be placed at the end of the ePIB.</p> <p>Actors: Pilot Dispatcher</p>
Title	FR:DIGITAL_BRIEFING:DISPLAY_ACRO_ABBR
Status	<Deleted>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Rationale	The ePIB should include at its end the list of the acronyms & abbreviations that have been used.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0046
Requirement	The End User shall be able to specify/select a FPL to be used as filtering criteria for filtering and retrieving briefing data.
Title	FPL based briefing data filtering
Status	<Deleted>
Rationale	A pilot that already filed a FPL is going to expect to use it as filed for retrieving briefing information
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0047
Requirement	The End User shall be able to specify/input time filtering criteria for filtering and retrieving briefing data
Title	Time based briefing data filtering
Status	<Deleted>
Rationale	A pilot is going to expect to be able to modify the timespan used for filtering briefing data in case the automatically proposed times (based on FPL or else) are not satisfactory
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0050
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	The End Users shall be able to specify parameters for the generation of the briefing: *) Ad-hoc values; *) Values which are part of the FPL associated with the briefing; *) A combination of above possibilities.
Title	Time based briefing data filtering
Status	<Deleted>
Rationale	A pilot is going to expect to be able to use the data from a FPL and Ad-hoc chosen values in combination with the FPL data in the request for retrieving briefing information.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0060
Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall organise the information per phase of flight, based on a specified route trajectory, displaying information for the following phases: • Aerodrome of departure • En-route phase • Aerodrome of destination • Alternate aerodromes
Title	Phase of flight based organisation of ePIB
Status	<Deleted>
Rationale	An improvement to a phase of flight agnostic list of NOTAMs, improving selectivity in the working memory of the pilot.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0061
Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall include an interactive table of content referring to the different sections of information.
Title	Interactive table of content in ePIB
Status	<Deleted>
Rationale	The ePIB shall contain a ToC to give the end-user a better overview on the content of the ePIB. On screen, the ToC shall contain links to the relevant sections.

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0062
Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall include an aerodrome map for each aerodrome phase, displaying graphically NOTAM information concerning: <ul style="list-style-type: none"> • Stands/push-back/parking • Taxiways • Runways • Obstacles
Title	Aerodrome maps in ePIB
Status	<Deleted>
Rationale	An improvement to a location agnostic list of aerodrome briefing information improving pilot's awareness of certain briefing facts by displaying them in a localized manner on an aerodrome map.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0063
Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall include an interactive table of content referring to the different sections of information.
Title	ToC navigable content in ePIB
Status	<Deleted>
Rationale	Improves the navigability of the content of ePIB
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0065
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall include NOTAM data that is valid within a specified time span, plus/minus a specified buffer which will enable the End Users to also retrieve NOTAM data that have a start or end validity close to the prescribed time window.
Title	Timespan based validity of briefing data in ePIB
Status	<Deleted>
Rationale	Reduction of unnecessary briefing information based on time constraints
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0066
Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall only display the validity period of the NOTAM data in the following cases: - A scheduled event - The NOTAM ends or starts within the selected time window - The NOTAM ends close to the selected time window (24 hours before and after) The NOTAM validity shall not be displayed if the information is valid for the complete selected time period, including the buffer
Title	Timespan criteria based selection of briefing data in ePIB
Status	<Deleted>
Rationale	Reduction of unnecessary briefing information based on time constraints
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0201.0067
Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall display the validity period of the NOTAM data graphically, such as a time bar representing the selected time window, where the validity period of the information is marked.
Title	Graphical display of time validity
Status	<Deleted>
Rationale	Improvement of awareness based on graphical display of validity timespan for briefing data.
Category	<Functional>
Validation Method	
Verification Method	<Test>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

1009 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

1010

1011 [REQ]

Identifier	REQ-13.02.02-TS-0201.0068
Requirement	The Pre-Flight Bulletin (ePIB) shall graphically represent and display meteorological and ATFM data, per phase of flight.
Title	MET data per phase of flight
Status	<Deleted>
Rationale	Improved MET information awareness by relating it to phase of flight
Category	<Functional>
Validation Method	
Verification Method	<Test>

1012

1013 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

1014

1015 [REQ]

Identifier	REQ-13.02.02-TS-0201.0069
Requirement	The enhanced Pre-Flight Bulletin (ePIB) shall display in the header the selected query parameters generating the information.
Title	ePIB Header
Status	<Deleted>
Rationale	Improve filtering information visual verification by End User, helps catching errors.
Category	<Functional>
Validation Method	
Verification Method	<Test>

1016

1017 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

1018

1019 [REQ]

Identifier	REQ-13.02.02-TS-0401.0480
Requirement	The Digital Integrated Briefing application shall use data that complies with the necessary quality requirements (completeness, coherency, resolution, accuracy, etc.).
Title	Data quality verification
Status	<Deleted>
Rationale	All data used for producing an ePIB shall comply with quality requirements.
Category	<Operational>
Validation Method	
Verification Method	<Test>

1020

1021 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

--	--	--	--

[REQ]

Identifier	REQ-13.02.02-TS-0501.0008
Requirement	Request registration of user of Digital NOTAM system.
Title	Register End-User
Status	<Deleted>
Rationale	Users can access the Digital NOTAM system in a controlled manner. Only registered users allowed.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0501.0012
Requirement	Request briefing data based on a defined flight trajectory before departure.
Title	Request Departure Briefing
Status	<Deleted>
Rationale	The digital briefing service enables the Pilot to retrieve and understand the information (AIS, MET, ATFM data) that is needed in order to decide upon the feasibility of an intended flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0501.0013
Requirement	Request briefing data based on a FPL
Title	Request Flight Preparation Briefing
Status	<Deleted>
Rationale	The digital briefing service enables the Pilot to retrieve and understand the information (AIS, MET, ATFM data) that is needed in order to decide upon the feasibility of an intended flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

1035

[REQ]

Identifier	REQ-13.02.02-TS-0501.0025
Requirement	Request all MET data needed for an ePIB.
Title	Request Meteo Data
Status	<Deleted>
Rationale	The integrated digital briefing application enables the end-user to retrieve all needed/available MET data from various providers
Category	<Functional>
Validation Method	
Verification Method	<Test>

1036

1037

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

1038

1039

[REQ]

Identifier	REQ-13.02.02-TS-0501.0027
Requirement	Request Airport Map with NOTAM information
Title	Request Airport Map with graphical NOTAM
Status	<Deleted>
Rationale	The digital briefing service enables the Pilot to retrieve and understand the information (AIS, MET, ATFM data) that is needed in order to decide upon the feasibility of an intended flight.
Category	<Functional>
Validation Method	
Verification Method	<Test>

1040

1041

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

1042

1043

[REQ]

Identifier	REQ-13.02.02-TS-0502.0004
Requirement	The data that is required to construct a Briefing (ePIB)
Title	Briefing Data
Status	<Deleted>
Rationale	The integrated digital briefing application uses filter data to request all non-specific needed data from available providers.
Category	<Functional>
Validation Method	
Verification Method	<Test>

1044

1045

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

1046

1047

[REQ]

Identifier	REQ-13.02.02-TS-0502.0005
------------	---------------------------

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

Requirement	Filters that allow the scope of a Digital Briefing to be defined. ePIB Request data.
Title	Briefing Filters
Status	<Deleted>
Rationale	The integrated digital briefing application uses filter data to specify additional information defining the scope of the briefing.
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0502.0008
Requirement	Map of airport area with overlaid NOTAM information
Title	Airport Map
Status	<Deleted>
Rationale	Graphical Airport Map
Category	<Functional>
Validation Method	
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

[REQ]

Identifier	REQ-13.02.02-TS-0901.0302
Requirement	Service instantiation shall be supported on the following interface binding. + Protocol stack: HTTPS GET/POST/PUTDELETE/HEAD over TCP. + MEP: SRR-MEP See: REQ-14.01.04-TS-0901.0302, SWIM-TI Yellow Profile Technical Specification 3.0, D42 004, SESAR 14.01.04
Title	Generic interface Binding. Over HTTPS GET/POST over TCP.
Status	<Deleted>
Rationale	The set of OGC protocols WMS, WFS, WCS and WPS use HTTP GET and POST methods. Encodings are not limited to standardized MIME types but also use vendor specific types from OGC. See: REQ-14.01.04-TS-0901.0302, SWIM-TI Yellow Profile Technical Specification 3.0, D42 004, SESAR 14.01.04
Category	<Functional>
Validation Method	
Verification Method	<Test>

founding members



Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

1056

1057 [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance

1058

founding members

Avenue de Cortenbergh 100 | B -1000 Bruxelles
www.sesarju.eu

108 of 109

-END OF DOCUMENT-

1059

1060

1061

founding members



EUROPEAN UNION



EUROCONTROL

Avenue de Cortenbergh 100 | B -1000 Bruxelles

www.sesarju.eu