



# Final System Requirements

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## Abstract

The objective of this document is to gather the final A-CWP technical requirements used for the implementation of the A-CWP prototypes after Release 5 validation exercises.

The requirements included in this document have been derived from the Operational Project 06.09.02 and updated along the lifecycle of the project in the SESAR Programme.

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## Executive summary

This Technical Specification document collects the Final Technical Requirements divided in two groups, Functional Requirements (section 3.1), used for the implementation of the A-CWP prototypes, and Non-functional Requirements (Section 3.2 to 3.9) identified along the SESAR Programme but not implemented in any phase of the project.

Since the beginning this project was organized in three phases, addressing one or several releases per phase. The functionalities covered in each phase are listed below:

- Phase 1 addressed Release 2 activities
  - 12.05.04.D02 – System Requirements – Step 1, 01/02/2012[10]
    - Basic HMI Requirements from EUROCONTROL ITWP Functional Specifications
    - Surveillance requirements from 12.03.01 (D01)
    - Departure Manager Requirements from 12.03.05 (D02)
    - Surface Routing Requirements from EMMA2 project, 12.03.03 (D02)
    - Surface Guidance Requirements from 'Enhanced Surface Guidance' (12.03.04)
    - D02 was used for prototypes part of the following validations:
      - EXE-06.03.02-VP-065/EXE-06.09.02-VP-568 ENAV/Leonardo
      - EXE-06.03.02-VP-401/EXE-06.09.02-VP-567 ENAIRE/Indra
      - EXE-06.09.02-VP-317 DSNA/Thales
      - EXE-06.07.01-VP-438/EXE-06.09.02-VP-569 ECTL/Frequentis/DFS
- Phase 2 addressed Release 3 and Release 4 activities respectively
  - 12.05.04.D23 – Technical Specification – Phase 2\_Part 1, version 00.01.01, 24/05/2013 [11] based on 06.09.02 requirements (D105 OSED [16], D109 INTEROP [17] and D107 SPR [18]) covering the following functionalities:
    - Basic HMI requirements (update of requirements from 06.09.02 initially obtained from ITWP)
    - Surface Routing (update of requirements from 06.07.02 initially obtained from EMMA2)
    - Safety Nets (06.07.01)
    - Surface Guidance (06.07.03)
    - Enhanced Braking Systems (06.08.02)
    - D23 was used for prototypes part of the following validations:
      - EXE-06.03.02-VP-614 ENAIRE/Indra

- 12.05.04.D81 – Technical Specification – Phase 2\_Part 2, version 00.01.01, 28/02/2014 [12] based on 06.09.02 requirements (D106 OSED [19] and D108 SPR[20]) covering the following functionalities:
  - 12.05.04.D23 + Wake Vortex Separation (Time Based Separation) (06.08.01)
  - D81 was used for prototypes part of the following validations:
    - EXE-06.09.02-VP-678 ECTL/Frequentis/DFS
- Phase 3 addresses Release 5 activities
  - 12.05.04.D44 – Technical Specification – Phase 3\_Part 1, version 00.01.00, 24/04/2015 [13] based on 06.09.02 requirements (D120 OSED [21] and D123 SPR [22] draft 2) covering the following functionalities:
    - Surface Routing (06.07.02)
    - Safety Nets (06.07.01)
    - Surface Guidance (06.07.03)
    - Wake Vortex Separation (Time Based Separation) (06.08.01)
    - D44 was used for prototypes part of the following validations:
      - EXE-06.03.01-VP-719 (Leonardo/ENAV)
      - EXE-06.03.01-VP-699 (Thales/DSNA)
      - EXE-06.03.01-VP-758 (Indra/Enaire)
      - EXE-06.09.02-VP-679 (Frequentis/DFS/Eurocontrol)
  - 12.05.04.D88 – Technical Specification – Phase 3\_Part 2, version 00.01.01, 22/12/2015 [14] based on 06.09.02 requirements (D120 OSED [23] and D123 SPR [24] draft 3) covering the following functionalities in addition to 12.05.04.D44
    - Coupled AMAN-DMAN (06.08.04)
    - Runway Management (06.05.03)
    - D88 was used for prototypes part of the following validations:
      - EXE-06.08.04-VP-343 (Indra/Enaire)
      - EXE-06.03.01-VP-669 (Leonardo/ENAV)
  - 12.05.04.D93 - Final System Requirements (this document)<sup>3</sup>
    - Requirement status updated according to the verification results collected along the project lifecycle (see Assumptions on section 4)

<sup>3</sup> Due to the SESAR closure process; this document does not include any input from Release 5 activities. In order to use this deliverable for further CWP activities (including PCP) it should be revised to take into consideration the conclusions obtained from Release 5 validations and ensure coherence with Technical Primary Projects (see section 4).



- Traceability update based on 06.09.02.D121 [26] and 06.09.02.D124 [25] (see Assumptions on section 4 for more information)

# 1 Introduction

## 1.1 Purpose of the document

The main purpose of the Technical Specification document is to define the technical requirements for the Advanced Controller Working Position (A-CWP) project based on the operational requirements provided by 06.09.02. This project is in charge of defining the HMI for the tower controllers. For this reason any functionality behind the HMI is considered out of scope of 12.05.04, being addressed by other projects within the SESAR Programme.

The production of the Technical Specification (TS) document, according to the figure below, is based on the Operational Service and Environment Description (OSED) and Safety and Performance Requirements (SPR) produced by Operational Primary Projects, in this case 06.09.02, ensuring the consistency with the Technical Architecture Description (TAD) produced by 12.01.07. It should be noted that Technical Primary Projects are not responsible of architecture modelling, but shall provide information to do it.

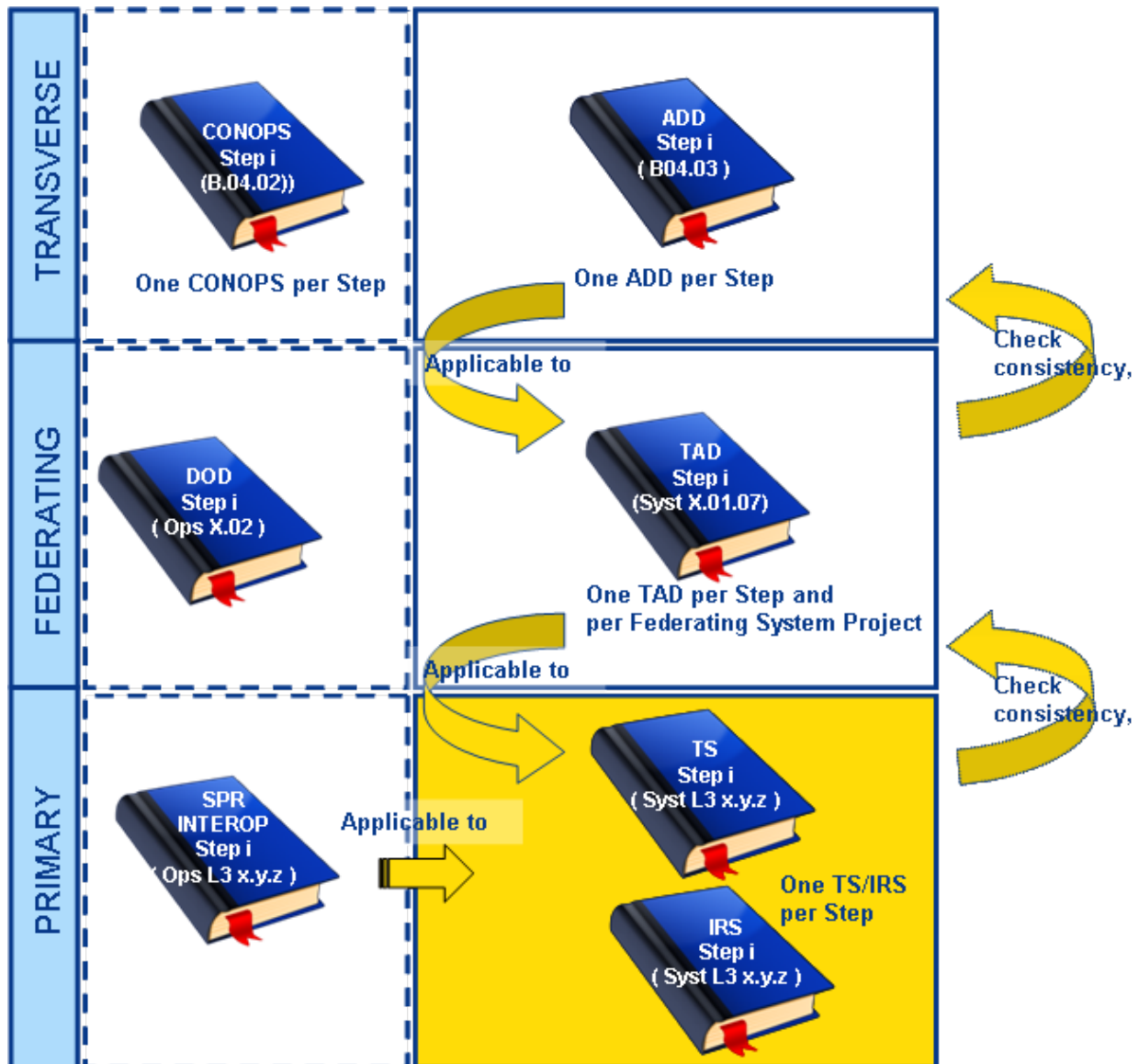


Figure 1: TS document with regards to the other SESAR deliverables

## 1.2 Intended readership

Due to the content of this document, it can be of interest of several WP12 projects which need a Controller Working Position to interact with the controller; in particular:

- **OFA06.01.01 CWP Airport.** This Operational Focus Area is responsible of integrating the different systems and elements from the airport air side into one homogenous set of configurable and customizable Tower Controller Working Position (CWP) and development of associated operational procedures, accommodating the wide range of controller's skill levels and experience.
- **OFA01.02.01 Airport Safety Nets** is working on increasing the level of safety at airports (apron, taxi and runway operations)
- **OFA01.03.01 Enhanced Runway Throughput** addresses the development of the operational concept, procedures and associated technology to allow an improvement in the management of arriving and departing flights with the focus on reducing the runway occupancy time thus increasing runway throughput.
- **OFA04.01.01 Integrated Arrival/Departure Management at Airports** addresses the definition and development of coupled AMAN and DMAN functions at one airport considering integration of surface management constraint
- **OFA04.02.01 Integrated Surface Management** is working on developing the advanced functions of A-SMGCS corresponding to the Surveillance, Guidance, and Route Planning functions
- **OFA05.01.01 Airport Operations Management** is focused on integrating the airport management framework, where all major aircraft operators, airport, aerodrome ATC and ground handling processes are conducted using common data sets and agreed procedures within a collaborative environment.
- **P12.01.07** since this project is the federating project producing the Technical Architecture Document (TAD) assessing the architecture proposed by the primary projects.

## 1.3 Inputs from other projects

The Technical Architecture of Tower Capability Configuration, elaborated by project 12.01.07 (see [7]) was used as input for this document.

## 1.4 Structure of the document

The structure of the document is composed of the following sections:

- **Section 1:** This section introduces the document
- **Section 2:** Provides a general context of the project
- **Section 3:** Details Functional (section 3.1) and Non-functional (Section 3.2 to 3.9) requirements
- **Section 4:** Provides assumptions considered in the Technical Specification
- **Section 5:** Lists the relevant references used within this document

## 1.5 Requirements Definitions – General Guidance

Requirements are produced to describe both Functional (section 3.1) and Non-functional (Section 3.2 to 3.9) requirements at system level. The purpose is to transform the operational requirements and safety recommendations into a coherent description that can be used to guide the system designers in the development of the system.

Requirements are structured by requirement type, according to:

- Functional requirements
- Non-functional requirements<sup>4</sup>
  - Adaptability Requirements
  - Performance Characteristics
  - Safety & Security Requirements
  - Maintainability Requirements
  - Reliability Requirements
  - Internal Data Requirements
  - Design and Construction Constraints
  - Interface Requirements

These requirements will address the “what” and not the “how”, therefore they don’t aim at specifying the physical design of the component, but the functional description and the necessary logical interfaces with other functional blocks.

In order to follow a common guideline for requirements definition, a reference document has been provided [2] so as a template [1] and user manual [3].

- **ID:** Unique identification

<Object type>-<Project code>-<Document code>-<Reference code>.<Reference number>  
(based on rules defined in [3])

e.g. REQ-12.05.04-TS-nnnn.uuuu

- REQ is the <Object type> (i.e. requirement),
- 12.05.04 is the <Project code> ,
- TS is the <Document code> (i.e. technical specification),
- nnnn is the <Reference code>, sequence of 4 alphanumeric characters,
  - Requirements from Phase 1 contain 0 in the first digit of the reference code
    - REQ-12.05.04-TS-0nnn.uuuu
  - Requirements from Phase 2 contain 2 in the first digit of the reference code

<sup>4</sup> Non-Functional requirements do not necessarily have a trace to an operational requirement.

- REQ-12.05.04-TS-2nnn.uuuu
  - Requirements from Phase 3 contain 3 in the first digit of the reference code
    - REQ-12.05.04-TS-3nnn.uuuu
      - uuuu is the <Reference number>, sequence of 4 digits,
- **Requirement:** Text of the requirement, images and tables can be included in this zone by means of OLE objects.
- **Title:** Requirement Title
- **Status:** Data lifecycle status
  - <In Progress> if the requirement is applicable
  - <Deleted> if it is no longer applicable and thus has been deleted
  - <Validated> if the verification of the requirement is successful in the frame of the SESAR R&D activities (until V3) and the requirement is mature enough to be directly transferred to Industrialisation (V4). Refer to section 4 for more details.
- **Rationale:** An explanation of why the object was written the way it is (it does not justify why the object is there, which is covered by a link). The explanation may include references to other studies.
- **Category:** Requirement category type
  - <Design>
  - <Functional>
  - <HMI>
  - <Interface>
  - <Interoperability>
  - <Maintainability>
  - <Metadata>
  - <Operational>
  - <Performance>
  - <Reliability>
  - <Security>
  - <Safety>

Requirements included in this Technical Specification will be categorised as HMI

- **Validation Method:** It corresponds to different validation methods for the requirements and can have following values:
  - <Dress Rehearsal>

- <Flight Trial>
- <Fast Time Simulation>
- <Live Trial>
- <Real Time Simulation>
- <Shadow Mode>
- <Gaming Technique (Agent Based Analysis)>
- <Expert Group (Judgement Analysis)>
- <Analytical Modelling>

Note that “Validation Method” should be filled by operational projects, since the description corresponds to a technical requirement and this field is not necessary, all requirements will be completed with <Real Time Simulation> as default method (non-binding).

- **Verification Method:** It corresponds to different verification methods for the requirements and can have following values:
  - <Review of Design>
  - <Analysis>
  - <Inspection>
  - <Test>

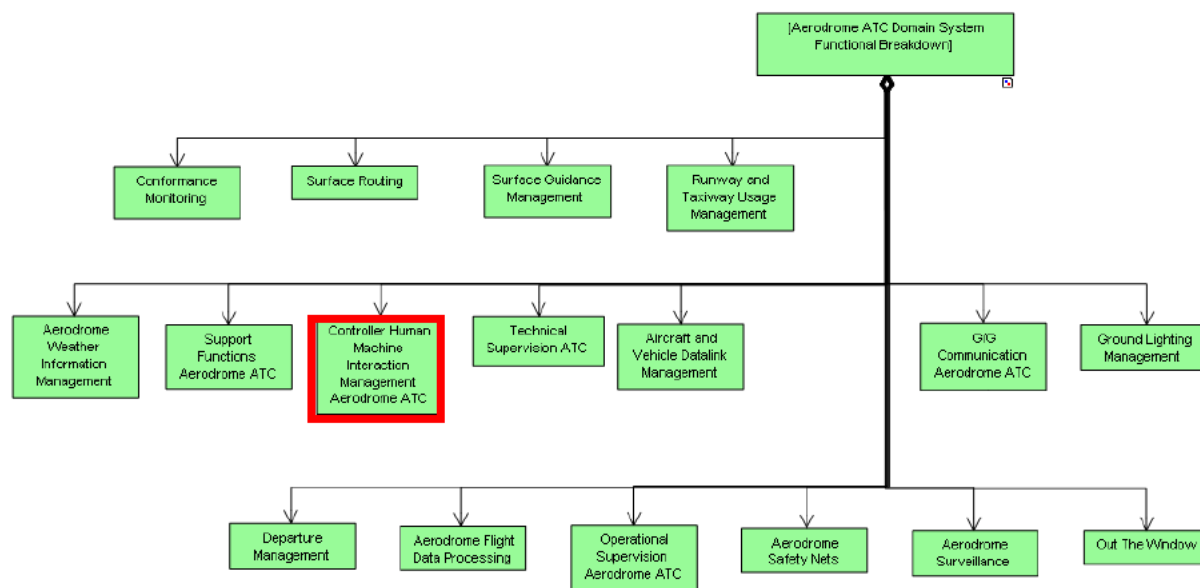
## 1.6 Functional block Purpose

This project is in charge of developing the Advanced Controller Working Position (A-CWP) prototypes for the Airport / ATC environment based on the SESAR concept.

Based on the 12.01.07 TAD [7] which describes the architecture of WP12 technical projects the main functional block addressed by this project is Controller Human Machine Interaction Management.

## 1.7 Functional block Overview

The Controller Human Machine Interaction Management Aerodrome ATC (CHMIM) functional block provides controllers with a graphical user interface and with the means to interact with the Aerodrome ATC system.



**Figure 2: Aerodrome ATC Domain System - Functional Breakdown**

The main responsibility is to provide any relevant information concerning the domains to the external actor and provide any support for actor's insertion of new information. Therefore by means of CHMIM Functional Block any external Actors are able to insert new information or modify the existing one.

The CHMIM functional block represents the access point between the "environment" and the SESAR system (SoS), being the contact point between external actors who use the system and the internal functional block.

Due to its role, the CHMIM contains and supports all interaction between external actors and functional blocks such as:

- **Conformance Monitoring** checks continuously the actual aircraft position, detects deviations of each aircraft from its taxi and/or from planning times. In case of detected deviation this function triggers warnings in order to alert concerned controllers.
- **Surface Routing** provides to the CHMIM the cleared taxi route for each departing/arriving flight on the basis of the aerodrome flight information, current operational airport resources conditions and potential interactions with other mobiles.
- **Surface Guidance Management** provides clearance requests and acknowledge of the guidance to aircraft.
- **Runway and Taxiway Usage Management** provides the schedule and real-time allocation of runways and taxi-ways with the goal to increase airport efficiency and capacity.
- **Aerodrome Weather Information Management**

This functional block is in charge of:

- the acquisition of airfield meteorological data in real-time by means of meteorological sensors;
- the processing of raw meteorological information collected from sensors and the production of observation and forecast reports needed for ATC and pilots;

- the detection and distribution of weather hazard alerts (dangerous weather phenomenon, wind-shear alerts).
- **Support Functions Aerodrome ATC** collects and records the ATM System data related to the Aerodrome ATC.
- **Technical Supervision ATC** monitors the system status.
- **Aircraft and Vehicle Datalink Management** is responsible for the air-ground communication. Its main role is to handle datalink messages, supporting the exchange of the messages between the TWR and the vehicles and/or the aircraft-aircraft on ground
- **G/G Communication Aerodrome ATC** provides the front-end processing to exchange flight data with the other CCs, aircraft operators, other civil ATS Units.
- **Ground Lighting Management** provides the functionalities, for the Aerodrome ATC users, to control and monitoring in real time that the entire "light system" is constantly able to support the operative needs, in order to assure all the airport operations in an appropriate way under all conditions (e.g. CAT I, CAT II, CAT III). This system is also the main enabler to support and implement the Surface Guidance.
- **Departure Management** calculates the departure sequence of the flights and provides the Departure Sequence to the CHMIM.
- **Aerodrome Flight Data Processing** manages from the CHMIM the creation, update and modification of system flight plans up to/from the moment the aircraft takes-off/lands
- **Operational Supervision Aerodrome ATC** allows the Supervisor to manage the most appropriate operational configuration, according to traffic demand and aerodrome needs, and to react in case of system fault, re-assigning and distributing available resources in order to maintain adequate safety levels and quality of service.
- **Aerodrome Safety Nets** detects and triggers alerts to controllers within manoeuvring areas (runway/s and taxiways) potential conflicts between two objects (i.e. aircraft or vehicles), or between an object and a restricted area, by processing the actual traffic situation.
- **Aerodrome Surveillance** provides controllers with airport situational awareness on landing / take-off paths, apron(s), taxiway(s), runway(s) by providing position and identification.
- **Out The Window** provides Tower Controllers with a clear view of the real traffic situation and with all the necessary traffic data concerning a Tower of another Aerodrome ATC system, in order to assist them in their control tasks.

## 1.8 Glossary of terms

N/A

## 1.9 Acronyms and Terminology

Term	Definition
ACC	Area Control Centre
A-CWP	Advanced – Controller Working Position
ADD	Architecture Definition Document

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Term	Definition
<b>AGL</b>	Airfield Ground Lighting
<b>AIBT</b>	Actual In-Block time
<b>AIRAC</b>	Aeronautical Information Regulation And Control
<b>ALDT</b>	Actual Landing Time
<b>AMAN</b>	Arrival Manager
<b>AMDB</b>	Aerodrome Mapping Database
<b>AMM</b>	Airport Moving Map
<b>AoR</b>	Area Of Responsibility
<b>APOC</b>	Airport Operations Centre
<b>APP</b>	Approach
<b>APTR</b>	Alternative Parallel Taxi Routing
<b>ASAT</b>	Actual Start-up Time
<b>A-SMGCS</b>	Advanced Surface Movement Guidance and Control System
<b>ASTERIX</b>	<b>All Purpose STructured Eurocontrol SuRveillance Information EXchange</b> (Eurocontrol Standard)
<b>ATC</b>	Air Traffic Control
<b>ATCO</b>	Air Traffic Control Officer
<b>ATIS</b>	Automatic Terminal Information Service
<b>ATOT</b>	Actual Take-Off Time
<b>ATM</b>	Air Traffic Management
<b>ATMS</b>	Air Traffic Management Service
<b>ATS</b>	Air Traffic Service
<b>AWVT</b>	Automatic Wake Vortex Timer
<b>CATC</b>	Conflicting ATC Clearances
<b>CHMIM</b>	Controller Human Machine Interaction Management
<b>CLD</b>	Clearance Delivery
<b>CMAC</b>	Conformance Monitoring Alerts for Controllers
<b>COTS</b>	Commercial Off The Shelf

Term	Definition
CPDLC	Controller-Pilot Data-Link Communication
CTOT	Calculated Take-Off Time
DCB	Demand-Capacity Balancing
DL	Data Link
DLIC	Data Link Initiation Capability
DMAN	Departure Manager
DOD	Detailed Operational Description
EBS	Enhanced Braking System
EFS	Electronic Flight Strips
EFSS	Electronic Flight Strips System
ELDT	Estimated Landing Time
EMMA	European Airport Movement Management by A-SMGCS
EOBT	Estimated Off-Block Time
EUROCAE	European Organisation for Civil Aviation Equipment
FB	Functional Block
FDPS	Flight Data Processing System
FPL	Flight Plan
FTD	Final Target Distance
GBAS	Ground Based Augmentation System
GND	Ground
HMI	Human Machine Interface
ICAO	International Civil Aviation Organization
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IFR	Instrumental Flight Rules
INTEROP	Interoperability Requirements
IRS	Interface Requirements Specification

Term	Definition
ISO	International Organization for Standardization
ITD	Initial Target Distance
ITWP	Integrated Tower Working Position
KPI	Key Performance Indicator
LVC	Low Visibility Condition
LVP	Low Visibility Procedure
METAR	Meteorological Aerodrome Report
MLAT	Mode S Multilateration
N/A	Not Applicable
OFA	Operational Focus Area
OSED	Operational Service and Environment Definition
OTW	Out The Window
PCP	Pilot Common Project
QFE	Atmospheric pressure at aerodrome elevation (or at runway threshold)
QNH	Altimeter sub-scale setting to obtain elevation when on ground
R/T	Radio Telephony
REL	Runway Entrance Lights
RIL	Runway Intersection Lights
RMCA	Runway Monitoring and Conflict Alerting
RVR	Runway Visual Range
RWSL	Runway Status Lights
RWY	Runway
SESAR	Single European Sky ATM Research
SESAR Programme	The programme which defines the Research and Development activities and Projects for the SJU.
SID	Standard Instrument Departure
SJU	SESAR Joint Undertaking (Agency of the European Commission)
SJU Work Programme	The programme which addresses all activities of the SESAR Joint

Term	Definition
	Undertaking Agency.
<b>SMR</b>	Surface Movement Radar
<b>SoS</b>	System of Systems
<b>SPR</b>	Safety and Performance Requirements
<b>SSN</b>	Surface Safety Nets
<b>SSR</b>	Secondary Surveillance Radar
<b>SUG</b>	Start Up Given
<b>SUR</b>	Start Up Requested
<b>TAD</b>	Technical Architecture Description
<b>TAF</b>	Terminal Aerodrome Forecast
<b>TCL</b>	Taxiway Centre Line
<b>TCP</b>	Transport Control Protocol
<b>TDI</b>	Target Distance Indicator
<b>THL</b>	Take-off Hold Lights
<b>TLDT</b>	Target Landing Time
<b>TOBT</b>	Target Off Block Time
<b>TS</b>	Technical Specification
<b>TSAT</b>	Target Start-up Time
<b>TTOT</b>	Target Take-Off Time
<b>TWR</b>	Tower
<b>TWY</b>	Taxiway
<b>UC</b>	Use Case
<b>UDP</b>	User Datagram Protocol
<b>UTC</b>	Coordinated Universal Time
<b>VBCL</b>	Virtual Block Control in Low Visibility
<b>VFR</b>	Visual Flight Rules
<b>VSB</b>	Virtual Stop Bar

Term	Definition
VSP	Variable System Parameter
WP	Work Package

## 2 General Functional block Description

### 2.1 Context

The Advanced Controller Working Position (A-CWP) prototype is the result of integrating all Human Machine Interfaces specified for the different airport systems into just one homogenous set of configurable and customisable Tower CWP that allows controllers to view or interact with all needed information to fulfil their tasks.

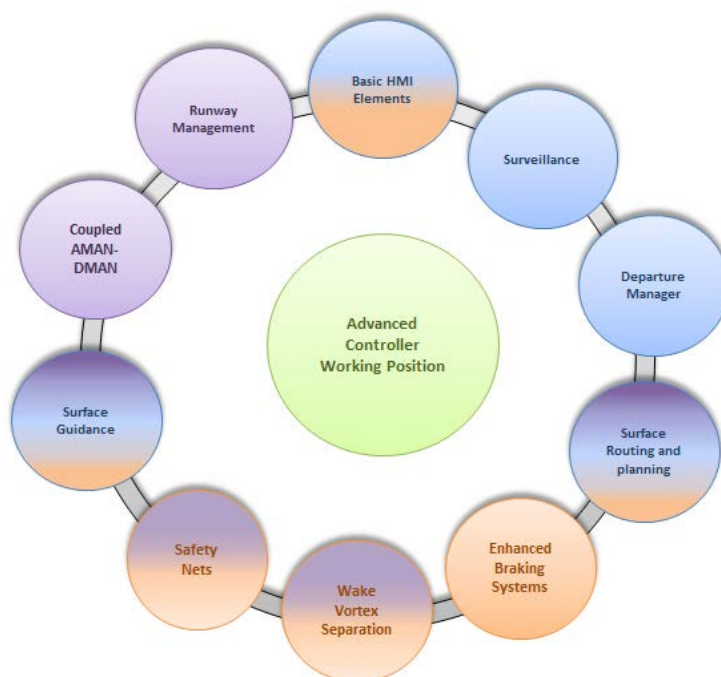
A-CWP is considered part of the following Operational Focus Areas (OFAs) part of the Priority Strategic Business need "Airport Integration and Throughput":

- **OFA01.02.01 Airport Safety Nets**
- **OFA01.03.01 Enhanced Runway Throughput**
- **OFA04.01.01 Integrated Arrival/Departure Management at Airports**
- **OFA04.02.01 Integrated Surface Management**
- **OFA05.01.01 Airport Operations Management**

Being the main one:

- **OFA06.01.01 CWP Airport**

In the SESAR context, the following figure shows the interactions between A-CWP project and other SESAR projects whose HMI need to be integrated into the A-CWP.



**Figure 3: SESAR A-CWP interactions** (explanation see text below)

Along the three phases defined in the project, the HMI requirements of different functionalities have been added in order to obtain a complete validated picture and reference document for the Tower Advanced Controller Working Position at the end of the SESAR Programme.

During Phase 1 (in **Blue**) the technical requirements were derived from consolidated R&D projects external to SESAR such as EMMA2 or iTWP and some SESAR projects whose input was available. They addressed basic requirements for the following functionalities:

- Basic HMI Elements (based on ITWP)
- Surveillance (12.03.01)
- Departure Manager (12.03.05)
- Surface Routing (initially based on EMMA 2 and P12.03.03)
- Surface Guidance Requirements from 'Enhanced Surface Guidance' (12.03.04)

In Phase 2 (in **Orange**) an update of the requirements from Phase 1 was done based on SESAR operational projects.

- Basic HMI Elements (updated by 06.09.02)
- Surface Routing (updated by 06.09.02 based on 06.07.02)

While it was also considered some new requirements from:

- Safety Nets (updated by 06.09.02 based on 06.07.01)
- Surface Guidance (updated by 06.09.02 based on 06.07.03)
- Enhanced Braking Systems (updated by 06.09.02 based on 06.08.02)
- Wake Vortex Separation (Time Based Separation)(updated by 06.09.02 based on 06.08.01)

The last one, Phase 3 (in **Purple**) considers updates in Phase 2 functionalities according to SESAR operational projects:

- Safety Nets (updated by 06.07.01)
- Surface Guidance (updated by 06.07.03)
- Surface Routing (updated by 06.07.02)
- Wake Vortex Separation (Time Based Separation)(06.08.01)

and new requirements from:

- Runway Management (06.05.03)
- Coupled AMAN-DMAN (06.08.04)

Note: Logical interactions between FBs can be found in section 3.9 according to the Logical Architecture described in 12.01.07 TAD [7].

## 2.2 Functional block Modes and States

The state is a technical configuration of the system while mode characterises the way the system is operating in respect to the availability of its functions.

The A-CWP can be operated in three different modes:

- **Normal mode:** In normal mode, the A-CWP provides continuous operational service despite the failure of a function. Under normal circumstances all functions are in use, and actively processing data. This mode is the operational one.
- **Degraded mode:** A function can automatically (as a result of failure) or manually be switched off, at any time, leading to a degraded mode of operation. The user can continue working with the A-CWP but some functions are missing.
- **Failed mode:** In case a significant set of functions necessary for the continuation of the operational service is not available. The user cannot use the system anymore.

The A-CWP could be configured in three different states:

- **Operational state:** the A-CWP is running in an operational environment and used for running user daily operational tasks (control, supervise, update the system)
- **Shadow state:** the A-CWP is running in an operational environment but it is not used to run user daily operational tasks but to verify the system and to test it
- **Simulation state:** the A-CWP is running in a simulated environment for test or replay purposes.

## 2.3 Major Functional block Capabilities

The following major capabilities have been identified which provides a structure for breaking down requirements:

Baseline services, these requirements are based on requirements generated by SESAR projects or projects outside SESAR. It should be noted that some of the baseline services requirements have been updated from Phase 1 according to validation and verification activities

- Login/Logout
- Configuration
- Track Management
- System Monitoring
- Airport information
- Range and Bearing
- Situational Awareness
- Meteorological information
- Movement Plan
- Electronic Flight Strips (EFSS)
- Transfer and control



Advances services, such as Airport Safety Nets, Enhanced Braking Systems, A-SMGCS routing and planning, A-SMGCS guidance coming from SESAR projects.

- Clearances
- Safety Nets
- Routing Information
- Sequencing Tools
- Data Link
- Airfield Ground Lighting
- Enhanced Braking Systems
- Wake Vortex Information
- Runway management
- Virtual Block Control and Virtual Stop Bars
- Navigation Equipment Status

## 2.4 User Characteristics

The A-CWP is foreseen to be located at complex airports, although it could be adapted to other airports less complex. P06.09.02 OSED defines different A-CWP users and their roles according to the definitions provided by 06.02 DOD [8].

For each role, the A-CWP will work in a specific mode adapted to the controller role.

### 2.4.1 Tower Supervisor

The Tower Supervisor is responsible for the safe and efficient provision of air traffic services by the Tower crew. He decides on staffing and manning of controller working positions in accordance with expected traffic demand. He represents the Tower when coordinating with the Airport Operator on operational issues.

### 2.4.2 Tower Runway Controller (RWY ATCO)

The Tower RWY ATCO is responsible for the provision of air traffic services to aircraft within the control zone, or otherwise operating in the vicinity of controlled aerodromes (unless transferred to Approach Control/ACC, or to the Tower GND Controller), by issuing clearances, instructions and permission to aircraft, vehicles and persons as required for the safe and efficient flow of traffic.

The Tower Runway Controller will be assisted by Arrival (AMAN), Departure (DMAN) and Surface (A-SMGCS) management systems, where available.

### 2.4.3 Tower Ground Controller (GND ATCO)

The Tower GND ATCO is part of the controller team responsible for providing an Air Traffic Service (ATS) at controlled aerodromes. His main task is the provision of ATS to aircraft and vehicles on the

manoeuvring area. He must also ensure that airport maintenance vehicles carrying out necessary improvements on an active manoeuvring area do not interfere with the movement of aircraft.

He will be assisted by an advanced surface movement guidance and control system (A-SMGCS).

## 2.4.4 Tower Clearance Delivery Controller (CLD ATCO)

The Tower CLD ATCO is part of the controller team responsible for providing an Air Traffic Service at controlled aerodromes. His main task is the verification of Flight data (e.g. FPL, CTOT, Stand, TSAT...), the provision of departure clearance to the Flight crew (which consists of information like, clearance limit, departure procedure, route, altitude information, communication frequency and transponder code) and Start-Up approval.

He is assisted by a departure management system (DMAN).

## 2.4.5 Apron Manager (optional)

Apron Manager has the responsibility of guiding aircrafts to and from the stands, ensuring the safe and efficient movement of aircrafts and vehicles within his/her area of responsibility according to local procedures, and maintaining close coordination with other actors on planned aircraft movements.

The role varies from airport to airport, but some tasks are general and common to all. Apron controller will have positive control over aircraft, just like ground control. Push-backs must be requested and approved.

## 2.5 Operational Scenarios

The following scenarios have been extracted from 06.02 DOD. These scenarios have been detailed more specifically by the operational project 06.09.02 OSED.

Scenario	06.02 Use Case	DOD reference	06.09.02 Use Case	06.09.02 OSED reference
Surface-in	Landing <ul style="list-style-type: none"> <li>• General (UC 6 15)</li> </ul>	Section 4.2.5.2	Use Case 1 "Arrival Flight"	Section 5.1
	Taxi-in <ul style="list-style-type: none"> <li>• General (UC 6 21)</li> </ul>			
	Taxi-in <ul style="list-style-type: none"> <li>• Optional                             <ul style="list-style-type: none"> <li>○ Towing (UC 6 26)</li> </ul> </li> </ul>		Use Case 4 "Aircraft Towing"	Section 5.4
Turn-round	Pre-departure <ul style="list-style-type: none"> <li>• General (UC 6 58)</li> </ul>	Section 4.2.5.3	Use Case 2 "Departure Flight"	Section 5.2
	Off-blocks			

Scenario	06.02 Use Case	DOD reference	06.09.02 Use Case	06.09.02 OSED reference
	<ul style="list-style-type: none"> <li>• General (UC 6 62)</li> <li>• Optional                             <ul style="list-style-type: none"> <li>○ Open stands (UC 6 63)</li> <li>○ Power back (UC 6 64)</li> </ul> </li> </ul>			
Surface-out	Handle pushback <ul style="list-style-type: none"> <li>• General (UC 6 76)</li> </ul>	Section 4.2.5.4	Use Case 2 "Departure Flight"	Section 5.2
	Ensure taxi-out <ul style="list-style-type: none"> <li>• General (UC 6 79)</li> </ul>			
	Handle take-off <ul style="list-style-type: none"> <li>• General (UC 6 86)</li> </ul>			
-	Not identified	-	Use Case 3 "Vehicle Crossing the Runway"	Section 5.3

Table 1: Operational Scenarios

For more references check 06.09.02 OSED. All Use Cases defined in 06.09.02 applies to the CHMIM functional block.

## 2.6 Functional

### 2.6.1 Functional decomposition

The main Functional Block addressed by 12.05.04 is the Controller Human Machine Interaction Management (CHMIM) FB, which provides controllers with a graphical user interface and with the means to interact with the Aerodrome ATC system.

The following functions have been defined as internal to the CHMIM

- Login/Logout
  - Describes the user access to the A-CWP
- Configuration
  - Defines user configuration, storage, savings or settings.
- Track Management

- Describes the representation and minimum information needed to be displayed to perform the controller tasks
- System Monitoring
  - Indicates the status of the different systems used in the A-CWP
- Airport information
  - Provides indication on the airport information, layout and maps.
- Range and Bearing
  - Provides information from one point of the airspace to another
- Situational Awareness
  - The main objective is to provide the controllers with a clear 'picture' of the actual traffic situation and with all the necessary traffic data to assist them in their control tasks.
- Meteorological information
  - Although weather information is displayed in most towers and control positions on a separate screen, in the A-CWP it should be possible to integrate this information to access and display on the same screen the relevant weather information
- Movement Plan
  - Defines how the ATCO is able to interact with fields of a traffic data item to enter new information or modify existing information on specific flights.
- Electronic Flight Strips (EFSS)
  - Defines how the ATCO interacts with the Electronic Flight Strips.
- Transfer and control
  - The purpose of defining this coordination service is to reduce the need for controller-to-controller verbal co-ordination, which is usually made by telephone
- Clearances
  - If the system knows the intended route and clearance given to a vehicle and will be able to detect any deviations to the ATCO's clearance. This will increase safety as many incidents and runway incursions occur due to vehicles not following procedures or the clearance they were given. Aircraft being towed will be able to be tracked and an estimated in block time will be possible allowing the Aircraft Operators to plan the start of the ground handling.
- Safety Nets
  - The detection of unsafe situations will provide an early prediction of situations that if not corrected would end up in hazardous situations
- Routing Information

- The objective is to display to the controller the optimum surface route in terms of time and distance for a flight generated by the A-SMGCS Routing and Planning function.
- Sequencing Tools
  - The objective is to provide the controller with a sequence of flights in order to optimise the runway throughput
- Data Link
  - The incorporation of data link service is expected to reduce voice communications between Flight Crew and ATCOs and also reduce the risk of Flight Crew misunderstanding a route due to possible poor quality of the R/T
- Airfield Ground Lighting
  - Additionally the A-CWP will provide the ATCO with the capability to input all the guidance instructions which will be, then, visualised through the AGL supporting the ground surface movements
- Enhanced Braking Systems
  - The increase of air traffic accompanied with an increase in delays makes necessary to maximise the use of the infrastructures. In the case of arriving flights, the uncertainty over the time each aircraft will remain on the runway and uncertainty over the exit point results in the inefficient use of the runway. New concepts such as Enhanced Braking Systems will reduce the uncertainty over the ROT and runway exit by providing accurate, reliable data in advance. This will allow systems to better plan runway occupancy and ATCOs to make more efficient use of the runway
- Wake Vortex Information
  - The objective is to improve the landing rate resilience to headwind conditions on final approach through recovering the lost landing rate currently experienced when applying distance based separations (DBS). This is to be achieved by stabilising the delivered time spacing between aircraft on final approach across headwind conditions.
- Runway Management
  - It provides a planning for the runway management to be considered by other tools during the execution phase. It will increase predictability and reduce imbalances.
- Virtual Block Control and Virtual Stop Bars
  - The objective is to enhance control in the airport surface by displaying in the HMI virtual stop bars that do not exist on the airport surface. Virtual block Control procedure offer to aircrafts a controlled sequence from one virtual stop bar to the next one improving taxiing throughput.
- Navigation Equipment Status
  - Since Navigation systems are essential for a safe and successful flight the A-CWP shall display the status of the equipment they are relying on.

## 2.6.2 Functional analysis

The following table traces the relation between the Functional Blocks defined in Section 1.7 and the functional decomposition used to allocate the technical requirements (Section 2.6.1)

	Customer Human Machine Interaction Management <small>Aerodrome ATC</small>	Departure Management	Surface Routing	Surface Guidance Management	Aerodrome Surveillance	Conformance Monitoring	Aerodrome Flight Data Processing	Aerodrome Safety Nets	Support Functions Aerodrome ATC	Operational Supervision Aerodrome ATC	Technical supervision ATC	G/G Communication Aerodrome ATC	Runway and Taxiway Usage Management	Aerodrome Weather information Management	Aircraft and vehicle Data link Management	Ground Lighting Management
Login/Logout	X															
Configuration	X															
Track Management	X				X											
System Monitoring											X					
Airport information	X						X									
Range and Bearing	X						X									
Situational Awareness	X				X	X										
Meteorological information														X		
Movement Plan	X						X									
Electronic Flight Strips (EFSS)	X				X		X									

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	Controller Human Machine Interaction Management Aerodrome ATC	Departure Management	Surface Routing	Surface Guidance Management	Aerodrome Surveillance	Conformance Monitoring	Aerodrome Flight Data Processing	Aerodrome Safety Nets	Support Functions Aerodrome ATC	Operational Supervision Aerodrome ATC	Technical supervision ATC	G/G Communication Aerodrome ATC	Runway and Taxiway Usage Management	Aerodrome Weather information Management	Aircraft and vehicle Data link Management	Ground Lighting Management
Transfer and control	X				X		X									
Clearances						X		X								
Safety Nets					X	X		X								
Routing information			X													
Sequencing tools		X														
Data link				X								X			X	
Airfield Ground Lighting																X
Enhanced Braking Systems					X		X									
Wake Vortex information					X		X									
Runway Management													X			
Virtual Block Control and Virtual Stop Bars	X												X			X
Navigation Equipment Status	X										X					

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**Table 2: Services / External functional block traceability**

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## 2.7 Service View

Although EXE-06.09.02-VP-678 and EXE-06.09.02-VP-679 were SWIM enabled, the A-CWP is not directly connected via SWIM but the applications (e.g. Routing, Guidance, Alert Server...), therefore P12.05.04 considers the section as N/A.

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## 3 Functional block Functional and non-Functional Requirements

### 3.1 Capabilities

#### 3.1.1 Login/Logout

[REQ]

Identifier	REQ-12.05.04-TS-0101.0001
Requirement	The A-CWP shall display a login window and allow the user to enter her/his credentials whenever a user wants to access the Aerodrome ATC system.
Title	Login
Status	<Validated>
Rationale	It has to be possible to an authorised user to access at any time to the A-CWP.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LOGG.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0002.0020	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0002
Requirement	The A-CWP shall allow log out of users.
Title	Logout
Status	<Validated>
Rationale	The user should have the possibility to exit the A-CWP.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LOGG.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0020
Requirement	The A-CWP shall not allow simultaneous access for an authorised user
Title	Login access
Status	<Validated>
Rationale	In order to avoid duplicity.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LOGG.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.1.2 Configuration

### 3.1.2.1 Screen settings

[REQ]

Identifier	REQ-12.05.04-TS-0101.0003
Requirement	The A-CWP shall allow configure the display according to user specific saved screen settings.
Title	Stored screen settings
Status	<Validated>
Rationale	It has to be possible to load a stored screen.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0004
Requirement	The A-CWP shall allow configure the display according to a default screen setting.
Title	Default settings
Status	<Validated>
Rationale	It has to be possible to load a stored screen.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0025
Requirement	The A-CWP shall allow the ATCO to reset to a default situation display setting.
Title	Default Settings Reset
Status	<Validated>
Rationale	ATCO needs to revert to default / initial settings  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0019	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction	N/A

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		Management Aerodrome ATC	
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0015
Requirement	The A-CWP should provide to the controller the possibility to store screen and global window settings including the presence and position of any toolboxes and tools and of all settings selectable within tools together with the location, size and current priority of all open windows, including hidden and (temporarily) iconified windows
Title	Settings storage
Status	<Validated>
Rationale	The controller should be allowed to save the display according to his/her preferences  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0010	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0012	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0016
Requirement	The A-CWP should provide to the controller the possibility to delete any previously stored screen configurations apart from a default setting
Title	Screen configuration deletion
Status	<Validated>
Rationale	The controller should be allowed to delete a previous screen configuration previously saved  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0006	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0017
Requirement	The A-CWP shall provide to the controller the possibility to fine tune brightness and contrast settings
Title	Settings adjustment
Status	<Validated>
Rationale	<p>The controller should be able to adjust bright and contrast for human performance issues.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0021
Requirement	The A-CWP shall allow configure the set of functions and services available to the ATCO according to the performed controller role.
Title	Access functions
Status	<Validated>
Rationale	<p>The following roles are considered:</p> <ul style="list-style-type: none"> <li>• Tower Supervisor,</li> <li>• Tower Runway Controller,</li> <li>• Tower Ground Controller,</li> <li>• Tower Clearance Delivery Controller.</li> </ul> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-INFO.1001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0035
Requirement	The A-CWP shall allow modify the screen settings.
Title	Screen Settings Modification
Status	<Validated>
Rationale	<p>ATCO / TWR Supervisor using the A-CWP shall be able to personalize the display configuration.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0065
Requirement	The A-CWP shall follow a colour coding guideline that details the colour coding for each service.
Title	Colour coding
Status	<Validated>
Rationale	<p>Colour coding helps the ATCO to structure information into different categories, e.g., target labels and flight strips shall use same colours for same flights. Hereby the coding defined by the operational projects related to a service can be used as a starting point but in some cases needs to be adapted for an integrated version of the HMI.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-COLR.1003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-2101.0070
Requirement	The A-CWP shall use a configuration tool (either file or application) to adjust the wording scheme for similar basic information/abbreviations throughout all services/applications according to the controllers preferences.
Title	Configurable Wording Scheme
Status	<Validated>
Rationale	Different wordings for the same functionality or information can lead to confusion of the controller. Configurable wording scheme here means that it can be configured to the current environment and commonly used wording within the specific control room/environment.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-WORD.1001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0009
Requirement	The A-CWP shall provide the possibility to re-centre the situation display on a chosen point.
Title	Airport Layout – Zoom - Center Situation Display
Status	<Validated>
Rationale	The controller should have the possibility to re-centre the situation display.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0019	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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### 3.1.2.2 Input devices

[REQ]

Identifier	REQ-12.05.04-TS-0101.0005
Requirement	The A-CWP shall allow interaction for right hand and left hand users by means a set of input devices: - Pointing device - Alphanumeric functional Keyboard
Title	Input Devices
Status	<Validated>
Rationale	The controller should be allowed to interact with the system with right or left hand.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.2.3 Zoom and Range

[REQ]

Identifier	REQ-12.05.04-TS-0101.0006
Requirement	The A-CWP shall allow the operator to change the situation display range without changing the size of the situation display.
Title	Zoom setting
Status	<Validated>
Rationale	The controller should be provided with the possibility to change the situation display range  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5)

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	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0011	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ZOOM.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0007
Requirement	The A-CWP shall allow the operator to save a range scale value
Title	Zoom storage
Status	<Validated>
Rationale	The controller should be allowed to store a particular range scale value.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0011	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ZOOM.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0014
Requirement	The A-CWP shall provide the possibility to store a pre-defined number of zoom settings.
Title	Airport Layout – Zoom – Store Settings
Status	<Validated>
Rationale	The controller should be provided with the possibility to store a pre-defined number of zoom settings.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2)

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	EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0011	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0027
Requirement	The A-CWP shall allow the ATCO to save a particular zoom range associated with a particular map centre point (zoom setting).
Title	Particular map zoom setting
Status	<Validated>
Rationale	It shall be possible to store a particular zoom range associated with a particular map centre-point (zoom setting).  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ZOOM.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0028
Requirement	The A-CWP shall store predefined zoom and panning settings.
Title	Storing of predefined zoom and panning settings
Status	<Validated>
Rationale	The ATCO likes to have the window appearing the same size as it was when it was iconified  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>

Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0005
Requirement	The A-CWP shall provide a composite picture which can zoom in to airport scale and out to APP/en-route scale.
Title	Airport Layout – Zoom – Airport/APP/En-route Scale
Status	<Validated>
Rationale	<p>The A-CWP should allow zooming in to airport scale and outing to APP/en-route scale.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0006
Requirement	The A-CWP shall provide the possibility to change the situation display range (APP or Ground situation display) being the minimum and maximum zoom values clearly indicated.
Title	Airport Layout – Zoom - Situation Display Range
Status	<Validated>
Rationale	<p>The minimum and maximum zoom values shall be defined</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)</p>

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	EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0009	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ZOOM.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0007
Requirement	The A-CWP shall provide the possibility to access a previously stored zoom setting.
Title	Airport Layout – Zoom – Retrieve Settings
Status	<Validated>
Rationale	The controller should have the possibility to quickly and easily access to a previously stored zoom setting.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0008
Requirement	The A-CWP shall provide the possibility to modify a previously stored zoom setting.
Title	Airport Layout – Zoom – Delete Settings

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Status	<Validated>
Rationale	<p>The controller should have the possibility to delete a previously stored zoom setting.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                  EXE-06.09.02-VP-371 (R2)                  EXE-06.09.02-VP-568 (R2)                  EXE-06.09.02-VP-567 (R2)                  EXE-06.09.02-VP-569 (R2)                  EXE-06.03.02-VP-614 (R3)                  EXE-06.09.02-VP-678 (R4)                  EXE-06.03.01-VP-758 (R5)                  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ZOOM.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.2.4 Alerts

[REQ]

Identifier	REQ-12.05.04-TS-2109.0040
Requirement	The A-CWP shall allow adjust the volume of audible alarms.
Title	Audible alarms volume
Status	<Validated>
Rationale	<p>Volume of the audio alerts depends greatly on the environment. It has to be made sure that the alarm is heard but does not interfere with the operational environment.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                  EXE-06.09.02-VP-678 (R4)                  EXE-06.09.02-VP-679 (R5)                  EXE-06.03.01-VP-758 (R5)                  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-AUDI.1001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-2109.0045
Requirement	The A-CWP audible alarms and voice communication sub-systems shall be independent.
Title	Audible Alarms and Voice Communication
Status	<Validated>
Rationale	To ensure that audible alarms have no influence on an on-going voice communication.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-AUDI.1002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2109.0050
Requirement	The A-CWP shall raise audible alerts and display alert message at the same time for alerts requiring immediate ATCO attention
Title	Audible alerts activation
Status	<Validated>
Rationale	To ensure the attention of the ATCO is drawn to the alert.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0017	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-AUDI.1003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.3 Track Management

#### 3.1.3.1 Track Label

[REQ]

Identifier	REQ-12.05.04-TS-0101.0008
Requirement	The A-CWP shall allow the operator to enable/disable an automatic anti-overlap function in order to avoid track label conflicts.
Title	Anti-overlap function
Status	<Validated>
Rationale	<p>The controller should have the possibility to activate and de-activate the anti-overlap function for track labels</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0009
Requirement	The A-CWP shall allow the operator to change the orientation of the track label with respect the North (magnetic or geographic): N, NE, E, SE, S, SW, W, and NW.
Title	Track Label Orientation
Status	<Validated>
Rationale	<p>The controller should have the possibility to change the orientation of the track label.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0010
Requirement	The A-CWP shall allow the operator to adjust the length of the leader line of the track labels according to the label position.
Title	Leader line
Status	<Validated>
Rationale	<p>The controller should have the possibility to change the length of the leader line of all the track labels.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0011
Requirement	The A-CWP shall allow the operator to manually move a particular label to a defined position taking them off the default setting.
Title	Label Positioning
Status	<Validated>
Rationale	<p>The controller should have the possibility to move the positioning of individual labels.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)</p>

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	EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0010	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0101.0012
Requirement	The A-CWP shall allow the operator to re-establish default position setting for labels manually moved.
Title	Label Positioning
Status	<Validated>
Rationale	The controller should have the possibility to re-establish the position of the labels that have been previously moved manually.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0018
Requirement	The A-CWP shall provide to the controller the possibility to choose between two, or more, configurable different font sizes of track labels

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Title	Font size
Status	<Validated>
Rationale	The controller should be allowed to select the font size of the track label.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0009	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0030
Requirement	The A-CWP shall allow the ATCO to set the initial default label position.
Title	Default Label Position
Status	<Validated>
Rationale	ATCO needs to revert to default / initial settings  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0014
Requirement	The controller shall be provided with feedback whether the automatic anti-overlap is active or not.
Title	De-conflict labels automatically   De-conflict labels manually
Status	<Validated>
Rationale	The controller should have the feedback if the anti-overlap function is to activated or de-activated.

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0015
Requirement	At any moment, the A-CWP shall allow the controller to manually set the orientation of all the displayed track labels, providing the possibility to display the track label with different angles within a given frame of reference.
Title	Set leader direction
Status	<Validated>
Rationale	The controller should have the possibility to manually set the orientation of all track labels, within a given frame of reference.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3102.0090
Requirement	The A-CWP shall allow the controller to manually choose between variable

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	and fixed frame of reference for the display of all track labels. <ul style="list-style-type: none"> <li>variable reference: aircraft heading</li> <li>fixed reference: the top of the screen.</li> </ul>
Title	Set frame of reference for label display direction
Status	<Validated>
Rationale	The controller should choose the reference for better display of track labels.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSD-POSN.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0016
Requirement	At any moment, the A-CWP shall allow the controller to manually set the leader line length of all the displayed track labels.
Title	Set leader length
Status	<Validated>
Rationale	The controller should have the possibility to change the length of the track labels' leader lines  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSD-POSN.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0046
Requirement	Several lengths of the leader line shall be available, allowing changing the

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	position of the labels without modifying their direction with respect to the aircraft track.
Title	Leader length selection
Status	<Validated>
Rationale	The controller should have the possibility to select the length of the track labels' leader lines  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0017
Requirement	When the controller manually move a particular track label on the radar image. The leader line shall automatically extend and reposition to maintain the link between the label and the aircraft position symbol.
Title	Move track label
Status	<Validated>
Rationale	The controller should have the possibility to move a particular track label anywhere on the radar image  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0018
Requirement	At any moment, the A-CWP shall allow the controller to include or not the individually moved labels into the global label position setting.
Title	Resume label position
Status	<Validated>
Rationale	<p>A label, manually put in a certain position, should be avoided by the labels which are monitored by the automatic track label anti-overlap function. The controller should have the possibility A label, manually put in a certain position, should be avoided by the labels which are monitored by the automatic track label anti-overlap function</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.03.01-VP-699 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0005
Requirement	It may be possible to move a particular track label anywhere on the radar image. The leader line may automatically extend and reposition to maintain the link between the label and the aircraft/vehicle position symbol.
Title	Move track label
Status	<Validated>
Rationale	<p>At any moment, it should be possible to move a particular track label anywhere on the radar image. The leader line should automatically extend and reposition to maintain the link between the label and the aircraft or vehicle position symbol.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)</p>

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	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0023
Requirement	The A-CWP shall allow the controller to configure the content of minimum and extended track labels by adding or removing data fields.
Title	Configure track labels
Status	<Validated>
Rationale	<p>The controller should be provided with a rapid and easy way to configure the content of minimum and selected track labels by adding or removing data fields.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0024
Requirement	The content of track labels shall be configurable according to operator role.
Title	Configure track labels
Status	<Validated>
Rationale	The content of track labels should be configurable according to operator role.

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0031
Requirement	The A-CWP shall display the minimum information needed by the controller as the permanently displayed traffic data in order to avoid screen congestion and minimise overlap of displayed information,
Title	Display aircraft representation
Status	<Validated>
Rationale	The minimum information to be displayed will be defined by the ATCO according to the airport necessities to avoid screen congestion.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-2102.0048
Requirement	For a vehicle or a towed aircraft, the A-CWP shall display the identifier (e.g. call-sign) in the label as minimum information.
Title	Towed aircraft identification
Status	<Validated>
Rationale	The identifier is the minimum information to be displayed for a vehicle or a towed aircraft  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0006	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0061
Requirement	The A-CWP shall display at all times the call-sign in the track label of a departing/arriving aircraft, if the track is correlated with the flight plan.
Title	Call-sign display at all times
Status	<Validated>
Rationale	The ATCO needs to see the call-sign of an aircraft to identify it from other mobiles.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0062
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Requirement	The A-CWP shall allow the controller to configure the content and layout of minimum and extended track labels by adding, removing or repositioning data fields off-line.
Title	Minimum and extended track labels layout configuration
Status	<Validated>
Rationale	Different ATSU require different set ups  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0063
Requirement	The A-CWP shall display mobile (vehicle and aircraft) labels in different colours depending on the operational status of the mobile (e.g. arriving/departing/tow).
Title	Mobile labels in different status colours
Status	<Validated>
Rationale	The ATCO needs to know the state (e.g. assumed, pending etc.) of the mobiles.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0019
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Requirement	The A-CWP shall provide to the controller the possibility to display specific SSR codes (7500, 7600,7700)
Title	SSR codes
Status	<Validated>
Rationale	Special codes 7500 (Hijack) 7600 (Communication failure) 7700 (Emergency) should be especially displayed  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.3.2 Track symbol

[REQ]

Identifier	REQ-12.05.04-TS-0102.0019
Requirement	The A-CWP shall allow the controller to display/remove and configure the speed vector length for all the aircraft tracks.
Title	Set speed vectors value
Status	<Validated>
Rationale	The controller should be provided with an easy and rapid way to configure the speed vector length for all the aircraft tracks.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0102.0020
Requirement	The speed vector shall not be 'confusable' with the leader line of the air aircraft track label.
Title	Set speed vectors value
Status	<Validated>
Rationale	<p>The controller should have the possibility to display each individual speed vector according to the values defined at local level.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0021
Requirement	Aircraft track symbols shall be different allowing the controller to clearly distinguish between them.
Title	Display track symbol
Status	<Validated>
Rationale	<p>It has to be possible to distinguish between track symbols.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRCK.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0022
Requirement	The A-CWP shall allow the controller to configure the number of trail dots for all the aircraft tracks.
Title	Set track history value
Status	<Validated>
Rationale	The number of trail dots to be displayed shall be defined at local level.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRCK.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0026
Requirement	The A-CWP shall provide the controller with the possibility to set/select groups of aircraft tracks to be displayed such as per aircraft category.
Title	Filter tracks
Status	<Validated>
Rationale	The Filter provides the possibility for the controller to filter out traffic depending on criteria such as height, speed, WTC...(future criteria need to be defined).  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FILT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0027
Requirement	The A-CWP shall provide a function to mark an aircraft by the controller.
Title	Marking
Status	<Validated>
Rationale	<p>The controller should be provided with an easy and rapid way to mark an aircraft or vehicle.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-HIGH.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.4 System Monitoring

[REQ]

Identifier	REQ-12.05.04-TS-2101.0040
Requirement	The A-CWP shall display the modes of the system (e.g. fall back modes or modes caused by running emergency procedures) in an understandable form. This includes the failure of system parts relevant for the work of the controller.
Title	Failure Indication
Status	<Validated>
Rationale	<p>This requirement is related to the presentation of information about the current mode of a system integrated within the A-CWP.</p> <p>The risk is that if ATCOs are unaware of the mode they might misinterpret situational cues and perform incorrect responses as a result.</p> <p>However if different modes of operation are used the ATCO should be made aware of them to know possible changes in the workflow or procedures.</p>

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1014	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0050
Requirement	Technical/system alerts shall be displayed in a dedicated window separate from the operational alerts.
Title	Technical/system alerts window
Status	<Validated>
Rationale	To improve visual perception of particularly important information and address immediate ATCO attention  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0055
Requirement	The A-CWP shall display to the ATCO the detected failure of services as long as the failure exists
Title	Services Failure Display
Status	<Validated>
Rationale	To make the operator aware of the failure.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>



[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0018
Requirement	The A-CWP shall display the failure status data as detected by the technical supervision.
Title	System failure
Status	<Validated>
Rationale	The controller should be provided with an indication in case of system failure detected by the technical supervision.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0001
Requirement	The A-CWP shall deliver a feedback about the success of the controlling actions.
Title	Feedback of performed action
Status	<Validated>
Rationale	Buttons shall provide feedback specific to the action taken.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0021	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0042
Requirement	The A-CWP shall display the status of the Routing Information Display (indication, failure, maintenance)
Title	Routing Information Display Status
Status	<Validated>
Rationale	The ATCO needs to know whether the routing information displayed is up to date. This applies especially to the clearances given and the cleared route segments.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0017	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0020	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0043
Requirement	The A-CWP shall display the status of the TCL (on/off, failure, intensity, maintenance, TWY closed)
Title	AGL Display Status
Status	<Validated>
Rationale	The controller shall be provided with an indication with the status of the TCL system  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0016	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0018	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.1.5 Airport Information

### 3.1.5.1 Date/Time

[REQ]

Identifier	REQ-12.05.04-TS-0103.0011
Requirement	The A-CWP shall display the current date (UTC)
Title	Current Date
Status	<Validated>
Rationale	<p>The UTC time shall be continuously provided to the controller. UTC date format according to ISO 8601</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TIME.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0012
Requirement	The A-CWP shall display the current time (UTC) in the format HH:MM:SS with a precision of 1 second.
Title	Current time
Status	<Validated>
Rationale	<p>The UTC time shall have the precision of 1 second. UTC time format according to ISO 8601</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TIME.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TIME.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0006
Requirement	The display of the UTC time shall be always available.
Title	Display time
Status	<Validated>
Rationale	<p>The UTC time shall be continuously provided to the controller. UTC time format according to ISO 8601</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TIME.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.5.2 Airport Layout

[REQ]

Identifier	REQ-12.05.04-TS-0102.0001
Requirement	The A-CWP shall display/remove parking stand names and associated locations on the ground situation display either permanently or temporarily (quick look mode).
Title	Display parking names
Status	<Validated>
Rationale	<p>The controller should be provided with a rapid and easy means to display / remove display parking names and associated location on the ground situation display.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)</p>

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	EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0002
Requirement	The A-CWP shall be able to display / remove display taxiway names on the ground situation window, either permanently or temporarily.
Title	Display taxiway names
Status	<Validated>
Rationale	The controller should be provided with a rapid and easy means to display / remove display taxiway names on the ground situation window.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0003
Requirement	The A-CWP shall be able to remove display or redisplay working areas on the ground situation window.
Title	Display working areas
Status	<Validated>

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Rationale	<p>The controller should be provided with a rapid and easy means to remove display or redisplay working areas on the ground situation window.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                  EXE-06.09.02-VP-371 (R2)                  EXE-06.09.02-VP-568 (R2)                  EXE-06.09.02-VP-567 (R2)                  EXE-06.09.02-VP-569 (R2)                  EXE-06.03.02-VP-614 (R3)                  EXE-06.09.02-VP-678 (R4)                  EXE-06.09.02-VP-679 (R5)                  EXE-06.03.01-VP-699 (R5)                  EXE-06.03.01-VP-758 (R5)                  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0081
Requirement	The A-CWP shall be able to include new maps or change existing ones.
Title	Map change
Status	<Validated>
Rationale	<p>As an airport environment changes it is important to keep the ATCO information up to date. Changes such as these are normally made off line by the supporting technical services</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                  EXE-06.03.02-VP-614 (R3)                  EXE-06.09.02-VP-678 (R4)                  EXE-06.09.02-VP-679 (R5)                  EXE-06.03.01-VP-699 (R5)                  EXE-06.03.01-VP-758 (R5)                  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0001
Requirement	The A-CWP shall allow define at local level the number of airport (2D)

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	video maps and the content of each map. The proposed default display is the following: <ul style="list-style-type: none"> <li>• Taxiways</li> <li>• Runways</li> <li>• Terminals and other airport buildings</li> <li>• Apron and gates</li> <li>• Stop bars.</li> </ul>
Title	Airport Layout – Airport Maps
Status	<Validated>
Rationale	The number of airport 2D maps and the content of each map shall be defined at local level.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0008	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0010
Requirement	The A-CWP shall allow the controller to modify the geographical orientation of airport maps.
Title	Airport Layout – Geographical Orientation
Status	<Validated>
Rationale	The controller should be provided with a rapid and easy means to modify the geographical orientation of airport maps.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2104.0018
Requirement	Depending on each airport, the A-CWP shall display the airport (2D) video map that contains, at least: <ul style="list-style-type: none"> <li>runway exit/entry</li> <li>stands</li> <li>stop bars</li> <li>Crossing and divergence points</li> <li>Any other relevant points (e.g. de-icing, virtual stop bars) according to local procedures</li> </ul>
Title	Airport Layout
Status	<Validated>
Rationale	The display of the airport layout is essential part of the ground situation presentation.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2104.0015
Requirement	The A-CWP shall allow the controller to turn off airport video maps.
Title	Airport Video Maps - turn off
Status	<Validated>
Rationale	The controller should have the possibility to turn off airport video maps  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4)

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	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2104.0016
Requirement	The A-CWP shall allow the controller to display airport video maps.
Title	Airport Video Maps - display
Status	<Validated>
Rationale	The controller should have the possibility to display airport video maps  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3104.0020
Requirement	The A-CWP shall use Aerodrome Mapping Databases (AMDB) to support the display of the airport map.
Title	Usage of Aerodrome Mapping Databases
Status	<In Progress>
Rationale	In order to ensure the interoperability of the routing function and the consistency of airport descriptions in ATC, aircraft and vehicles systems and standardised airport data bases need to be used.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3104.0021
Requirement	The Aerodrome Mapping Databases (AMDB) used by the A-CWP shall be adaptable.
Title	Adaptability of Aerodrome Mapping Databases
Status	<In Progress>
Rationale	In order to ensure the interoperability of the routing function and the consistency of airport data bases used by ATC, the A-CWP must support of being adapted following the AIRAC cycle.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.6 Range and Bearing

[REQ]

Identifier	REQ-12.05.04-TS-0102.0007
Requirement	The A-CWP shall provide access to the Range and Bearing function allowing obtaining precise range and bearing information as measured from one point of the airspace to another.
Title	Obtain Range and Bearing information
Status	<Validated>
Rationale	The controller should be provided with a rapid and easy access to the Range and Bearing function allowing obtaining precise range and bearing information  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0001	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0008
Requirement	The A-CWP shall allow the controller to leave the Range and Bearing function.
Title	Obtain Range and Bearing information
Status	<Validated>
Rationale	<p>The controller should be provided with a rapid and easy way of leaving the Range and Bearing function.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0009
Requirement	The A-CWP shall provide the controller with feedback when the Range and Bearing function is active or not.
Title	Obtain Range and Bearing information
Status	<Validated>
Rationale	<p>The controller should be provided with feedback when the Range and Bearing function is active or not.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0010
Requirement	The A-CWP shall provide an access to the Tracker link function allowing to monitor over time the change in relative range and bearing over time of two points, one or both of which are dynamic (an aircraft and a fixed point, or two aircraft).
Title	Create Range and Bearing Tracker Link
Status	<Validated>
Rationale	<p>The controller should be provided with a rapid and easy access to the Tracker link function allowing monitor over time the change in relative range and bearing over time of two points.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0011
Requirement	The A-CWP shall provide with the controller the possibility to leave the Tracker Link function.
Title	Create Range and Bearing Tracker Link
Status	<Validated>
Rationale	<p>The controller should be provided with a rapid and easy way of leaving the Tracker Link function.</p> <p>This requirement has been implemented, successfully verified and included</p>

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	in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0012
Requirement	The A-CWP shall provide the controller with feedback when the Tracker link function is active or not.
Title	Create Range and Bearing Tracker Link
Status	<Validated>
Rationale	The controller should be provided with feedback when the Tracker link function is active or not.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0013
Requirement	The A-CWP shall allow the controller to remove the displayed range and

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	bearing information.
Title	Cancel Range and Bearing Tracker Link
Status	<Validated>
Rationale	<p>The controller should be provided with a rapid and easy way of removing the displayed range and bearing information.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-RANB.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.1.7 Situational awareness

### 3.1.7.1 Traffic data

[REQ]

Identifier	REQ-12.05.04-TS-0101.0013
Requirement	<p>The A-CWP shall provide to Controller textual data in various formats:</p> <ul style="list-style-type: none"> <li>• Labels</li> <li>• Lists of data</li> <li>• Electronic Flight Strips</li> </ul>
Title	Textual Data
Status	<Validated>
Rationale	<p>Textual data should be provided in several formats</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2101.0060
Requirement	While the ATCO makes an input in a specific field, the A-CWP shall maintain the focus (e.g. prompt) on that position/field
Title	Focus maintained on position/field
Status	<Validated>
Rationale	To avoid erroneous/unintended inputs  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-INPT.1012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0028
Requirement	Selecting an aircraft shall: a) Highlight all the available representations on the traffic situation management A-CWP of that traffic wherever such information appears, b) Show the track label in the highlighted format.
Title	Select an individual aircraft
Status	<Validated>
Rationale	The controller should have the possibility to highlight and show the track label in the appropriate format.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5)

	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SELC.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0029
Requirement	De-selecting a mobile shall: a) Deselect the previously highlighted traffic representation. b) Revert the track label to no-highlighted form
Title	Deselect an individual aircraft
Status	<Validated>
Rationale	The controller should have the possibility to deselect or revert the track label.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SELC.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0033
Requirement	All Traffic Data Items pertinent to a controller shall be presented in a clear and predefined format(s) that help her/him to prioritise planning and control actions.
Title	Display Traffic Data List
Status	<Validated>
Rationale	The controller should be presented with all traffic data items in a clear way that helps him/her to prioritise planning and control actions.

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0047
Requirement	Depending on operational needs, traffic data shall be configurable with regard to layout, size, shape, fonts, colours and interaction capability.
Title	Traffic Data List Configuration
Status	<Validated>
Rationale	The controller should be able to configure the traffic data list depending on the operational needs.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0102.0035
Requirement	The presentation format of the Extended Traffic Data Item information shall be fixed, allowing the controller to find information.
Title	Fixed information on extended Traffic data item
Status	<Validated>
Rationale	The controller should be provided with a fixed presentation format.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0036
Requirement	The A-CWP shall be able to sort out Traffic Data Items displayed in a Traffic Data List, either manually or according to configurable criteria.
Title	Expand Traffic data item
Status	<Validated>
Rationale	The controller should be provided with an easy means to sort out Traffic Data Items displayed in a Traffic Data List, either manually or according to configurable criteria.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0007	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0037
Requirement	The A-CWP shall assist the controller to create a new traffic data item
Title	Expand Traffic data item
Status	<Validated>
Rationale	<p>The controller should be assisted to create a new traffic data</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0038
Requirement	Several sets of traffic data shall be provided in order to assist the controller in different types of tasks as updating of data, planning of actions, surface conflict detection and monitoring.
Title	Traffic Data sets
Status	<Validated>
Rationale	<p>Different sets of traffic data should be provided in order to assist the controllers in different types of tasks (e.g. updating of data, planning of actions, traffic monitoring and conflict detection). These sets of data should be presented in a combination of graphical and textual formats.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)</p>

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	EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0002	<Full>
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<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0005	<Full>
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<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0010	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0011	<Full>
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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0042
Requirement	The A-CWP shall allow the controller to expand the format of a displayed Traffic Data Item to access additional data. By default, Traffic Data Items may be presented under normal (minimum) format.
Title	Traffic indication
Status	<Validated>
Rationale	<p>The controller should be able to expand the format of a displayed traffic data item to access additional data. By default, traffic data items should be presented under normal (minimum) format.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0049
Requirement	Traffic data items shall be removed from the A-CWP (but flight data remain archived in Tower System Database) a time after (VSP time parameter), as follows: <ul style="list-style-type: none"> <li>• controller decision, or</li> <li>• AIBT (for arrival flights) or</li> <li>• ATOT (for departure flights).</li> </ul>
Title	Data Items removal
Status	<Validated>
Rationale	The traffic data items should be removed a time after certain actions  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0010	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0051
Requirement	The A-CWP should display the following traffic data items for towed aircrafts: <ul style="list-style-type: none"> <li>• Mobile callsign</li> <li>• Aircraft type</li> <li>• Start and End Point</li> <li>• Estimated Start Taxi Time</li> </ul>
Title	Traffic data items for towed aircrafts
Status	<Validated>
Rationale	The controller should be provided with the following minimum data items for towed aircrafts.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0071
Requirement	<p>The A-CWP shall display, if available, the following information for arrival aircraft:</p> <ul style="list-style-type: none"> <li>• Aircraft callsign</li> <li>• Wake Vortex category</li> <li>• Stand identification + Waiting time indication (if the stand is occupied)</li> <li>• Distance/Time to touchdown</li> <li>• Altitude</li> <li>• Speed</li> <li>• ELDT (Estimated Landing Time, when estimated) or ALDT (Actual Landing Time)</li> <li>• Aircraft type</li> <li>• IFR or VFR flight indicator</li> <li>• Indication of last clearance / instruction</li> <li>• Runway</li> <li>• Runway sequence number (as optional object)</li> <li>• Departure airport</li> <li>• Special requests form aircraft (e.g. medical assistance, police)</li> <li>• Equipment (according to ICAO 2012 FPL format)</li> </ul>
Title	Arrival aircraft information
Status	<Validated>
Rationale	<p>The ATCO needs to know specific information for arriving flights.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0072
Requirement	<p>The A-CWP shall display, if available, the following information for departure aircraft:</p> <ul style="list-style-type: none"> <li>• TTOT (Target Take-Off Time) or ATOT (Actual Take Off Time)</li> <li>• Aircraft callsign</li> <li>• Aircraft type</li> <li>• Wake vortex category</li> <li>• Stand</li> </ul>

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	<ul style="list-style-type: none"> <li>• SID or VFR indicator</li> <li>• CTOT (Calculated Take Off Time) and Ready Message indicator</li> <li>• Indication of last clearance / instruction</li> <li>• Runway</li> <li>• Runway sequence number (as optional object)</li> <li>• Runway Entry Point</li> <li>• Destination airport</li> <li>• Altitude</li> <li>• Speed</li> <li>• Equipment (according to ICAO 2012 FPL format).</li> </ul>
Title	Departure aircraft information
Status	<Validated>
Rationale	<p>The ATCO needs to know specific information for departing flights</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0105.0002
Requirement	The A-CWP shall provide a visible indication on a traffic data item when a flight has been cancelled or delayed
Title	Traffic Data – Flight cancelled or delayed
Status	<Validated>
Rationale	<p>The controller should receive a visible indication when a flight has been cancelled or delayed.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ZOOM.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0022
Requirement	The A-CWP shall allow the controllers to sort, move, and create new traffic data items in the traffic data lists.
Title	EFSS Manual interaction
Status	<Validated>
Rationale	It should be possible to manually sort and move flight strips.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0008	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0140
Requirement	The A-CWP shall allow the controllers by manual action to move traffic data items from one position to another one in the same Traffic List or from one List to another on the same control position.
Title	EFSS Manual movement of traffic data items
Status	<Validated>
Rationale	It should be possible to manually sort and move flight strips.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A

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<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A
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[REQ]

Identifier	REQ-12.05.04-TS-0108.0012
Requirement	The A-CWP may be able to present to controller the list of movement plans for all target present in movement area, according to this classification: <ul style="list-style-type: none"> <li>• Vehicle list</li> <li>• Tow movement</li> <li>• Unknown movement</li> </ul>
Title	Classification of movement plan data
Status	<Validated>
Rationale	Movement plan types and attributes for all targets in movement area.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0013
Requirement	The A-CWP shall be able to update in real time, the information presented within the movement plan list, according to this classification: <ul style="list-style-type: none"> <li>• Vehicle list</li> <li>• Tow movement</li> <li>• Unknown movement</li> </ul>
Title	Display of flight plan data: real time update
Status	<Validated>
Rationale	The Flight Plan information from the flight data processing system (FDPS) should be available.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0102.0039
Requirement	Sets of traffic data shall be presented in either textual or graphical format.
Title	Traffic Data sets – Visual Presentation
Status	<Validated>
Rationale	<p>Different sets of traffic data should be provided in order to assist the controllers in different types of tasks (e.g. updating of data, planning of actions, traffic monitoring and conflict detection). These sets of data should be presented in a combination of graphical and textual formats</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.7.2 Traffic situation

[REQ]

Identifier	REQ-12.05.04-TS-0104.0002
Requirement	The A-CWP shall allow the controller to modify and display the status of the runways and taxiways (active / closed).
Title	Airport Layout – Runways/Taxiways Status
Status	<Validated>
Rationale	<p>The controller should be provided with an easy means to access / modify the status of the RWY and taxiways (active / closed)</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)</p>

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	EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0008	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0006	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0007	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0025
Requirement	The colours associated to arriving and departing traffic shall be different.
Title	Configure track labels
Status	<Validated>
Rationale	<p>The colors associated to arriving and departing traffic should be different.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0032
Requirement	The A-CWP shall update the traffic representation on the controller's display: a) updates of the surveillance system b) controller updates of traffic data.
Title	Display aircraft representation
Status	<Validated>
Rationale	<p>The traffic representation should be updated on the controller's display.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)</p>

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	EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0034
Requirement	Mobiles under the control area responsibility of a controller at a particular working position shall be clearly distinguished from mobiles which are not under her/his control responsibility.
Title	Display Traffic Data List
Status	<Validated>
Rationale	Traffic under the control area responsibility of a controller at a particular working position should be clearly distinguished from traffic which is not under her/his control responsibility.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0005	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0040
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Requirement	The A-CWP shall provide the controller with a clear indication that a mobile is: a) Entering her/his area of responsibility; b) Being under her/his responsibility; c) Leaving her/his area of responsibility
Title	Traffic indication
Status	<Validated>
Rationale	The controller should be provided with a clear indication of a movement  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0044
Requirement	The A-CWP shall display the complete airport traffic situation, allowing a situation assessment.
Title	Airport Traffic Situation
Status	<Validated>
Rationale	The HMI should display the complete airport traffic situation, allowing a rapid situation assessment  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-PICT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0046
Requirement	The A-CWP should allow the controller to distinguish between different aircraft categories on the situation display.
Title	Aircraft categories
Status	<Validated>
Rationale	The A-CWP will distinguish between different wake vortex categories  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRCK.0002	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0047
Requirement	The A-CWP should display the aircraft shape
Title	Aircraft shape
Status	<Validated>
Rationale	The aircraft shape should be displayed in the CWP  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRCK.0003	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0050
Requirement	The A-CWP shall allow the display of additional situation views on the screen (e.g. by using complementary windows).

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Title	Complementary windows
Status	<Validated>
Rationale	The usage and how many additional windows are displayed will depend on the role and the way of working  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VIEW.0001	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0082
Requirement	The A-CWP shall highlight the status of a closed runway
Title	Closed Runway highlighting
Status	<Validated>
Rationale	The ATCO have to be aware of the closure of runways  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-SPR-0131.0210	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2102.0083
Requirement	The A-CWP shall highlight the status of a closed taxiway (for example with a red border or a red centerline).
Title	Closed Taxiway highlighting
Status	<Validated>

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Rationale	The ATCO have to be aware of the closure of runways  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0003
Requirement	The A-CWP shall display and remove different types of surface information on the ground situation display.
Title	Airport Layout – Ground Situation Display
Status	<Validated>
Rationale	The controller shall be able to display and remove different types of surface information on the ground situation display.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0004
Requirement	The A-CWP shall display when a runway is occupied by an aircraft or a

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	vehicle which is under the responsibility of the controller.
Title	Airport Layout – Runway Occupation
Status	<Validated>
Rationale	<p>The controller should be provided with an indication when a runway is occupied by an aircraft or a vehicle which is on the frequency with the controller.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.03.01-VP-699 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0104.0011
Requirement	The A-CWP shall provide, at each controller working position, a traffic situation display capable to present labelled target tracks superimposed on an airport and approach map.
Title	Airport Layout – Labelled target tracks
Status	<Validated>
Rationale	<p>The controller should be provided with a traffic situation display superimposed in the airport and approach map.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-699 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-2104.0013
Requirement	The A-CWP shall allow the controller to hide indication for occupied stands
Title	Occupied stands - hide indication
Status	<Validated>
Rationale	The controller should have the possibility to hide the indication for occupied stands.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2104.0014
Requirement	The A-CWP shall allow the controller to display indication for occupied stands
Title	Occupied stands - display indication
Status	<Validated>
Rationale	The controller should have the possibility to display the indication for occupied stands.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2104.0017
Requirement	The A-CWP shall allow ATCO to distinguish when an aircraft is able to taxi with or without pushback instruction.
Title	Pushback required
Status	<Validated>
Rationale	The controller should be indicated when an aircraft is able to taxi with or without pushback instruction.

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0309	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2104.0019
Requirement	The A-CWP shall not display traffic that has reached its parking stand
Title	Airport Layout
Status	<Validated>
Rationale	Trigger can either be transponder turned off or local time parameter after reaching stand  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0105.0003
Requirement	The A-CWP shall display arrival traffic data on the RWY arrival control position at a time parameter before the estimated landing time (ELDT).
Title	Traffic Data – Arrival Flight RWY Display
Status	<Validated>
Rationale	The arrival traffic data item should be displayed according to the proposed time parameter defined at local level.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2)

	EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0007	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0105.0004
Requirement	Based on local decision, the A-CWP shall display arrival traffic on concerned GND control position(s) either at a time parameter before the estimated landing time (ELDT) or based on an identified runway controller action / clearance for that flight.
Title	Traffic Data – Arrival Flight GND Display
Status	<Validated>
Rationale	The arrival traffic data item should be displayed according to the proposed time parameter defined at local level.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0007	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0105.0005
Requirement	Based on local decision, the A-CWP shall display departure traffic data item on concerned ATCO position(s) either at a time parameter before the

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	estimated or target off block time (EOBT /TOBT) time or based on an identified controller action/clearance for that flight.
Title	Traffic Data – Departure Flight Display
Status	<Validated>
Rationale	The departure traffic data item should be displayed according to the proposed time parameter defined at local level.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0105.0006
Requirement	The A-CWP shall provide visible indication of completion of a flight transfer/assume control responsibility on both assuming and transferring operator roles.
Title	Traffic Data – Mobile Transfer/Assume Control Responsibility
Status	<Validated>
Rationale	Visible indication of completion of a flight or vehicle transfer/assume control responsibility should be provided on both assuming and transferring operator roles.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0105.0007
Requirement	<p>The A-CWP shall update the traffic representation in the following situations:</p> <ul style="list-style-type: none"> <li>• Target reports received from the Surveillance function</li> <li>• Controller-initiated update of data</li> <li>• Updates of traffic context data</li> <li>• Flight plan updates from the Routing/Planning functions.</li> </ul>
Title	Traffic Data – Traffic Update
Status	<Validated>
Rationale	<p>The controller should be provided with clear and visible indication when the traffic is updated.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0105.0008
Requirement	<p>The A-CWP shall present a clear "picture" of the actual traffic situation in the controller's responsibility area, with all the necessary traffic data to assist in the control task.</p>
Title	Traffic Data – Traffic Situation
Status	<Validated>

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Rationale	<p>The HMI should present a clear 'picture' of the actual traffic situation in the controller's responsibility area, with all the necessary traffic data to assist in the control and guidance tasks, i.e. to easily locate and identify aircraft and vehicles and to have a direct access to essential information.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                  EXE-06.09.02-VP-371 (R2)                  EXE-06.09.02-VP-568 (R2)                  EXE-06.09.02-VP-567 (R2)                  EXE-06.09.02-VP-569 (R2)                  EXE-06.03.02-VP-614 (R3)                  EXE-06.09.02-VP-678 (R4)                  EXE-06.09.02-VP-679 (R5)                  EXE-06.03.01-VP-699 (R5)                  EXE-06.03.01-VP-758 (R5)                  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0005	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0002
Requirement	The A-CWP shall provide to the controller traffic position and trajectory in graphical format with labels (including identifier and vehicle type) in order to locate each vehicle and visualise its progress
Title	Display Airport Traffic Situation
Status	<Validated>
Rationale	<p>The HMI should provide, at each controller working position, a traffic situation display capable to present labelled target tracks superimposed on an airport and approach map.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                  EXE-06.09.02-VP-567 (R2)                  EXE-06.09.02-VP-569 (R2)                  EXE-06.03.02-VP-614 (R3)                  EXE-06.09.02-VP-679 (R5)                  EXE-06.03.01-VP-758 (R5)                  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0005	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0003
Requirement	The selection of an vehicle target shall: a) Highlight all the available representations of that target b) Show the label in the appropriate selected format.
Title	Target Selection
Status	<Validated>
Rationale	The notion of selection relates to the intention to interact with the traffic label and/or with the associated symbol and trajectory, and/or its representation through traffic data.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SELC.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-HIGH.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0006
Requirement	The colours associated to vehicles shall be different from the defined colours of arriving and departing traffic.
Title	Configure track labels
Status	<Validated>
Rationale	The color associated to vehicles should be different from the associated to the arriving and departing traffic.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRCK.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0007
Requirement	The controller shall be provided with a function to mark a mobile for herself / himself and other ATCOs.
Title	Marking
Status	<Validated>
Rationale	<p>The controller should be provided with an easy and rapid way to mark an aircraft or vehicle</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-HIGH.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0008
Requirement	Vehicle representation shall be provided in a format helping the controller to locate and identify the traffic and to have direct access to essential information without unambiguous relation between traffic representation and information concerning that traffic
Title	Display vehicle representation
Status	<Validated>
Rationale	<p>The controller should easily locate and identify the traffic to have direct access to essential information</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0009
Requirement	Visible indication of completion of a vehicle transfer/assume control responsibility shall be provided on both assuming and transferring operator roles.
Title	Traffic Data – Mobile Transfer/Assume Control Responsibility
Status	<Validated>
Rationale	The controller should be provided with an indication when assuming and /or transferring  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0021
Requirement	The A-CWP shall allow the controller to filter out the presentation of vehicles by means of a combination of the following criteria: <ul style="list-style-type: none"> <li>• Vehicle position;</li> <li>• Primary track identifier;</li> <li>• Correlated/Not correlated track;</li> <li>• Vehicle type.</li> </ul>
Title	Vehicle labels fitter
Status	<In Progress>
Rationale	The controller should be able to filter the presentation of vehicles according to the selected criteria.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0022
Requirement	The A-CWP shall allow the supervisor to define the area where the vehicle labels have to be filtered out by means of the area Filter as follows: <ul style="list-style-type: none"> <li>describe polygonal areas by using the pointing device to define the area's outlines.</li> </ul>
Title	Vehicle labels filter definition
Status	<Validated>
Rationale	The supervisor should be able to define the area where the vehicle labels have to be filtered out.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0005
Requirement	The A-CWP shall be able to display air video maps taking following issues into account: <ul style="list-style-type: none"> <li>The number of airspace maps and the content of each air map shall be defined at local level. The proposed default display is the following: The area of the sector(s) controlled on the position</li> <li>The waypoints and waypoint identifications</li> <li>The airways / airway centre-lines</li> <li>The military areas</li> <li>The coastlines</li> <li>The scale markers</li> <li>The range-rings.</li> </ul>
Title	Display air video map
Status	<Validated>
Rationale	The controller should be provided with a rapid and easy access to the airspace information  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2)

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	EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0030
Requirement	The A-CWP shall provide aircraft and vehicle representation in a format helping the controller to locate and identify the traffic and to have direct access to essential information. The relation between traffic representation and information concerning that traffic shall be unambiguous.
Title	Display traffic representation
Status	<Validated>
Rationale	The controller should easily locate and identify the traffic and to have direct access to essential information.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRCK.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0036
Requirement	The A-CWP shall display the parking position of a departure flight
Title	Parking Position display for departure flight.
Status	<Validated>
Rationale	The ATCO needs to know the position of a departure flight early before the departure (for example, as update of the EFS)

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0103	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0040
Requirement	The A-CWP shall display a clear representation of the traffic situation in terms of cleared routes, individual route indications and activated stop bars.
Title	Traffic situation display
Status	<Validated>
Rationale	The ATCO needs to get a clear picture of the current traffic situation  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0014	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.1.8 Meteorological Information

### 3.1.8.1 Weather Information

[REQ]

Identifier	REQ-12.05.04-TS-0103.0001
Requirement	Minimum weather information shall always be displayed and available to the controller and includes: surface wind direction and strength.

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Title	Minimum weather information: surface wind direction and strength
Status	<Validated>
Rationale	The controller should be provided with minimum weather Information.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0062	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0002
Requirement	Minimum weather information shall always be displayed and available to the controller and includes: QNH (mb, inches or hPa).
Title	Minimum weather information: QNH
Status	<Validated>
Rationale	The controller should be provided with minimum weather Information. QNH can be displayed in mb, hPa or inches  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0103.0003
Requirement	Minimum weather information shall always be displayed and available to the controller and includes: ATIS code.
Title	Minimum weather information: ATIS code
Status	<Validated>
Rationale	The controller should be provided with minimum weather Information.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0004
Requirement	Minimum weather information shall always be displayed and available to the controller and includes: temperature.
Title	Minimum weather information: temperature
Status	<Validated>
Rationale	The controller should be provided with minimum weather Information.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED TO>	<Functional block>	Controller Human Machine Interaction	N/A

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<ALLOCATED_TO>	<Project>	Management Aerodrome ATC 12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0005
Requirement	Minimum weather information shall always be displayed and available to the controller and includes: dew point.
Title	Minimum weather information: dew point
Status	<Validated>
Rationale	The controller should be provided with minimum weather Information.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0006
Requirement	Minimum weather information shall always be displayed and available to the controller and include: RVR (Touchdown/Midpoint/Stop End).
Title	Minimum weather information: RVR (Touchdown/Midpoint/Stop End)
Status	<Validated>
Rationale	The controller should be provided with minimum weather Information.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0007
Requirement	The A-CWP shall allow the controller to access to additional weather information that shall include: visibility
Title	Additional weather information: visibility
Status	<Validated>
Rationale	The controller should be provided with an easy means to access to additional weather Information  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0008
Requirement	The A-CWP shall allow the controller to access to additional weather information that shall include: current weather
Title	Additional weather information: current weather
Status	<Validated>
Rationale	The controller should be provided with an easy means to access to additional weather Information  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0009
Requirement	The A-CWP shall allow the controller to access to additional weather information that shall include: cloud ceiling/coverage.
Title	Additional weather information: cloud ceiling
Status	<Validated>
Rationale	<p>The controller should be provided with an easy means to access to additional weather Information</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-669 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0010
Requirement	The A-CWP shall allow the controller to access to additional weather information that shall include: QFE
Title	Additional weather information: QFE
Status	<Validated>
Rationale	<p>The controller should be provided with an easy means to access to additional weather Information. QFE can be displayed in mb, hPa or inches</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-669 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0013
Requirement	The A-CWP shall display incoming METARs for this airport and alternative airports.
Title	METAR information
Status	<Validated>
Rationale	The controller should be provided with an easy means to access to additional weather Information  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0103.0014
Requirement	The A-CWP shall display incoming TAFs for this airport and alternative airports.
Title	TAF information
Status	<Validated>
Rationale	The controller should be provided with an easy means to access to additional weather Information  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction	N/A

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<ALLOCATED_TO>	<Project>	Management Aerodrome ATC 12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2103.0017
Requirement	The A-CWP shall allow the controller to access to additional weather information such as: <ul style="list-style-type: none"> <li>• Wind Gust</li> <li>• Tail/Cross component</li> <li>• RWY conditions</li> <li>• Forecast Information / warnings</li> </ul>
Title	Access to additional weather information
Status	<Validated>
Rationale	The controller should be able to access to additional weather information  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0098	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2103.0030
Requirement	The A-CWP shall display a window automatically when certain weather parameters are triggered with the following information: <ul style="list-style-type: none"> <li>• Weather parameter (Cloud ceiling, temperature, dew point);</li> <li>• Value.</li> </ul>
Title	Weather Parameters Automatic Displaying
Status	<Validated>
Rationale	It is important for the ATCO or Supervisor to be aware when certain weather conditions occur.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3103.0040
Requirement	The A-CWP shall display the wind velocity for touchdown threshold in graphical and text format per runway.
Title	Wind velocity displaying
Status	<Validated>
Rationale	It is important for the ATCO or Supervisor to be aware when certain weather conditions occur.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-669 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0002	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.8.2 Low Visibility Conditions (LVC)

[REQ]

Identifier	REQ-12.05.04-TS-2103.0015
Requirement	The A-CWP shall allow the controller the activation of Low Visibility Procedures
Title	LVP Activation
Status	<Validated>
Rationale	The controller should be able to activate the LVP procedures  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0006	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2103.0016
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Requirement	The A-CWP shall allow the controller the deactivation of Low Visibility Procedures
Title	LVP Deactivation
Status	<Validated>
Rationale	The controller should be able to deactivate the LVP procedures  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0006	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2103.0025
Requirement	The A-CWP shall display different information depending on LVP activation/deactivation.
Title	LVP Activation/Deactivation.
Status	<Validated>
Rationale	Information to be displayed on LVP conditions will be determined by each airport (e.g. vehicle movement, CAT3 holding points)  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0102.0004
Requirement	The A-CWP shall be able to display / remove display the limits of RWY restricted areas according to LVP or non-LVP conditions.
Title	Display RWYs restricted areas
Status	<Validated>
Rationale	The controller should be provided with a rapid and easy means to display / remove display RWY strip boundaries according to LVP or non-LVP conditions.  This requirement has been implemented, successfully verified and included

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	in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2104.0012
Requirement	The A-CWP shall display the activation and deactivation of Low Visibility Procedures
Title	LVP Activation display
Status	<Validated>
Rationale	The controller should be able to display the activation/deactivation of the LVP procedures  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-WEAT.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.1.9 Movement Plan

### 3.1.9.1 Flight Plan Management

[REQ]

Identifier	REQ-12.05.04-TS-0106.0001
Requirement	The A-CWP shall allow to manually create a new flight plan.
Title	Manual creation of a new flight plan
Status	<Validated>
Rationale	The controller should be provided with an easy and simple means to manually create a new flight plan  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises

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	EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0002
Requirement	At any stage of a new flight plan creation, the A-CWP shall assist the controller with indications of data to be input, data available for input, erroneous data, possible actions, and forbidden actions.
Title	System assistance at manual flight plan creation
Status	<Validated>
Rationale	The controller should be assisted on the creation of a flight plan.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0002.0030	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0003
Requirement	The A-CWP shall allow to correct or update a previously saved flight plan

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	under her/his responsibility.
Title	Manual flight plan update or delete
Status	<Validated>
Rationale	<p>The controller should have the possibility to correct or delete a previously saved flight plan.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0005	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0015	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0022	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0023	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0004
Requirement	The A-CWP shall be able to display the flight plan data of any existing flight plan
Title	Manual display of flight plan data
Status	<Validated>
Rationale	<p>The controller should be provided with an easy and simple access to the display a flight plan.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0005
Requirement	The A-CWP shall allow to manually input/modify flight plan elements under her/his responsibility: <ul style="list-style-type: none"> <li>• Departure Runway (for departing flights)</li> <li>• Arrival Runway (for arriving flights)</li> <li>• Parking stand</li> <li>• SID (for departing flights)</li> <li>• aircraft type</li> <li>• actual time of arrival</li> <li>• actual time of departure</li> <li>• remarks</li> </ul>
Title	Manual modification of flight plan data
Status	<Validated>
Rationale	The controller should have the possibility to correct elements of a saved flight plan  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0015	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0022	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0023	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-0106.0006
Requirement	The A-CWP shall be able to receive and manage any update of movement plan from a flight data processing system of the ATM at the airport
Title	Update of flight plan data received from FDPS system
Status	<Validated>
Rationale	The CWP will manage any update received from the FDP  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0007
Requirement	The A-CWP may be able to present to controller the list of flight plans for all aircraft present in movement area, according to this classification: <ul style="list-style-type: none"> <li>• Inbound flight plan</li> <li>• Outbound Flight Plan</li> <li>• Crossing Flight plan</li> <li>• Local Ground aircraft movement</li> </ul>
Title	Classification of flight plan data
Status	<Validated>
Rationale	Movement plan types and attributes to be presented  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0008
Requirement	The A-CWP shall be able to update in real time, the information presented within the flight plan list, according to this classification: <ul style="list-style-type: none"> <li>• Inbound flight plan</li> <li>• Outbound Flight Plan</li> <li>• Crossing Flight plan</li> <li>• Local Ground aircraft movement</li> </ul>
Title	Display of flight plan data: real time update
Status	<Validated>
Rationale	The surveillance system shall interface to a flight data processing system of the ATM at the airport  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0017
Requirement	The A-CWP shall allow the controller to view the complete flight plan data.
Title	EFSS Additional Data
Status	<Validated>
Rationale	It should be possible for the controller to expand a flight strip in order to view the complete flight plan  This requirement has been implemented, successfully verified and included

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	in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.9.2 Vehicles Plan

[REQ]

Identifier	REQ-12.05.04-TS-0108.0001
Requirement	The A-CWP shall allow the controller to manually put the callsign in the label associated to a vehicle equipped with cooperative equipment.
Title	Manual Label Attribution
Status	<Validated>
Rationale	The system should provide to the user the ability to manually put the right call sign in the label associated to a vehicle equipped with co-operative equipment used for different vehicles  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0007	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-2108.0023
Requirement	The A-CWP shall allow the controller to manually create a Movement Plan for a vehicle
Title	Creation of FPL for a vehicle
Status	<Validated>
Rationale	The controller should be able to create a movement plan.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.9.3 Manual correlation

[REQ]

Identifier	REQ-12.05.04-TS-0106.0009
Requirement	The A-CWP shall allow the controller to manually associate any target to a system track (manual identification procedure): identification data shall be manually inserted by operator, or selected from a predefined set.
Title	Display and storing of flight plan data, after manual identification
Status	<Validated>
Rationale	It shall be possible to manually identify a target. Identification data shall be manually inserted by operator or selected by a predefined set. Identification data manually associated to a target shall overwrite the ones coming from cooperative sensors.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A

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<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A
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[REQ]

Identifier	REQ-12.05.04-TS-0106.0010
Requirement	The A-CWP shall allow the controller to manually remove data which were manually associated to a target.
Title	Remove of flight plan identification data: manual de-assign function
Status	<Validated>
Rationale	<p>It shall be possible to remove data manually associated to the target. After this removal operation, data coming from cooperative sensor shall be restored in target attributes.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.10 Electronic Flight Strips (EFSS)

[REQ]

Identifier	REQ-12.05.04-TS-0106.0012
Requirement	<p>The A-CWP shall allow the controller to enter the following flight data, through EFSS:</p> <ul style="list-style-type: none"> <li>• Runway Allocation</li> <li>• SID</li> <li>• ASAT</li> </ul>
Title	Support to DMAN from EFSS system
Status	<Validated>
Rationale	<p>There is some information that need to be entered in the EFSS</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.09.02-VP-679 (R5)</p>

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	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0014
Requirement	The A-CWP shall provide, at each controller working position, an EFSS display capable of presenting flight strips sorted into bays according to the phase of flight.
Title	EFSS Display
Status	<Validated>
Rationale	<p>The presentation of electronic flight strips should be harmonized with current paper strips and the way they are stacked in flight strip bays to replace the use of paper strips and support the controller by reducing workload</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0015
Requirement	The layout of the A-CWP flight strips may be independently configurable for each bay area.
Title	EFSS Configurability
Status	<Validated>
Rationale	Depending on operational needs, traffic data items should be highly configurable with regard to layout, size, shape, fonts, colors and interaction

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	<p>capability</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0017	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0016
Requirement	The A-CWP flight strip shall contain data fields with all flight plan data relevant for the controller role at each position. All traffic data items pertinent to a controller shall be presented in clear and pre-defined formats that help to prioritize planning and control actions.
Title	EFSS data format
Status	<Validated>
Rationale	<p>The flight strips should contain data fields with all flight plan data relevant for the controller role at each position</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction	N/A

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		Management Aerodrome ATC	
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0018
Requirement	As well as flight plan data fields, the A-CWP flight strip shall contain special-purpose fields.
Title	EFSS Special Fields
Status	<Validated>
Rationale	<p>The following list of fields as example:</p> <ul style="list-style-type: none"> <li>• Clearance fields for issuing clearances;</li> <li>• Handover field for transferring the flight strip to another controller role;</li> <li>• Regress field for returning the flight strip to its previous location;</li> <li>• Taxi route information field;</li> <li>• Request field to indicate pilot requests received via data link;</li> <li>• Data link dialogue fields.</li> </ul> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0016	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0019
Requirement	The A-CWP shall display at each position the EFS for flights under control of that position, as well as flights that will become controlled in the near future
Title	EFSS Responsibility
Status	<Validated>
Rationale	<p>The HMI at each working position should display the flight strips for flights under control of that position, as well as flights that will become controlled in the near future</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2)</p>

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	EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0020
Requirement	The A-CWP shall group flight strips and traffic data lists according to user requirements.
Title	EFSS grouping
Status	<Validated>
Rationale	Flight strips should be logically grouped in bays according to the phase of flight and user requirements (e.g. inbound, outbound, pending, etc.)  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0021
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Requirement	The A-CWP flight strip bays shall contain lists of flight strips that are selected, sorted and presented according to configurable criteria.
Title	EFSS Sorting criteria
Status	<Validated>
Rationale	<p>The flight strip bays should contain lists of flight strips that are selected, sorted and presented according to configurable criteria</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0023
Requirement	If the controller role has the authority to modify certain items of flight plan data, the A-CWP EFS shall provide means for the controller with that authority to input missing data and to correct wrong data for a flight.
Title	EFSS editing
Status	<Validated>
Rationale	<p>If required locally, the controller should be provided with an easy and simple means to manually create a new flight plan or modify an existing flight plan</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0015	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0022	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0023	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0024
Requirement	Each flight strip may be placed in the appropriate bay area based on the user selected sorting criteria and the phase of flight.
Title	EFSS Bay Area
Status	<Validated>
Rationale	<p>Flight strips should be logically grouped in bays according to the phase of flight and user requirements (e.g. inbound, outbound, pending, etc.)</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0025
Requirement	The number of bay areas and the title of each bay shall be configurable for each working position according to the controller role.
Title	EFSS Bay configurability
Status	<Validated>
Rationale	<p>The user is able to configure each working position according to the controller role</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)</p>

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	EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0017	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0026
Requirement	Depending on the controller role, flight strips shall appear in the entry (pending) area when generated by the flight data processing system (FDPS) or when transferred from another control position.
Title	EFSS initialisation
Status	<Validated>
Rationale	Depending on the controller role, flight strips should appear in the entry (pending) area a pre-defined time before expected arrival or departure or when transferred from another control position  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0018	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0027
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Requirement	The EFS A-CWP shall provide means to the runway controller to input clearances to an aircraft into the EFS
Title	EFSS Aircraft Clearance Input
Status	<Validated>
Rationale	<p>Controllers should be presented with a means to input clearances into the system (via the electronic flight strip and/or labels)</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0033	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0035	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0052
Requirement	The A-CWP shall provide means to the runway controller to input clearances to a vehicle into the EFS
Title	EFSS Vehicle Clearance Input
Status	<Validated>
Rationale	<p>Controllers should be presented with a means to input clearances into the system (via the electronic flight strip and/or labels)</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0012	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0034	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0035	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0053
Requirement	The EFS A-CWP shall provide means to the ground controller to input clearances to an aircraft into the EFS
Title	EFSS Aircraft Clearance Input
Status	<Validated>
Rationale	<p>Controllers should be presented with a means to input clearances into the system (via the electronic flight strip and/or labels)</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0012	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0054
Requirement	The A-CWP shall provide means to the ground controller to input clearances to a vehicle into the EFS
Title	EFSS Vehicle Clearance Input
Status	<Validated>
Rationale	<p>Controllers should be presented with a means to input clearances into the system (via the electronic flight strip and/or labels)</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0013	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-0107.0006
Requirement	The A-CWP EFS shall allow the handover of flight strips between controllers.
Title	EFSS Handover 1
Status	<Validated>
Rationale	<p>The system should support the controller by automatic distribution/exchange of flight data and co-ordination between control positions</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0007
Requirement	An electronic handover shall transfer flight strips from one controller role to another and shall normally consist of two actions: transfer and assume
Title	EFSS Handover 3
Status	<Validated>
Rationale	<p>Controllers should be provided with system assistance for transferring aircraft control from one to another control position</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0008
Requirement	All information on the A-CWP flight strip shall be retained during handover.
Title	EFSS Handover 5
Status	<Validated>
Rationale	<p>The durability of annotations and instructions shall be ensured during handover</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)                      EXE-06.09.02-VP-678 (R4)                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-699 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0009
Requirement	The A-CWP shall allow the controller role that has the flight strip to transfer it to another role. After transfer, the flight strip shall remain under control of the former until the latter assumes it, which completes the handover.
Title	EFSS Handover 6
Status	<Validated>
Rationale	<p>It should be possible for a controller to take back a flight strip that has been transferred by mistake, as long as it has not been assumed by the controller to whom it was transferred</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)                      EXE-06.09.02-VP-568 (R2)                      EXE-06.09.02-VP-567 (R2)                      EXE-06.09.02-VP-569 (R2)                      EXE-06.03.02-VP-614 (R3)</p>

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	EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0010
Requirement	The A-CWP shall allow a controller to take back a flight strip that has been transferred by mistake, as long as it has not been assumed by the controller to whom it was transferred
Title	Mistaken transfer
Status	<Validated>
Rationale	It should be possible to take back a flight strip that has been transferred by mistake  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0021	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0011
Requirement	The A-CWP EFS shall support coordination between Clearance Delivery, Ground and Runway controller roles, in case these roles exist.
Title	Coordination support
Status	<Validated>
Rationale	The introduction of automation of surface movement planning and electronic flight strips should support the ATCOs coordination between Ground and Tower controllers and adjacent Approach controllers

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0005	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3107.0013
Requirement	The A-CWP shall allow the Runway controller to include in the EFSS the assigned Runway and holding point
Title	Runway and holding point
Status	<Validated>
Rationale	The controller shall be able to input into the EFSS aircraft or vehicle information related to assigned runway and holding point.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0013	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3107.0014
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Requirement	The EFS HMI shall highlight runway bays in a way that clearly sets them apart from other bays to attract the ATCOs attention.
Title	Distinctive runway bay display
Status	<Validated>
Rationale	The controller needs to be able to easily distinguish the runway bays from other bays for runway safety reasons.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-HIGH.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3107.0015
Requirement	For runways which are not operated independently, the EFS HMI should display the runway bays being equal in size and in direct juxtaposition to better visualize the combined runway situation.
Title	Positioning of runway bays
Status	<Validated>
Rationale	When using more than one runway, the ATCO often has to check what mobiles have been cleared on one runway before clearing a mobile on the other runway. It is easier to do this when the runway bays are next to each other  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0020	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3107.0016
Requirement	The EFS HMI should provide the means to reverse the workflow direction of the electronic flight strips within the bays.
Title	Selection of flow direction of EFS
Status	<Validated>
Rationale	ATCOs have different working methods and some prefer the logic of EFS

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	being ordered from top to bottom and others vice versa  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0021	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.11 Transfer and control

[REQ]

Identifier	REQ-12.05.04-TS-0107.0001
Requirement	The A-CWP shall allow to modify the control responsibility for a mobile, and to transfer control responsibility to other operator roles. Transfer of control responsibility shall be possible through any representation of the mobile.
Title	Modify control responsibility or Transfer control responsibility
Status	<Validated>
Rationale	Transfer of control responsibility shall consist of two actions: transfer (to transfer traffic to default next operator role) and assume (to assume traffic).  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0002
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Requirement	Transfer of control responsibility consists of two actions: transfer (to transfer traffic to default next operator role) and assume (to assume traffic). The A-CWP shall provide the controller with a way to indicate that transfer of control responsibility has been initiated on both giving and receiving control positions.
Title	Transfer Traffic   Assume Traffic
Status	<Validated>
Rationale	<p>The controller should be provided with an easy and visible way to indicate that transfer of control responsibility has been initiated on both giving and receiving control positions.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0010	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0003
Requirement	The A-CWP shall allow to transfer a flight to another controller role than planned in the predefined sequence. The A-CWP shall allow to transfer control responsibility of any traffic to a control position different from the pre-defined one
Title	Direct Transfer Traffic
Status	<Validated>
Rationale	<p>The controller should be provided with an easy means to transfer control responsibility of any traffic to a control position different from the pre-defined one.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5)</p>

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	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0004
Requirement	After successful transfer of a flight to another controller role, it shall remain under control of the former controller until the latter assumes it, only after this acknowledgment the transfer will be considered as completed
Title	Transfer Traffic   Assume Traffic 2
Status	<Validated>
Rationale	<p>After successful transfer of a flight or vehicle to another controller role, it shall remain under control of the former controller until the latter assumes it that completes the transfer.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0005
Requirement	The A-CWP shall allow the operator to interface and coordinate with the approach movement plan processing system of the ATM at the airport.
Title	Coordination with ATM FDPS systems
Status	<Validated>
Rationale	The surveillance system should interface to a flight data processing system (FDPS) of the ATM at the airport.

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	<p>In some cases, it may also be necessary to interface to a separate code-call-sign database.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0107.0012
Requirement	The A-CWP shall permit controller roles to be combined at any physical working position.
Title	Combined roles
Status	<Validated>
Rationale	<p>It should be possible to combine the operational roles in a number (1 to n) of physical controller working positions based on operational constraints, e.g. traffic load, time of day, etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-POSN.0017	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2107.0013
Requirement	The A-CWP shall allow the controller to coordinate the modification of a standard handover point.
Title	Handover point

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Status	<Validated>
Rationale	The ATCO should be able to coordinate a change of Transfer Point such as Stop, Holding Point or Altitude/SID  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-CORD.0009	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0011
Requirement	After successful transfer of a vehicle to another controller role, it may remain under control of the former controller until the latter assumes it, only after this acknowledgement the transfer will be considered as completed.
Title	Transfer Traffic   Assume Traffic
Status	<Validated>
Rationale	The vehicle should remain under control of the former controller until the latter assumes it.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0011
Requirement	On airports having more than one sector, the A-CWP shall provide an inter-sector highlighting for a flight or a vehicle on both sectors (assuming and transferring).
Title	Inter-sector highlighting
Status	<Validated>
Rationale	The controller should be provided with an indication that a flight or a vehicle is on both sectors.

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-HIGH.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.12 Clearances

[REQ]

Identifier	REQ-12.05.04-TS-0105.0001
Requirement	The A-CWP shall display only available options for interaction. Such options depend on the flight planning state and previously issued clearances for the flight
Title	Traffic Data – Flight available options
Status	<Validated>
Rationale	Only available options for interaction should be displayed. Such options depend on the flight planning state and previously issued clearances for the flight  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ZOOM.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0106.0028
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'cleared to land',
Title	Clearance Types: cleared to land
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional lineup', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0029	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0029
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'go-around'.
Title	Clearance Types: go-around
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional lineup', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0030
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'vacate'
Title	Clearance Types: vacate
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional lineup', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0017	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0031
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'cross'
Title	Clearance Types: cross
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional lineup', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p>

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	EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0030	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0032
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'taxi'
Title	Clearance Types: taxi
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional lineup', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-0106.0033
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'start-up'
Title	Clearance Types: start-up
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional line-up', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0034
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'push-back'
Title	Clearance Types: push-back
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional line-up', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0035
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'hold'
Title	Clearance Types: hold
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional line-up', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0036
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'line-up'
Title	Clearance Types: line-up
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'line-up', 'conditional line-up', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p>

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	EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0026	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0037
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'conditional line-up'
Title	Clearance Types: conditional line-up'
Status	<Validated>
Rationale	Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional line-up', 'take-off', 'abort take-off', etc.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0027	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-0106.0038
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'take-off'
Title	Clearance Types: take-off
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional line-up', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0028	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0039
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'abort take-off'
Title	Clearance Types: abort take-off
Status	<Validated>
Rationale	<p>Clearances should represent the normal set of clearances a controller gives to an aircraft, such as: 'cleared to land', 'continue approach', 'go-around', 'vacate', 'cross', taxi', 'start-up', 'push-back', 'hold', 'lineup', 'conditional line-up', 'take-off', 'abort take-off', etc.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0018	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0106.0040
Requirement	The A-CWP shall enable the controller to undo/cancel an instruction/clearance.
Title	EFSS Mistake correction
Status	<Validated>
Rationale	<p>It should be possible for the controller to easily correct a mistaken action</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0021	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.08-SPR-11AT.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0041
Requirement	The A-CWP shall allow the controller to give a set of clearances to a mobile, such as: "Hold at"
Title	Clearance Types: hold at
Status	<Validated>
Rationale	<p>ATCO needs to be able to input a hold at short instruction</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)</p>
Category	<HMI>

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Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0014	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0042
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: "ATC clearance"
Title	Clearance Types: ATC clearance
Status	<Validated>
Rationale	ATCO needs to be able to input an ATC clearance instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0020	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0043
Requirement	The A-CWP should allow the controller to give a set of clearances to an aircraft, such as: "Give way/Follow"
Title	Clearance Types: Give way/Follow
Status	<Validated>
Rationale	ATCO needs to be able to input a give way/follow instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0019	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED TO>	<Functional block>	Controller Human Machine Interaction	N/A

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<ALLOCATED_TO>	<Project>	Management Aerodrome ATC	
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0044
Requirement	The A-CWP should allow the controller to give a set of clearances to an aircraft, such as: "Enter "
Title	Clearance Types: Enter
Status	<Validated>
Rationale	ATCO needs to be able to input a enter instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0031	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0045
Requirement	The A-CWP shall allow the controller to give "cross conditional clearances"
Title	Clearance Types: conditional crossing clearance
Status	<Validated>
Rationale	ATCO needs to be able to input a conditional crossing clearance instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0014	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0046
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Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'hold short '
Title	Clearance Types: hold short
Status	<Validated>
Rationale	ATCO needs to be able to input a hold short instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0047
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'resume taxi'
Title	Clearance Types: resume taxi
Status	<Validated>
Rationale	ATCO needs to be able to input a resume taxi instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-ATCL.0008	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0048
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'push back long'
Title	Clearance Types: push back long
Status	<Validated>
Rationale	ATCO needs to be able to input a push back instruction

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0015	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0049
Requirement	The A-CWP shall allow the controller to give a set of clearances to an aircraft, such as: 'pushback and pull'
Title	Clearance Types: pull
Status	<Validated>
Rationale	ATCO needs to be able to input a pushback and pull instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED- CLRT.0016	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0050
Requirement	The A-CWP shall provide the possibility to input a cancellation of an ATC clearance
Title	Cancellation of ATC clearances
Status	<Validated>
Rationale	ATCO needs to be able to cancel a previously given instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4)

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	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0022	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0009	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2106.0051
Requirement	The A-CWP shall provide information about the clearances given to an aircraft
Title	Clearances given
Status	<Validated>
Rationale	The controller should be provided with the information of the previous clearances given to an aircraft  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRFC.0021	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0014
Requirement	The A-CWP shall allow the controller to input a "Tow" instruction or to revise a "Tow" instruction for a tow vehicle.
Title	Input instruction: Tow
Status	<Validated>
Rationale	ATCO needs to be able to input a tow instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0016
Requirement	The A-CWP shall allow the controller to input an instruction to "Release" a vehicle.
Title	Input instruction: Tow Release
Status	<Validated>
Rationale	ATCO needs to be able to input a tow release instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0017
Requirement	The A-CWP shall allow the controller to input an "Enter runway protected area" instruction for a Vehicle
Title	Input instruction: Enter runway protected area
Status	<Validated>
Rationale	ATCO needs to be able to input a enter runway protected area instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-2108.0018
Requirement	The A-CWP shall allow the controller to input an “Vacate runway protected area” instruction for a Vehicle
Title	Input instruction: Vacate runway protected area
Status	<Validated>
Rationale	ATCO needs to be able to input a vacate runway protected area instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0019
Requirement	The A-CWP shall allow the controller to input a “Cross runway” instruction for a Vehicle
Title	Input instruction: Cross runway
Status	<Validated>
Rationale	ATCO needs to be able to input a cross runway instruction  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0020
Requirement	The A-CWP shall allow the controller to input a “Hold” instruction for a Vehicle
Title	Input instruction: Hold
Status	<Validated>
Rationale	ATCO needs to be able to input a hold instruction

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0010
Requirement	The A-CWP shall allow the controller to issue instructions/clearances via label or list.
Title	Label/list instructions/clearances
Status	<Validated>
Rationale	The controller should be able to input instructions via label or list  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LABL.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.13 Safety Nets

[REQ]

Identifier	REQ-12.05.04-TS-2101.0045
Requirement	The A-CWP shall display in the ATCO's primary viewing area the information that is particularly important or that requires immediate user response.
Title	Primary viewing area
Status	<Validated>
Rationale	To improve visual perception of particularly important information and address immediate ATCO attention.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5)

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	EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-SETT.0018	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0004
Requirement	The A-CWP may provide the controller with clear and visible indication of a conflict alert as soon as the alert exists including, at the minimum, the identification of the involved vehicles, wherever present.
Title	Conflict alert- vehicle
Status	<Validated>
Rationale	The controller should be provided with clear and visible indication of a conflict alert as soon as the alert exists  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0002
Requirement	The A-CWP shall assign conflict responsibility to each working position depending on conflict type and the area where the conflict happens.
Title	Alert Report Acquisition Requirements
Status	<Validated>
Rationale	The conflicts should be assigned to each working position according to the role, AoR and conflict type.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-567 (R2)

	EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0004
Requirement	After start-up, the A-CWP shall automatically acquire the existing alerting situation from Safety Net Server.
Title	Alert Report Acquisition Requirements
Status	<Validated>
Rationale	The system need to recover all the information from servers after start-up in order to have a clear picture of the situation.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0005
Requirement	The A-CWP shall display alerts continuously as long as related alert reports will come from SSN Server
Title	Alert notification Requirements
Status	<Validated>
Rationale	All alerts need to be shown in the CWP  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises

	EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CMAC.0025	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-INPT.1011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0006
Requirement	After start-up, the A-CWP shall automatically display the existing alerting situation in conformance with the existing alerting status of the Safety Net Server.
Title	Alert notification Requirements
Status	<Validated>
Rationale	The system need to recover all the information from servers after start-up in order to have a clear picture of the situation.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0007
Requirement	The A-CWP shall visually notify that an event is not valid any longer on every A-CWP where the event was displayed, as soon as the information is provided by the Safety Net Server.
Title	Alert notification Requirements

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Status	<Validated>
Rationale	All alerts no longer valid need to be shown in the CWP  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0008
Requirement	The A-CWP shall display the alert at least in the controller position responsible for the area in which the conflict occur
Title	Alert notification Requirements
Status	<Validated>
Rationale	The alerts should be assigned to each working position according to the role, AoR and conflict type.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0009
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Requirement	The A-CWP shall display the alerts related to Surface Safety Nets in the track label and in an alert list
Title	Alert notification Requirements
Status	<Validated>
Rationale	The controller shall see the alert indicating the mobile(s) involved.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0052	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CMAC.0023	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0010
Requirement	The A-CWP shall display the alerts also on the electronic flight strips
Title	Alert notification Requirements
Status	<Validated>
Rationale	The controller shall see the alert indicating the mobile(s) involved.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CMAC.0023	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0011
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Requirement	The A-CWP shall provide a dedicated list to visualize alerts generated by the SSN server
Title	Alert notification Requirements
Status	<Validated>
Rationale	The controller shall see the alert indicating the mobile(s) involved.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0052	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0017	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0017	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0012
Requirement	The A-CWP shall include in the alert list the identification of the involved traffic, if received in alert reports from SSN Server.
Title	Alert notification Requirements
Status	<Validated>
Rationale	The ATCO needs to be able to identify the mobiles involved in the conflict situation  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0005	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0052	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0013
Requirement	The A-CWP provides two stages of alert INFORMATION (less important) and ALARM (more important), according to RMCA, CATC and CMAC alert reports. These two stages shall be displayed with different colours "INFORMATION colour" (recommendation Yellow) "ALARM colour" (recommendation Red)
Title	Alert notification Requirements
Status	<Validated>
Rationale	Characterize the degree of importance of the alert detected by the ATC system for RMCA, CATC and CMAC alerts  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0008	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0010	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0011	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-COLR.1004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0014
Requirement	The A-CWP shall present the ALARM alert firstly in the list visualisation.
Title	Alert notification Requirements
Status	<Validated>
Rationale	According to the degree of importance of the alert  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1016	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0015
Requirement	When the display of several alerts overlap, the A-CWP shall always display in priority the higher priority alert.
Title	Higher Priority Alert display
Status	<Validated>
Rationale	<p>According to the degree of importance of the alert</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-371 (R2)  EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1016	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CMAC.0040	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0016
Requirement	The A-CWP may display conflicts involving aircrafts in a different way from conflicts involving vehicle.
Title	Alert notification Requirements
Status	<Validated>
Rationale	<p>The controller should be provided with the conflicts involving aircrafts in a different way from conflicts involving vehicle.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.03.01-VP-719 (R5)</p>

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-TRCK.0001	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0017
Requirement	The A-CWP shall trigger an audio signal for the ALARM alerts.
Title	Alert notification Requirements
Status	<Validated>
Rationale	<p>The controller needs to be notified about alarm alert via acoustic signal. The type and duration of the audio signal tone are matters of local implementation.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0010
Requirement	The A-CWP shall allow the controller to disable the audio signal related to an alert.
Title	Audio signal cancellation.
Status	<Validated>
Rationale	<p>The controller should be able to disable the audio signal related to an alert</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0020
Requirement	When an audio signal related to an alert has been disabled by the controller, all details of the alert shall remain visible in the A-CWP alert window and mobile labels until the situation has been resolved.
Title	Audio signal cancellation does not cancel alert information.
Status	<Validated>
Rationale	Note: If a different ALARM is triggered after the audio signal has been turned off then the audio signal will be reactivated. The details of the alert shall remain visible although the audio signal has been disabled.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0018
Requirement	The A-CWP shall stop the audio signal when the related alert report is no longer received.
Title	Alert notification Requirements
Status	<Validated>
Rationale	Stopping of an audio alert when the alert is no longer valid.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>

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Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0019
Requirement	The A-CWP shall display alerts always in the foreground and never hide them with other information.
Title	Alert notification Requirements
Status	<Validated>
Rationale	<p>The details of the alert shall remain visible</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.03.01-VP-699 (R5)  EXE-06.03.01-VP-758 (R5)  EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0020
Requirement	The A-CWP shall allow the acknowledgment of alerts, removing the highlight and audio signal on the controller position once the acknowledgment has been performed.
Title	Alert notification Requirements
Status	<Validated>
Rationale	<p>The controller should be allowed to remove the highlight and audio signal when acknowledgment of alerts.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-568 (R2)  EXE-06.09.02-VP-567 (R2)  EXE-06.09.02-VP-569 (R2)  EXE-06.03.02-VP-614 (R3)  EXE-06.09.02-VP-678 (R4)  EXE-06.09.02-VP-679 (R5)</p>

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	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0023
Requirement	Priorities may be established to ensure that Aerodrome ATC system logic performs. Conflict alerting priorities may be as follows: a) Runway incursions b) Restricted area incursions
Title	Conflict Alert Priorities
Status	<Validated>
Rationale	In order to ensure that the system logic performs efficiently, priorities should be established  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0003	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0024
Requirement	The A-CWP shall provide the ATCO with the possibility to solve potential conflicts by issuing a corrective clearance or confirming the given clearances
Title	Potential conflicts
Status	<Validated>
Rationale	The controller should be able to solve potential conflicts by issuing a corrective clearance or confirming the given clearances  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4)

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	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2109.0025
Requirement	The A-CWP shall display the alert reports coming from SSN server with at least the following information: <ul style="list-style-type: none"> <li>• Conflict type and subtype,</li> <li>• Conflict severity (INFORMATION or ALERT),</li> <li>• Conflict location,</li> <li>• Identification of involved mobile(s) by the callsign/Mobile identifier (if the callsign/Mobile identifier is not available they will be identified by their track id or transponder code),</li> <li>• Date and time.</li> </ul>
Title	Alert report display
Status	<Validated>
Rationale	Display to the Tower Runway Controller HMI an explicit error message  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0052	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2109.0026
Requirement	The A-CWP shall provide means for the controller to acknowledge the alerts.
Title	Alert acknowledgement
Status	<Validated>
Rationale	The ATCO shall be able to acknowledge the alerts.

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0014	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2109.0030
Requirement	The dedicated alert window of the A-CWP shall display alerts sorted by priority, where higher priority alerts (alarms) shall be displayed in the primary viewing area of that window.
Title	Alarms displayed in the primary viewing area
Status	<Validated>
Rationale	To ease the recognition of an alert.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-DISP.1016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0030
Requirement	The A-CWP shall be able to replay all alerts and associated information necessary to assess the situation: <ul style="list-style-type: none"> <li>• mobile positions</li> <li>• RWY/TWY status</li> <li>• clearances</li> </ul>
Title	Replay of Alerts
Status	<Validated>
Rationale	It is necessary to evaluate what happened when an alert has been triggered

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0040
Requirement	The A-CWP shall receive and display CATC, CMAC and RMCA alerts
Title	Reception and Display of CATC, CMAC and RMCA alerts
Status	<Validated>
Rationale	To clearly state that RMCA, CATC and CMAC are complementing and not replacing RMCA alerts.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0050
Requirement	The A-CWP shall display RMCA alerts with a higher priority than CATC and CMAC alerts
Title	Priority of CATC, CMAC and RMCA alerts
Status	<Validated>
Rationale	To clearly state that RMCA alerts (especially the RMCA INFORMATION alert as this is an indication that a RMCA ALARM will trigger soon afterwards) have a higher priority compared to CATC and CMAC alerts. Priority assignment depends on the technical solution. This can be done by the Safety Net server or by the A-CWP client.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises

	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0003	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0060
Requirement	The A-CWP shall display all alerts for all mobiles in the controlled AOR
Title	Display of multiple Alerts for Mobiles in controlled AOR
Status	<Validated>
Rationale	The ATCO needs to be aware of all active alerts, this could be, for example, one mobile generating 2 alerts or 2 mobiles generating individual alerts or 2 mobiles involved in the same alert.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0070
Requirement	The A-CWP shall display an alert associated with the mobiles position and identification
Title	Alert display with position and identification
Status	<Validated>
Rationale	The ATCO needs to be able to see which mobile is involved in an alert and what type of alert is being triggered  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5)

	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0090
Requirement	The A-CWP shall display alerts associated with mobiles planned to enter the controlled AOR and being only a configurable time or distance away from the expected point of entry.
Title	Alerts on mobiles planned to enter an AOR
Status	<Validated>
Rationale	The ATCO needs to be able to see alerts on mobiles in (or about to enter) his/her AOR.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0100
Requirement	The A-CWP shall provide means to disable the detection of CATC and/or CMAC alerts.
Title	De-activation of CATC and CMAC alerts detection
Status	<Validated>
Rationale	The Supervisor might require to disable alerts in case of an accident or incident on the airport surface. The OPS requirement (REQ-06.07.01-OSED-GENL.0012) very explicitly calls for switching off the <b>detection</b> , not only the display. Whether this makes sense in general is questionable. For a supervisor, it probably does; for an individual controller it probably doesn't, because his choice would also affect all other working positions. However, it shall be an organisational issue base on local decisions, whether this ability shall be offered to the individual controllers. The ops requirement is supported here by two TS requirements: this one for disabling the detection and another one for

	<p>disabling the display of alerts (see REQ-12.05.04-TS-3109.0110).</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0012	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0110
Requirement	The A-CWP shall provide means to disable the display of CATC and/or CMAC alerts on the local HMI
Title	A-CWP CATC and CMAC alert display de-activation
Status	<Validated>
Rationale	<p>The ATCO might require to disable the display of alerts in case of an accident or incident on the airport surface for his A-CWP.</p> <p>The OPS requirement (REQ-06.07.01-OSED-GENL.0012) very explicitly calls for switching off the <b>detection</b>, not only the display. Whether this makes sense in general is questionable. For a supervisor, it probably does; for an individual controller it probably doesn't, because his choice would also affect all other working positions. However, it shall be an organisational issue base on local decisions, whether this ability shall be offered to the individual controllers. The ops requirement is supported here by two TS requirements: this one for disabling the display and another one for disabling the detection of alerts (see REQ-12.05.04-TS-3109.0100).</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0012	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0120
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Requirement	The A-CWP shall only display alerts indicating active conflict situations
Title	Receive only active alerts
Status	<Validated>
Rationale	The Tower Controller does not want to see alerts displayed that are no longer valid  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0130
Requirement	The A-CWP shall provide means to locally hide and unhide an INFORMATION alert on the radar/track label and EFS, while keeping the alert details visible in the alert list.
Title	A-SMGCS - Suppression of INFORMATION alert
Status	<Validated>
Rationale	The Controller might not be able to instantly resolve the situation but want to remove the alert message from the radar/track label and EFS in order to reduce clutter. The details of the suppressed alert display shall still be shown in the alert list.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-3109.0140
Requirement	The A-CWP shall display alerts regarding mobiles that have left the controlled AOR but still are on the controllers frequency.
Title	Alert on mobiles having left an AOR but still on frequency
Status	<Validated>
Rationale	The ATCO needs to be able to see alerts on mobiles that have left his/her AOR but that are still on frequency, what will be based on the status of the mobile on the EFS (e.g. assumed or transferred).  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0150
Requirement	The A-CWP shall provide a special alert window for the Supervisor role that allows see all active alerts.
Title	Alert List for Supervisor
Status	<Validated>
Rationale	The Supervisor needs to be to see all active alerts in a dedicated list  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0017	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0160
Requirement	The A-CWP may display an indicator next to a clearance button that signifies that if that specific clearance is input it will trigger a CATC alert
Title	Predictive CATC indicator

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Status	<Validated>
Rationale	The Tower Runway Controller should have an indication on the HMI to show that a potential CATC could be triggered if entering a certain clearance  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0062	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0170
Requirement	The A-CWP may request a user confirmation if a clearance input will trigger a CATC alert
Title	CATC input confirmation
Status	<Validated>
Rationale	The Tower Runway Controller should confirm the clearance input to indicate his awareness of triggering a CATC alert  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CATC.0063	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0180
Requirement	The A-CWP shall display alert messages with explicit alert type identifiers
Title	Alert Type Identifiers
Status	<Validated>
Rationale	Explicit alert type identifiers help to instantly comprehend the conflict situation. See list of alert type identifiers in 6.9.2 OSED.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5)

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	EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-CMAC.0039	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0190
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when clearances are given to two mobiles which, when executed, might lead to a runway conflict.
Title	Clearances Conflict Alert providing to the controller
Status	<Validated>
Rationale	The controller needs to be warned about potential runway conflicts.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0200
Requirement	The A-CWP shall display in a distinguishable for the controller way the different alerts from CATC system and from RMCA.
Title	RMCA and CATC Alerts display in a distinguishable way
Status	<Validated>
Rationale	The controller must be able to distinguish different types of alerts.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>

Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0210
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when an aircraft is moving from its stand and has not received a push back approval.
Title	Moving aircraft without push-back approval Alert
Status	<Validated>
Rationale	<p>The controller needs to be warned if a mobile is moving without having received the corresponding clearance.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0220
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when an aircraft starts to move on the apron/taxiway without taxi approval.
Title	Moving aircraft without taxi approval Alert
Status	<Validated>
Rationale	<p>The controller needs to be warned if a mobile is moving without having received the corresponding clearance.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-699 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0017	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0230
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when an aircraft is deviating from its cleared taxi route.
Title	Aircraft route deviation Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0018	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0240
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when an aircraft enters or goes towards a closed or unsuitable taxiway.
Title	Closed taxiway Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0020	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A

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<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A
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[REQ]

Identifier	REQ-12.05.04-TS-3109.0250
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when a mobile starts to make positioning movements on the apron/taxiway without a clearance.
Title	Moving mobile without taxi clearance Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0021	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0260
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when an aircraft crosses a holding position marking without a clearance.
Title	Unauthorised aircraft crossing holding position Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0023	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-3109.0270
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when an aircraft on the taxiway exceeds a speed to be defined locally which indicates an attempt to take-off from a taxiway.
Title	Attempt to take-off from taxiway Alert
Status	<Validated>
Rationale	The controller needs to be warned if an aircraft attempts to take off from a taxiway.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0024	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0280
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when the longitudinal separation between two aircraft on a taxiway in Low Visibility Conditions is lower than a value specified by the appropriate ATS authority.
Title	Taxiway LVP separation infringement Alert
Status	<Validated>
Rationale	The controller needs to be warned when horizontal separation is not sufficient.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0025	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0290
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when a taxi-out aircraft proceeds past a point specified by the appropriate ATS authority, without having been transferred to the Tower Runway Controller.
Title	Ground to Tower missed handover Alert

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Status	<Validated>
Rationale	The controller needs to be warned upon late handover.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0026	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0300
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when a mobile, having received a clearance to move, remains stationary on the taxiway for a period of time exceeding a predetermined value (to be specified locally by the appropriate ATS authority).
Title	Taxiway stationary aircraft Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile does not react to an instruction/clearance to move.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0027	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0310
Requirement	The A-CWP shall display an alert to the Tower Ground Controller when an aircraft is assigned to use a taxiway that is unsuitable for the aircraft type.
Title	Unsuitable taxiway Alert
Status	<Validated>
Rationale	The controller shall be made aware when trying to assign an unsuitable taxiway to an aircraft.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5)

	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0028	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0320
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Ground Controller for a route deviation not in the proximity of the runway protected area.
Title	Taxiway-related Information Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response for a route deviation not in the proximity of the runway protected area.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0029	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0330
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Ground Controller for a movement without push-back/taxi approval or for a stationary situation but without traffic in the immediate vicinity.
Title	Taxiway-related Information Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response for a movement without push-back/taxi approval or a stationary situation without traffic in the immediate vicinity.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5)

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	EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0029	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0340
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Ground Controller for an aircraft planned for a route on a closed taxiway or on a taxiway not suitable for this aircraft type.
Title	Taxiway-related Information Alert Provision
Status	<Validated>
Rationale	<p>The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response for aircraft planned for closed or unsuitable.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0029	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0350
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Ground Controller for an aircraft having a taxiing speed considerable but not yet considered excessive, based on local configuration.
Title	Taxiway-related Information Alert Provision
Status	<Validated>
Rationale	<p>The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response for an aircraft taxiing with increased, but not yet considered excessive speed.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)</p>

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0029	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0360
Requirement	The A-CWP shall display an ALARM alert to the Tower Ground Controller for a taxi route deviation near the runway protected area.
Title	Taxiway-related Alarm Alert Provision
Status	<Validated>
Rationale	<p>The controller needs to receive an Alarm alert requiring immediate controller awareness and immediate response for a taxi route deviation near the runway protected area.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-758 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0030	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0370
Requirement	The A-CWP shall display an ALARM alert to the Tower Ground Controller for a detected stationary situation with traffic in the vicinity.
Title	Taxiway-related Alarm Alert Provision
Status	<Validated>
Rationale	<p>The controller needs to receive an Alarm alert requiring immediate controller awareness and immediate response for a detected stationary situation with traffic in the vicinity.</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises                      EXE-06.09.02-VP-679 (R5)                      EXE-06.03.01-VP-719 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0030	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0380
Requirement	The A-CWP shall display an ALARM alert to the Tower Ground Controller for an aircraft on a taxiway unsuitable for the aircraft type or on a closed taxiway.
Title	Taxiway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Alarm alert requiring immediate controller awareness and immediate response for an aircraft on a taxiway unsuitable for the aircraft type or on a closed taxiway.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0030	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0390
Requirement	The A-CWP shall display an ALARM alert to the Tower Ground Controller for an aircraft taxiing with an excessive speed.
Title	Taxiway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Alarm alert requiring immediate controller awareness and immediate response for an aircraft taxiing with an excessive speed.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0030	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction	N/A

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<ALLOCATED_TO>	<Project>	Management Aerodrome ATC	
<APPLIES_TO>	<Operational Focus Area>	12.05.04	N/A
		OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0400
Requirement	The A-CWP shall display an ALARM alert to the Tower Ground Controller for a mobile that has crossed a red stop bar or a virtual stop bar
Title	Taxiway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Alarm alert requiring immediate controller awareness and immediate response for a red stop bar which has been crossed.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0009	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.07-SPR-0001.0070	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0030	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0410
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when a mobile enters the runway protected area without a clearance.
Title	Unauthorised mobile access to runway protected area Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0038	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-3109.0420
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when a mobile starts to make positioning movements on the runway protected area without a clearance.
Title	Unauthorised mobile moving into a runway protected area Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0039	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0440
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when a mobile is assigned to use a closed runway or when the mobile is already on that closed runway.
Title	Closed runway Alert
Status	<Validated>
Rationale	The runway controller needs to be warned if a mobile is planned for or moving on a closed runway.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0043	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0450
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an aircraft is lining up on a runway that differs from the runway assigned.

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Title	Line-up to wrong runway Alert
Status	<Validated>
Rationale	The runway controller needs to be warned if an aircraft is lining up on a runway that differs from the assigned runway.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0045	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0460
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when a departing aircraft proceeds past a point specified by the appropriate ATS authority, without having been transferred to the controller of the next controlling unit, responsible for the departure.
Title	Tower to departure, missed handover Alert
Status	<Validated>
Rationale	The controller needs to be warned upon late handover.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0046	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0470
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an arriving aircraft proceeds past a point defined by local implementation without having been transferred from the previous controlling unit, responsible for the approach.
Title	Approach to Tower missed handover Alert
Status	<Validated>
Rationale	The controller needs to be warned upon late handover. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises

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	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0047	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0480
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when a taxi-in aircraft or a vehicle crossing/entering the runway proceeds past a point specified by the appropriate ATS authority, without having been transferred to the Tower Ground Controller.
Title	Ground to Tower missed handover for crossing runway Alert
Status	<Validated>
Rationale	The controller needs to be warned upon late handover. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0048	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0490
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an aircraft enters the runway to line up without instructions.
Title	Unauthorised line-up Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0049	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0500
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when a mobile, having received a clearance to move, remains stationary on the runway protected area for a period of time exceeding a predetermined value (to be specified locally by the appropriate ATS authority).
Title	Stationary mobile on runway Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile does not react to an instruction/clearance to move. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0050	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0510
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an aircraft, having received a line-up clearance, does not receive a take-off clearance within a period of time exceeding a predetermined value (to be specified locally by the appropriate ATS authority).
Title	Delayed take-off clearance Alert
Status	<Validated>
Rationale	The controller needs to be warned if no take-off clearance is given in due time after line-up. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0071	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-3109.0520
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an aircraft is starting to Take off without clearance.
Title	Unauthorised take-off Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0051	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0530
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an aircraft reaches a point (to be specified locally by the appropriate ATS authority, e.g. 2 Nm from the touchdown) and has not received a landing clearance.
Title	Unauthorised landing Alert
Status	<Validated>
Rationale	The controller needs to be warned if a mobile is going to land without landing clearance. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0052	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0540
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an aircraft starts to taxi-in from the runway exit point without a taxi clearance.
Title	Unauthorised taxi-in Alert

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Status	<Validated>
Rationale	The controller needs to be warned if a mobile is moving without having received the corresponding clearance. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0054	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0550
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an arriving aircraft is aligned to a runway which differs from the assigned runway landing clearance.
Title	Wrong runway alignment Alert
Status	<Validated>
Rationale	The controller needs to be warned when an aircraft is going to land on a runway that was not assigned to that aircraft for landing. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0056	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0560
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when an aircraft is assigned to use an unsuitable runway considering the aircraft type or is already on that unsuitable runway.
Title	Aircraft using an unsuitable runway Alert
Status	<Validated>
Rationale	The controller needs to be warned if a runway is assigned to an aircraft and the runway is not suitable for the aircraft type, or if an aircraft is already on such unsuitable runway. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises

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	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0057	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0570
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Runway Controller for situations where aircraft/vehicle are moving from their position without having received line-up, crossing, take-off, landing clearance but without other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority).
Title	Runway-related Information Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response as follows for non-conformance situations. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0058	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0580
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Runway Controller for an aircraft planned for a runway unsuitable for the aircraft type or for a closed runway.
Title	Runway-related Information Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response for an aircraft not yet on a runway unsuitable for the aircraft type or on a closed runway; <ul style="list-style-type: none"> <li>for an aircraft landing or lining up on wrong runway but without other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority);</li> <li>for a runway incursion without other traffic in the runway protected area.</li> </ul> This requirement has been implemented, successfully verified and included

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	in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0058	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0590
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Runway Controller for an aircraft landing or lining up on wrong runway but without other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority).
Title	Runway-related Information Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response for an aircraft landing or lining up on wrong runway but without other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority). This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0058	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0600
Requirement	The A-CWP shall display an INFORMATION alert to the Tower Runway Controller for a runway incursion without other traffic in the runway protected area.
Title	Runway-related Information Alert Provision
Status	<Validated>
Rationale	The controller needs to receive an Information alert requiring immediate controller awareness but not necessarily immediate response for a runway incursion without other traffic in the runway protected area. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0058	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0610
Requirement	The A-CWP shall display an ALARM alert to the Tower Runway Controller for situations where aircraft/vehicle are moving from their position without having received line-up, crossing, take-off, landing clearance and with other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority).
Title	Runway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller shall receive an Alarm alert requiring immediate controller awareness and immediate response for situations where aircraft/vehicle are moving from their position without having received line-up, crossing, take-off, landing clearance and with other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority). This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0059	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0620
Requirement	The A-CWP shall display an ALARM alert to the Tower Runway Controller for an aircraft on a runway unsuitable for the aircraft type or on a closed runway.
Title	Runway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller shall receive an Alarm alert requiring immediate controller awareness and immediate response for an aircraft on a runway unsuitable for the aircraft type or on a closed runway. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>

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Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0059	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0630
Requirement	The A-CWP shall display an ALARM alert to the Tower Runway Controller for an aircraft landing or lining up on wrong runway with other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority).
Title	Runway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller shall receive an Alarm alert requiring immediate controller awareness and immediate response for an aircraft landing or lining up on wrong runway with other traffic foreseen in the runway protected area within a specified time (value to be specified locally by the appropriate ATS authority). This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0059	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0640
Requirement	The A-CWP shall display an ALARM alert to the Tower Runway Controller for a runway incursion with other traffic foreseen on the runway protected area.
Title	Runway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller shall receive an Alarm alert requiring immediate controller awareness and immediate response for a runway incursion with other traffic foreseen on the runway protected area. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0059	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0650
Requirement	The A-CWP shall display an ALARM alert to the Tower Runway Controller when a mobile crosses a red stop bar.
Title	Runway-related Alarm Alert Provision
Status	<Validated>
Rationale	The controller shall receive an Alarm alert requiring immediate controller awareness and immediate response for a red stop bar crossed. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0041	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0017	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0670
Requirement	The A-CWP shall display the conformance monitoring alert well positioned on the screen in a manner to facilitate a quick controller response to the alert.
Title	CMAC alert position on A-CWP screen
Status	<Validated>
Rationale	The controller needs to be visually notified by the alert. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-3109.0680
Requirement	The A-CWP shall indicate alarms caused by runway stop bar violation in a different manner than alarms caused by violation of stop bars on the taxiways and apron area.
Title	Distinction of runway incursion alarms from stop bar violations.
Status	<Validated>
Rationale	Violation of stop bars on runways can cause more dangerous situations than violation of stop bars on the taxiways and apron area. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.14 Routing Information

[REQ]

Identifier	REQ-12.05.04-TS-0106.0011
Requirement	The A-CWP shall present in real time any update of FPL routing information
Title	Real time display of updated FPL routing data
Status	<Validated>
Rationale	The Routing/Planning function shall interface with an external FDPS to receive flight plans information. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-FPLN.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0110.0001
Requirement	The A-CWP shall allow controller to send requests as: <ul style="list-style-type: none"> <li>• taxi route</li> <li>• taxi route change</li> <li>• destination update</li> <li>• intermediate waypoints definition</li> <li>• taxi routes clearances.</li> </ul>
Title	Routing/Planning requests
Status	<Validated>
Rationale	The Routing/Planning function should designate a route for each aircraft or vehicle, should allow for a change of a route or a change of destination at any time. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0002
Requirement	The A-CWP shall display graphically or in a label field the planned routes in order to check it.
Title	Route display
Status	<Validated>
Rationale	In order to allow the controller to check the routes of a mobile. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0003
Requirement	The A-CWP shall present taxi route information graphically on the Traffic Situation Display (or textually on the EFS Display).
Title	Route Presentation
Status	<Validated>
Rationale	The route (path) information should be indicated alphanumerically within the EFS but should also be linked with the traffic situation display (TSD) (on request of the ATCO the route could be presented graphically) This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0014	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0013	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0013	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0004
Requirement	The A-CWP shall present on the Traffic Situation Display (or on the EFS Display) the taxi time information associated to the presented taxi route.
Title	Taxi time presentation
Status	<Validated>
Rationale	The controller shall be informed about the estimated taxi duration on a proposed taxi route. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AMDM.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0012
Requirement	In semi-automatic mode, the A-CWP shall assist the ATCO in constructing a route by depicting a nodal grid on the graphical representation of the aerodrome layout, when the ATCO is interacting with a route.
Title	Route construction assistance
Status	<Validated>
Rationale	The nodal grid will help the controller on constructing the route This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0013
Requirement	In semi-automatic and in manual mode, the A-CWP shall enable the ATCO to start entering or modifying a route from its start, from any intermediate point or from its end, in manual mode using a node-by-node process.
Title	Route edition
Status	<Validated>
Rationale	The route need to be modified from its start to the end helped by a node-by-node process This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0009	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0016	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGGE.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction	N/A

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		Management Aerodrome ATC	
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0015
Requirement	The A-CWP shall enable the ATCO to modify cleared routes within his/her AoR independent from the mode of operation.
Title	Route edition of cleared routes on AoR
Status	<Validated>
Rationale	The controller should be able to modify cleared routes within his/her AoR This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGGE.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0016
Requirement	The A-CWP shall enable the ATCO to modify planned routes within his/her AoR independent from the mode of operation.
Title	Route edition of planned routes in AoR
Status	<Validated>
Rationale	The controller should be able to modify planned routes within his/her AoR This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGGE.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0017
Requirement	The A-CWP shall enable the ATCO to modify planned routes outside his/her AoR independent from the mode of operation and the current mobile position only after coordination with the responsible ATCO.

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Title	Route edition outside the AoR
Status	<Validated>
Rationale	The controller should be able to modify planned routes outside his/her AoR This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGGE.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0018
Requirement	The A-CWP shall enable the ATCO to clear routes within his/her AoR only independent from the mode of operation.
Title	Route clearances
Status	<Validated>
Rationale	The controller should be able to clear routes within his/her AoR This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGGE.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0014
Requirement	The A-CWP shall allow the ATCO to end the route input process at any time in manual mode.
Title	Manual end route input
Status	<Validated>
Rationale	The controller should be able to end the route edition at any time This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)

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	EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0036
Requirement	The A-CWP shall allow the controller to trigger and uplink the planned route.
Title	Planned route distribution
Status	<Validated>
Rationale	The controller should be able to trigger and uplink the planned route This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0015
Requirement	The A-CWP shall provide a function to accept modifications to a planned route.
Title	Modified route acceptance
Status	<Validated>
Rationale	The controller should have the possibility to accept modifications to a planned route This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0005	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0016
Requirement	The A-CWP shall enable the ATCO to request an automatically generated alternative route to a proposed one.
Title	Alternative route selection
Status	<Validated>
Rationale	The controller should have the possibility to accept modifications to a planned route This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGAU.0016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0017
Requirement	The A-CWP shall allow to modify any automatically generated route.
Title	Mode of operation
Status	<Validated>
Rationale	The controller should have the possibility to modify any automatically generated route This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGGE.0007	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGGE.0008	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0001.0050	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0019
Requirement	The A-CWP shall provide through the HMI interaction with the routing and planning service
Title	Routing and planning service interaction
Status	<Validated>
Rationale	The controller should be able to interact with the routing and planning service This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0020
Requirement	In manual and semi-automatic modes, the A-CWP shall display all possible pre-defined destinations for a push-back, push-pull or a pull-out for aircrafts
Title	Display pushback/pull out manoeuvres
Status	<Validated>
Rationale	The A-CWP will display all pre-defined destinations and allow through the HMI the integration of pre-defined destinations in the taxi-out route. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0021
Requirement	The A-CWP should provide the capability to define the end point of a pushback, pull out or push-pull procedure manually and independent from any pre-defined destination point according to Routing functionality

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Title	Manual route procedures
Status	<Validated>
Rationale	Sometimes the pre-defined destination positions are not sufficient to optimize a traffic situation as much as possible. Thus, the ATCO shall always be able to define a destination position free of any limitations. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0046
Requirement	In the manual and semi-automatic modes, the A-CWP shall provide the ATCO with the capability to combine a pushback procedure with a pull-action.
Title	Manual route procedures: combine pushback with pull
Status	<In Progress>
Rationale	The ATCO shall be able to link any manually defined push procedure with any manually defined pull procedure to a push-pull procedure. In semi-automatic mode, for both parts (push and pull), only starting point and destination point are required as an input.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0023
Requirement	The A-CWP shall display the routes generated according to its operational status (planned, pending and cleared)
Title	Route status
Status	<Validated>
Rationale	The status of a route shall affect how the controller deals with it. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5)

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	EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0017	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0045
Requirement	The A-CWP shall allow the user to choose which routes to be displayed: <ul style="list-style-type: none"> <li>only planned routes, or</li> <li>only cleared and pending routes, or</li> <li>all routes.</li> </ul>
Title	Route display according to operational status
Status	<In Progress>
Rationale	The status of a route shall affect how the controller deals with it.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0025
Requirement	The A-CWP shall display the last route that the ATCO interacted with on top, in case of intersecting routes
Title	Routes display priority
Status	<Validated>
Rationale	Sometimes it may save a lot of time if the ATCO is able to select several routes for the same operation. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0016	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0039
Requirement	The A-CWP shall indicate that a planned route shown on the HMI has been updated because of an unplanned constraint.
Title	Routes update display
Status	<Validated>
Rationale	Any planned route, which has already been displayed to the controller, which is affected by a new constraint and which is automatically recalculated, must lead to an HMI indication to warn the controller that the planned route that he/she previously visualised has changed. The purpose is to avoid surprising the controller at the time he/she will clear the planned route. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0040
Requirement	The A-CWP shall display in the first place to the controller the new proposed routes due to an unplanned constraint for the FPs with cleared routes.
Title	New proposed routes display
Status	<Validated>
Rationale	In case of the appearance of a new constraint, the cleared routes of mobiles affected by the automatic re-routing have to be shown in priority to the ATCO. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-2110.0026
Requirement	The A-CWP shall display the route in all AoRs that a route extends to.
Title	Routes display on AoR
Status	<Validated>
Rationale	The ATCO needs to know the complete route. If a route extends in several AoR, the HMIs should display the route in all AoRs This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0018	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0027
Requirement	The A-CWP shall display warnings generated in case of overriding constraints
Title	Override constraints
Status	<Validated>
Rationale	Provision of specific warning in case manual route update overrides aerodrome layout rules will support the controllers to build a reliable picture about ground surface movements. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0028
Requirement	The A-CWP shall allow the ATCO to distinguish between the centre line and the parallel taxi lines in case of airports with Alternative Parallel Taxi Routing available
Title	APTR centerlines
Status	<Validated>
Rationale	In order to make use of APTR, the information on which line to use needs to be a part of the route displayed on the HMI.

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0031
Requirement	The A-CWP shall send to the Routing and Planning function the specific elements (starting point, intermediate segment and destination).
Title	Specific Elements sending
Status	<Validated>
Rationale	The semi-automatic route generator shall enable the ATCO to input manually the start and ending points of a route. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0032
Requirement	In the manual and semi-automatic mode and in case of APTR available, the A-CWP shall allow the selection of the pre-defined destinations for a push-back, push-pull or a pull-out to be integrated into the taxi-out routes for aircrafts.
Title	Pre-defined Destinations selection
Status	<In Progress>
Rationale	On many airports, pushback and push-pull procedures are executed with pre-defined destination positions on different taxiway centre lines (orange, blue, or yellow) in order to optimize the overall traffic situation.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0011	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0033
Requirement	The A-CWP shall send the pre-defined destination for a push-back, push-pull or a pull-out to the Routing and Planning function.
Title	Pre-defined Destinations sending
Status	<Validated>
Rationale	On many airports, pushback and push-pull procedures are executed with pre-defined destination positions on different taxiway centre lines (orange, blue, or yellow) in order to optimize the overall traffic situation. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0034
Requirement	The A-CWP shall display the taxi-out route including the push-back, push-pull or pull-out manoeuvre.
Title	Taxi-out manoeuvre display
Status	<Validated>
Rationale	On many airports, pushback and push-pull procedures are executed with pre-defined destination positions on different taxiway centre lines (orange, blue, or yellow) in order to optimize the overall traffic situation. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-2110.0035
Requirement	The A-CWP shall allow the controller to modify a proposed route before sending it without having to decline the proposal first.
Title	Proposed route modification
Status	<Validated>
Rationale	The ATCO needs the opportunity to modify a route before he or she clears it. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGAU.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0041
Requirement	The A-CWP shall distinguish routes or route segments under the responsibility of the ATCO at this CWP from routes or route segments under the responsibility of other ATCOs.
Title	Display route responsibilities
Status	<Validated>
Rationale	The ATCO needs to identify which routes are under his responsibility and which ones are not. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.02-VP-614 (R3) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0014	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0043
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "planned" to "cleared"/"pending" upon receipt of a PUSH BACK input

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Title	Change of route status indication (PUSHBACK)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0044
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "planned" to "cleared"/"pending" upon receipt of a TAXI input
Title	Change of route status indication (TAXI)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0045
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "cleared" to "pending" upon receipt of a HOLD input
Title	Change of route status indication (HOLD)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0046
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "cleared" to "pending" upon receipt of a HOLD SHORT input
Title	Change of route status indication (HOLD SHORT)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0047
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "pending" to "cleared" upon receipt of a LINE UP input
Title	Change of route status indication (LINE UP)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5)

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	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0048
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "pending" to "cleared" upon receipt of a CONDITIONAL LINE UP input as soon as the condition is fulfilled.
Title	Change of route status indication (CONDITIONAL LINE UP)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0049
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "pending" to "cleared" upon receipt of a CROSS input
Title	Change of route status indication (CROSS)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0013	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0050
Requirement	The A-CWP shall provide a distinctive display of the change of a route status portion from "pending" to "cleared" upon receipt of a ENTER input
Title	Change of route status indication (ENTER)
Status	<Validated>
Rationale	ATCO's need to be able to visualise the status of each route and the system needs the status for conformance monitoring and switching of AGL This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-CLRT.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0037
Requirement	The A-CWP shall allow to work on any mode of operation (automatic, semi-automatic or manual) supported by the routing function.
Title	Mode of operation
Status	<Validated>
Rationale	The controller should be able to work on any mode of operation supported by the routing function according to his/her needs. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-699 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A

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<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A
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[REQ]

Identifier	REQ-12.05.04-TS-3110.0038
Requirement	In case APTR available, the A-CWP shall include a clear indication on which of the centre line or taxi lane the destination point for the taxi-out route are located
Title	Route destination point
Status	<Validated>
Rationale	On many airports, pushback and push-pull procedures are executed with pre-defined destination positions on the centre line or either of the taxi lanes in order to optimize the overall traffic situation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGED.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0047
Requirement	The A-CWP shall display linked mobiles different from other mobiles.
Title	Linked mobiles presentation
Status	<Validated>
Rationale	The ATCO shall be aware of linked mobiles moving through his/her AoR This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-RGHM.0020	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0048
Requirement	The A-CWP shall provide an indication about availability of the Routing and Planning function.
Title	Routing and planning status indication.
Status	<Validated>
Rationale	The ATCO shall be aware of availability or partial or total loss of the routing and planning function. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0001.0010	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0001.0020	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0049
Requirement	The A-CWP shall allow reverting to backup procedures in case of a loss of the Routing and Planning function.
Title	Routing and planning backup procedures.
Status	<Validated>
Rationale	Reverting to backup procedures will allow limiting the operational effects of the hazard. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0001.0040	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0050
Requirement	The A-CWP shall display an indication to the controller if a manual route update overrides aerodrome layout rules.
Title	Rules override warning.
Status	<Validated>
Rationale	Provision of specific warning in case manual route update overrides aerodrome layout rules will support the controllers to build a reliable picture about ground surface movements. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0001.0090	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-3110.0051
Requirement	The A-CWP shall provide the ability to display Focus Areas defined for an airport.
Title	Focus area display
Status	<In Progress>
Rationale	All concerned ATCOs shall be aware of the current Focus Area distribution, and have to be informed when a new Focus Area (both temporary or procedure-related) has been defined.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0001.0115	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0052
Requirement	Where textual input is required for the routing and planning functions, the A-CWP shall support this input in a format following common standards defined by ICAO and EUROCAE
Title	Standard input format.
Status	<In Progress>
Rationale	Manual input by ATCO shall follow a common standard.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0002.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0053
Requirement	The A-CWP shall annotate any input data with the identification of the role or controller being logged on. Note that the source identification will not be displayed at the HMI.
Title	Source identifier of input data.
Status	<Validated>
Rationale	Input data shall be identified with its source to provide a better control of controller's work and be capable to predict further conflicts it may incur into. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)

Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0002.0040	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3110.0054
Requirement	The A-CWP shall be able to cope with all planned routes even if the movement area reaches its capacity limit.
Title	HMI capacity sufficient for all planned routes
Status	<Validated>
Rationale	Display and input of planned routes (as needed by the controllers) need to be available even at the capacity limit case. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0002.0340	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0002.0370	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.1.15 Sequencing Tools

### 3.1.15.1 Departure Manager

[REQ]

Identifier	REQ-12.05.04-TS-0106.0013
Requirement	The A-CWP shall display to its operator the following flight plan information on electronic flight strip: <ul style="list-style-type: none"> <li>• TSAT</li> <li>• TTOT</li> <li>• Allocated Departure Runway</li> </ul>
Title	Reception of DMAN data to EFSS system
Status	<Validated>
Rationale	Basic information is displayed to controllers for departure management, already taking into account dependencies with arrivals This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-568 (R2)

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	EXE-06.09.02-VP-567 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.09.02-VP-678 (R4) EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0004	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0005	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0051	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0004
Requirement	The A-CWP shall inform Tower Delivery controllers about the following situations: <ul style="list-style-type: none"> <li>• According to current TSAT, it's too early to issue departure clearance;</li> <li>• According to current TSAT, departure clearance can be issued. It's too early to issue start-up clearance;</li> <li>• According to current TSAT, start-up clearance can be issued.</li> <li>• The flight is currently removed from the sequence</li> </ul>
Title	DMAN - Tower Delivery Controller
Status	<Validated>
Rationale	TSAT information (and its associated window) is the primary parameter for ATCO to follow This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0120	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0005
Requirement	The A-CWP shall allow controllers: <ul style="list-style-type: none"> <li>• To manually remove any flight from the sequence.</li> <li>• To manually re-sequence any flight</li> <li>• To insert a flight manually in the Pre-Departure Sequence by entering a TSAT for the concerned flight.</li> </ul>

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	<ul style="list-style-type: none"> <li>To sort the flights according to various criteria, e.g.: TSAT, callsign</li> </ul>
Title	DMAN - Tower Delivery Controller
Status	<Validated>
Rationale	The controller should be able to modify the fights of a sequence This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0006
Requirement	The A-CWP shall present the following data on the same display as the one used by the controller to issue start-up or pushback clearance in the Aerodrome ATC system: TSAT for start-up clearance
Title	TSAT visualisation for start-up clearance
Status	<Validated>
Rationale	TSAT information (and its associated window) is the primary parameter for ATCO to follow This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0100	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0120	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0008
Requirement	The A-CWP shall highlight to the controller any changes performed by the Aerodrome ATC system to the TSAT and TTOT
Title	DMAN Clearance Delivery
Status	<Validated>
Rationale	The controller should be aware of changes on TSAT and TTOT due to flight plan modifications This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2)

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	EXE-06.09.02-VP-567 (R2) EXE-06.03.02-VP-614 (R3) EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0050	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0100
Requirement	The A-CWP shall display in DMAN window the arrival flights integrated in sequence of departures.
Title	Arrival integrated in DMAN window
Status	<Validated>
Rationale	Information on arrivals is required for coordination of late tweaks. The call sign shall also be displayed in order to facilitate phone co-ordination if necessary. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0060	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0105
Requirement	The A-CWP shall display in DMAN window the following flight plan information for each arrival flight: TLDT, Wake Vortex Category and call sign
Title	Arrival information in DMAN window
Status	<Validated>
Rationale	Flight information shall be displayed in order to facilitate phone co-ordination if necessary. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0060	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0110
Requirement	The A-CWP shall display separately on the Tower supervisor display information on arrival and departures KPIs.
Title	Arrival and departures KPIs on Tower supervisor Display
Status	<Validated>
Rationale	Information on KPIs provides visibility on the current performances of the arrival/departure management process This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0080	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0115
Requirement	Information on arrival and departures KPIs visualized Tower supervisor display shall include: - forecasted delay (difference between “Airline desired time” and “ATC target times”); Forecasted Schedule deviation (difference between “Scheduled Airline times” and “ATC target times”).
Title	Arrival and departures KPIs Information
Status	<Validated>
Rationale	Information on KPIs provides visibility on the current performances of the arrival/departure management process This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0080	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-3106.0120
Requirement	The A-CWP shall present the following data on the same display as the one used by the controller to issue push-back clearance in the Aerodrome ATC system: TTOT for take-off clearance.
Title	TTOT visualisation for push back clearance
Status	<Validated>
Rationale	TTOT order information might be used by the controller in addition to the TSAT order to give clearances at the right time to build an optimized departure sequence. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.08.04-VP-343 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0110	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.15.2 Arrival Manager

[REQ]

Identifier	REQ-12.05.04-TS-3106.0145
Requirement	The A-CWP shall provide a means to the tower controller to input the size of the gap (provided in distance or time) needed to accommodate two or more departures between arrivals.
Title	Input of size of gap between arrivals.
Status	<In Progress>
Rationale	In order to calculate an optimized arrival sequence, the separation required by each pattern must be known by AMAN.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1200.0030	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0150
Requirement	The A-CWP shall provide a means to the tower controller to input the pattern for arrivals and departures, where a pattern describes the number of departures between two consecutive arrivals.
Title	Input the pattern for arrivals and departures.
Status	<In Progress>

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Rationale	Controllers can decide to impose manually a pattern in order to best adapt it to the observed conditions.  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1200.0040	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0155
Requirement	The A-CWP shall provide a means to the controller to manually modify the pattern of arrivals and departures calculated by the AMAN.
Title	Modify pattern calculated by AMAN.
Status	<In Progress>
Rationale	It will always be possible for the controller to manually impose one pattern  This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1200.0055	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0160
Requirement	The A-CWP shall be able to display departing flights information such as TTOT, Call sign, Wake Vortex Category and Flight Status (SUR, SUG, Taxi) in the sequence of arrivals (on the AMAN display).
Title	DMAN Clearance Delivery
Status	<Validated>
Rationale	Basic information is displayed to controllers for arrival management, in order to provide visibility on characteristics of departures.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.08.04-VP-343 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0020	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.15.3 Coupled AMAN/DMAN

#### [REQ]

Identifier	REQ-12.05.04-TS-3106.0130
Requirement	The A-CWP shall allow the operator to select a time horizon for the visualization of flight sequence in AMAN/DMAN window.
Title	DMAN time horizon
Status	<Validated>
Rationale	The coupled AMAN/DMAN behavior will depend on the time horizon This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

#### [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-2020.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

#### [REQ]

Identifier	REQ-12.05.04-TS-3106.0135
Requirement	The A-CWP shall present to the controller all flights using a runway in one integrated sequence including arrivals, departures and crossings.
Title	Display of integrated runway sequence
Status	<Validated>
Rationale	The coupled AMAN/DMAN function must assist the controller This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

#### [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-2020.0050	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.1.16 Data link

### 3.1.16.1 Data Link Display

[REQ]

Identifier	REQ-12.05.04-TS-2111.0037
Requirement	The A-CWP shall allow to distinguish vehicles that are data link equipped and non data link equipped.
Title	Data link capability indication
Status	<Validated>
Rationale	The ATCO needs to know whether a vehicle has data link capability or not. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0104	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2110.0024
Requirement	The A-CWP shall display an UNABLE Data Link message when the flight crew or vehicle does not accept the planned route
Title	UNABLE message
Status	<Validated>
Rationale	The CWP will display the correspondent data link message when the Flight Crew or vehicle is unable to accept the planned route according to the proposed standard This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0405	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0111.0007
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Requirement	The A-CWP shall display data link messages.
Title	Message display
Status	<Validated>
Rationale	The ATCO needs to know when a data link dialogue is in progress  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-568 (R2) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0500	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0001
Requirement	The A-CWP shall allow to distinguish aircrafts that are data link equipped and non data link equipped.
Title	Aircraft datalink equipment
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has data link capability This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0100	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0090
Requirement	The A-CWP shall allow distinguishing data link equipped aircraft from datalink equipped vehicles and non-datalink equipped aircraft from non-datalink equipped vehicles.
Title	Differentiate aircraft display from vehicle display.
Status	<Validated>
Rationale	ATCO's need to be able to identify immediately if will be work with an

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	aircraft or vehicle as well as if they are data link equipped or non-data link equipped. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0105	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0002
Requirement	The A-CWP shall display when a mobile has established a data link connection
Title	Mobile Data Link connection
Status	<Validated>
Rationale	ATCO's need to be able to identify whether a mobile has established a data link connection This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0101	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0130	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0004
Requirement	The A-CWP shall display a START-UP REQUEST message sent by the Flight Crew
Title	D-TAXI message display: START-UP REQUEST
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a Start-Up Request This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>

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Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0200	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0011
Requirement	The A-CWP shall display the reception of STANDBY D-TAXI downlink message sent by the Flight Crew in reply to START UP APPROVED D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: STAND-BY
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a STANDBY message in reply to a START-UP approval message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0204	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0012
Requirement	The A-CWP shall display the reception of UNABLE D-TAXI downlink message sent by the Flight Crew in reply to START UP APPROVED D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: UNABLE
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link an UNABLE message in reply to a START-UP approval message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0205	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0013
Requirement	The A-CWP shall display the reception of WILCO D-TAXI downlink message sent by the Flight Crew in reply to START UP APPROVED D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: WILCO
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a WILCO message in reply to a START-UP approval message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0206	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0014
Requirement	The A-CWP shall display a PUSH-BACK REQUEST message sent by the Flight Crew
Title	D-TAXI message display: PUSH-BACK REQUEST
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a Pushback Request This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0300	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0020
Requirement	The A-CWP shall display the reception of STAND-BY D-TAXI downlink message sent by the Flight Crew in reply to PUSHBACK APPROVED D-TAXI uplink message sent by the controller.

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Title	D-TAXI message display: STAND-BY
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a STANDBY message in reply to a PUSHBACK approval message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0306	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0021
Requirement	The A-CWP shall display the reception of UNABLE D-TAXI downlink message sent by the Flight Crew in reply to PUSHBACK APPROVED D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: UNABLE
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link an UNABLE message in reply to a PUSHBACK approval message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0307	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0022
Requirement	The A-CWP shall display the reception of WILCO D-TAXI downlink message sent by the Flight Crew in reply to PUSHBACK APPROVED D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: WILCO
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a WILCO message in reply to a PUSHBACK approval message

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	This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0308	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0023
Requirement	The A-CWP shall display a TAXI REQUEST message sent by the Flight Crew
Title	D-TAXI message display: TAXI REQUEST
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a Taxi Request This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0400	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0028
Requirement	The A-CWP shall display the reception of STAND-BY D-TAXI downlink message sent by the Flight Crew in reply to TAXI or REVISED TAXI D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: STAND-BY
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a STANDBY message in reply to a data link TAXI or data link REVISED TAXI message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5)

	EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0404	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0029
Requirement	The A-CWP shall display the reception of UNABLE D-TAXI downlink message sent by the Flight Crew in reply to TAXI or REVISED TAXI D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: UNABLE
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link an UNABLE message in reply to a data link TAXI or data link REVISED TAXI message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0405	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0030
Requirement	The A-CWP shall display the reception of WILCO D-TAXI downlink message sent by the Flight Crew in reply to TAXI or REVISED TAXI D-TAXI uplink message sent by the controller.
Title	D-TAXI message display: WILCO
Status	<Validated>
Rationale	ATCO's need to be able to identify whether an aircraft has sent via data link a WILCO message in reply to a data link TAXI or data link REVISED TAXI message This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)

Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0406	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0031
Requirement	The A-CWP shall display the information related to any open data link dialogue
Title	Data Link display
Status	<Validated>
Rationale	The ATCO needs to know when a data link dialogue is in progress (e.g. via MESSAGE IN/OUT windows)  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0500	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0032
Requirement	After reception of a WILCO or ROGER message, the A-CWP shall remove the display of the information related to an open data link dialogue.
Title	Information removal
Status	<Validated>
Rationale	The ATCO needs to know when a data link dialogue is terminated (e.g. via MESSAGE IN/OUT windows)  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0501	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0033
Requirement	The A-CWP shall warn the ATCO when NO REPLY from the Flight Crew has been received within the required "receipt of response" time.
Title	NO REPLY warning
Status	<Validated>
Rationale	ATCO's need to know when an open data link dialogue has timed out This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0502	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0035
Requirement	The A-CWP shall display Free Text data link message sent by the Flight Crew.
Title	Free Text Data Link message display
Status	<Validated>
Rationale	ATCO's need to be able to visualize a received a free text data link message from the Flight Crew for unusual, non-critical events. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0506	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0038
Requirement	The A-CWP shall provide means to access previously sent or received Data

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	Link messages for a given flight.
Title	Dialogue exchange history
Status	<Validated>
Rationale	The ATCO wants to check on the current status of a dialogue exchange This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0508	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0017	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0039
Requirement	The A-CWP shall indicate the ATCO if he is not reacting to an incoming Data Link message within a pre-defined period of time
Title	Unhandled message alert
Status	<Validated>
Rationale	The ATCO might not notice when a data link message arrives This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0507	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0051
Requirement	The A-CWP shall display the status of a route segment (cleared or pending) upon issue of a STOP AT clearance via datalink
Title	Route segment status on STOP AT clearance
Status	<Validated>
Rationale	The ATCO needs a visualisation of the status of each route segment This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4)



	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED- DTXI.0409	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0066
Requirement	The A-CWP shall display the reception of a DL REQUEST PROCEED message sent by the vehicle driver
Title	Display of Data Link messages from vehicle driver
Status	<Validated>
Rationale	ATCOs need to be able to identify whether a vehicle has sent via data link a PROCEED Request  Note: The use of PROCEED D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group. It should be noted that these requirements could suffer modifications in next versions This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0600	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0067
Requirement	The A-CWP shall display the reception of Data-link messages sent by the vehicle driver: <ul style="list-style-type: none"> <li>• STAND-BY,</li> <li>• UNABLE,</li> <li>• WILCO</li> </ul> in reply to a PROCEED or REVISED PROCEED uplink message sent by the controller
Title	Display of Data Link messages from vehicle driver
Status	<Validated>
Rationale	ATCOs need to be able to identify whether a Vehicle has sent via data link a STANDBY, UNABLE or WILCO message in reply to a data link PROCEED or data link REVISED PROCEED message sent by the controller.  Note: The use of PROCEED D-TAXI message for vehicles has to be

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	confirmed by the standard document coming from Working Group 78. It should be noted that these requirements could suffer modifications in next versions  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0604	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0605	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0606	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0010
Requirement	The A-CWP shall display whether a sent data link message has been successfully received by the receiving system (aircraft or vehicle) or not.
Title	Display of Data Link message delivery status
Status	<Validated>
Rationale	ATCOs should to be able to see whether a clearance sent via datalink is already available to the recipient (pilot or driver). Note: This is independent on any acknowledging action of the recipient.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0020
Requirement	The A-CWP shall display an indication when the data link system is not available.
Title	Display of Data Link system status
Status	<Validated>
Rationale	ATCOs shall be able to identify whether the data link system is properly working connected to the data link communication service provider.  This requirement has been implemented, successfully verified and included

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	in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0100
Requirement	The A-CWP shall display the reception of a DL REQUEST TOW message sent by the vehicle driver
Title	Display of Data Link messages from vehicle driver
Status	<Validated>
Rationale	ATCOs need to be able to identify whether a vehicle has sent via data link a TOW Request  Note: The use of TOW D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group 78. It should be noted that these requirements could suffer modifications in next versions  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0611	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0110
Requirement	The A-CWP shall display the reception of data-link messages sent by the vehicle driver: <ul style="list-style-type: none"> <li>• STAND-BY,</li> <li>• UNABLE,</li> <li>• WILCO</li> </ul> in reply to a TOW or REVISED TOW uplink message sent by the controller
Title	Display of Data Link messages from vehicle driver
Status	<Validated>
Rationale	ATCOs need to be able to identify whether a Vehicle has sent via data link a STANDBY, UNABLE or WILCO message in reply to a data link TOW or data link REVISED TOW message sent by the controller.  Note: The use of TOW D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group 78. It should be noted

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	that these requirements could suffer modifications in next versions This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0615	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0616	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0617	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0140
Requirement	The A-CWP shall indicate to the ATCO if the Data Link Initiation Capabilities fail.
Title	DLIC failure display
Status	<In Progress>
Rationale	If DLIC fails, the controller needs to contact the aircraft via R/T. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0145
Requirement	The A-CWP shall display the data link communication status on a dedicated diagnostic window.
Title	Data link communication status display
Status	<In Progress>
Rationale	ATCO needs to know the data-link communication status. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0016	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0133	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-3111.0150
Requirement	The A-CWP shall display the acknowledgement status of each data-link message on a dedicated diagnostic window.
Title	Data link diagnostic display
Status	<In Progress>
Rationale	ATCO needs to know the data-link communication status. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0018	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0155
Requirement	The A-CWP shall warn the ATCO when the ATCO does not react on a received downlink message within the required operational reaction time.
Title	No Reaction warning
Status	<Validated>
Rationale	ATCO's need to know when an open data link dialogue has timed out  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0106	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0107	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0160
Requirement	The A-CWP shall indicate to the ATCO when the CPDLC connection cannot be established with the mobile.
Title	No CPDLC connection indication
Status	<Validated>
Rationale	ATCO's need to know when an open data link dialogue has timed out This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0131	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0132	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0165
Requirement	The A-CWP shall indicate to the ATCO when a data-link message cannot be successfully transmitted.
Title	Transmission failure indication
Status	<Validated>
Rationale	ATCO's should know when messages don't reach the destination. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0134	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.16.2 Data Link Input

[REQ]

Identifier	REQ-12.05.04-TS-2111.0003
Requirement	The A-CWP shall provide the ATCO with the possibility to choose between sending a data link message or making a standard non-data link clearance via R/T.
Title	Message election
Status	<Validated>
Rationale	Even if aircraft is data link equipped, the ATCO might select not to use it for operational/safety reasons This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0102	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0011	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0013	<Full>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0005
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: EXPECT START-UP AT [Time] in reply to a START-UP REQUEST D-TAXI message sent by the flight crew.
Title	D-TAXI message issue: EXPECT START-UP AT [Time]
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link an EXPECT START-UP message in reply to a START-UP REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0207	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0006
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: STOP AT
Title	D-TAXI message issue: STOP AT
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link a STOP AT instruction. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0408	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0007
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: EXPECT TAXI AT [Time] in reply to a TAXI REQUEST D-TAXI message sent by the flight crew
Title	D-TAXI message issue: EXPECT TAXI AT [Time]

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Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link an EXPECT TAXI message in reply to a TAXI REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0410	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0008
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: START UP APPROVED.
Title	D-TAXI message issue: START UP APPROVED.
Status	<Validated>
Rationale	ATCO's need to be able to deliver a data link START-UP APPROVAL message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0201	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0001	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0022	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0009
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: STAND-BY in reply to a START-UP REQUEST D-Taxi message sent by the flight crew.
Title	D-TAXI message issue: STAND-BY
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link a STANDBY message in reply to a START-UP REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)

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Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0202	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0010
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: UNABLE in reply to a START-UP REQUEST D-Taxi message sent by the flight crew.
Title	D-TAXI message issue: UNABLE
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link an UNABLE message in reply to a START-UP REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0203	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0015
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: PUSH-BACK APPROVED
Title	D-TAXI message issue: PUSH-BACK APPROVED
Status	<Validated>
Rationale	ATCO's need to be able to deliver a data link PUSHBACK APPROVAL message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0301	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0001	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0022	<Partial>

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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0016
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: STAND-BY in reply to a PUSHBACK REQUEST D-Taxi message sent by the flight crew.
Title	D-TAXI message issue: STAND-BY
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link a STANDBY message in reply to a PUSHBACK REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0302	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0017
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: UNABLE in reply to a PUSHBACK REQUEST D-Taxi message sent by the flight crew
Title	D-TAXI message issue: UNABLE
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link an UNABLE message in reply to a PUSHBACK REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0303	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-2111.0018
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: EXPECT PUSH-BACK AT [Time] in reply to a PUSHBACK REQUEST D-Taxi message sent by the flight crew
Title	D-TAXI message issue: EXPECT PUSH-BACK AT [Time]
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link an EXPECT PUSHBACK message in reply to a PUSHBACK REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0304	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0019
Requirement	If several directions are available, the A-CWP shall allow the controller to issue a D-TAXI message: PUSH-BACK direction
Title	D-TAXI message issue: PUSH-BACK direction
Status	<Validated>
Rationale	ATCO's need to be able to specify in the data link PUSHBACK APPROVAL message the direction for pushback if more than one pushback direction has been specified for the parking stand This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0305	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0001	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0022	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0024
Requirement	The A-CWP shall allow the ATCO to input a route representation

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	automatically translated into a D-TAXI TAXI message by the system
Title	D-TAXI route message
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link a TAXI instruction describing the cleared part of the TAXI route. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0401	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0001	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0025
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: STAND-BY in reply to a TAXI REQUEST D-TAXI message sent by the flight crew.
Title	D-TAXI message issue: STAND-BY
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link a STANDBY message in reply to a D-TAXI REQUEST message. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0402	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0026
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: UNABLE in reply to a TAXI REQUEST D-Taxi message sent by the flight crew
Title	D-TAXI message issue: UNABLE
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link an UNABLE message in reply to a data link TAXI REQUEST message. This requirement has been implemented, successfully verified and included

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	in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0403	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0027
Requirement	The A-CWP shall allow the controller to issue a D-TAXI message: REVISED TAXI
Title	D-TAXI message issue: REVISED TAXI
Status	<Validated>
Rationale	ATCO's need to be able to deliver via data link a Revision to the TAXI instruction already send This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0407	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0001	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0022	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0034
Requirement	The A-CWP shall allow ATCO to input a Free Text data link message
Title	Free Text Data Link message input
Status	<Validated>
Rationale	ATCO's need to be able to send a free text data link message to the Flight Crew for unusual, not critical events. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0505	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0002.0200	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0068
Requirement	The A-CWP shall allow the ATCO to input a route representation for vehicles as a D-Taxi PROCEED message
Title	Route representation D-Taxi PROCEED message
Status	<Validated>
Rationale	<p>ATCOs need to be able to input through data link a PROCEED message the route representation for a vehicle</p> <p>Note: The use of PROCEED D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group. It should be noted that these requirements could suffer modifications in next versions</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0601	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0002	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0005	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0023	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0069
Requirement	The A-CWP shall allow the ATCO to input a DL REVISED PROCEED message
Title	Route representation in D-Taxi REVISED PROCEED message
Status	<Validated>
Rationale	<p>ATCOs need to be able to input via data link a Revision to the PROCEED message already sent</p> <p>Note; The use of PROCEED D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group 78. It should be noted that these requirements could suffer modifications in next versions</p> <p>This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises</p> <p>EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)</p>
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0607	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0002	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0005	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0023	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0070
Requirement	The A-CWP shall allow the ATCO to input a Data-link message: <ul style="list-style-type: none"> <li>• STAND-BY,</li> <li>• UNABLE,</li> <li>• EXPECT PROCEED AT [TIME]</li> </ul> In reply to REQUEST PROCEED D-TAXI downlink message sent by the vehicle driver.
Title	Input of Data Link messages
Status	<Validated>
Rationale	ATCOs need to be able to input via data link a STANDBY, UNABLE or EXPECT PROCEED AT [TIME] message in reply to a Data Link PROCEED Request message Note: The use of PROCEED D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group. It should be noted that these requirements could suffer modifications in next versions  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0602	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0603	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0608	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0071
Requirement	The A-CWP shall allow the ATCO to request via data link whether Flight Crew is able to accept a specific Runway Holding Point for the departure
Title	Specific Runway Holding Point confirmation request
Status	<Validated>
Rationale	ATCO's need to know if the departure flight is able to depart by a specific Runway Holding Point.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4)

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	EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0411	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0120
Requirement	The A-CWP shall allow the ATCO to input a route representation for vehicles as a DL TOW message
Title	Route representation DL message
Status	<Validated>
Rationale	ATCOs need to be able to input through data link a TOW message the route representation for a vehicle Note: The use of TOW D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group 78. It should be noted that these requirements could suffer modifications in next versions  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0612	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0023	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0125
Requirement	The A-CWP shall allow the ATCO to input a DL REVISED TOW message
Title	Input of Data Link messages
Status	<Validated>
Rationale	ATCOs need to be able to input via data link a Revision to the TOW message already sent Note; The use of TOW D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group 78. It should be noted that these requirements could suffer modifications in next versions  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0618	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0002	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0023	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0130
Requirement	The A-CWP shall allow the ATCO to input a Data-link message: <ul style="list-style-type: none"> <li>• STAND-BY,</li> <li>• UNABLE</li> </ul> In reply to REQUEST TOW D-TAXI downlink message sent by the vehicle driver.
Title	Input of Data Link messages
Status	<Validated>
Rationale	ATCOs need to be able to input via data link a STANDBY or UNABLE message in reply to a Data Link TOW Request message Note: The use of TOW D-TAXI message for vehicles has to be confirmed by the standard document coming from Working Group 78. It should be noted that these requirements could suffer modifications in next versions  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0613	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-DTXI.0614	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0135
Requirement	The A-CWP shall allow the ATCO to repeat the same uplink data link message if the recipient did not confirm the reception.
Title	Repeat a data-link message
Status	<Validated>
Rationale	In case of non-reception the controller should be able to repeat the message  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0170
Requirement	The A-CWP shall provide guidance to the ATCO as of which data-link clearance can be given, depending on the current status of the mobile.
Title	Data-link clearance workflow guidance
Status	<Validated>
Rationale	In order to avoid that the ATCOs could input wrong clearances / instructions (e.g. the ATCO cannot input a taxi-out instruction before push-back) This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0136	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0175
Requirement	The A-CWP, before sending a data link message, shall add a timestamp in UTC time with the precision of at least one second to the data link message.
Title	Add time stamp to uplink messages
Status	<Validated>
Rationale	To avoid hazardous situation. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0220	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.17 Airfield Ground Lighting (AGL)

[REQ]

Identifier	REQ-12.05.04-TS-2111.0052
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Requirement	The A-CWP shall visualize the supervision/observation of AGL system
Title	AGL monitoring
Status	<In Progress>
Rationale	The ATCO needs to monitor the AGL This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3111.0080
Requirement	The A-CWP shall provide a means to indicate unserviceable segments of the AGL system.
Title	AGL monitoring
Status	<In Progress>
Rationale	The ATCO needs to monitor the AGL This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0053
Requirement	The A-CWP shall allow selecting/deselecting the status for each light segment of the AGL
Title	Indication of light status
Status	<In Progress>
Rationale	The A-CWP shall be able to visualize the light status This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0054
Requirement	The A-CWP shall be able to symbolically indicate a fixed number of illuminated segments in front of a moving mobile
Title	Partial indication of illuminated segments for mobile.
Status	<Validated>
Rationale	The A-CWP shall be able to visualize lamps in front of moving mobiles  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0055
Requirement	The A-CWP shall allow the switching on/off of AGL segments.
Title	Switching of AGL segments
Status	<In Progress>
Rationale	The A-CWP shall be able to switch the AGL segment This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0009	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0056
Requirement	The A-CWP shall allow the switching on/off all taxiway centreline lights.
Title	Switching of TCL
Status	<In Progress>
Rationale	The A-CWP shall be able to switch TCL This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction	N/A

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		Management Aerodrome ATC	
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0057
Requirement	The A-CWP shall display the AGL information as configurable settings.
Title	Configurable settings
Status	<In Progress>
Rationale	The A-CWP will display AGL information as configurable settings in order to avoid congestion on the screen. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0012	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0058
Requirement	The A-CWP shall be able to display illuminated segments according to a customized colour.
Title	Visualization of illuminated segments
Status	<Validated>
Rationale	The A-CWP shall display illuminated segments  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0059
Requirement	The A-CWP shall display illuminated lamps for guiding a mobile on APTR according to a customized colour
Title	Visualization of Illuminated lamps
Status	<Validated>
Rationale	The A-CWP shall display illuminated lamps for guiding a mobile  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4)

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	EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLA.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0060
Requirement	The A-CWP shall display the status of Runway Status Lights (RWSL) given to a mobile
Title	Visualization of RWSL
Status	<In Progress>
Rationale	The A-CWP shall display the Runway Status Lights This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-RWSL.0032	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0061
Requirement	The A-CWP shall display REL / RIL / THL status warnings as soon as they arrive at the A-CWP.
Title	REL / RIL / THL status
Status	<In Progress>
Rationale	The A-CWP shall display REL / RIL / THL status This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-RWSL.0033	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0062
Requirement	The A-CWP for the tower supervisor shall be able to deactivate the whole RWSL system by providing a dedicated switch on the HMI.
Title	Deactivation of RWSL system

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Status	<In Progress>
Rationale	The A-CWP shall be able to deactivate the RWSL system. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-RWSL.0034	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-RWSL.0035	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0063
Requirement	The A-CWP shall present loss of communication with RWSL system on the RWY ATCO and tower supervisor displays as soon as detected.
Title	Loss of communication with RWSL
Status	<In Progress>
Rationale	The A-CWP shall present loss of communication with RWSL system This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-RWSL.0036	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0064
Requirement	The A-CWP shall allow Tower Supervisor / ATCO to adjust the light intensity of the AGL
Title	Light Intensity
Status	<In Progress>
Rationale	Depending on the environmental conditions the light intensity has to be adjusted by the Tower Supervisor / ATCO, e.g. in low visibility conditions the light intensity needs to be intensified. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2111.0065
Requirement	The A-CWP shall allow to select and visualize different pre-configured lighting setups
Title	Pre-configured lighting setups
Status	<In Progress>
Rationale	The ATCO can select different configurations for lighting This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0011	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0021
Requirement	The controller may be provided with the possibility to manually activate or de-activate VSB and stop bars.
Title	Activate / Deactivate Stop bars
Status	<Validated>
Rationale	The controller should be provided with easy means to manually activate or de-activate stop bars.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2) EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VBCL.0001	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0022
Requirement	The status of stop bars shall be clearly and visually indicated to the controller as activated, de-activated, failure, maintenance.
Title	Status of the stop bar
Status	<Validated>
Rationale	The status of stop bars (i.e. activated, de-activated, failure) should be clearly and visually indicated to the controller.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-371 (R2)

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	EXE-06.09.02-VP-569 (R2) EXE-06.03.02-VP-614 (R3)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0014	<Partial>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-AGLG.0013	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0019	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0710
Requirement	The A-CWP shall display an alarm in case of deviations from an assigned route or an illuminated segment.
Title	Alarm for route deviation
Status	<Validated>
Rationale	Deviations of a mobile from an assigned route should be notified to the ATCO This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0017	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.18 Enhanced Braking System

[REQ]

Identifier	REQ-12.05.04-TS-2112.0001
Requirement	The A-CWP shall inform the ATCO if the EBS has failed, is disconnected or has degraded below specified limits.
Title	EBS status indication
Status	<Validated>
Rationale	The ATCO (or the automatic routing function) needs to know if no EBS-calculated runway exit is available. Consequently, the taxi route of the landed aircraft has to be adjusted. This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0115	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2112.0002
Requirement	The A-CWP shall display the down linked EBS-calculated runway exit on the flight strip as soon as available
Title	EBS - calculated runway exit.
Status	<Validated>
Rationale	The runway exit of a landing aircraft is essential to plan the taxi route to its parking position. Early availability of this information will increase the ability to plan and schedule the upcoming taxi traffic This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0123	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2112.0003
Requirement	The A-CWP shall display the runway exit calculated by the EBS
Title	Display of EBS-calculated runway exit
Status	<Validated>
Rationale	The runway exit point of a landing aircraft is essential to plan the taxi route to its parking position This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-678 (R4) EXE-06.09.02-VP-679 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0114	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0124	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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### 3.1.19 Wake Vortex information

[REQ]

Identifier	REQ-12.05.04-TS-2113.0010
Requirement	The A-CWP Wake Vortex Display Tool shall display each type of separation indicator harmoniously and in conformity with its design rules (concerning their shape, colour, size, local operations and display priority).
Title	Separation Indicator Display Conformity
Status	<In Progress>
Rationale	To ensure that the separation indicators are fit for purpose.  This requirement has not been part of any validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OPS1.0213	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0046	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0048	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0049	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0053	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2113.0020
Requirement	The A-CWP Wake Vortex Display Tool shall display the default shape of the separation indicator on the extended runway centre-line behind each lead aircraft established on final approach or <ul style="list-style-type: none"> <li>• Behind the projected position on the lead aircraft</li> <li>• Behind the TDI of the aircraft ahead</li> </ul> When the lead aircraft has not yet established, the TDI is eligible for display or the projected position is behind its own TDI
Title	Separation Indicator display rules
Status	<In Progress>
Rationale	Allows early display of TDIs This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0041	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0042	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0043	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2113.0030
Requirement	The A-CWP Wake Vortex Display Tool shall display the separation

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	indicators at least a distance step resolution of 0.1NM
Title	Separation Indicator resolution
Status	<In Progress>
Rationale	Correct visualisation of the separation indicator. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0054	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2113.0040
Requirement	The A-CWP Wake Vortex Display Tool shall display configurable settings for the separation indicator depending on the type of separation/spacing
Title	Separation Indicator settings
Status	<In Progress>
Rationale	Correct design of the separation indicator. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OFA1.0050	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0039	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2113.0050
Requirement	The A-CWP Wake Vortex Display Tool shall be displayed on all applicable CWP's (Tower Runway, Final Approach and Intermediate Approach)
Title	Separation Indicator settings - colour and intensity configurable
Status	<In Progress>
Rationale	Correct design of the separation indicator. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0040	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2113.0060
Requirement	The A-CWP Wake Vortex Display Tool shall display the separation indicator automatically to prevent the controller unknowingly infringing the FTD.
Title	Automatic display of the separation indicator
Status	<In Progress>
Rationale	Correct display of the separation indicator to avoid unsafe situations. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0051	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2113.0070
Requirement	The A-CWP Wake Vortex Display Tool shall use different graphical representations for FTD and ITD indicators and make them easily distinguishable for the controller to avoid ambiguity.
Title	Different graphical representation FTD and ITD separation indicators
Status	<In Progress>
Rationale	Correct design of the separation indicator. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0055	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0071
Requirement	The A-CWP Wake Vortex Display Tool shall display each aircraft associated with its correspondent display indicator.
Title	Pairing functionality
Status	<In Progress>
Rationale	Correct pairing of the separation indicator with the aircraft. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0056	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0072
Requirement	The mode of operation shall be displayed to the controllers and supervisors.
Title	Wake Vortex Mode of operation
Status	<In Progress>
Rationale	Allow controllers to know the mode of operation used. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.01-OSED-OFA1.0061	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0073
Requirement	The A-CWP shall allow select/deselect the display of an Automatic Wake Vortex Timer for Departures for each individual runway.
Title	Wake Vortex Timer display
Status	<In Progress>
Rationale	Certain controller roles do not necessarily require the information provided by the AWVT. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AWVT.0001	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AWVT.0002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0074
Requirement	The A-CWP Automatic Wake Vortex Timer shall display the required spacing (in time) based on ICAO (or local) Wake Vortex Separation standards.
Title	Wake Vortex Timer display
Status	<In Progress>
Rationale	Wake Vortex Separation for Departures defined by ICAO (or local parameters) shall be taken into account to calculate the required spacing. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AWVT.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0075
Requirement	The A-CWP Automatic Wake Vortex Timer shall display the wake vortex categories of previous and next departing aircraft on the runway.
Title	Wake Vortex Category display
Status	<In Progress>
Rationale	For Situational Awareness purposes, the ATCO requires the Wake Vortex Category information. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AWVT.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0076
Requirement	The A-CWP Automatic Wake Vortex Timer shall display the line-up points of previous and next departing aircraft on the runway.
Title	Display of line-up points in Wake Vortex Timer tool
Status	<In Progress>
Rationale	For Situational Awareness purposes, the ATCO requires the Line-up points information This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AWVT.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0077
Requirement	The A-CWP Automatic Wake Vortex Timer shall display the required spacing between two consecutive departing aircraft on a runway.
Title	Display of required spacing between consecutive departures.
Status	<In Progress>
Rationale	For Situational Awareness purposes, the ATCO requires information regarding the required wake vortex spacing to be applied

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	This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AWVT.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3113.0078
Requirement	The A-CWP Automatic Wake Vortex Timer shall indicate whether the required spacing between two consecutive departures is obtained.
Title	Display of spacing violation.
Status	<In Progress>
Rationale	In order to be expeditious. The ATCO using the AWVT indicator to have a clear indication whether it is safe or not (wrt to Wake Vortex separation) to issue the next Take-off clearance. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-AWVT.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.20 Runway Management

[REQ]

Identifier	REQ-12.05.04-TS-3120.0005
Requirement	The A-CWP shall allow TWR supervisor or ATCO to overwrite current and forecast runway capacity values.
Title	Runway capacity inputs
Status	<Validated>
Rationale	This information is provided by the RMAN and required by the APOC, AMAN and DMAN  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-57	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0010
Requirement	The A-CWP shall allow TWR supervisor or ATCO to overwrite current and forecasted runway configuration and/or mode of operation (e.g. active - Landing/Departing/Mixed mode or inactive - being used as a taxiway).
Title	Runway configuration change
Status	<Validated>
Rationale	This information is provided by the RMAN and required by the Airport Safety Nets, APOC, AMAN and DMAN This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-57	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0020
Requirement	The A-CWP shall visualize actual and forecasted runway capacity values.
Title	Actual and forecasted capacity values
Status	<Validated>
Rationale	This information is provided by the RMAN and required by the APOC, AMAN and DMAN Visualization is important for the human using the APOC, AMAN/DMAN systems, less important for A-DCB (RMAN) and other tools  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-57	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

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Identifier	REQ-12.05.04-TS-3120.0035
Requirement	The A-CWP shall visualize the actual and forecasted runway mode of operation (Arrivals, Departures and Mixed).
Title	Actual and forecasted information display
Status	<Validated>
Rationale	This information is required by Tower Supervisor This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.09.02-VP-679 (R5) EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.05.03-OSED-DCBH.0100	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-57	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0060
Requirement	The A-CWP shall visualize the following actual and forecasted KPI values selectable by the user: <ul style="list-style-type: none"> <li>Capacity Shortage</li> <li>Delay</li> <li>Punctuality</li> </ul> To be presented per runway or total ops, selectable by the user
Title	Actual and forecasted KPI values display
Status	<Validated>
Rationale	Basic information for DCB Management and provided by the airport-DCB support tool (RMAN) This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-719 (R5)
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DATA.0007	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.05.03-OSED-DCBH.0100	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-49	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-57	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.21 Virtual Block Control and Virtual Stop Bars

[REQ]

Identifier	REQ-12.05.04-TS-3121.0005
Requirement	The A-CWP shall allow the controller to dynamically reduce the size of a block.

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Title	Dynamic block size reduction.
Status	<In Progress>
Rationale	There may be situations where the controller might need to reduce the size of a block further in order to allow for two aircraft to be present in one block without infringing safety. In such situations it might suffice to ensure that one of the aircraft in that block will hold position and will not start moving unexpectedly. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0003	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0010
Requirement	The A-CWP shall allow using existing Intermediate Holding Positions in the manoeuvring area as Virtual Stop Bar Positions for non-data link equipped aircraft.
Title	Use of Intermediate Holding Positions as Virtual Stop Bar Positions
Status	<In Progress>
Rationale	Additional blocks are created by adding VSB positions on the controller display. VSBs only exist virtually on the controller display. Aircraft without AMM or data link updates for VSB positions and statuses need to rely on visual indicators on the ground for detecting VSB positions which are part of the clearance limits given by controllers. IHP lights were indicated in earlier research to be the best means on the ground available to represent a VSB position. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0004	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0015
Requirement	The A-CWP shall allow using Virtual Stop Bar positions that are not linked to an Intermediate Holding Point for aircraft equipped with data link and Moving Airport Map (AMM).
Title	Use of arbitrary position s as Virtual Stop Bar Positions
Status	<In Progress>
Rationale	Only aircraft with data link and an AMM that can show positions and statuses of VSBs transmitted via data link shall be cleared to positions in the manoeuvring area that are not linked to an IHP. Otherwise the pilot will not be able to determine the position of the aircraft with respect to the VSB

	location and might infringe a clearance limit. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0020
Requirement	The A-CWP shall provide the control of stop bars and virtual stop bars through the same HMI.
Title	Stop bar and virtual stop bar control
Status	<In Progress>
Rationale	Switching of statuses of stop bars and VSBs must occur on the same interface in order to reduce workload and avoid the loss of situational awareness. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0025
Requirement	The A-CWP shall allow the controller to assign a clearance limit to an aircraft, where the clearance limit is linked to a stop bar or to a virtual stop bar position.
Title	Clearance limits assignment.
Status	<In Progress>
Rationale	In order to enhance situational awareness, the controller must be able to use the block limits (stop bar or VSB position) as clearance limits and assign such a clearance limit to an aircraft. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-3121.0030
Requirement	The A-CWP shall automatically and clearly display the clearance limits assigned to an aircraft.
Title	Dynamic block size reduction.
Status	<In Progress>
Rationale	In order to reduce workload and enhance situational awareness, the controller must be able to verify the clearance limit of each aircraft without being forced to make a system input. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08702-OSED-VBCL.0008	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0035
Requirement	The A-CWP shall provide an indication about availability of the VSB function.
Title	VSB status indication.
Status	<In Progress>
Rationale	The ATCO shall be aware of availability or partial or total loss of the virtual stop bar function. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.07-SPR-0001.0020	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0040
Requirement	The A-CWP shall display an alert if two aircraft are in the same block
Title	Control Block occupancy alert
Status	<In Progress>
Rationale	For safety reasons, only one aircraft shall be present in one control block. Any violation of this procedure shall be notified. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<ATMS Requirement>	REQ-06.08.07-SPR-0001.0040	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0045
Requirement	The A-CWP shall display Virtual Stop Bars in GO status (for example in Green colour) when an aircraft has been cleared to cross it.
Title	VSB display with crossing authorisation
Status	<In Progress>
Rationale	VSB switching as further evidence of the clearance issued. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.07-SPR-0001.0080	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0050
Requirement	The A-CWP shall display Virtual Stop Bars in STOP status (for example in Red colour) as soon as the aircraft has completely crossed it, after a configurable time limit.
Title	VSB display without crossing authorisation
Status	<In Progress>
Rationale	To avoid hazardous situation as two aircraft in the same block This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.07-SPR-0001.0090	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-OSED-VBCL.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3121.0055
Requirement	The A-CWP shall display Virtual Stop Bars corresponding to a clearance limit in STOP status (for example in Red colour).
Title	VSB display without crossing authorisation
Status	<In Progress>
Rationale	To avoid hazardous situation as two aircraft in the same block This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.07-SPR-0001.0100	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.1.22 Navigation Equipment Status

[REQ]

Identifier	REQ-12.05.04-TS-3122.0005
Requirement	The A-CWP shall display the status of the Ground Based Augmentation System.
Title	GBAS station status display.
Status	<In Progress>
Rationale	The status of GBAS is required for correct use of the ATC system. This requirement has not been part of any prototype/validation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.05-OSED-GBAS.0160	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.2 Adaptability

### 3.2.1 Modularity Requirements

[REQ]

Identifier	REQ-12.05.04-TS-0201.0003
Requirement	The A-CWP shall be based as far as practicable on commercial off-the-shelf (COTS) hardware.
Title	COTS technology
Status	<In Progress>
Rationale	The system should be modular so that the appropriate level of service can be provided to different aerodromes as well as to different areas of an aerodrome. This requirement has not been verified in any prototype.
Category	<Design>
Validation Method	<Analytical Modelling>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A

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<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A
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## 3.2.2 Scalability Requirements

[REQ]

Identifier	REQ-12.05.04-TS-0202.0002
Requirement	The A-CWP shall be dimensioned according to the needs of different aerodromes.
Title	System dimension at different aerodromes
Status	<In Progress>
Rationale	The modules should be such that the system can be dimensioned according to the needs of different aerodromes This requirement has not been verified in any prototype.
Category	<Design>
Validation Method	<Analytical Modelling>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0202.0003
Requirement	The A-CWP shall be expandable in terms of functionality.
Title	System dimension according to number of users
Status	<In Progress>
Rationale	The modules should be such that further components can be added in order to expand the system in terms of functionality and number of users This requirement has not been verified in any prototype.
Category	<Design>
Validation Method	<Analytical Modelling>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.2.3 Adaptability Requirements

[REQ]

Identifier	REQ-12.05.04-TS-0203.0001
Requirement	Adaptation of the equipment to different local site configurations, procedures and working methods shall be done through an appropriate database (sensor positions, airport topography/topology, etc.).
Title	Adaptability to local procedures and working methods
Status	<In Progress>
Rationale	Adaptation of the equipment to different local site configurations, procedures

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	and working methods shall be done through an appropriate database This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0203.0002
Requirement	The A-CWP services shall be configurable to adapt to local ATC procedures and working methods.
Title	Adaptability to ATC procedures
Status	<In Progress>
Rationale	In order to efficiently assist the ATCO, the automated services should be configurable to adapt to local ATC procedures and working methods This requirement has not been verified in any prototype.
Category	<Design>
Validation Method	<Analytical Modelling>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0203.0003
Requirement	The A-CWP design shall take into account the working environment of the user under all operational conditions.
Title	A-CWP adaptability
Status	<In Progress>
Rationale	Equipment to different local site configurations shall be considered Note: As an example, good visibility operations with high traffic throughput will require a different Aerodrome ATC system's set-up than that required for low visibility operations with reduced throughput. This requirement has not been verified in any prototype.
Category	<Design>
Validation Method	<Analytical Modelling>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-APTL.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.3 Performance Characteristics

### 3.3.1 Accuracy and Resolution Requirements

[REQ]

Identifier	REQ-12.05.04-TS-0301.0001
Requirement	The accuracy of all map information to be presented on the A-CWP display(s) shall be 1m or better.
Title	Map Accuracy
Status	<In Progress>
Rationale	The accuracy of all map information presented on the traffic situation displays should be sufficient to ensure that each movement is seen in the correct position with respect to the aerodrome layout and other traffic, and particularly with respect to hold lines and stop bars This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0301.0002
Requirement	The position registration accuracy of all information presented on the A-CWP display(s) shall be one pixel.
Title	Position Registration Accuracy
Status	<In Progress>
Rationale	The accuracy with which the HMI registers position information on the display should be sufficient to not appreciably degrade the accuracy of the information it receives This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.3.2 Timeliness Requirements

[REQ]

Identifier	REQ-12.05.04-TS-0302.0001
Requirement	The HMI of the A-CWP shall give feedback to inputs entered by the ATCO within 0.5 second or less.
Title	Target Display Latency
Status	<In Progress>
Rationale	The response time of the HMI should be adequate to allow the controller to make inputs without having to wait unduly for the system to process and

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	validate the input Note: <ul style="list-style-type: none"> <li>Feedback is the direct action performed by an HMI to indicate that a user input has been received</li> <li>Response is the result of an input being processed by a function (and displayed by the HMI)</li> </ul> This requirement has not been verified in any prototype..
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0026	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0302.0002
Requirement	The response time to the operator Input shall not exceed 250ms on average
Title	Average response time to Operator Input
Status	<In Progress>
Rationale	The response time of the HMI should be adequate to allow the controller to make inputs without having to wait unduly for the system to process and validate the input This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-CLRT.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0302.0003
Requirement	The response time to the operator Input shall not exceed 500ms.
Title	Response time to Operator Input
Status	<In Progress>
Rationale	The response time of the HMI should be adequate to allow the controller to make inputs without having to wait unduly for the system to process and validate the input This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-CLRT.0007	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A

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<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2302.0003
Requirement	The response time to the key-press should be less than 0,1 seconds
Title	Response time to key-press
Status	<In Progress>
Rationale	The response time after key press should be adequate to allow the controller to make inputs without having to wait unduly for the system to process and validate the input This requirement has not been verified in any prototype..
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2302.0010
Requirement	The A-CWP shall provide feedback for starting or rebooting a computer system in less than 60 seconds.
Title	Starting/Rebooting Delay
Status	<In Progress>
Rationale	If the ATCO has to wait too long for the system to provide feedback the ATCO might get the impression that the system is not working correctly. Ensuring a timely feedback avoids this feeling. For longer waiting times feedback could also be given by showing e.g. an hourglass to inform the ATCO that the system is still running and processing inputs or data. This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3302.0010
Requirement	The A-CWP shall allow its user to input data-link clearances in less than 3 seconds.
Title	D-TAXI input time performance
Status	<In Progress>
Rationale	To avoid hazardous situation. This requirement has not been verified in any prototype.
Category	<Performance>

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Validation Method	<Analytical Modelling>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0062	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0216	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3302.0020
Requirement	The A-CWP shall send to the D-TAXI server all D-TAXI clearances inputs in less than 0.5 seconds
Title	D-TAXI messaging time performance
Status	<In Progress>
Rationale	To avoid hazardous situation. This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0063	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-DTAX.0217	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3302.0030
Requirement	The A-CWP should allow its user to input clearances in less than 3 seconds.
Title	Clearance input performance
Status	<In Progress>
Rationale	Timely input of given taxi clearances to avoid hazardous situation. This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Analytical Modelling>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0009	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0014	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0035	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3107.0017
Requirement	The A-CWP shall display a state transition of an electronic flight strip in less than 0.1 seconds.

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Title	EFS state transition time
Status	<In progress>
Rationale	To ensure real time coherency between EFS status and the clearances issued. This requirement has not been verified in any prototype..
Category	<Performance>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-CLRT.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0720
Requirement	The A-CWP shall not allow an error of incongruent display with AGL lights more than $1.0 \times 10^{-4}$ per taxi event.
Title	AGL display error
Status	<In Progress>
Rationale	To avoid hazardous situation. This requirement has not been verified in any prototype.
Category	<Performance>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.03-SPR-AGLS.0006	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0660
Requirement	The A-CWP shall display the alerts to the Tower Runway Controller not more than 1 second following their generation from the alerting sub-systems.
Title	Tower Runway Controller Alerting Latency
Status	<Validated>
Rationale	The controller needs to see the alerts in due time.  This requirement has been implemented, successfully verified and included in the prototypes part of the validation exercises EXE-06.03.01-VP-758 (R5) EXE-06.03.01-VP-719 (R5)
Category	<Performance>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CATC.0010	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.4 Safety & Security

[REQ]

Identifier	REQ-12.05.04-TS-0400.0001
Requirement	The acknowledgment of alerts shall not impact the safety situation.
Title	Acknowledge of alert messages
Status	<In Progress>
Rationale	The controller should be provided with means to easily acknowledge perception of visual and sound alert messages. The acknowledgment of alerts should not impact the safety situation. This requirement has not been verified in any prototype.
Category	<Safety>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0014	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0015	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2400.0007
Requirement	The A-CWP shall request confirmation from the controller for critical decisions or overrides
Title	Critical Decisions
Status	<In Progress>
Rationale	If controller input is against general rules, the HMI shall ask for confirmation. This requirement has not been verified in any prototype.
Category	<Safety>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.02-SPR-0001.0091	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.5 Maintainability

[REQ]

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Identifier	REQ-12.05.04-TS-2500.0002
Requirement	The A-CWP operation should not be affected by system updates of services
Title	System updates
Status	<In Progress>
Rationale	System updates should not affect operations This requirement has not been verified in any prototype.
Category	<Design>
Validation Method	<Analytical Modelling>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.6 Reliability

[REQ]

Identifier	REQ-12.05.04-TS-2600.0001
Requirement	A failure in a service of the A-CWP should not affect other services included in the A-CWP apart from functions requiring data from the failed service.
Title	Failure
Status	<In Progress>
Rationale	Failures should be kept in isolation as much as possible This requirement has not been verified in any prototype.
Category	<Reliability>
Validation Method	<Analytical Modelling>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2600.0002
Requirement	The A-CWP shall have a reliability of 99.9%.
Title	Reliability
Status	<In Progress>
Rationale	To avoid hazardous situation the system should be reliable 99.9%. This requirement has not been verified in any prototype.
Category	<Reliability>
Validation Method	<Analytical Modelling>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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## 3.7 Functional block Internal Data Requirements

N/A

## 3.8 Design and Construction Constraints

N/A

## 3.9 Functional block Interface Requirements

### 3.9.1 Overall Requirements

[REQ]

Identifier	REQ-12.05.04-TS-0901.0002
Requirement	In order to fully benefit from an Aerodrome ATC system by all parties concerned, the A-CWP may be capable of interfacing with the following: a) air traffic management (ATM); b) aerodrome management systems; c) ATS systems; d) meteorological systems; e) visual aids; f) aircraft operators; g) emergency authorities.
Title	Interface with Aerodrome ATC subsystems
Status	<In Progress>
Rationale	The A-CWP should interface to the systems to obtain the required Information This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0901.0003
Requirement	It shall be possible to connect each A-CWP to the physical interface used by the other Aerodrome ATC sub-systems: this connection will normally depend on what is available on the airport's existing equipment.
Title	Physical interfaces
Status	<In Progress>
Rationale	Various standards are in use for the physical interfaces to external systems. The type of physical interface used will normally depend on what is available on the airport's existing equipment This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>

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Verification Method	<Analysis>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0901.0004
Requirement	The A-CWP may use the following OSI protocols to interface external systems: <ul style="list-style-type: none"> <li>At the Physical Layer, IEEE 802.3/802.3u (Ethernet 10BaseT/100BaseTX)</li> <li>At the Network Layer, Internet Protocol (IP)</li> <li>At the Transport Layer, User Datagram Protocol (UDP) for surveillance target reports and other time-critical data, and Transport Control Protocol (TCP) for more secure, but less time-critical, data transmission.</li> </ul>
Title	Protocols and data format
Status	<In Progress>
Rationale	Various data formats exist for the different external interfaces This requirement has not been verified in any prototype..
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.2 Interface to Aerodrome Surveillance

[REQ]

Identifier	REQ-12.05.04-TS-0903.0001
Requirement	The A-CWP shall interface the Aerodrome surveillance FB to provide data from manual correlation
Title	Interface to Aerodrome Surveillance
Status	<In Progress>
Rationale	The surveillance system shall be able to manage data coming both from external systems and from manual HMI operations This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0903.0002
Requirement	The A-CWP shall be able to receive and decode the SDF output in the ASTERIX CAT 011 or CAT062/CAT063 data format
Title	Use of ASTERIX format for Aerodrome Surveillance
Status	<In Progress>
Rationale	The Surveillance system shall accept the ADEXP data format as an input and be able to transform it for internal usage to its internal format This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0903.0003
Requirement	The A-CWP shall interface any approach surveillance system (terminal radars)
Title	Interface to approach surveillance system
Status	<In Progress>
Rationale	The surveillance system shall interface to the approach surveillance system at the airport in order to receive data on airborne aircraft in the vicinity This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0903.0004
Requirement	The A-CWP shall be able to receive and decode input target report data from approach in the ASTERIX CAT001, CAT002, CAT 034, CAT 048, CAT 062 and CAT 063 data formats, in accordance with local requirements
Title	Use of ASTERIX to interface approach systems
Status	<In Progress>
Rationale	The surveillance system need to process ASTERIX format This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0903.0005
Requirement	The A-CWP shall be able to receive and decode input target report from MLAT in the ASTERIX CAT 10 formats
Title	Use of ASTERIX cat 10 for MLAT
Status	<In Progress>
Rationale	The surveillance system shall be able to manage position, identity and other relevant data coming from cooperating mobile equipment This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0903.0006
Requirement	The A-CWP shall be able to receive and decode input target report from ADSB in the ASTERIX CAT 21 formats
Title	Use of ASTERIX cat 21 for ADSB
Status	<In Progress>
Rationale	The surveillance system shall be able to manage position, identity and other relevant data coming from cooperating mobile equipment This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0903.0007
Requirement	The A-CWP shall be able to receive and decode SMR reports and other non-cooperative ground sensor systems using ASTERIX CAT010 data format
Title	Use of ASTERIX cat 10 format
Status	<In Progress>
Rationale	The surveillance system shall be able to manage position, identity and other relevant data coming from cooperating mobile equipment This requirement has not been verified in any prototype.
Category	<Interface>

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Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0903.0008
Requirement	The A-CWP shall be able to receive and decode reports from surveillance sensor systems, using ASTERIX data format.
Title	Use of ASTERIX format
Status	<In Progress>
Rationale	Target position reports output from surveillance sensor systems shall be in the ASTERIX data format This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.3 Interface to Surface Routing

[REQ]

Identifier	REQ-12.05.04-TS-0907.0001
Requirement	The A-CWP function shall interface the Surface Routing FB to receive Planned taxi route and forward <ul style="list-style-type: none"> <li>cleared route for a mobile</li> <li>route change</li> <li>destination update</li> <li>intermediate waypoints definition</li> <li>taxi routes clearances.</li> </ul>
Title	Interface to Surface Routing: data received
Status	<In Progress>
Rationale	Interface to Surface Routing: data received This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0907.0002
Requirement	The A-CWP function shall interface the Surface Routing FB to provide <ul style="list-style-type: none"> <li>• taxi route clearances</li> <li>• route changes</li> <li>• manual route inputs</li> </ul>
Title	Interface to Surface Routing: data forwarded
Status	<In Progress>
Rationale	Interface to Surface Routing: data forwarded This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.4 Interface to Departure Management

[REQ]

Identifier	REQ-12.05.04-TS-0908.0001
Requirement	The A-CWP should interface the Departure Management FB in order to receive the departure sequence data (TSAT and TTOT)
Title	Interface to DMAN
Status	<In Progress>
Rationale	DMAN information that need to be received This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0908.0002
Requirement	The A-CWP shall be able to interface the Departure Management FB in order to provide sequence orders from the ATCO
Title	Interface to DMAN
Status	<In Progress>
Rationale	ATCO orders that need to be provided to DMAN This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.5 Interface to Surface Guidance Management

[REQ]

Identifier	REQ-12.05.04-TS-0909.0002
Requirement	The A-CWP shall interface the Surface Guidance Management FB to: <ul style="list-style-type: none"> <li>Send request acknowledgements</li> <li>Send clearance acknowledgements</li> </ul>
Title	Interface with Surface Guidance Management: data forwarded
Status	<In Progress>
Rationale	Surface guidance information that need to be sent by the CWP This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0909.0003
Requirement	The A-CWP shall interface the Surface Guidance Management FB to: <ul style="list-style-type: none"> <li>Receive taxi routes requests</li> <li>Receive clearance requests</li> </ul>
Title	Interface with Surface Guidance Management: data received
Status	<In Progress>
Rationale	Surface guidance information that need to be received by the CWP This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.6 Interface to Runway and Taxiway Usage Management

[REQ]

Identifier	REQ-12.05.04-TS-0912.0001
Requirement	The A-CWP should interface the Runway and Taxiway Usage Management

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	FB in order to receive Runway and Taxiway status and constraints
Title	Interface with Runway and Taxiway Usage Management
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0912.0002
Requirement	The A-CWP should interface the Runway and Taxiway Usage Management FB in order to provide Runway and Taxiway manual status and constraints
Title	Interface with Runway and Taxiway Usage Management
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.7 Interface to Aerodrome Weather Information Management

[REQ]

Identifier	REQ-12.05.04-TS-0913.0001
Requirement	The A-CWP should interface the Aerodrome Weather Information Management FB in order to receive local weather information
Title	Interface with Aerodrome Weather Information Management
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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### 3.9.8 Interface to Aircraft & Vehicle Data Link Management

[REQ]

Identifier	REQ-12.05.04-TS-0914.0001
Requirement	The A-CWP should interface the Aircraft & Vehicle Data Link Management FB in order to receive Data Link information
Title	Interface with Aircraft & Vehicle Data Link Management
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0914.0002
Requirement	The A-CWP should interface the Aircraft & Vehicle Data Link Management FB in order to provide Data Link information
Title	Interface with Aircraft & Vehicle Data Link Management
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.9 Interface to Ground Lighting Management

[REQ]

Identifier	REQ-12.05.04-TS-0915.0001
Requirement	The A-CWP should interface the Ground Lighting Management FB in order to display AGL status and ground lighting system
Title	Interface with Ground Lighting Management
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED TO>	<Functional block>	Controller Human Machine Interaction	N/A

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<ALLOCATED_TO>	<Project>	Management Aerodrome ATC	
<APPLIES_TO>	<Operational Focus Area>	12.05.04	N/A
		OFA06.01.01	N/A

### 3.9.10 Interface to Conformance Monitoring

[REQ]

Identifier	REQ-12.05.04-TS-3916.0001
Requirement	The A-CWP should interface the Conformance Monitoring FB in order to receive CATC alerts due to Non Conformance to ATC procedure/instruction
Title	Interface with Conformance Monitoring
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.11 Interface to Support Functions Aerodrome ATC

[REQ]

Identifier	REQ-12.05.04-TS-3917.0001
Requirement	The A-CWP should interface the Support Functions Aerodrome ATC FB to receive: <ul style="list-style-type: none"> <li>Airport adaptation data</li> </ul>
Title	Interface with Support Functions
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3917.0002
Requirement	The A-CWP should interface the Support Functions Aerodrome ATC FB to provide: <ul style="list-style-type: none"> <li>Displayed data for Recording</li> <li>Airport Adaptation data Update</li> </ul>
Title	Interface with Support Functions
Status	<In Progress>

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Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

## 3.9.12 Interface to Technical Supervision ATC

[REQ]

Identifier	REQ-12.05.04-TS-3918.0001
Requirement	The A-CWP should interface the Technical Supervision ATC FB to provide: <ul style="list-style-type: none"> <li>Control Monitoring Status</li> <li>Manual actions</li> </ul>
Title	Interface with Technical Supervision
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3918.0002
Requirement	The A-CWP should interface the Technical Supervision ATC FB to receive: <ul style="list-style-type: none"> <li>Control Monitoring Status Report</li> <li>Supervision commands and actions</li> </ul>
Title	Interface with Technical Supervision
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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### 3.9.13 Interface to G/G Communication Aerodrome ATC

[REQ]

Identifier	REQ-12.05.04-TS-3919.0001
Requirement	The A-CWP should interface the G/G Communication Aerodrome ATC FB to exchange data link information.
Title	Interface with G/G Communication Aerodrome ATC
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.14 Interface to Aerodrome Flight Data Processing

[REQ]

Identifier	REQ-12.05.04-TS-3920.0001
Requirement	The A-CWP should interface the Aerodrome Flight Data Processing FB to receive Flight Plan information.
Title	Interface with Aerodrome Flight Data Processing
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3920.0002
Requirement	The A-CWP should interface the Aerodrome Flight Data Processing FB to provide manual inputs to Flight Plan information.
Title	Interface with Aerodrome Flight Data Processing
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>

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Verification Method	<Analysis>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.15 Interface to Operational Supervision Aerodrome ATC

[REQ]

Identifier	REQ-12.05.04-TS-3921.0001
Requirement	The A-CWP should interface the Operational Supervision Aerodrome ATC FB to provide the most appropriate operational configuration, according to traffic demand and aerodrome needs to maintain adequate safety levels and quality of service
Title	Interface with Operational Supervision
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3921.0002
Requirement	The A-CWP should interface the Operational Supervision Aerodrome ATC FB to receive the Operational Supervision status
Title	Interface with Operational Supervision
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

### 3.9.16 Interface to Aerodrome Safety Nets

[REQ]

Identifier	REQ-12.05.04-TS-3922.0001
Requirement	The A-CWP should interface the Aerodrome Safety Nets FB to receive the Safety Nets alerts to be displayed.
Title	Interface with Aerodrome Safety Nets
Status	<In Progress>
Rationale	System Architecture requirement. This requirement has not been verified in any prototype.
Category	<Interface>
Validation Method	<Analytical Modelling>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management Aerodrome ATC	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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## 4 Assumptions

1. Although dedicated sections of the document are reserved for non-functional requirements (Section 3.2 to 3.9), focused on Safety, Security and Performance Characteristics, however due to the nature of the development (prototype), the implementation of these requirements are not mandatory and will be under each industry consideration. These requirements can be considered as recommendations during the industrialisation phase being the parameters indicated only a suggestion for implementation since the feasibility of each requirement need to be analysed.
2. With the objective to close the evolution of a requirement, and considering in one hand that it is not possible to ensure that a Technical Requirement is "Validated" but "Verified", and on the other hand that there is not available a <Verified> status in the template; It has been **assumed** that the REQ status is transferred from <In Progress> to <Validated> when the requirement has been successfully verified by 1 or more partners during the test execution task and has positively supported one or several V3 validations .

In order to provide evidence the list of validation exercises, in which the prototype and the corresponding requirement has taken part of, has been included in the rationale.

3. Due to the SESAR 1 closure schedule, it has not been possible to take into consideration the results from Release 5 validation activities coming from Operational and Technical Primary Projects. In order to use this deliverable for further CWP activities (including PCP) it should be reviewed to take into consideration the conclusions obtained from Release 5 validations and ensure coherence with the Technical Specifications produced by Technical Primary Projects. (12.03.02.D64 [27] and 12.03.03.D36 [28]) that could impact on 12.05.04 Technical Requirements.
4. In 06.09.02.D121 [26] several new requirements were included from 06.08.01 and 06.08.08, and due to the tight schedule some of the requirements have not been addressed in this Final Technical Specification. These requirements (listed below) need to be further analysed in the upcoming SESAR CWP activities.

### Requirements from GBAS functionality

- REQ-06.08.08-OSED-ATCO.0270
- REQ-06.08.08-OSED-ATCO.0272
- REQ-06.08.08-OSED-ATCO.0280
- REQ-06.08.08-OSED-ATCO.0291
- REQ-06.08.08-OSED-ATCO.0380
- REQ-06.08.08-OSED-ATCO.0390
- REQ-06.08.08-OSED-ATCO.0478
- REQ-06.08.08-OSED-ATCO.0594
- REQ-06.08.08-OSED-ATCO.0232

### Requirements from Enhanced RWY throughput functionality

- REQ-06.08.01-OSED-OFA1.0044

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- REQ-06.08.01-OSED-OFA1.0047
  - REQ-06.08.01-OSED-OFA1.0059
  - REQ-06.08.01-OSED-OFA1.0060
  - REQ-06.08.01-OSED-OFA1.0063
  - REQ-06.08.01-OSED-OFA1.0074
  - REQ-06.08.01-OSED-OFA1.0103
5. The following requirements have not been included for not being considered as HMI Requirements.
- REQ-06.07.02-SPR-0001.0110
  - REQ-06.07.02-SPR-0002.0310
  - REQ-06.07.02-SPR-0002.0320
  - REQ-06.07.02-SPR-0002.0330
  - REQ-06.07.02-SPR-0001.0080
  - REQ-06.07.02-SPR-0002.0360
  - REQ-06.07.03-SPR-DTAX.0102
6. During the lifecycle of the project, the prototypes contributed to the Enablers (ENs):
- AERODROME-ATC-50 - Advanced Controller Working Position (A-CWP) supporting A-SMGCS functionalities
  - AERODROME-ATC-49 - Advanced CWP (A-CWP) to support Airport DCB and integration of DMAN
  - AERODROME-ATC-57 - Advanced CWP to support improved runway management concept

included in Dataset 16 [29] that are transversal to several Operational improvements. However, at the end of the programme, it was identified the need to clarify the scope, description and allocation of the ENs addressed by this project and an action to rework these ENs was initiated.

After coordination with 12.01.07, 06.09.02, 06.02, OFA Coordinators and SJU, two enablers were kept linked to 12.05.04: AERODROME-ATC-50 and AERODROME-ATC-57, while AERODROME-ATC-49 was removed from Dataset 16 as the previous ENs were enough to cover all the needs on A-CWP for current and future initiatives.

This last minute modification impacts on this Final Technical Specification, being the requirements allocated to AERODROME-ATC-49 moved to AERODROME-ATC-57.

In conclusion AERODROME-ATC-50 covers HMI basic functionalities and functionalities linked to the SESAR Solutions:

- #02 Airport Safety Nets for controllers: conformance monitoring alerts and detection of conflicting ATC clearances

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- #14 Departure Management integrating Surface Management constraints
- #15 Integrated and throughput-optimised sequence of arrivals and departures
- #22 Automated Assistance to Controller for Surface Movement Planning and Routing
- #23 D-TAXI service for CPDLC application
- #53 Pre-departure sequencing supported by route planning
- #54 Flow-based integration of arrival and departure management

And AERODROME-ATC-57 covers HMI functionalities linked to the SESAR solutions:

- #01 Runway Status Lights (partial)
- #21 Airport Operations Plan and AOP-NOP Seamless Integration
- #35 MET Information Exchange
- #47 Guidance Assistance through Airfield Ground Lighting
- #48 Virtual Block Control in LVPs
- #55 Precision approaches using GBAS Category II/III

## 5 References

- [1] Template Toolbox 03.00.00  
<https://extranet.sesarju.eu/Programme%20Library/SESAR%20Template%20Toolbox.dot>
- [2] Requirements and V&V Guidelines 03.00.00  
<https://extranet.sesarju.eu/Programme%20Library/Requirements%20and%20VV%20Guidelines.doc>
- [3] Templates and Toolbox User Manual 03.00.00  
<https://extranet.sesarju.eu/Programme%20Library/Templates%20and%20Toolbox%20User%20Manual.doc>
- [4] EUROCONTROL ATM Lexicon  
<https://extranet.eurocontrol.int/http://atmlexicon.eurocontrol.int/en/index.php/SESAR>
- [5] IEEE / MIL Standards
- [6] B4.3.D95 - ADD Step 1, 00.02.02, 30/04/2015
- [7] 12.01.07.D30 - Step1 Airport Technical Architecture Description, 00.02.00, 17/06/2016
- [8] 06.02.D122 - Step 1 Airport (DOD) Update 2014, 00.01.01, 31/03/2015.
- [9] SESAR WPB4.2 Actual Roles Responsibilities Step1 in ConOps Step1, 01.00.00, edition 11/01/2013
- [10] 12.05.04.D02 – System Requirements – Step 1, 01/02/2012
- [11] 12.05.04.D23 – Technical Specification – Phase 2\_Part 1, version 00.01.01, 24/05/2013
- [12] 12.05.04.D81 – Technical Specification – Phase 2\_Part 2, version 00.01.01, 28/02/2014
- [13] 12.05.04.D44 – Technical Specification – Phase 3\_Part 1, version 00.01.00, 24/04/2015
- [14] 12.05.04.D88 - Technical Specification – Phase 3\_Part 2, version 00.01.01, 22/12/2015
- [15] 06.09.02.D04 and D07 - Operational Services and Environment Description (OSED) for the Advanced Integrated Controller Working Position (A-iCWP), 01/08/2011
- [16] 06.09.02.D105 - Operational Services and Environment Description (OSED) for the Advanced Integrated Controller Working Position (A-iCWP), 19/02/2013
- [17] 06.09.02.D109 – Interoperability Requirements (INTEROP) for 06.09.02, 11/03/2013
- [18] 06.09.02.D107 – SESAR Safety and Performance Requirements, 21/03/2012
- [19] 06.09.02.D106 - Advanced Integrated Controller Working Position (A-CWP) - Operational Service and Environment Definition (OSED), 06/08/2013
- [20] 06.09.02.D108 - Safety and Performance Requirements version 1 & 2, 23/08/2013
- [21] 06.09.02.D120 - Advanced Integrated Controller Working Position (A-CWP) - Release 5 - OSED version 3, 00.01.04 18/12/2014
- [22] 06.09.02.D123 – Release 5\_Safety and Performance Requirements\_Version 3\_Draft 2, 00.00.05, 23/12/2014

- [23]06.09.02.D120 – Advanced Integrated Controller Working Position (A-CWP) – Release 5 – OSED version 3, edition 00.01.08, 09/07/2015
- [24]06.09.02.D123 – Safety and Performance Requirements V3 Draft 3, edition 00.01.00, 17/07/2015
- [25]06.09.02.D124 – OFA06.01.01 Final SPR, 00.01.00, 22/07/2016
- [26]06.09.02.D121 – OFA06.01.01 Final OSED, 00.01.00, 22/07/2016
- [27]12.03.02.D64 – Technical Specifications – Final Report, 00.01.00, 08/07/2016
- [28]12.03.03.D36 – Final Technical Specifications, 00.03.00, 19/05/2016
- [29]B.01.D84 - Integrated Roadmap DS16 Release Note, 00.01.00, 25/05/2016

## 5.1 Use of copyright / patent material /classified material

N/A

### 5.1.1 Classified Material

N/A

## Appendix A

### A.1 Deleted Requirements

#### [REQ]

Identifier	REQ-12.05.04-TS-0102.0041
Requirement	Traffic under the controller responsibility at a particular working position shall be clearly distinguished from traffic which is not under her/his control responsibility.
Title	Traffic indication
Status	<Deleted>
Rationale	Traffic under the control area responsibility of an ATCO should be clearly distinguished from traffic which is not under her/his control responsibility  Deleted in 12.05.04.D81 [12]. The requirement text is equal to REQ-12.05.04-TS-0102.0034
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

#### [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0003	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0004	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-DISP.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

#### [REQ]

Identifier	REQ-12.05.04-TS-0102.0043
Requirement	The A-CWP may allow the controller to sort, move, create new traffic data item in the Traffic Data Lists.
Title	Traffic indication
Status	<Deleted>
Rationale	The controller should be able to sort, move and create new traffic data items.  Deleted in 12.05.04.D81 [12] after review from 06.09.02. Requirement covered by REQ-12.05.04-TS-3106.0140
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

#### [REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0006	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0007	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0008	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0009	<Full>
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-LIST.0014	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-0102.0045
Requirement	Conflict information may be unambiguously displayed on a traffic situation display or by other appropriate means.
Title	Conflict Detection and Alerting
Status	<Deleted>
Rationale	The text is redundant and it is covered by REQ-12.05.04-TS-0108.0004 Deleted in 12.05.04.D81 [12].
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0108.0010
Requirement	It may be possible to modify the control responsibility for a vehicle, and transfer control responsibility to other operator roles. The controller may be provided with a means to modify or transfer the control responsibility for a vehicle to other operator roles. Transfer of control responsibility may be possible through any representation of the vehicle.
Title	Modify control responsibility or Transfer control responsibility
Status	<Deleted>
Rationale	The controller should be provided with easy means to modify or transfer the control responsibility for an aircraft or vehicle to other operator roles.  Deleted in 12.05.04.D81 [12]. Requirement covered by REQ-12.05.04-TS-0107.0001
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2108.0015
Requirement	The A-CWP shall allow the controller to input an "Release" instruction for a towed aircraft
Title	Input instruction: Release
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. A towed aircraft do not have associated FP; moreover tow manoeuvre is covered by REQ-12.05.04-TS-2108.0014 and REQ-12.05.04-TS-2018.0016
Category	<HMI>

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Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-OSED-VECH.0005	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0109.0003
Requirement	The A-CWP shall allow the operator to assign conflict priorities depending on conflict type.
Title	Alert Report Acquisition Requirements
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement covered by REQ-12.05.04-TS-2109.0030
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0007
Requirement	The A-CWP shall indicate specifically when a start-up clearance can be issued according to the TSAT, this indication is on the same display than the TSAT.
Title	DMAN Clearance Delivery
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement covered by REQ-12.05.04-TS-0110.0004
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0110.0009
Requirement	An alert associated with a detected conflict shall be shown to the controller (ALARM coding). An alert associated with a predicted conflict (INFORMATION coding) shall also be displayed.

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Title	Conflict Detection and Alerting
Status	<Deleted>
Rationale	The controller should be provided with the correct colour coding according to the severity of the conflict.  Deleted in 12.05.04.D81 [12]. This requirement is already covered by REQ-12.05.04-TS-0109.0013, REQ-12.05.04-TS-0109.0006, REQ-12.05.04-TS-0109.0004, REQ-12.05.04-TS-0109.0005
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.09.02-SPR-COLR.1002	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0111.0001
Requirement	The A-CWP shall be able to present to the controller clearance requests from the on-board systems.
Title	Clearance Requests from on-board system
Status	<Deleted>
Rationale	Requirement deleted in 12.05.04.D23 [11] New Data-link requirements were included in te deliverable based on 06.09.02 input which overwrite this requirement initially written by 12.05.04 in isolation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0111.0002
Requirement	The A-CWP shall allow to acknowledge clearance requests to the on-board systems.
Title	Acknowledgements from ground system
Status	<Deleted>
Rationale	Requirement deleted in 12.05.04.D23 [11] New Data-link requirements were included in te deliverable based on 06.09.02 input which overwrite this requirement initially written by 12.05.04 in isolation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0111.0003
Requirement	The A-CWP shall allow to send clearances to the on-board systems.
Title	Clearance to on-board system
Status	<Deleted>
Rationale	Requirement deleted in 12.05.04.D23 [11] New Data-link requirements were included in te deliverable based on 06.09.02 input which overwrite this requirement initially written by 12.05.04 in isolation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0111.0004
Requirement	The A-CWP shall be able to display clearances acknowledgements from the on-board systems
Title	Clearance acknowledgements from the on-board systems
Status	<Deleted>
Rationale	Requirement deleted in 12.05.04.D23 [11] New Data-link requirements were included in te deliverable based on 06.09.02 input which overwrite this requirement initially written by 12.05.04 in isolation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0111.0005
Requirement	The A-CWP shall allow the controller to provide guidance information to pilots: 1)Start-up (Clearance and Time) 2)Push-Back (Clearance and Time) 3)Taxi (cleared ground route)

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	4)Taxi revision (updated cleared ground route)
Title	Provision of guidance information to pilots
Status	<Deleted>
Rationale	Requirement deleted in 12.05.04.D23 [11] New Data-link requirements were included in te deliverable based on 06.09.02 input which overwrite this requirement initially written by 12.05.04 in isolation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0111.0006
Requirement	The A-CWP shall permit to identify uniquely the end-user in a datalink handshake
Title	Unique identification Data link
Status	<Deleted>
Rationale	Requirement deleted in 12.05.04.D23 [11] New Data-link requirements were included in te deliverable based on 06.09.02 input which overwrite this requirement initially written by 12.05.04 in isolation.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2109.0027
Requirement	The A-CWP shall allow to disable all the alerts related to Airport Safety Nets on individual runways.
Title	Alert deactivation
Status	<Deleted>
Rationale	The Tower Supervisor Controller might require to partly disable the alerting system in case of an accident or incident.  Deleted; replaced by REQ-12.05.04-TS-3109.0100 and REQ-12.05.04-TS-3109.0110.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
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<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2400.0008
Requirement	The A-CWP shall display priority and important information on the A-CWP
Title	Information priority
Status	<Deleted>
Rationale	The controller should be presented with the important information on first place. Priority should be determined according to local decisions.  Deleted in 12.05.04.D88 [14]. Covered by REQ-12.05.04-TS-2109.0030 and REQ-12.05.04-TS-0109.0015
Category	<Safety>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0201.0001
Requirement	The A-CWP design shall be modular in the sense that no major design change shall be necessary to meet specific operational requirements of an aerodrome.
Title	A-CWP modularity
Status	<Deleted>
Rationale	The system design shall be modular to meet specific operational requirements of an aerodrome.  Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Design>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0201.0002
Requirement	The A-CWP equipment shall comprise hardware and software modules that are independent of supplier specific features.
Title	Components
Status	<Deleted>

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Rationale	Each aerodrome will only implement the modules fitting its needs and its technological choices.  Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Design>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0201.0004
Requirement	Any element design (of the A-CWP) shall comply with the "modularity concept"
Title	Design
Status	<Deleted>
Rationale	Each aerodrome will only implement the modules fitting its needs and its technological choices.  Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Design>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0201.0005
Requirement	The A-CWP shall be modular so that the appropriate level of service can be provided to different aerodromes as well as to different areas of an aerodrome.
Title	Service levels at different aerodromes
Status	<Deleted>
Rationale	The system should be modular to provide the appropriate level of service  Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Design>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0202.0001
Requirement	The A-CWP shall be such that further components can be added in order to expand the Aerodrome ATC system in terms of functionality and numbers of users
Title	A-CWP Scalability
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Design>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0204.0001
Requirement	The A-CWP architecture shall be configurable in order to accommodate any change in the layout of the aerodrome (runways, taxiways and aprons), without modifying the core processing.
Title	Layout change
Status	<Deleted>
Rationale	Depending on the nature, it may be necessary to augment the system with additional components such as additional surveillance sensors  Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Design>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0205.0001
Requirement	The A-CWP may be harmonized where possible with existing ATM A-CWP. The ATM A-CWP may be specific to each local implementation.
Title	Harmonization
Status	<Deleted>

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Rationale	ATM CWP may be specific to each local implementation.  Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Performance>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0400.0004
Requirement	The use of aural signal may be restricted to highly critical events requiring immediate action.
Title	Conflict Detection and Alerting
Status	<Deleted>
Rationale	An alert should always be associated with a visual signal. The use of aural signal should be restricted to highly critical events requiring immediate action.  Deleted in 12.05.04.D81 [12]. Requirement covered by REQ-12.05.04-TS-0109.0017
Category	<Safety>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0400.0005
Requirement	The A-CWP shall provide the controller with clear and visible indication of a conflict alert.
Title	Conflict Detection and Alerting
Status	<Deleted>
Rationale	The controller should be provided with clear and visible indication of a conflict alert as soon as the alert exists. The provided information should include, at the minimum the identification of the involved aircraft and/or vehicle, wherever present.  Deleted in 12.05.04.D81 [12]. It's already covered by requirements from REQ-12.05.04-TS-0109.0009 to REQ-12.05.04-TS-0109.0016
Category	<Safety>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0400.0006
Requirement	Alerts may always be associated with a visual signal
Title	Conflict Detection and Alerting
Status	<Deleted>
Rationale	An alert should always be associated with a visual signal. The use of aural signal should be restricted to highly critical events requiring immediate action.  Deleted in 12.05.04.D81 [12]. Covered by REQ-12.05.04-TS-0109.0005
Category	<Safety>
Validation Method	<Real Time Simulation>
Verification Method	<Inspection>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2500.0001
Requirement	The A-CWP shall be designed to assure quality software standards [e.g. ISO/IEC 9126, ISO/IEC 25000]
Title	Quality software standards
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Design>
Validation Method	<Real Time Simulation>
Verification Method	<Review of Design>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0901.0005
Requirement	The A-CWP shall be synchronized to the airport reference clock system
Title	Reference clock

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Status	<Deleted>
Rationale	Synchronization is required to align the internal clocks of workstations, servers, etc., affected by time drift, to a common network time  Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02.
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0902.0001
Requirement	The A-CWP shall interface the Aerodrome Flight Data Processing FB of the ATM at the airport
Title	Interface to Aerodrome FDP
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0919.0001 and REQ-12.05.04-TS-0919.0002
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0902.0002
Requirement	The A-CWP shall interface the Aerodrome Flight Data Processor FB to receive Flight Plan Data and forward orders to A FDP (e.g. departure / start-up / push-back and taxi clearances)
Title	Interface to Aerodrome FDP: forward of clearances for departures
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12].  Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0919.0001 and REQ-12.05.04-TS-0919.0002
Category	<Interface>
Validation Method	<Real Time Simulation>

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Verification Method	<Analysis>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0904.0001
Requirement	The A-CWP shall interface the Conformance Monitoring FB in order to receive conformance monitoring alerts
Title	Conformance Monitoring interface
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0916.0001
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0905.0001
Requirement	The A-CWP shall interface the Aerodrome Safety Nets FB in order to receive SSN alerts
Title	Surface Safety Nets interface
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0921.0001
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0906.0001
Requirement	The A-CWP shall interface the Support Functions FB in order to be able to display and playback recorded data

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Title	Support Functions interface
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0917.0002
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0909.0001
Requirement	The A-CWP shall interface the Surface Guidance Management FB
Title	Interface with Surface Guidance Management
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0909.0002 and REQ-12.05.04-TS-0909.0003
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0910.0001
Requirement	The A-CWP should interface the Operational Supervisor FB in order to receive status data and provide ATCO orders
Title	Interface with Operational Supervision
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0920.0002
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>

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<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-0911.0001
Requirement	The A-CWP should interface the Technical Supervision FB in order to receive status and information to be displayed and provide ATCO orders
Title	Interface with Technical Supervision
Status	<Deleted>
Rationale	Deleted in 12.05.04.D81 [12]. Requirement linked to an initial 06.09.02 INTEROP deliverable not updated by 06.09.02. Substituted by REQ-12.05.04-TS-0918.0002
Category	<Interface>
Validation Method	<Real Time Simulation>
Verification Method	<Analysis>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2109.0010
Requirement	The A-CWP shall provide a clear and visible indication of an alert from the SSN system within a configurable system parameter of time.
Title	In time SSN alerting
Status	<Deleted>
Rationale	Alerts are important information to which the controller has to react appropriately and often within a critical time frame to avoid incidents. Thus information has to be provided within a certain time frame. <u>Note:</u> Times are defined in the specific OSEDs or SPRs coming from operational projects in WP 6. Deleted in 12.05.04.D88 [14] due to deletion of SPR REQ-06.09.02-SPR-DISP.1004. Covered by REQ-12.05.04-TS-3109.0660.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-2109.0020
Requirement	The A-CWP shall provide a clear and visible indication of an alert from the Weather Server system within a configurable system parameter of time.
Title	In time Weather Server alerting

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Status	<Deleted>
Rationale	Alerts are important information to which the controller has to react appropriately and often within a critical time frame to avoid incidents. Thus information has to be provided promptly, i.e. within a certain time frame. <u>Note:</u> Times are defined in the specific OSEDs or SPRs coming from operational projects in WP 6.  Deleted in 12.05.04.D88 [14] due to deletion of SPR REQ-06.09.02-SPR-DISP.1004. Covered by REQ-12.05.04-TS-3109.0660.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0080
Requirement	The A-CWP shall display all active alerts in a dedicated window
Title	Active Alerts List for Tower controller
Status	<Deleted>
Rationale	The ATCO needs to see all active alerts in the primary viewing area of the A-CWP HMI  Deleted in 12.05.04.D88 [14] due to duplication of REQ-12.05.04-TS-0109.0011.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-OSED-GENL.0017	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0125
Requirement	The A-CWP shall present the following data on the same display than the one used by the controller to issue start-up clearance in the Aerodrome ATC system: TSAT for start-up clearance.
Title	TSAT visualisation for push back clearance
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14], covered by REQ-12.05.04-TS-0110.0006.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

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Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0120	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3109.0430
Requirement	The A-CWP shall display an alert to the Tower Runway Controller when a mobile is crossing a stop bar turned-on (red).
Title	Red stop bar crossing Alert
Status	<Deleted>
Rationale	The runway controller needs to be warned if a mobile is crossing a stop bar without clearance. Deleted in 12.05.04.D88 [14], duplication of REQ-12.05.04-TS-3109.0650.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.07.01-SPR-CMAC.0041	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0015
Requirement	The A-CWP shall allow TWR supervisor to input runway usability.
Title	Runway usability input
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: duplicated requirement with REQ-12.05.04-TS-3120.0010 Operational Requirement REQ-06.05.03-OSED-DCBH.0060 has been deleted in 06.09.02.D120 OSED
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.05.03-OSED-DCBH.0060	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0021
Requirement	The A-CWP shall allow to visualize different forecasted capacity values for short term planning and for medium term planning.
Title	Forecasted capacity values
Status	<Deleted>

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Rationale	Deleted in 12.05.04.D88 [14]: RMAN does not differentiate between short/long term planning. REQ already covered with the modifications made in REQ-12.05.04-TS-3120.0020.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0025
Requirement	The A-CWP shall allow TWR supervisor to override current and future DCB values regarding runway usability per runway and time period.
Title	Runway usability override
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: This requirement does not have any relation with the operational requirement.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0030
Requirement	The A-CWP shall visualize in a user selectable view for arrival and departure flights and also for each runway the actual and forecasted runway configuration.
Title	Actual and forecasted information display
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: This requirement does not have any relation with the operational requirement and also is covered by REQ-12.05.04-TS-3120.0035
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A

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[REQ]

Identifier	REQ-12.05.04-TS-3120.0040
Requirement	The A-CWP shall visualize in a user selectable view for arrival and departure flights and also for each runway the actual and forecasted bottleneck tag.
Title	Actual and forecasted information display
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: This requirement does not have any relation with the operational requirement.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0045
Requirement	The A-CWP shall visualize in a user selectable view for arrival and departure flights and also for each runway the actual and forecasted delta delay.
Title	Actual and forecasted information display
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: This requirement does not have any relation with the operational requirement and also is covered by REQ-12.05.04-TS-3120.0060.
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0050
Requirement	The A-CWP shall allow TWR supervisor to configure the types of airport events affecting the runway usability, updating the default list, in a dedicated window.
Title	Runway usability configuration
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: This requirement does not have any relation with the operational requirement.
Category	<HMI>
Validation Method	<Real Time Simulation>

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Verification Method	<Test>
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[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0004	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0055
Requirement	The A-CWP shall allow TWR supervisor to configure the arrival and departure capacity in the time interval of a mixed runway in a dedicated window.
Title	Capacity configuration
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: because it's already covered by REQ-12.05.04-TS-3120.0005
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ.06.09.02-OSED-DATA.0005	<Partial>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3120.0065
Requirement	The A-CWP shall visualize in a dedicated window the condition in which the runway capacity is fulfilled (i.e. there is not shortage and runway is fully allocated).
Title	Runway capacity display
Status	<Deleted>
Rationale	Deleted in 12.05.04.D88 [14]: This requirement is not compliant with 12.02.01 project
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED_TO>	<Project>	12.05.04	N/A
<APPLIES TO>	<Operational Focus Area>	OFA06.01.01	N/A

[REQ]

Identifier	REQ-12.05.04-TS-3106.0165
Requirement	The A-CWP shall provide a means to display to the tower supervisor the active pattern for arrivals and departures, where a pattern describes the

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	number of departures between two consecutive arrivals.
Title	Display the pattern for arrivals and departures.
Status	<Deleted>
Rationale	Deleted in 12.05.04.D93: REQ-06.08.04-OSED-1500.0070 has been deleted from 06.08.04.D17 S01V3 Final OSED Pattern information provides visibility of the active pattern for arrivals and departures
Category	<HMI>
Validation Method	<Real Time Simulation>
Verification Method	<Test>

[REQ Trace]

Relationship	Linked Element Type	Identifier	Compliance
<SATISFIES>	<ATMS Requirement>	REQ-06.08.04-OSED-1500.0070	<Full>
<SATISFIES>	<Enabler>	AERODROME-ATC-50	<Full>
<ALLOCATED_TO>	<Functional block>	Controller Human Machine Interaction Management	N/A
<ALLOCATED TO>	<Project>	12.05.04	N/A
<APPLIES_TO>	<Operational Focus Area>	OFA06.01.01	N/A



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