



Technical Systems

A collection of technical components organised to accomplish a specific function or set of functions.

Title	Description	Type	Related Elements
4DWxCube	Gathers and consolidates ATM relevant meteorological (MET) information from various sensors and...	Technical System	
ACAS Monitoring	Consists of a set of distributed ACAS ground receiving stations and a central ACAS processing...	Technical System	
ADS-B Ground Station	Automatic Dependent Surveillance - Broadcast is a Surveillance technique which relies on aircraft...	Technical System	
Aerodrome ATC	Supports the ATC controllers at an aerodrome and provides the following main functionalities:...	Technical System	
AIM	Implements functionalities to collect, process, validate and verify, store, integrate, exchange...	Technical System	
AIM (External)	Represents non-European Civil AIM systems contributing to the European ATM system	Technical System	
Air Defence (External)	Represents the European national Air Defence organisations and systems. Includes Air Policing and...	Technical System	
Aircraft	Represents the Aircraft (Civil or Military or UAV) operating from the end to end, on the airport...	Technical System	
Airport Airside Operations	Supports the Airport operators in their airside activities related to ATM. It provides the...	Technical System	
Airport Multilateration	Allows tracking of aircraft and ground vehicles located at the airport environment.	Technical System	
Airport Operations Centre	Deals with the strategic and tactical management of airport operations in coordination with other...	Technical System	
ASM	Implements the airspace design and management functions.	Technical System	
ATC (External)	Represents the non-European ATC centres and systems contributing to the European ATM system.	Technical System	
ATFCM	Supports the regional, sub-regional and local Air Traffic Flow and Capacity Management functions.	Technical System	
ATM Security	Focused on cyber-security management. The system will support the collection, consolidated...	Technical System	
BEIDOU (External)	BeiDou Navigation Satellite System (BDS), also known as BeiDou-2, is China's second-generation...	Technical System	
Civil AU Aircraft Operations Centre	Manages and tracks the availability of the aircraft for the operations of the Airspace User.	Technical System	
Civil AU Airport Operations Centre	Manages the relation to the airport with regard to the turnaround-related activities of the...	Technical System	
Civil AU Business Operations Centre	Supports the Airspace Users in the management of the business aspects of its operations.	Technical System	
Civil AU Cargo Operations Centre	Takes care about the cargo related processes of the Airspace User.	Technical System	
Civil AU Crew Operations Centre	Takes care about the flight deck crew and the cabin crew.	Technical System	
Civil AU Flight Operations Centre (FOC)	Supports Airspace Users performing manned or unmanned flight operations of civil aircraft (as...	Technical System	
Civil AU Passenger Operations Centre	Takes care about the passengers and their baggage.	Technical System	
Data Radio Station	The A/G Datalink radio infrastructure enables air-ground data communication with aircraft via...	Technical System	

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DME	Distance Measuring Equipment (DME) is a ground-based system which transmits a signal to enable...	Technical System	
E-AMAN Common Service System	Provides the 'Arrival Sequence Approval' and 'Arrival Management Information' services in the...	Technical System	
En-Route / Approach ATC	Gathers the ground based automated means, used in En-Route and Approach ATC Centres, to support...	Technical System	
Enhanced MET Sensors	Depending mostly on specific airport needs and new operations with special requirements for...	Technical System	
GALILEO (External)	Galileo is European own global navigation satellite system, providing a highly accurate,...	Technical System	
GBAS Ground station	Ground Based Augmentation System (GBAS) is a civil-aviation safety-critical system that supports...	Technical System	
GLONASS (External)	GLONASS is a space-based global navigation satellite system (GNSS) that provides reliable...	Technical System	
GNSS Monitoring	Performance assessment system	Technical System	
GPS (External)	GPS is the U.S. Global Navigation Satellite System (GNSS) which provides free positioning and...	Technical System	
Ground ATM Networks	The European IP-Based backbone network provides data and voice services and comprises PENS,...	Technical System	
ILS	Provides precision approach and landing by broadcasting of the VHF (localiser) and UHF...	Technical System	
MLS	Is a precision approach and landing guidance system which provides position information and...	Technical System	
Multistatic Primary Radar	The Multi-Static Primary Surveillance Radar (MSPSR) is based on a sparse network of...	Technical System	
NDB	The non-directional beacon (NDB) transmits a continuous signal on a frequency between 190 and...	Technical System	
Non-ATM MET (External)	Contains all the enablers contributing to the production of "pure" MET information, when...	Technical System	
Non-Aviation Users (External)	Represents various organisations/systems using data generated by the European ATM system. This...	Technical System	
Primary Radar	The Primary Surveillance Radar provides surveillance information of all aircraft regardless of...	Technical System	
Routing Networking Equipment for A/G Datalink	Represents the ground segment of the A/G datalink infrastructure supporting both ACARS and ATN,...	Technical System	
SATCOM (External)	Enables the air-ground voice and data communication with aircrafts via satellites. It combines...	Technical System	
SBAS	Space Based Augmentation Systems (SBAS, i.e. EGNOS) are civil aviation safety-critical systems...	Technical System	
Secondary Radar	SSR is used for En-Route and Approach surveillance. It provides the position (range and bearing)...	Technical System	
Sequence Management	Supports the ATS controllers in their decision making in the case of mixed mode operations on the...	Technical System	
Standard MET Sensors	Provide parameters such as temperature, pressure, humidity, cloud base height, etc. are collected...	Technical System	
State AU Wing Operations Centre (WOC)	Supports State Airspace Users (this term includes Military Airspace Users, Border Police Airspace...	Technical System	
Surface Movement Radar	Is a primary radar equipment specifically designed to detect aircraft and vehicles on the surface...	Technical System	
SWIM Blue Profile	Supports the Flight Object services for information sharing between ER-APP-ATC Technical Systems...	Technical System	
SWIM Certification Authority	Covers Certification Management, Registration Authority and Validation Authority. SWIM CA...	Technical System	
SWIM Profile	-	Technical System	

Title	Description	Type	Related Elements
SWIM Purple Profile	Developed to support the Air to Ground and Ground to Air service provision/consumption.	Technical System	
SWIM Registry	Enables the retrieval of information (metadata) about the Services and the ATM information which...	Technical System	
SWIM Security Token Identity Provider	Verifies, maintains, manages, and may create and assign identity information (Security Tokens...	Technical System	
SWIM Yellow Profile	Enables the provision and consumption of Business to Business services for information sharing...	Technical System	
TACAN	Is a Military Nav-aid (ground-based) which transmits a signal to provide information on range and...	Technical System	
TELECOM (External)	Commercial Telecom providers Communication Systems	Technical System	
Time Reference (External)	Technical Systems providing Time Reference to ensure that all ATM operations can be synchronised.	Technical System	
Video Surveillance	This system groups all the non-cooperative sensors that can be used for surface surveillance,...	Technical System	
Voice	Allows ATC controllers to exchange voice information with pilots and other ground personnel (ATC...	Technical System	
Voice Radio Station	Enables voice communication between FOC, ATC and Aircraft. The infrastructure is generally...	Technical System	
VOR	Is a navigation aid which transmits a radio frequency carrier. This is associated with two 30 Hz...	Technical System	
Wide Area Multilateration	The wide area multilateration (WAM) system provides real-time accurate and reliable...	Technical System	