



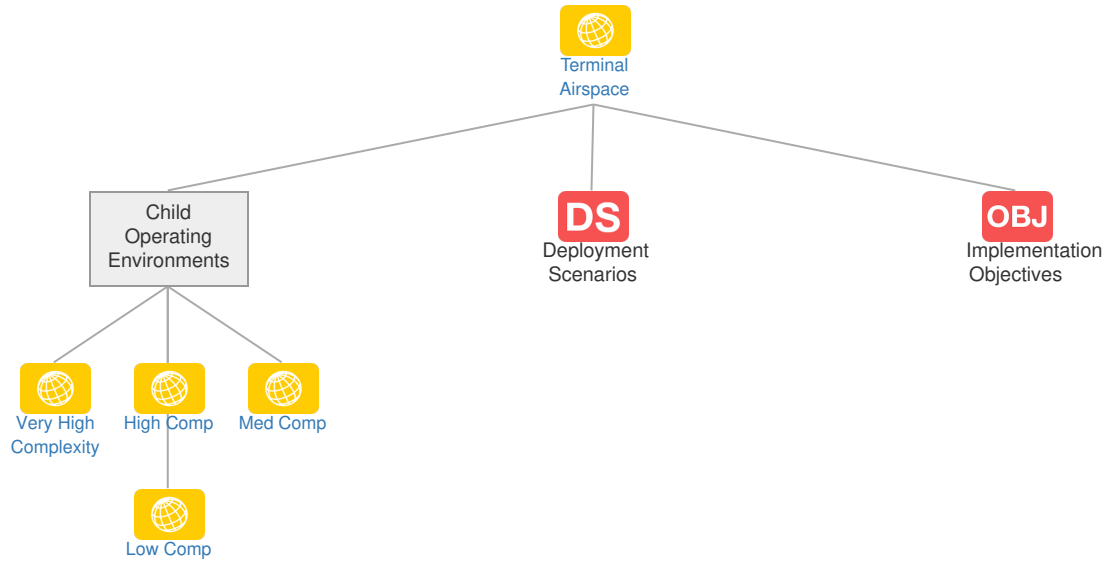
Terminal Airspace

A Terminal Airspace Operating Environment is a control area established at the confluence of aircraft trajectories in the vicinity of one or more major aerodromes, in which or part of which, approach control service is provided by an ATC unit.

Note : definitions of OEs and sub-OEs to be reviewed in the next dataset.

Context

Related Elements





Parent Operating Environment: No associated data



Child Operating Environments

Title	Description	Related Elements
Very High Complexity	A Very High Complexity Terminal Airspace Operating Environment is a control area established at...	
High Complexity	A High Complexity Terminal Airspace Operating Environment is a control area established at the...	
Medium Complexity	A Medium Complexity Terminal Airspace Operating Environment is a control area established at the...	
Low Complexity	A Low Complexity Terminal Airspace Operating Environment is a control area established at the...	



SESAR Solutions: No associated data


















































































Deployment Scenarios

Code	Title	Related Elements
-	ACAS evolution for rotorcraft and general aviation	
-	AMAN and point merge	
-	Advanced geometric GNSS-based procedures in TMAs	
-	Advanced rotorcraft operations in the TMA	
-	Aeronautical digital map service	
-	Aeronautical mobile airport communication system (AeroMACS)	
-	Airborne spacing flight deck interval management	
-	Aircraft as an AIM/MET sensor and consumer	
-	Alternative position, navigation and timing (A-PNT)-short term	
-	Approach improvement through assisted visual separation	
-	Arrival management into multiple airports	
-	CNS rationalisation	
-	CNS services evolution	
-	Collaborative control and multi-sector planner in en-route	
-	Collaborative network performance management	
-	Collision avoidance for IFR RPAS	
-	Completion of aeroMACS development	
-	Continuous descent operations (CDO)	
-	Controlled time of arrival (CTA) in medium density / medium complexity environment	
-	Delegation of services amongst ATSUs	
-	Digital integrated network management and ATC planning	
-	Digitally enhanced briefing	
-	Dynamic extended TMAs for advanced CCO/CDO and improved arrival and departure operations	
-	E-AMAN service	
-	Efficient aircraft separation during take-off and final approach	
-	Enhanced AMAN/DMAN integration	
-	Enhanced airborne collision avoidance for commercial air transport normal operations (ACAS Xa)	

Code	Title	Related Elements
-	Enhanced arrival procedures	
-	Enhanced integration of AU trajectory definition and network management processes	
-	Enhanced network traffic prediction and shared complexity representation	
-	Enhanced rotorcraft and GA operations in the TMA	
-	Enhanced safety nets	
-	Enhanced short-term conflict alert (STCA) and non transgression zone (NTZ) ground based safety nets making use of DAPs information	
-	Enhanced visual operations	
-	Flight-centric ATC and improved distribution of separation responsibility in ATC	
-	HMI interaction modes for ATC centres and airport towers	
-	High-productivity controller team organisation	
-	Hyper-connected ATM	
-	IFR RPAS accommodation in airspace classes A to C	
-	IFR RPAS integration in airspace classes A to C	
-	Improved access to secondary airports	
-	Improved aviation AIM and MET services through automation and digitalisation	
-	Improved ground trajectory predictions enabling future automation tools	
-	Improved vertical profiles through enhanced vertical clearances	
-	Independent rotorcraft operations at airports	
-	Mission trajectories management with integrated dynamic mobile areas type 1 and type 2	
-	Network optimisation of multiple ATFCM time-based measures	
-	New use and evolution of cooperative and non-cooperative surveillance	
-	Next generation AMAN for a 4D environment	
-	Optimised low-level IFR routes for rotorcraft	
-	Optimised route network using advanced RNP	
-	Point merge in complex TMA	
-	RBT revision supported by datalink and increased automation	
-	SWIM T1 (technical infrastructure) purple profile for air/ground advisory information sharing	
-	SWIM T1 green profile for ground/ground civil military information sharing	
-	SWIM T1 purple profile for air/ground safety-critical information sharing	
-	Safety support tools for runway excursions	
-	Static aeronautical data service	
-	Sub-regional demand capacity balancing service	
-	Surveillance performance monitoring	
-	Traffic optimisation on single- and multiple-runway airports	
-	Trajectory prediction service	
-	U-space U1 — foundation services	
-	U-space U2 — initial services	
-	Virtual centre concept	
-	eFPL supporting SBT transition to RBT	

OBJ Implementation Objectives

Code	Title	Related Elements
AOM14	Implement re-organisation of ECAC airspace to ensure a uniform and simplified application of ICAO Air Traffic Service classes Flight Level 195 and below	STK OI
AOM19	Implement Advanced Airspace Management	STK OI EN
AOM19.1	ASM Support Tools to Support Advanced FUA (AFUA)	STK SOL OI PCP ICAO
AOM19.2	ASM Management of Real-Time Airspace Data	STK SOL OI PCP ICAO
AOM19.3	Full Rolling ASM/ATFCM Process and ASM Information Sharing	STK SOL OI PCP ICAO
AOM19.4	Management of Pre-defined Airspace Configurations	STK ICAO
AOM21.2	Free Route Airspace	STK SOL OI PCP ICAO
AOP01.2	Implement airside capacity enhancement method and best practices based on Eurocontrol capacity and efficiency implementation manual	STK OI
AOP05	Airport Collaborative Decision Making (A-CDM)	STK SOL OI PCP ICAO
AOP10	Time-Based Separation	STK SOL OI PCP ICAO
ATC02.2	Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2 for en-route operations	STK OI ICAO
ATC02.5	Implement ground based safety nets - Area Proximity Warning - level 2	STK OI
ATC02.6	Implement ground based safety nets - Minimum Safe Altitude Warning - level 2	STK OI
ATC02.7	Implement ground based safety nets - Approach Path Monitor - level 2	STK OI
ATC02.8	Ground-Based Safety Nets	STK OI ICAO
ATC02.9	Short Term Conflict Alert (STCA) for TMAs	STK SOL OI ICAO
ATC07.1	AMAN Tools and Procedures	STK SOL OI ICAO
ATC15.1	Information Exchange with En-route in Support of AMAN	STK OI ICAO
ATC15.2	Arrival Management Extended to En-route Airspace	STK SOL OI PCP ICAO
ATC17	Electronic Dialogue as Automated Assistance to Controller during Coordination and Transfer	STK SOL OI
ATC19	Enhanced AMAN-DMAN integration	STK SOL OI
ATC20	Enhanced STCA with down-linked parameters via Mode S EHS	STK SOL OI
COM10	Migrate from AFTN to AMHS	STK EN
COM11.2	Voice over Internet Protocol (VoIP) in Airport/Terminal	STK EN
COM12	New Pan-European Network Service (NewPENS)	STK EN ICAO
ENV01	Continuous Descent Operations (CDO)	STK SOL OI ICAO
ENV03	Continuous Climb Operations (CCO)	STK OI ICAO
FCM01	Implement enhanced tactical flow management services	STK OI ICAO
FCM03	Collaborative Flight Planning	STK OI ICAO
FCM04.1	Short Term ATFCM Measures (STAM) - Phase 1	STK OI

Code	Title	Related Elements
FCM05	Interactive Rolling NOP	     
FCM06	Traffic Complexity Assessment	     
FCM07	Calculated Take-off Time (CTOT) to Target Times for ATFCM Purposes	     
FCM07.1	Implement Target Times for ATFM purposes	    
FCM08	Extended Flight Plan	     
INF07	Electronic Terrain and Obstacle Data (eTOD)	  
INF08.1	Information Exchanges using the SWIM Yellow T1 Profile	     
INF08.2	Information Exchanges using the SWIM Blue T1 Profile	     
ITY-ACID	Aircraft Identification	  
ITY-ADQ	Ensure Quality of Aeronautical Data and Aeronautical Information	   
ITY-AGVCS2	8,33 kHz Air-Ground Voice Channel Spacing below FL195	  
ITY-COTR	Implementation of ground-ground automated co-ordination processes	    
ITY-FMTP	Common Flight Message Transfer Protocol (FMTP)	   
ITY-SPI	Surveillance Performance and Interoperability	   
NAV03.1	RNAV 1 in TMA Operations	     
NAV03.2	RNP 1 in TMA Operations	     
NAV10	RNP Approach Procedures to instrument RWY	     
NAV11	Implement precision approach procedures using GBAS CAT II/III based on GPS L1	   
NAV12	ATS IFR Routes for Rotorcraft Operations	    
SAF10	Implement measures to reduce the risk to aircraft operations caused by airspace infringements	