

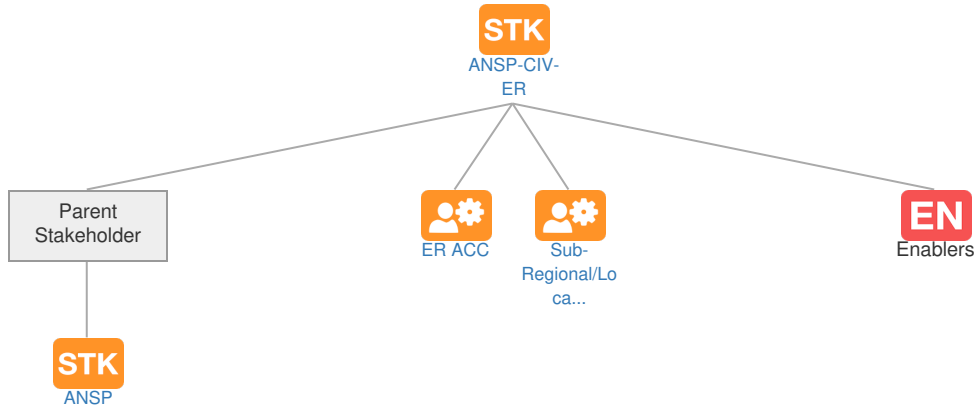


# ANSP-CIV-ER - Civil ATS En-Route Service Provider

The provider of air traffic services for the en-route phase of a flight from the end of the take-off and initial climb phase to the commencement of the approach and landing phase.

## Context

### Related Elements



## STK Parent Stakeholder

Title	Description	Related Elements
Air Navigation Service Provider	A public or private entity providing air navigation services	EN

## STK Child Stakeholders: No associated data

## EN Enablers

Code	Title	IOC	Related Elements	Analysis
AAMS-01	Automated impact of Hazard Zones	-	STK OI DS	Analysis
AAMS-02	Dynamic Airspace Configuration tools for the Integrated Network Working Position	31-03-2028	STK OI DS	Analysis
AAMS-06b	ASM support systems enhanced to exchange static data and airspace usage data with NM systems in AIXM format	31-12-2019	STK OI EN DS PCP	Analysis
AAMS-06c	Local ASM Tools to be updated to support Transmission of VPA-related data from local ASM tool to the NM	31-12-2016	STK OI EN DS PCP	Analysis
AAMS-11	ASM support systems enhanced to exchange real-time airspace status updates	31-12-2016	STK OI EN OBJ DS PCP	Analysis
AAMS-16a	Airspace management functions equipped with tools able to deal with free-routing	31-12-2016	STK OI DS PCP	Analysis
AIMS-06	Ground-Ground AIS provision to ASM	31-12-2019	STK OI EN DS PCP	Analysis
AIMS-07a	Generation of Enhanced Pre-flight Briefing based on digital data	31-12-2023	STK OI EN DS	Analysis
AIMS-14	Set up a digital data chain to ensure the Aeronautical Information data provision into on-board avionic systems	31-10-2020	STK OI EN DS	Analysis
AIMS-23	Enhanced digital data chain to ensure Aeronautical Information data provision to meet full 4D trajectory management requirements	31-12-2023	STK OI DS	Analysis
APP ATC 162	AMAN Sequence build with integration of constraints applied for DCB/dDCB purposes	31-12-2028	STK OI DS	Analysis
CTE-C01b	New Digital A/G Voice	31-12-2029	STK OI DS	Analysis
CTE-N06	Space Based Augmentation System (SBAS)	31-12-2020	STK OI EN DS ⚙️	Analysis
CTE-S05	Gradual rationalisation of conventional surveillance infrastructure (ADS-B/WAM vs SSR and MSPSR vs PSR)	12-09-2018	STK OI EN ⚙️	Analysis
CTE-S06	Composite Surveillance	-	STK OI EN DS	Analysis
CTE-S07	Surveillance Performance Monitoring Tools	08-06-2030	STK OI EN DS	Analysis
CTE-S07a	Coop sensor SPM Tool ¿ ER & TMA	08-06-2030	STK OI EN DS	Analysis
CTE-S07e	SUR Chain SPM Tool ¿ ER & TMA	08-06-2030	STK OI DS	Analysis
ER APP ATC 10	Mission Trajectory including airspace reservations integrated in ATC systems	31-12-2027	STK OI	Analysis
ER APP ATC 14	Enhance Short Term Conflict Alert (STCA) to use Downlinked Aircraft Parameters	31-12-2015	STK OI EN DS	Analysis
ER APP ATC 15	Flight Data Processing: support Dynamic Sectorisation and Dynamic Constraint Management.	-	STK OI DS PCP	Analysis
ER APP ATC 17	Enhance Traffic and Flow Management sub-systems to support dynamic flow management in co-ordination with local, regional, and European levels.	31-12-2019	STK OI OBJ DS PCP	Analysis

Code	Title	IOC	Related Elements	Analysis
ER APP ATC 68	Enable Controller workstation to indicate when aircraft systems indicates an RA occurrence.	31-12-2019	STK OI EN DS	Analysis
ER APP ATC 69	STCA Separation Parameters Defined for Various Types - of Aircraft and Operations		STK OI	Analysis
ER APP ATC 75	Enhance FDP for Direct Route and Free Route Operations	31-12-2016	STK OI DS PCP	Analysis
ER APP ATC 76	Enable systems to differentiate between different traffic type airspaces.	31-12-2020	STK OI	Analysis
ER APP ATC 77	ATC Systems enhanced to exchange real-time (tactical) airspace status data with ASM support system	31-12-2019	STK OI EN DS PCP	Analysis
ER APP ATC 78	Update FDP to support 4D trajectory direct segments in free routing airspace beyond local AoR	31-12-2026	STK OI DS PCP	Analysis
ER APP ATC 80	Enable ATC System to Use Dynamically-Defined Airspace Reservations	31-12-2027	STK OI EN DS	Analysis
ER APP ATC 82	Enhance EN/APP ACC to use eFPL data	31-12-2026	STK OI EN DS	Analysis
ER APP ATC 82b	Enhance FDP to process iSMT/iRMT	31-12-2026	STK OI DS	Analysis
ER APP ATC 86	Enhance FDP to use locally related parts of the 4D trajectory	31-12-2023	STK	Analysis
ER APP ATC 90	Enable En-Route and Approach ATC sub-systems to manage 4D contracts	31-12-2025	STK OI	Analysis
ER APP ATC 91	Enable En-Route and Approach ATC sub-system to manage 3D precision trajectory clearances	31-12-2025	STK OI	Analysis
ER APP ATC 93	Enhance Resource Management and Planning Tools to use Traffic Complexity Assessment.	31-12-2019	STK OI EN DS PCP	Analysis
ER APP ATC 96	ATC System Support to Permit a Single Planner Role Associated to Multiple Tactical Roles	30-09-2026	STK OI DS	Analysis
ER APP ATC 100	4D Trajectory Management by Synchronization of Air and Ground Trajectories through EPP	31-12-2022	STK OI DS PCP	Analysis
ER APP ATC 101	4D Trajectory Management to support the RBT (Reference Business Trajectory) revision process	31-12-2027	STK OI	Analysis
ER APP ATC 102	ATC System Support to Adapted Sector Team Roles Based on Flexible Collaboration of Tactical Controllers Supported by a Single Planner	31-12-2024	STK OI DS	Analysis
ER APP ATC 103	Enhance Monitoring Aids to Use RBT/RMT Constraints and Commitments	-	STK OI DS ⚙️	Analysis
ER APP ATC 104	Adapt Controller Conflict Detection and Resolution Tools to Use Enhanced Ground-Based Trajectory Prediction	09-12-2026	STK OI EN DS	Analysis
ER APP ATC 104b	Adapt Controller Conflict Detection and Resolution Tools to Use Enhanced Trajectory Prediction	30-12-2029	STK OI DS	Analysis
ER APP ATC 104c	Adapt Controller Conformance Monitoring Tools to Use Enhanced Ground-Based Trajectory Prediction	09-12-2026	STK OI DS	Analysis
ER APP ATC 104d	Adapt Controller Conformance Monitoring Tools to Use Enhanced Trajectory Prediction	30-12-2029	STK OI DS	Analysis
ER APP ATC 109	Support for Metering Of Interacting Arrival Flows to Multiple Airports Upstream of the TMAs	31-12-2022	STK OI DS	Analysis
ER APP ATC 119	Air/Ground Datalink Communication/Protocols for i4D and Controlled Time of Arrival	31-12-2022	STK OI EN DS PCP	Analysis
ER APP ATC 120	Enhance Conflict Detection and Resolution to Use the RBT/RMT	31-12-2023	STK OI DS	Analysis
ER APP ATC 121	Management and Delivery of Pre-Defined 2D RNP Clearances	31-12-2021	STK OI EN	Analysis
ER APP ATC 123	Enhance FDP and Traffic and Capacity Tools to Support the Dynamic Transfer of Sectors between ACCs.	31-12-2027	STK OI	Analysis
ER APP ATC 125	Management and Delivery of 2D RNP Clearances	31-12-2028	STK OI EN DS	Analysis
ER APP ATC 128	Introduce Basic AMAN	15-05-2019	STK OI DS	Analysis
ER APP ATC 129	Upgrade FDP and provide Controller Tools to provide assistance to ATC Planning for Preventing Conflicts in En-Route Airspace	-	STK OI EN DS PCP	Analysis
ER APP ATC 132	Transition ER and APP ATC systems from use of direct AGDL connection to use of European gateway.	31-12-2027	STK OI DS	Analysis

Code	Title	IOC	Related Elements	Analysis
ER APP ATC 137	Enhance Safety Nets to use ADS-B information	-	STK OI	Analysis
ER APP ATC 140	Enhance Controller Tools to Support Delegated ASAS Separation in a Mixed Mode control environment.	31-12-2037	STK OI	Analysis
ER APP ATC 143	Upgrade of ATC System to handle Improved OAT Flight Plan	31-12-2024	STK OI EN DS	Analysis
ER APP ATC 145	Controllers HMI able to identify and indicate the flights authorised to maintain self separation.	31-12-2037	STK OI	Analysis
ER APP ATC 149a	Air-Ground Datalink Exchange to Support i4D - Extended Projected Profile (EPP)	31-12-2022	STK OI EN DS PCP	Analysis
ER APP ATC 149b	Air-Ground Datalink Exchange to Support i4D - ETA min/max	31-12-2022	STK OI EN DS	Analysis
ER APP ATC 149c	Air-Ground Datalink Exchange to Support i4D - Controlled Time of Arrival/Overflight (CTA/CTO)	-	STK OI EN DS	Analysis
ER APP ATC 160	ATC to ATC Flight Data Exchange Using The Flight Object	31-12-2023	STK OI EN DS PCP	Analysis
ER APP ATC 162	ATC Flight Data Exchange with NM Using the Flight Object	31-12-2024	STK OI EN DS	Analysis
ER APP ATC 163	CWP & ground processing systems for ADS-B in Non-Radar Airspace (ADS-B NRA)	31-12-2012	STK EN	Analysis
ER APP ATC 164	Enhance ATC System to Receive and Integrate ADS-B data	-	STK OI EN	Analysis
ER APP ATC 165	CWP & ground processing systems for ATSAW ITP	-	STK OI	Analysis
ER APP ATC 167	ATC Planned Trajectories improvement with new ADS-C reports, eFPL and surveillance information.	31-12-2026	STK OI EN DS	Analysis
ER APP ATC 119	Air/Ground Datalink Communication/Protocols for i4D and Controlled Time of Arrival	31-12-2022	STK OI EN DS PCP	Analysis
ER APP ATC 149a	Air-Ground Datalink Exchange to Support i4D - Extended Projected Profile (EPP)	31-12-2022	STK OI EN DS PCP	Analysis
ER APP ATC 168	Enable ATC System to manage improved OAT flight plans with inherent ARES information (reservation restrictions) in accordance with VPA design principle.	31-12-2026	STK OI DS	Analysis
ER APP ATC 169	ATC System Support to Permit a Single Planner Role Associated to Single Person Operations	31-12-2028	STK OI	Analysis
ER APP ATC 170	ATC LOA Status Update	31-12-2026	STK OI DS	Analysis
ER APP ATC 171	Upgraded En-route and Approach STCA safety-net using DAPs via ADS-B information	31-12-2028	STK ⚙️	Analysis
ER APP ATC 172	Upgraded En-route and Approach STCA safety-net using DAPs via Mode-S information	31-12-2028	STK ⚙️	Analysis
ER APP ATC 173	ATC System Support to Collaboration between Controller Teams for Flexible Bypassing of Initial Planned Profiles	31-12-2027	STK OI DS	Analysis
ER APP ATC 174	ATC System to Support Flight-Centric ATC	-	STK OI DS	Analysis
ER APP ATC 175	Introduction of a new virtualisation technical concept for Controller Working Positions in the Virtual Centre Air Traffic Service Unit (VC ATSU) for improving cost efficiency.	31-12-2029	STK OI DS	Analysis
ER APP ATC 180	Controller productivity enhancements by Automatic Speech Recognition at the ER/APP CWP/HMI	31-12-2029	STK OI DS	Analysis
ER APP ATC 181	Controller productivity enhancements by Multi-Touch Input at the ER/APP CWP/HMI	31-12-2029	STK OI DS	Analysis
ER APP ATC 182	Controller productivity enhancements by Attention Guidance at the CWP/HMI	31-12-2029	STK OI DS	Analysis
ER APP ATC 183	Controller productivity enhancements by User Profile Management at the ER/APP CWP/HMI	31-12-2029	STK OI DS	Analysis
ER APP ATC 184	ATM Data Service Provider for ATC services in a Virtual Centre context	31-12-2029	STK OI DS	Analysis
ER APP ATC 185	ATM Data Service Provider for Voice services in a Virtual Centre context	31-12-2029	STK OI DS	Analysis
ER APP ATC 186	Virtual Centre ATSU	31-12-2029	STK OI DS	Analysis

Code	Title	IOC	Related Elements	Analysis
ER ATC 91	ATC System Support for Advanced Conformance Monitoring in En-route Airspace	31-12-2016	STK OI DS PCP	Analysis
ER ATC 92	ATC tools to re-organize traffic flows to reduce complexity in the planning phase	31-12-2023	STK OI EN DS	Analysis
PRO-220a	ATC Procedures related to Detection and Resolution of Complexity, Density and Traffic Flow Problems	31-12-2019	STK OI EN DS PCP	Analysis
ER ATC 94	ATC tools in support of RNP (e.g. RNP1, A-RNP) for En-Route	31-12-2024	STK OI EN	Analysis
ER ATC 95	ATC System Support to Permit a Single Planner Role Associated to Two Adjacent Tactical Roles	31-12-2016	STK OI DS	Analysis
ER ATC 134	Adapt Safety Nets for Support to RNP Operations En-route	31-10-2020	STK EN	Analysis
ER ATC 154a	Basic air-ground datalink communications service derived from the CM and CPDLC applications	-	STK OI EN	Analysis
ER ATC 154b	Enhance En-route ATC sub-systems (internal processing, FDP and Controller Workstation) to enable CPDLC dialog with Pilot	31-12-2011	STK OI	Analysis
ER ATC 157	Enhanced ATC System Support to the Tactical Controller for Conflict Detection and Resolution in En-Route	-	STK OI EN DS	Analysis
ER ATC 157b	Enhanced ATC System Support the Planning Activity for Conflict Detection and Resolution in En-Route	31-12-2030	STK OI DS	Analysis
ER ATC 158	Enroute ATC System Share and Display Sequencing Advisories from Multiple AMANs	31-12-2028	STK OI DS	Analysis
ER ATC 163	Support to En-route delay absorption for cross-border implementation of arrival sequence	31-12-2021	STK OI DS PCP	Analysis
ER ATC 164	ATC tools to re-organize traffic flows to reduce complexity in the execution phase	31-12-2023	STK OI DS	Analysis
HUM-003	Human factors ATCOs - Interval Management	31-12-2028	STK OI DS	Analysis
HUM-004	New staffing configuration / Extended ATC Planner in en-route	31-12-2016	STK OI DS	Analysis
HUM-005	New staffing configuration/ Single Person Operation	31-12-2028	STK OI	Analysis
HUM-017	New working methods for operation within FC-ATC Environment	-	STK OI DS	Analysis
HUM-018	New staffing configuration/ Multi Sector Planning in En-Route	30-09-2026	STK OI DS	Analysis
METEO-05b	Generate and provide MET information relevant for TMA and En-route related operations (PCP)	01-07-2022	STK OI EN DS PCP	Analysis
METEO-05c	Generate and provide MET information relevant for TMA and En-route related operations at short notice ('time to decision' between 3 minutes and 7days), including for low-level IFR operations.	31-12-2026	STK OI EN DS	Analysis
METEO-05d	Generate and provide MET information relevant for TMA and En-route related operations at shortest notice (less than 3 minutes 'time to decision')	-	STK OI EN	Analysis
MIL-0108	Exchange of specific MT data (ARES description) in standard format	31-12-2027	STK OI	Analysis
MIL-STD-04	Procedure to implement EUROAT rules.	30-10-2013	STK OI DS	Analysis
NIMS-02	Provision , reception and processing of collaborative flight plan updates	31-12-2011	STK OI EN	Analysis
NIMS-12	Demand Capacity Balancing equipped with a tool to identify and arbitrate multiple imbalance and hotspots	30-08-2026	STK OI DS	Analysis
NIMS-13b	Enhanced short term ATFM measures ( STAM)	31-12-2019	STK OI DS PCP	Analysis
NIMS-20	Provision, reception and processing of ATFCM flight progress messages	31-12-2011	STK OI OBJ	Analysis
NIMS-27	Network DCB sub-system enhanced with improved accuracy of processing real-time data	31-12-2019	STK OI DS PCP	Analysis
NIMS-37	Basic Complexity assessment tools	31-12-2019	STK OI DS PCP	Analysis
NIMS-46	Integrated local DCB working position	31-12-2027	STK OI DS	Analysis
PRO-011	ASM Procedures to ensure that the change in airspace availability is promulgated through SWIM and reflected in the NOP	31-12-2019	STK OI DS PCP	Analysis

Code	Title	IOC	Related Elements	Analysis
PRO-015	Harmonised ATC Procedures for providing a standardized service to OAT flights at pan-European level	31-12-2023	STK OI DS	Analysis
PRO-022	FCM procedures for collaborating on SBT changes with Airspace Users	31-12-2019	STK OI DS PCP	Analysis
PRO-024	ASM Procedures related to real-time (tactical) ASM level III information exchange	31-12-2019	STK OI DS PCP	Analysis
PRO-027	Procedures for ground-ground coordination in case of Trajectory Revision	31-12-2017	STK	Analysis
PRO-029	ATC Procedures to build a sequence and coordinate with other AoR in order to facilitate CCO/CDO	01-07-2017	STK OI DS	Analysis
PRO-054a	Operational procedures for separation management in En-Route using RNP specifications	-	STK OI	Analysis
PRO-076	Procedures for the iSMT in the CDM process	-	STK OI DS	Analysis
PRO-077	Procedures facilitating iRMT management	31-12-2015	STK OI DS	Analysis
PRO-078	Procedures facilitating iRMT management in Trajectory Based Operations environment	-	STK OI	Analysis
PRO-100	FCM procedures to allocate, monitor and update 4D targets for ATFCM purposes	-	STK OI DS	Analysis
PRO-118	ATC Procedures for use of CTA across several AoRs	31-12-2023	STK OI DS	Analysis
PRO-125	ATC Procedures (En-route and TMA) to accommodate mixed traffic streams into multiple aerodromes	-	STK OI DS	Analysis
PRO-220a	ATC Procedures related to Detection and Resolution of Complexity, Density and Traffic Flow Problems	31-12-2019	STK OI EN DS PCP	Analysis
PRO-220b	FCM procedures to describe how detection and resolution of complexity, density or traffic flow issues are managed.	31-12-2019	STK OI EN DS PCP	Analysis
PRO-245	ATC Procedures for use of cross border extended Arrival Management	31-12-2021	STK OI DS PCP	Analysis
PRO-247	FCM Procedures for hotspots information sharing and for CDM process to support STAM coordination and implementation..	31-12-2019	STK OI DS PCP	Analysis
PRO-255	Harmonised ATC Procedures for SPO in En Route	31-12-2028	STK OI	Analysis
PRO-256	Harmonised ATC procedures for SPO in TMA/eTMA	31-12-2028	STK OI	Analysis
STD-090	Update of ICAO standards for Global Reporting Format of runway surface conditions	-	STK EN	Analysis
SVC-001	Modification of the TacticalUpdates service provided by Regional ATFCM to incorporate PTR status query and updates.	31-12-2026	STK OI DS	Analysis
SVC-004	Provision of cost-efficient E-AMAN capabilities using a Common Service	31-12-2026	STK OI DS	Analysis
SVC-005	Provision of cost-efficient Sub-Regional DCB capabilities using a Common Service	31-12-2023	STK OI DS	Analysis
SVC-008	Provision and Consumption of FlightDataDistribution Service in the context of Virtual Centres.	31-12-2029	STK OI DS	Analysis
SVC-009	Provision and Consumption of FlightDataManagement Service in the context of Virtual Centres	31-12-2029	STK OI DS	Analysis
SVC-010	Provision and Consumption of CoordinationAndTransferManagement Service in the context of Virtual Centres	31-12-2029	STK OI DS	Analysis
SVC-013	Provision and Consumption of Airspace Status Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-014	Provision and Consumption of Arrival Sequence Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-015	Provision and Consumption of Arrival Sequence Management Service	31-12-2029	STK OI DS	Analysis
SVC-016	Provision and Consumption of Correlation Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-017	Provision and Consumption of Correlation Management Service	31-12-2029	STK OI DS	Analysis
SVC-018	Provision and Consumption of Medium Term Conflict Detection Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-019	Provision and Consumption of Medium Term Conflict Management Service	31-12-2029	STK OI DS	Analysis

Code	Title	IOC	Related Elements	Analysis
SVC-020	Provision and Consumption of Monitoring Aids Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-021	Provision and Consumption of Operational Configuration Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-022	Provision and Consumption of Operational Configuration Management Service	31-12-2029	STK OI DS	Analysis
SVC-023	Provision and Consumption of Safety Net (SNET) Alert Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-024	Provision and Consumption of SSR Code Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-025	Provision and Consumption of SSR Code Management Service	31-12-2029	STK OI DS	Analysis
SVC-028	Provision and Consumption of Surveillance Data Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-031	Provision and Consumption of Time-based Separation Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-032	Provision and Consumption of Time-based Separation Management Service	31-12-2029	STK OI DS	Analysis
SVC-033	Provision and Consumption of Voice Comm Information Distribution Service	31-12-2029	STK OI DS	Analysis
SVC-034	Provision and Consumption of Voice Comm Management Service	31-12-2029	STK OI DS	Analysis
SVC-039	Provision of cost-efficient Aeronautical Digital Maps using a Common Service	20-12-2025	STK OI DS	Analysis
SWIM-APS-02a	Consumption of Aeronautical Information services	31-12-2020	STK OI EN DS PCP S	Analysis
SWIM-APS-04a	Consumption of G/G ATFCM Information Services	31-12-2020	STK OI EN DS PCP S	Analysis
SWIM-APS-05a	Provision and Consumption of Flight Object Sharing services	31-12-2023	STK OI EN DS PCP S	Analysis
SWIM-APS-07a	Stakeholder systems consumption of G/G Meteorological Information services	31-12-2023	STK OI EN DS PCP S	Analysis
SWIM-APS-12a	Provision and Consumption of general information for air traffic management using SWIM	31-12-2019	STK OI EN S	Analysis
SWIM-APS-16	ATC Letter of Agreement (LOA) Status publication via TacticalUpdates service by ER APP ACC	31-12-2026	STK OI DS	Analysis
SWIM-APS-18	eFPL service consumption in ATC	31-12-2026	STK OI DS	Analysis
SWIM-INFR-01a	High Criticality SWIM Services infrastructure Support and Connectivity.	31-12-2023	STK OI EN DS PCP	Analysis
SWIM-INFR-05a	General SWIM Services infrastructure Support and Connectivity.	31-12-2020	STK OI EN DS PCP	Analysis
SWIM-INFR-06b	Ground side SWIM technical infrastructure for Air-Ground Advisory Information Sharing	31-12-2028	STK OI EN DS	Analysis
SWIM-INFR-07	Ground/Ground SWIM technical infrastructure for civil-military SWIM-based non high-critical exchanges	31-12-2027	STK OI DS	Analysis
SWIM-NET-01a	SWIM Network Point of Presence	31-12-2020	STK OI EN DS PCP	Analysis
SWIM-SUPT-05a	SWIM Supporting IP Network Bridging Provisions	31-12-2015	STK OI EN	Analysis