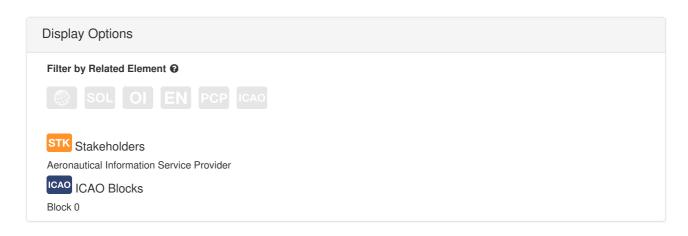


Implementation Objectives

Edition 2022

Agreed set of common actions to be taken by stakeholders to implement OI steps that have reached the appropriate level of maturity. Together they constitute the engineering view of the European ATM Master Plan Level 3 - Implementation Plan.



Code	Title	Start Date	Finish Date	Status	Related Elements
AOM13.1	Harmonise Operational Air Traffic (OAT) and General Air Traffic (GAT) Handling	01-01-2012	31-12-2018	Active	STK SOL
AOM19.4	Management of Predefined Airspace Configurations	01-01-2018	31-12-2022	Active	STK ICAO
AOM19.5	ASM and A-FUA	01-01-2014	31-12-2022	Active	
AOM21.1	Direct Routing	01-01-2015	31-12-2017	Achieved	STK SOL
AOM21.2	Initial Free Route Airspace	01-01-2015	31-12-2022	Active	STK SOL OI PCP ICAO
AOM21.3	Enhanced Free Route Airspace Operations	01-01-2021	31-12-2025	Active	
AOP04.1	Advanced Surface Movement Guidance and Control System A-SMGCS Surveillance Service (former ICAO Level 1)	01-01-2007	31-12-2020	Active	STK SOL
AOP04.2	Advanced Surface Movement Guidance and Control System (A-SMGCS) Runway Monitoring and Conflict Alerting (RMCA) (Airport Safety Support Service = former ICAO Level 2)	01-01-2021	31-12-2025	Active	STK OI EN ICAO
AOP05	Airport Collaborative Decision Making (A-CDM)	01-01-2004	31-12-2020	Active	STK SOL
AOP10	Time-Based Separation	01-01-2015	31-12-2023	Active	STK SOL
AOP11	Initial Airport Operations Plan	01-01-2015	01-01-2021	Removed	STK SOL OI PCP ICAO
AOP11.1	Initial Airport Operations Plan	01-01-2021	31-12-2023	Active	
AOP11.2	Extended Airport Operations Plan	01-01-2021	31-12-2027	Active	
AOP12	Improve Runway and Airfield Safety with Conflicting ATC Clearances (CATC) Detection and Conformance Monitoring Alerts for Controllers (CMAC)	01-01-2015	01-01-2021	Removed	STK SOL OI EN PCP
AOP12.1	Airport Safety Nets	01-01-2021	31-12-2025	Active	
		J. 01 LUL1	57 IL 2020		

Code	Title	Start Date	Finish Date	Status	Related Elements
AOP13	Automated Assistance to Controller for Surface Movement Plannin and Routing	⁹ 01-01-2016	31-12-2025	Active	STK SOL OI PCP ICAO
AOP14.1	Remote Tower Services	31-05-2019	01-01-2030	Active	STK SOL
AOP14.2	Multiple Remote Tower Module	01-07-2022	31-12-2030	Initial	
AOP15	Enhanced traffic situational awareness and airport safety nets for the vehicle drivers	31-05-2019	01-01-2030	Active	STK SOL
AOP16	Guidance assistance through airfield ground lighting	31-05-2019	01-01-2030	Active	STK SOL
AOP17	Provision/integration of departure planning information to NMOC	31-05-2019	01-01-2030	Active	STK SOL
AOP18	Runway Status Lights (RWSL)	31-05-2019	01-01-2030	Active	STK SOL
AOP19	Departure Management Synchronised with Pre-departure	01-01-2021	31-12-2022	Active	
AOP20	sequencing Wake Turbulence Separations for Departures based on Static Aircraft Characteristics (S-PWS-D)	01-01-2020	31-12-2030	Initial	
AOP21	Wake Turbulence Separations for Arrivals based on Static Aircraft Characteristics (S-PWS-A)	01-01-2020	31-12-2030	Initial	
AOP22	Minimum pair separations based on RSP	01-01-2020	31-12-2030	Initial	
AOP23	Integrated runway sequence for full traffic optimization on single and multiple runway airports	01-01-2020	31-12-2030	Initial	
AOP24	Optimised use of runway configuration for multiple runway airports	01-01-2020	31-12-2030	Initial	
AOP25	De-icing management tool	01-07-2022	31-12-2030	Active	
AOP26	Reduced separation based on local Runway Occupancy Time	01-07-2022	31-12-2030	Active	
ATC02.8	(ROT) characterisation Ground-Based Safety Nets	01-01-2009	31-12-2021	Active	STK OI
ATC02.9	Short Term Conflict Alert (STCA) for TMAs	01-01-2018	31-12-2020	Achieved	STK SOL
ATC07.1	AMAN Tools and Procedures	01-01-2007	31-12-2019	Active	STK SOL
ATC12.1	Automated Support for Conflict Detection, Resolution Support Information and Conformance Monitoring	01-01-2015	31-12-2021	Active	STK SOL
ATC15.1	Information Exchange with En-route in Support of AMAN	01-01-2012	31-12-2019	Active	STK OI
ATC15.2	Arrival Management Extended to En-route Airspace	01-01-2021	31-12-2024	Active	STK SOL OI PCP ICAO
ATC16	Implement ACAS II compliant with TCAS II change 7.1	01-03-2012	31-12-2015	Achieved	STK EN ICAO
ATC18	Multi-Sector Planning En-route - 1P2T	31-05-2019	01-01-2030	Active	STK SOL
ATC19	AMAN/DMAN Integration	01-01-2021	31-12-2027	Active	STK SOL
17000	Enhanced STCA with down-linked parameters via Mode S EHS	31-05-2019	01-01-2030	Active	STK SOL
ATC20					
ATC21	Composite surveillance (ADS-B/WAM)	15-09-2020	31-12-2030	Initial	
ATC21		15-09-2020	31-12-2030	Initial Initial	
	Composite surveillance (ADS-B/WAM) Initial Air-Ground Trajectory Information Sharing (Airborne Domain) Initial Air-Ground Trajectory Information Sharing (Ground Domain)	01-01-2024	31-12-2027		
ATC21 ATC22	Initial Air-Ground Trajectory Information Sharing (Airborne Domain)	01-01-2024 01-01-2024	31-12-2027 31-12-2027	Initial	
ATC21 ATC22 ATC23	Initial Air-Ground Trajectory Information Sharing (Airborne Domain) Initial Air-Ground Trajectory Information Sharing (Ground Domain)	01-01-2024 01-01-2024 01-01-2024	31-12-2027 31-12-2027 31-12-2027	Initial Initial	
ATC21 ATC22 ATC23 ATC24	Initial Air-Ground Trajectory Information Sharing (Airborne Domain) Initial Air-Ground Trajectory Information Sharing (Ground Domain) Network Manager Trajectory Information Enhancement	01-01-2024 01-01-2024	31-12-2027 31-12-2027	Initial Initial Initial	

Code	Title	Start Date	Finish Date	Status	Related Elements
COM10.2	Extended AMHS			Active	
COM11.1	Voice over Internet Protocol (VoIP) in En-Route	01-12-2011	31-12-2024	Active	
	, ,	01-01-2013	31-12-2021		STK EN
COM11.2	Voice over Internet Protocol (VoIP) in Airport/Terminal	01-01-2013	31-12-2023	Active	STK EN
COM12	New Pan-European Network Service (NewPENS)	01-01-2018	Multiple	Active	STK EN
COM13	Air Traffic Services (ATS) datalink using SatCom Class B	01-07-2022	31-12-2030	Active	
ENV01	Continuous Descent Operations (CDO)	01-07-2022	31-12-2023	Active	STK SOL
		01 07 2007	01 12 2020		OI ICAO
NV02	Airport Collaborative Environmental Management	31-05-2018	01-01-2030	Active	STK OI
ENV03	Continuous Climb Operations (CCO)	01-01-2013	01-01-2030	Active	
		01-01-2013	01-01-2030		STK OI
CM01	Implement enhanced tactical flow management services	01-08-2001	31-12-2006	Achieved	STK OI
					ICAO
FCM03	Collaborative Flight Planning	01-01-2000	31-12-2022	Active	STK OI
					ICAO
CM04.2	Enhanced Short Term ATFCM Measures	01-11-2017	31-12-2022	Active	STK SOL
					OI EN PCP
CM06.1	Automated Support for Traffic Complexity Assessment and Flight Planning interfaces	01-01-2021	31-12-2022	Active	
CM09	Enhanced ATFM Slot Swapping	01-01-2016	31-12-2021	Achieved	STK SOL
		0.0.20.0	0		OI ICAO
CM10	Interactive Rolling NOP	01-01-2021	31-12-2023	Active	
CM11.1	Initial AOP/NOP Information Sharing	01-01-2021	31-12-2023	Active	
CM11.2	AOP/NOP integration	01-01-2021	31-12-2027	Active	
NF07	Electronic Terrain and Obstacle Data (eTOD)	01-11-2014	31-12-2018	Active	STK EN
NF09	Digital Integrated Briefing	31-05-2019	-	Removed	STK SOL
NF10.10	Meteorological Information Exchange - Aerodrome Meteorological	04 04 0004	04 40 0005	Active	OI
NF10.11	information Service Meteorological Information Exchange - En-Route and Approach	01-01-2021	31-12-2025	Active	
NF10.11	Meteorological information Exchange - Enrique and Approach Meteorological information Exchange - Network Meteorological	01-01-2021	31-12-2025		
	Information	01-01-2021	31-12-2025	Active	
NF10.13	Cooperative Network Information Exchange - ATFCM Tactical Updates Service (Airport Capacity and Enroute)	01-01-2021	31-12-2025	Active	
NF10.14	Cooperative Network Information Exchange – Flight Management Service (Slots and NOP/AOP integration)	01-01-2021	31-12-2025	Active	
NF10.15	Cooperative Network Information Exchange – Measures Service	01-01-2021	31-12-2025	Active	
NF10.16	(Traffic Regulation) Cooperative Network Information Exchange - Short Term ATFCM	01-01-2021	31-12-2025	Active	
NF10.17	Measures services (MCDM, eHelpdesk, STAM measures) Cooperative Network Information Exchange – Counts service	01-01-2021	31-12-2025	Active	
VF10.18	(ATFCM Congestion Points) Flight Information Exchange (Yellow Profile) - Filing Service	01-01-2021	31-12-2025	Active	
NF10.19	Flight Information Exchange (Yellow Profile) - Flight Data Request	01-01-2021	31-12-2025	Active	
VF10.2	Service Stakeholders' SWIM PKI and cyber security			Active	
VF10.20	Flight Information Exchange (Yellow Profile) - Notification Service	01-01-2021	31-12-2025	Active	
VF10.21	Flight Information Exchange (Yellow Profile) - Data Publication	01-01-2021	31-12-2025	Active	
NF10.22	Service Flight Information Exchange (Yellow Profile) - Trial Service	01-01-2021	31-12-2025	Active	
NF10.22 NF10.23	Flight Information Exchange (Yellow Profile) - Extended AMAN	01-01-2021	31-12-2025	Active	
	SWIM Service	01-01-2021	31-12-2025		
NF10.3	Aeronautical Information Exchange - Airspace structure service	01-01-2021	31-12-2025	Active	
NF10.4	Aeronautical Information Exchange - Airspace Availability Service	01-01-2021	31-12-2025	Active	
NF10.5	Aeronautical Information Exchange - Airspace Reservation (ARES	01-01-2021	31-12-2025	Active	
NF10.6 NF10.7	Aeronautical Information Exchange – Digital NOTAM service Aeronautical Information Exchange - Aerodrome mapping service	01-01-2021	31-12-2025	Active	
		01-01-2021	31-12-2025	Active	
NF10.8	Aeronautical Information Exchange - Aeronautical Information	01-01-2021	31-12-2025	Active	

Code	Title	Start Date	Finish Date	Status	Related Elements
INF10.9	Meteorological Information Exchange - Volcanic Ash Mass Concentration information service	01-01-2021	31-12-2025	Active	
INF11.1	Enhanced Ground Weather Management System (GWMS) as locational to the state of the	^{al} 01-07-2022	31-12-2030	Initial	
INF11.2	Cb-global capability and service	01-07-2022	31-12-2030	Initial	
ITY-ACID	Aircraft Identification	13-12-2011	02-01-2020	Active	STK EN
ITY-AGDL	Initial ATC Air-Ground Data Link Services	06-02-2009	Multiple	Active	STK OI
ITY-AGVCS2	8,33 kHz Air-Ground Voice Channel Spacing below FL195	07-12-2012	Multiple	Active	STK EN
ITY-COTR	Implementation of ground-ground automated co-ordination processes	27-07-2006	Multiple	Achieved	STK SOL
ITY-FMTP	Common Flight Message Transfer Protocol (FMTP)	28-06-2007	Multiple	Active	STK EN
NAV03.1	RNAV 1 in TMA Operations	01-01-2001	Multiple	Active	STK SOL
NAV03.2	RNP 1 in TMA Operations	07-08-2018	Multiple	Active	STK SOL
NAV10	RNP Approach Procedures to instrument RWY	01-06-2011	Multiple	Active	STK SOL
NAV11	Implement precision approach procedures using GBAS CAT II/III based on GPS L1	31-05-2019	-	Removed	STK SOL
NAV11.1	Implement precision approach procedures using GBAS CAT II based on GAST C	01-07-2022	31-12-2030	Active	
NAV11.2	Implement precision approach procedures using GBAS CAT II/III based on GPS L1 and/or GALILEO E1	01-07-2022	31-12-2030	Initial	
NAV12	ATS IFR Routes for Rotorcraft Operations	01-08-2018	Multiple	Active	STK SOL
SAF10.1	Implement measures to reduce the risk to aircraft operations caused by airspace infringements	01-07-2022	31-12-2030	Active	
SAF11	Improve Runway Safety by Preventing Runway Excursions	01-09-2013	31-01-2018	Removed	STK EN
SAF11.1	Improve Runway Safety by Preventing Runway Excursions	01-07-2022	31-12-2030	Active	