Deployment Scenario Title	Improved aviation AIM and MET services through automation and digitalisation
Deployment Scenario Description	Improved aviation AIM and MET services through automation and digitalisation: this deployment scenario addresses new services such as static aeronautical data service and aeronautical digital map service functions that will provide static and dynamic aeronautical data in digital form, to be used by various ATM systems (e.g. safety nets). The output is an aeronautical information exchange model-compliant data set, subsets of which can be retrieved by individual requests for specific geographical areas, attributes or functional features.
Essential Operational Change	Digital AIM and MET Services
Maturity	In development phase: Key Solutions Approaching Maturity

Applicable Operating Environment			
Airport	**Terminal Airspace**	**En-Route**	**Network**

Timeline																				
2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
								Deployment												
													Benefit							

Performance Contribution of the DS				
Capacity	**Safety**	**Environment**	**Cost-efficiency**	**Operational efficiency**

Stakeholders affected (at least one enabler to be deployed)						
ANSP		**AO**		**AU**		**Network Manager**
Civil	**Military**	**Civil**	**Military**	**Civil**	**Military**	
TWR, APP, ENR, MET	TWR, APP, ENR, MET	APT Operator	APT Operator	Scheduled, BA Fixed, GA, FOC	Transport, Light, WOC,	

SESAR Solutions			
Solution Code	**Solution Title**	**Solution Description**	**Related Elements**
PJ.18-04a	Aeronautical Information Management (AIM) information	Developments in new or enhance aeronautical (AIM) information will improve the quality,...	PJ DS EOC
PJ.18-04b	Meteorological (MET) information	Developments in new or enhance meteorological (MET) information will improve the quality,...	PJ OI DS EOC

Operational Improvement Steps			
OI Step Code	**OI Step Title**	**OI Step Description**	**Related Elements**
POI-0008-MET	Provision of MET data as SWIM services (Yellow Profile) relevant for Aerodrome and TMA	Dedicated MET information (observations, nowcasts and forecasts) will be provided by MET systems...	SOL EN DS
POI-0009-MET	Provision of MET data as SWIM services (Yellow Profile) relevant for En-route and Network operations	Dedicated MET information (observations, nowcasts and forecasts) will be provided by MET systems...	SOL EN DS

Enablers						
Required/ Optional	**New/ Inherited**	**Develop/ Use**	**Enabler Code**	**Enabler Title**	**Enabler Description**	**Related Elements**
🔒			METEO-03c	Provision and monitoring of real-time airport weather information for time-based separation and curved approaches	ATM-MET ground based sub-system dedicated to acquire, collect, combine, provide and monitor...	STK OI EN DS ⚙
🔒			METEO-04c	Generate and provide MET information relevant for Airport and approach related operations at short notice ('time to decision' between 3 minutes and 7days) including rotorcraft and RPAS	The ATM-MET system is acquiring, generating, assembling and providing Meteorological (MET)...	STK OI EN DS ⚙
🔒			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.	The ATM-MET system is acquiring, generating, assembling and providing Meteorological (MET)...	STK OI EN DS
🔒			METEO-06c	Generate and provide Meteorological information relevant at short notice ('time to decision' between 3 minutes and 7days)	ATM-MET system acquiring, generating, assembling and providing Meteorological (MET) information...	STK OI EN DS
🔒			METEO-07c	Integrated system of infrared and visual cameras to enable automatic detection of LVC	An integrated system of IR and VIS cameras monitors the visibililty situation around the airport....	STK OI EN DS
🔒			METEO-08c	Integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar for all-weather wind monitoring	An integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar monitors...	STK OI EN DS
🔒			METEO-10a	VIS Camera for visibility measurement and cloud monitoring	VIS camera imagery supports MET observer especially in observation of cloud cover (in daylight),...	STK OI DS
🔒			METEO-10b	IR Camera for cloud monitoring	IR camera imagery supports MET observer especially in observation of cloud cover during night and...	STK OI DS
🔒			METEO-11a	Wind monitoring in wet conditions using data from Doppler Weather Radar	Ground based Doppler Weather Radar installed at the Airport for ATM dedicated purpose is used for...	STK OI DS

Enablers						
Required/ Optional	New/ Inherited	Develop/ Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			METEO-11b	Wind monitoring in dry conditions using data from Scanning Doppler Lidar	Ground based Scanning Doppler Lidar installed at the Airport for ATM dedicated purpose is used...	STK OI DS
🔒			METEO-12a	Compile data for METForTAM service	Further enhancement of all functionalities of the 4DWxCube including choice of raw data sources...	STK OI EN DS
🔒			METEO-08c	Integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar for all-weather wind monitoring	An integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar monitors...	STK OI EN DS
🔒			METEO-12b	Compile data for METForWTS service	Further enhancement of all functionalities of the 4DWxCube including choice of raw data sources...	STK OI EN DS
🔒			METEO-08c	Integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar for all-weather wind monitoring	An integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar monitors...	STK OI EN DS
🔒			SVC-037	METForTAM Service	METForTAM Service for the exchange between Aerodrome ATM-MET and the Airport.	STK OI EN DS
🔒			METEO-08c	Integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar for all-weather wind monitoring	An integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar monitors...	STK OI EN DS
🔒			SVC-040	METForWTS Service	This service addresses the dependency with Wake Turbulence Separation Optimisation solution...	STK OI EN DS
🔒			METEO-08c	Integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar for all-weather wind monitoring	An integrated system of 3D scanning Doppler X-Band radar and long range Doppler lidar monitors...	STK OI EN DS