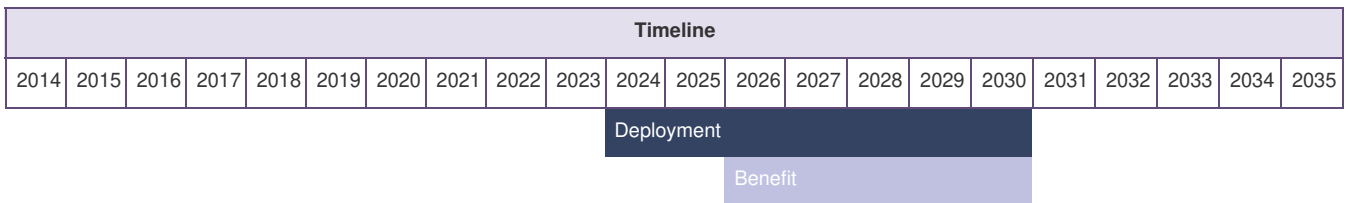


Deployment Scenario Title	Traffic optimisation on single- and multiple-runway airports
Deployment Scenario Description	Traffic optimisation on single- and multiple-runway airports: this will involve the provision of tower and approach controllers with system support to optimise runway operations' arrival and/or departure spacing and make optimal use of minimum separations, runway occupancy, runway capacity and airport capacity.
Essential Operational Change	Airport and TMA performance
Maturity	In development phase: Key Solutions Approaching Maturity

Applicable Operating Environment			
Airport	Terminal Airspace	En-Route	Network



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, SWIM, AIS, MET	TWR, APP, AIS, MET	APT Operator	APT Operator	Scheduled, BA Fixed, BA Rotorcraft, GA, FOC	Transport, Fighter, Light, WOC,	Network Manager

SESAR Solutions			
Solution Code	Solution Title	Solution Description	Related Elements
PJ.02-08	Traffic optimisation on single and multiple runway airports	Traffic optimisation on single and multiple runway airports provides tower and approach...	SOL PJ OI DS EOC ICAO

Operational Improvement Steps			
OI Step Code	OI Step Title	OI Step Description	Related Elements
AUO-0704	Enhanced Prediction of Arrival Runway Occupancy Time (ROT)	A better prediction (or integrity) of the arrival ROT (Runway Occupancy Time) will help ATC to...	SOL EN DS
TS-0301	Integrated Arrival Departure Management for Full Traffic Optimisation on the Runway	A full integration of arrival and departure management processes provides dynamic assistance to...	SOL EN DS ICAO
TS-0313	Optimized Use of Runway Capacity for Multiple Runway Airports	The controller of a multiple runway airport is provided with decision support tools enhanced to...	SOL EN DS

Enablers						
Required/Optional	New/Inherited	Develop/Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			AERODROME-ATC-33	Coupled sequencing tool enhanced to better handle arrivals and departures	Coupled AMAN-DMAN enhanced to manage mixed mode and dependent runway operations as well as to...	STK OI EN DS
🔒			AERODROME-ATC-55	Airport ATC analyser tool for predicting ROT	Provide enhanced Runway Capacity analyser tool for predicting Final Approach speed profile and...	STK OI EN DS
🔒			AERODROME-ATC-58	Agile synchronisation of arrivals with departure information for the same airport	Improvement on the service orchestration between AMAN and DMAN to better synchronise arrivals and...	STK OI DS
🔒			AERODROME-ATC-74	Runway Demand and Capacity system enhanced for multiple runway airport	In order to manage the different flows and dependencies between the multiple Runways in the...	STK OI EN DS
🔒			APP ATC 164	APP ATC System adapted to support integrated arrival/departure sequence functionalities in ATCO's HMI	The APP ATC system ATCO HMI is enhanced to support the display of integrated arrival/departure...	STK OI DS
➔			A/C-37a	Downlink of trajectory data according to contract terms (ADS-C) compliant to ATN baseline 2 (FANS 3/C)	Downlink of trajectory data (waypoints or pseudo waypoints with associated constraints and/or...	STK OI EN DS PCP
➔			A/C-48a	Air broadcast of aircraft position/vector (ADS-B OUT) compliant with DO260B	Air broadcast of aircraft position/vector (ADS-B OUT) compliant with DO260B	STK OI EN DS
➔			AERODROME-ATC-09c	Improvement of operational orchestration among arrival / departure management and surface management services	Provision of surface movement information (including variable taxi time) processing system for...	STK OI EN
➔			AERODROME-ATC-27	Sequence Management system enhanced to use new wake turbulence separations	Using optimized spacing of arrivals and departures reflecting new wake turbulence separations,...	STK OI
➔			AERODROME-ATC-29	Enhanced Runway Demand and Capacity system for mixed mode runway	Improvement of Runway Demand and Capacity system to integrate Arrival and departure information...	STK OI EN
➔			AERODROME-ATC-32	Runway condition awareness management system based on weather-based runway condition model	Runway condition awareness management system that delivers runway conditions takes into account a...	STK OI EN DS
➔			AERODROME-ATC-34	Sequence Management system enhanced to use reduced and predicted ROT	Sequence Management system enhanced to use reduced and predicted Runway Occupancy Time to improve...	STK OI EN
➔			AERODROME-ATC-56	Airport ATC Function exchange current ROT information between a/c and ATC Systems	Sharing current ROT information between the Flight Crew and ATC operators to increase runway...	STK OI
➔			AIMS-16	Electronic Terrain and Obstacle Data (TOD)	The purpose is to ensure the availability of electronic Terrain and Obstacle Data .	STK OI EN OBJ DS

Enablers						
Required/ Optional	New/ Inherited	Develop/ Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
→			AIMS-23	Enhanced digital data chain to ensure Aeronautical Information data provision to meet full 4D trajectory management requirements	Enhanced aeronautical information data provision chain enabling the provision of high quality...	STK OI DS
→			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 ⚙️
→			NIMS-12	Demand Capacity Balancing equipped with a tool to identify and arbitrate multiple imbalance and hotspots	Develop an assistance tool allowing the Network Manager, the civil ATS Providers and the civil...	STK OI DS
→			SWIM-APS-07b	Consumption by Ground Systems of Meteorological Information services for Trajectory Based Operations	Ground systems evolve to consume SWIM enabled services for meteorological information exchange	STK OI DS S
→			SWIM-APS-08b	Provision of Airport Information services for Step 2	Ground systems evolve to consume SWIM enabled services for airport information exchange	OI DS S
→			SWIM-APS-09b	Consumption by Ground Systems of SWIM enabled G/G and initial A/G Airport Information services	Ground systems evolve to provide SWIM enabled services for airport information exchange	OI DS S