

Deployment Scenario Title	Surveillance performance monitoring
Deployment Scenario Description	-
Essential Operational Change	CNS Infrastructure and Services
Maturity	Additional R&D Activities in development

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

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, CNS, SWIM, AIS, MET, AMC	TWR, APP, ENR, CNS, AIS, MET, SWIM, AMC	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.14-04-01	Surveillance Performance Monitoring	Surveillance Performance Monitoring notably for new surveillance systems wide area...	SOL PJ OI DS EOC
PJ.14-W2-83	Surveillance Performance Monitoring	This key R&D activity aims at enabling an improved performance monitoring of surveillance...	PJ DS EOC

Operational Improvement Steps			
OI Step Code	OI Step Title	OI Step Description	Related Elements
CNS-0003-B	Rationalisation of SUR systems/infrastructure for Step2	Implement new SUR functionalities and/or technologies for CNS systems supporting cost efficiency,...	SOL EN DS
POI-0005-CNS	Performance Based Surveillance Monitoring	This OI will enable monitoring of surveillance data performances, which is in line with a...	SOL EN DS

Enablers						
Required/Optional	New/Inherited	Develop/Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			CTE-S02	Primary SUR sensor	Independent Non Cooperative Surveillance sensors	STK OI DS ⚙️
🔒			CTE-S02c	Multi Static Primary Surveillance Radar	Independent Non Cooperative Surveillance using Multi Static Primary Surveillance Radar for TMA.	STK OI EN DS ⚙️
🔒			CTE-S02d	Video Based Surveillance	The camera sensor (visual or infrared) provides 25 frames per second of video data. Video Based...	STK OI EN DS ⚙️
🔒			CTE-S03	ADS-B Receiving Station	ADS-B Receiving station for the provision of NRA, RAD and APT surveillance including Satellite...	STK OI EN DS ⚙️
🔒			CTE-S03a	ADS-B station for NRA surveillance	ADS-B station for provision of Non Radar Airspace Surveillance, compliant with EUROCAE ED-129...	STK OI EN DS ⚙️
🔒			CTE-S03b	ADS-B station for RAD and APT surveillance	ADS-B station for provision of Radar and Airport surveillance, compliant with EUROCAE ED129A and ...	STK OI EN OBJ DS ⚙️
🔒			STD-027	ED-129B Technical Specification for a 1090 MHz Extended Squitter ADS-B Ground Station (RAD & APT applications)	EUROCAE	OI EN DS
🔒			CTE-S03c	New ADS-B station for future ADS-B applications	ADS-B station for provision future ADSB applications, receiving ED102A+ Phase overlay squitter...	STK OI EN DS ⚙️
🔒			CTE-S03d	Satellite based ADS-B technology	ADS-B Satellite based stations for the provision of surveillance in low density airspace.	STK OI EN DS ⚙️
🔒			CTE-S04	Multilateration ground System	Multilateration Ground system for the provision of En-route, TMA and Airport surveillance,...	STK OI DS ⚙️
🔒			CTE-S04a	Wide Area Multilateration (WAM)	Wide Area Multilateration technology for the provision of independent cooperative surveillance in...	STK OI EN DS ⚙️
🔒			CTE-S04b	Airport Multilateration (MLAT)	Multilateration technology for the provision of independent cooperative surveillance in Airports.	STK OI EN OBJ DS ⚙️
🔒			CTE-S06	Composite Surveillance	Composite surveillance encompasses the different combinations of data at surveillance sensor...	STK OI EN DS
🔒			CTE-S02c	Multi Static Primary Surveillance Radar	Independent Non Cooperative Surveillance using Multi Static Primary Surveillance Radar for TMA.	STK OI EN DS ⚙️

Enablers						
Required/Optional	New/Inherited	Develop/Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			CTE-S02d	Video Based Surveillance	The camera sensor (visual or infrared) provides 25 frames per second of video data. Video Based...	STK OI EN DS ⚙️
🔒			CTE-S03a	ADS-B station for NRA surveillance	ADS-B station for provision of Non Radar Airspace Surveillance, compliant with EUROCAE ED-129...	STK OI EN DS ⚙️
🔒			CTE-S03c	New ADS-B station for future ADS-B applications	ADS-B station for provision future ADSB applications, receiving ED102A+ Phase overlay squitter...	STK OI EN DS ⚙️
🔒			CTE-S04a	Wide Area Multilateration (WAM)	Wide Area Multilateration technology for the provision of independent cooperative surveillance in...	STK OI EN DS ⚙️
🔒			CTE-S04b	Airport Multilateration (MLAT)	Multilateration technology for the provision of independent cooperative surveillance in Airports.	STK OI EN OBJ DS ⚙️
🔒			CTE-S07	Surveillance Performance Monitoring Tools	Surveillance Performance Monitoring Tools are enablers of an harmonised performance monitoring of...	STK OI EN DS
🔒			CTE-S07a	Coop sensor SPM Tool ¿ ER & TMA	Surveillance Performance Monitoring Tools, seeking to identify surveillance degradation trends...	STK OI EN DS
🔒			CTE-S07b	Coop sensor SPM Tool ¿ Surface	Surveillance Performance Monitoring Tools, seeking to identify surveillance degradation trends...	STK OI EN DS
🔒			CTE-S07d	Non-Coop sensor SPM Tool ¿ Surface	Surveillance Performance Monitoring Tools, seeking to identify surveillance degradation trends...	STK OI EN DS
🔒			CTE-S07e	SUR Chain SPM Tool ¿ ER & TMA	Surveillance Performance Monitoring Tools, seeking to identify surveillance degradation trends...	STK OI DS
🔒			STD-027	ED-129B Technical Specification for a 1090 MHz Extended Squitter ADS-B Ground Station (RAD & APT applications)	EUROCAE	OI EN DS
🔒			STD-070	ED-142a Technical Specification for Wide Area Multilateration (WAM) Systems	Technical Specifications for ground components of the ADS-B / WAM system solutions. ADS-B + WAM...	OI EN DS