

<b>Deployment Scenario Title</b>	<b>Airport safety nets vehicle</b>
<b>Deployment Scenario Description</b>	Airport safety nets vehicle: this addresses operational requirements and technical specifications to detect the risk of collision between a vehicle and an aircraft and to prevent infringement on restricted or closed areas. The vehicle driver is provided with an appropriate alert, either generated by an on-board system or uplinked from the airport safety net by the controller.
<b>Essential Operational Change</b>	Airport and TMA performance
<b>Maturity</b>	In deployment phase: Key SESAR Solution



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, CNS	TWR, CNS	APT Operator	APT Operator	Scheduled, BA Fixed, FOC		

SESAR Solutions			
Solution Code	Solution Title	Solution Description	Related Elements
#04	Enhanced Traffic Situational Awareness and Airport Safety Nets for the vehicle drivers	Operational requirements and technical specifications to detect a risk of collision between a...	<span>SOL</span> <span>OI</span> <span>OBJ</span> <span>DS</span> <span>EOC</span> <span>ICAO</span>

Operational Improvement Steps			
OI Step Code	OI Step Title	OI Step Description	Related Elements
AO-0105	Airport Safety Net for Vehicle Drivers	The System detects potential and actual risk of collision with aircraft and infringement of...	<span>SOL</span> <span>OI</span> <span>EN</span> <span>OBJ</span> <span>DS</span> <span>ICAO</span> 
AO-0204	Airport Vehicle Driver's Traffic Situational Awareness	Information regarding the surrounding traffic (incl. Both aircraft and airport vehicles) during...	<span>SOL</span> <span>OI</span> <span>EN</span> <span>OBJ</span> <span>DS</span> <span>ICAO</span> 

Enablers						
Required/ Optional	New/ Inherited	Develop/ Use	Enabler Code	Enabler Title	Enabler Description	Related Elements
🔒			AERODROME-ATC-21	A-SMGCS extended with dedicated processing to provide alerts for vehicles	A-SMGCS is extended with dedicated processing to trigger and uplink alerts to vehicles in case of...	STK OI EN DS
🔒			AIRPORT-30	Use of airport wireless communication infrastructure for mobile data'	Use of wireless communications infrastructure to handle the data traffic between mobile and fixed...	STK OI EN DS
🔒			AIRPORT-45	On-board vehicle system to provide safety net alerts to vehicle drivers	On-board vehicle system to display safety net alerts. Depending of the type of alert, it should...	STK OI EN DS
🔒			AIRPORT-46	On-board vehicle safety net alerts generation	On-board vehicle safety net alerts generation.	STK OI EN DS
🔒			AIRPORT-47	Surface Traffic Situational Awareness to process and display in an 'On-board Vehicle System' the own position and surrounding traffic.	This enabler ensures that the surrounding traffic and own position are displayed on-board to...	STK OI EN DS
➔			CTE-C02d	New Airport Datalink technology (AEROMACS)	New wireless technology for the Airport Datalink AEROMACS over ATN/OSI and ATN/IPS, based on IEEE...	STK OI EN DS ⚙️
➔			CTE-C02f	Future Satcom for ATM: SATCOM Class B in Multilink	A new satellite A/G datalink to provide service redundancy to the existing terrestrial datalink...	STK OI EN DS ⚙️
➔			CTE-C02h	Future Satcom for ATM - Long term Satcom/IRIS ( class A Satcom)	A new satellite A-G datalink to provide service redundancy to the new terrestrial datalink.	STK OI DS ⚙️
➔			CTE-C04	Future Communication Infrastructure - ATN/IPS and Multilink	Evolution of the Ground part of A/G infrastructure to support multi-link (IP Router)	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-S03f	New ADS-B receiver for vehicles	ADS-B in receiver	STK OI EN DS ⚙️
➔			PRO-137	Airport Operations Procedures for vehicle drivers for systematic, standard response to safety alerts	Airport Operations Procedures-safety alerts	STK OI
➔			REG-0200	Safety Targets in Relation to Reductions of Runway Incursions	Formal requirements for safety targets in relation to reductions of runway incursions to be met...	OI