

Deployment Scenarios

This view presents Deployment Scenarios for changes that are in the pipeline towards deployment and that are associated with Essential Operational Changes.

These Deployment Scenarios are based on mature Solutions proposed for deployment, and Solutions approaching maturity. For each Deployment Scenario, the operating environment(s) in which performance gains can be realised is indicated. A rollout time is also provided: the timescales for start of deployment and end of deployment is shown in blue, and timescales for start of benefits at a given place/site, up to reaching of full benefit is shown in purple.

The contribution to performance is indicated on the right hand side of the table. When the contribution is positive, then it is shown in dark green. When it is shown in light green, then the contribution to performance has not yet been evaluated. The categories for the contribution to performance are:

CAP: Capacity, SAF: Safety, ENV: Environment, CEF: Cost-efficiency, OEF: Operational-efficiency

Essential Operational Change	Deployment Scenario	Operating Environments	Start of Deployment	IOC	FOC	Contribution to Performance	Related Elements
CNS Infrastructure and Services	Alternative position, navigation and timing (A-PNT)- short term	Airport TMA En-Route Network	31-10-2019	01-01-2022	31-12-2030	CAP SAF	STK SOL OI
	CNS rationalisation	Airport TMA En-Route Network	31-12-2010	01-01-2026	31-12-2035	CEF	STK SOL OI EN
	Enhanced airborne collision avoidance for commercial air transport normal operations (ACAS Xa)	Airport TMA En-Route	01-01-2026	01-01-2026	31-12-2035	SAF	STK SOL OI EN
ATM Interconnected Network	Airport integration into the network	Airport Network	31-12-2010	31-12-2017	31-12-2027	CEF OEF	STK SOL OI EN
	Collaborative airport (airport operations plan - network operations plan, phase 2)	Airport Network	01-01-2021	01-01-2023	31-12-2030	ENV OEF	STK SOL OI EN
	Enhanced ATFM slot swapping	Airport Network	31-12-2016	31-12-2017	31-12-2025	OEF	STK SOL OI EN
	SWIM TI (technical infrastructure) purple profile for air/ground advisory information sharing	Airport TMA En-Route Network	01-01-2021	01-01-2029	31-12-2034	SAF	STK SOL OI EN

Essential Operational Change	Deployment Scenario	Operating Environments	Start of Deployment	IOC	FOC	Contribution to Performance	Related Elements
Digital AIM and MET Services	Digitally enhanced briefing	Airport TMA En-Route Network	31-12-2010	01-01-2024	31-12-2030	SAF	EN STK SOL OI
	Improved aviation AIM and MET services through automation and digitalisation	Airport TMA En-Route Network	01-01-2022	01-01-2027	31-12-2032	CEF OEF	EN STK SOL OI
U-space services	U-space U1 — foundation services	Airport TMA En-Route	01-01-2019	01-01-2019	31-12-2022		EN SOL
	U-space U2 — initial services	Airport TMA En-Route	01-01-2019	01-01-2019	31-12-2027		EN SOL
Virtualisation of Service Provision	Remotely provided ATS for multiple aerodromes	Airport	30-06-2025	30-06-2027	31-12-2030	CAP CEF	EN STK SOL OI
	Virtual centre concept	TMA En-Route	01-01-2022	01-01-2024	31-12-2032	CAP CEF	EN STK SOL OI
Airport and TMA performance	Airport safety nets vehicle	Airport	01-01-2018	01-01-2023	31-12-2026	SAF	EN STK SOL OI
	Efficient aircraft separation during take-off and final approach	Airport TMA	31-08-2023	01-01-2026	31-12-2030	CAP SAF ENV CEF OEF	EN STK SOL OI
	Enhanced AMAN/DMAN integration	Airport TMA	01-01-2020	01-01-2022	31-12-2025	CAP CEF OEF	EN STK SOL OI
	Enhanced airport safety nets	Airport	29-04-2018	29-04-2021	29-04-2025	SAF	EN STK SOL OI
	Enhanced arrival procedures	Airport TMA	31-08-2023	31-08-2026	31-12-2030	CAP SAF ENV CEF OEF	EN STK SOL OI
	Enhanced visual operations	Airport TMA	30-09-2023	30-09-2023	30-09-2029	SAF ENV CEF OEF	EN STK SOL OI

Essential Operational Change	Deployment Scenario	Operating Environments	Start of Deployment	IOC	FOC	Contribution to Performance	Related Elements
	Integrated surface management	Airport	31-03-2020	31-03-2022	31-12-2027	SAF ENV CEF OEF	STK SOL OI EN
	Traffic alerts for pilots for airport operations	Airport	30-07-2019	30-07-2025	31-12-2030	SAF	STK SOL OI EN
	Traffic optimisation on single- and multiple-runway airports	Airport TMA	31-08-2024	31-08-2026	31-08-2030	CAP SAF ENV CEF OEF	STK SOL OI EN
Fully Dynamic and Optimised Airspace	High-productivity controller team organisation	TMA En-Route	30-09-2024	30-09-2026	30-09-2030	CEF	STK SOL OI EN
Trajectory Based Operations	Enhanced safety nets	TMA En-Route	31-12-2015	31-12-2017	31-12-2027	SAF	STK SOL OI EN
	eFPL supporting SBT transition to RBT	TMA En-Route Network	01-01-2021	01-01-2027	31-12-2030	CAP SAF CEF OEF	STK SOL OI EN
Multimodal Mobility and integration of all Airspace Users	Enhanced rotorcraft and GA operations in the TMA	Airport TMA	30-09-2019	30-09-2024	30-09-2027	ENV CEF OEF	STK SOL OI EN
	Independent rotorcraft operations at airports	Airport TMA	30-09-2019	30-09-2024	30-09-2027	ENV OEF	STK SOL OI EN
	Optimised low-level IFR routes for rotorcraft	Airport TMA	01-01-2019	01-01-2021	31-12-2026	SAF ENV CEF OEF	STK SOL OI EN