Annex V to RP4 performance plan

Deployment of Strategic Deployment Objectives (SDOs) set out in the ATM Master Plan

Strategic Deployment Objectives (SDOs)	Specific deployment action linked with the implementation of the SDO as defined in the ATM MP	Description of planned investment(s) related to the SDO including the relevant supporting SESAR solutions (if applicable)	Relevant investments (Ref. # as per section 2 of the performance plan)	RP4 determined costs related to the deployment of the SDOs (in nominal terms and in national currency)				
				2025	2026	2027	2028	2029
SDO #1 Alerts for reduction of collision risks on taxiways and runways								
			Total costs SDO - 1					
SDO #2 Optimising airport and TMA environmental footprint								
			Total costs SDO - 2					
SDO #3 Dynamic airspace configuration								
			Total costs SDO - 3					
SDO #4 Increased automation support	*Implement automatic speech recognition (ASR), user profile management system (UPMS) and attention guidance (AG) to provide higher automation environment to support ATCOs role.*	*Upgrade of obsolescent system*	*ATM System Backup*	**-**	**-**	**353 804**	**737 435**	**659 269**

			Total costs SDO - 4	**-**	**-**	**353 804**	**737 435**	**659 269**
SDO #5 Transformation to trajectory-based operations (TBO)								
			Total costs SDO - 5					
SDO #6 Virtualisation of operations	*Implement virtual centre to allow decoupling the ATM data service provider (ADSP) and air traffic service unit (ATSU) through service interfaces supporting new ways of dynamic ATS delegation (e.g. contingency delegation, night delegation (scheduled), fixed time delegation (scheduled), "on-demand").*	*Technical measures of cybersecurity related to SWIM services mainly in AIM and ATM*	*Information Systems and Network*	**1 465 410**	**1 711 994**	**2 251 815**	**2 395 964**	**3 644 798**
	Implement virtual centre to allow decoupling the ATM data service provider (ADSP) and air traffic service unit (ATSU) through service interfaces supporting new ways of dynamic ATS delegation (e.g. contingency delegation, night delegation (scheduled), fixed time delegation (scheduled), "on-demand").	*Voice communication switch system upgrade*	*Voice Communication System*	**1 181 036**	**2 874 445**	**2 490 789**	**3 577 758**	**2 810 847**
			Total costs SDO - 6	**2 646 445**	**4 586 439**	**4 742 605**	**5 973 722**	**6 455 644**
SDO #7 Transition towards high performance of air-ground connectivity (multilink)	*Implement future ground communications network infrastructure, which supports ATN/IPS multilink capability and complete mobility between different datalinks.*	*Technical measures of cybersecurity related to SWIM services mainly in AIM and ATM*	*Information Systems and Network*	**1 465 410**	**1 711 994**	**2 251 815**	**2 395 964**	**3 644 798**

			Total costs SDO - 7	**1 465 410**	**1 711 994**	**2 251 815**	**2 395 964**	**3 644 798**
SDO #8 Service-oriented delivery model (data driven and cloud based)								
			Total costs SDO - 8					
SDO #9 CNS optimisation, modernisation and resilience	*Optimise surveillance.*	*Spectrum saving enhancement of ADS-B / MLAT coverage and replacement of Mode S stations*	*SUR Systems*	**1 951 223**	**2 067 635**	**3 007 301**	**4 024 105**	**6 933 348**
	Implement minimum operational network (MON).	*DME/DME coverage enhancement supporting deployment of PBN and MON concept*	*Navigation Systems*	**1 404 025**	**1 635 659**	**2 037 205**	**3 048 012**	**3 749 752**
	Implement virtual centre to allow decoupling the ATM data service provider (ADSP) and air traffic service unit (ATSU) through service interfaces supporting new ways of dynamic ATS delegation (e.g. contingency delegation, night delegation (scheduled), fixed time delegation (scheduled), "on-demand").	*Voice communication switch system upgrade*	*Voice Communication System*	**1 181 036**	**2 874 445**	**2 490 789**	**3 577 758**	**2 810 847**
	Rationalise ILS and implement efficiency measures / methods for a more cost-effective maintenance of ILS, providing link between ICAO Doc. 8071 and national CNS provision	*Improvement of quality of the radio communication services by separation of the receivers from transmitters*	*Ancilliary Sites*	**-**	**-**	**1 903 118**	**1 915 363**	**1 755 688**
	Rationalise ILS and implement efficiency measures / methods for a more cost-effective maintenance of ILS, providing link between ICAO Doc. 8071 and national CNS provision	*Radio communication back-up systems upgrade*	*Radio Communication System*	**77 138**	**1 408 656**	**1 290 094**	**1 111 502**	**928 110**
	Implement GBAS based on single frequency signals to support Cat II/III precision approach, landing, and departure procedures in all-weather operations conditions.	*System upgrade*	*Instrument Flight Procedures Design System*	**-**	**49 368,00**	**55 539,00**	**150 161,00**	**151 189,50**
			Total costs SDO - 9	**4 613 422**	**8 035 763**	**10 784 046**	**13 826 901**	**16 328 934**

SDO #10 Enable innovative air mobility (IAM) & drone operations *** Investments related to U-space in this SDO are outside the scope of the performance plan ***								
			Total costs SDO - 10					

Total RP4 determined capital related and operating costs for project related to the deployment of SDOs across charging zones for the concerned entity (in nominal terms and in national currency)	**8 725 277**	**14 334 196**	**18 132 270**	**22 934 022**	**27 088 645**