IDENTIFICATION AND DEVELOPMENT OF CNS - COMMUNICATIONS PROJECTS

Operational Requirements	CNS Services	Identified projects components	Identified Tasks	To be completed	New Task	ASBU PIA	ASBU Module
G/G Coordination	**AFS**	**Ground/Ground coordination communication**	**Implementation of ATS/DS**	**x**		PIA2-Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration. PIA3-Increased effectiveness of ground based safety nets. PIA3- Air Traffic Situational Awareness(ATSA	B0-FICE B0-SNET B0-ASEP
			Implementation of VoIP		**x**	PIA2-Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration. PIA3-Increased effectiveness of ground based safety nets. PIA3- Air Traffic Situational Awareness(ATSA)	B0-FICE B0-SNET B0-ASEP
			Implementation of AIDC		**x**	PIA2 Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration PIA2 Service Improvement through	BO-FICE BO-DAIM

						Digital Aeronautical Information Management PIA 2Meteorological information supporting enhanced operational efficiency and safety PIA3. Improved Operations through Enhanced En-Route Trajectories PIA3 Improved Flow Performance through Planning based on a Network-Wide view PIA3. Air Traffic Situational Awareness(ATSA) PIA3 Increased Effectiveness of Ground-Based Safety Nets	BO-AMET B0-FRTO B0-NOPS B0- ASEP B0-SNET
Aeronautical Information and MET data flow	**AFS**	**Ground digital data dissemination**	**Implementation of AFTN**	**x**			
			AMHS (Domestic) **AMHS (Regional-AFI)** **AMHS (Inter Regional)**	**x**	**X** **X**	PIA1Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2) PIA1 Improved Airport Operations through Airport-CDM PIA2 Increased Interoperability,	B0-SURF B0-ACDM BO-FICE

						Efficiency and Capacity through Ground-Ground Integration PIA2 Service Improvement through Digital Aeronautical Information Management PIA2Meteorological information supporting enhanced operational efficiency and safety PIA3 Improved Operations through Enhanced En-Route Trajectories PIA3 Improved Flow Performance through Planning based on a Network-Wide view PIA3 Air Traffic Situational Awareness(ATSA) PIA3- Increased Effectiveness of Ground-Based Safety Nets	BO-DAIM BO-AMET B0-FRTO B0-NOPS B0- ASEP B0-SNET
			Deployment of AFI ATN backbone Infrastructure	**x**		PIA1 Improved Airport Operations through Airport-CDM PIA2 Increased Interoperability,	B0-ACDM BO-FICE

						Efficiency and Capacity through Ground-Ground Integration PIA2 Service Improvement through Digital Aeronautical Information Management PIA2Meteorological information supporting enhanced operational efficiency and safety PIA3 Improved Operations through Enhanced En-Route Trajectories PIA3 Improved Flow Performance through Planning based on a Network-Wide view PIA3 Air Traffic Situational Awareness(ATSA) Increased Effectiveness of Ground-Based Safety Nets	BO-DAIM BO-AMET B0-FRTO B0-NOPS B0- ASEP B0-CDO
			Reduction of missing operational messages (Flight plans, NOTAM, Met messages etc)	**x**		PIA2 Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration PIA2 Service	B0-FICE B0-DAIM

						Improvement through Digital Aeronautical Information Management	
						PIA2 Meteorological information supporting enhanced operational efficiency and safety	B0-AMET
						PIA3 Improved Flow Performance through Planning based on a Network-Wide view	0-NOPS
						PIA3 Air Traffic Situational Awareness(ATSA)	B0- ASEP
						PIA3 Increased Effectiveness of Ground-Based Safety Nets	B0-SNET
			Upgrade of current networks to handle bigger bandwidth	**x**		PIA2 Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	B0-FICE
						PIA2 Service Improvement through Digital Aeronautical Information Management	B0-DAIM
						PIA2 Meteorological information supporting enhanced operational	B0-AMET

						efficiency and safety PIA3 Improved Flow Performance through Planning based on a Network-Wide view PIA3 Air Traffic Situational Awareness(ATSA) PIA3 Increased Effectiveness of Ground-Based Safety Nets	 B0-NOPS B0- ASEP B0-SNET
Air/Ground Communication	**AMS**	**Improvement of Air/Ground voice communication**	**Implementation of VHF& HF(Voice) including coverage**	**x**		PIA1 Improve Traffic flow through Runway Sequencing (AMAN/DMAN) *PIA1 Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2) PIA2Meteorological information supporting enhanced operational efficiency and safety PIA2 Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration PIA3 Air Traffic	B0-RSEQ B0-SURF B0-AMET B0-FICE B0- ASEP

						Situational Awareness(ATSA)	
		Implementation ofAir/Ground digital communication	**Implementation of CPDLC (data)**	**x**		PIA3 Improved Operations through Enhanced En-Route Trajectories PIA2 Meteorological information supporting enhanced operational efficiency and safety PIA4 Improved Safety and Efficiency through the initial application of Data Link En-Route. PIA3Air Traffic Situational Awareness(ATSA)	B0-FRTO B0-AMET B0-TBO B0- ASEP
			Implementation of VDL (data)		**x**	PIA2 Service Improvement through Digital Aeronautical Information Management PIA1 Improve Traffic flow through Runway Sequencing (AMAN/DMAN) PIA1 Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)	B0-DAIM B0-RSEQ B0-SURF

						PIA2Meteorological information supporting enhanced operational efficiency and safety PIA3 Air Traffic Situational Awareness(ATSA	B0-AMET B0- ASEP
			Implementation of HF DL(data)		**x**	PIA 1Improve Traffic flow through runway Sequencing (AMAN/DMAN) PIA1 Increased Runway Throughput through optimized Wake Turbulence Separation. PIA1 Improved Airport Operations through Airport –CDM PIA2 Service improvement through Digital Aeronautical Information Management PIA 2 Meteorological information supporting enhanced operational efficiency and safety. PIA2 Increased interoperability efficiency and capacity through ground-ground integration.	B0-RSEQ B0-WAKE B0-ACDM B0-DIAM B0- MET BO-FICE

						PIA 3 Improved operations through Enhanced En-Route Trajectories.	BO-FRTO
						PIA3 Improved flow performance through planning based on Network-wide view.	B0- NOPS
						PIA3 Air Traffic Situational awareness (ATSA)	B0-ASEP
						PIA3 Improved access to optimum Flight levels through Climb/Descent Procedures using ADS-B.	B0-OPF
						PIA3 Increased effectiveness of ground – based safety Nets.	B0-102 SNET
						PIA4.Improved flexibility and Efficiency in Decent provides (CDO).	B0-CDO
						PIA4Improved safety and efficiency through the initial application of Data link En –Route	B0-TBO
						PIA4 Improved Flexibility and Efficiency Departure profiles-Continuous Climb Operations (CCO	B0-05 CCO

			Implementation of SSR Mode S DL(data)		**x**	PIA2 Service Improvement through Digital Aeronautical Information Management PIA1 Improve Traffic flow through Runway Sequencing (AMAN/DMAN) PIA1 Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2) * PIA2Meteorological information supporting enhanced operational efficiency and safety PIA3 Air Traffic Situational Awareness(ATSA)	B0-DAIM B0-RSEQ B0-SURF B0-AMET B0- ASEP
Maintain an acceptable QoS	**AMS/AFS**	**Identification of AFI Required Communication Performance (RCP)**	**Implementation of RCP**		**x**	PIA 1Improve Traffic flow through runway Sequencing (AMAN/DMAN) PIA1 Increased Runway Throughput through optimized Wake Turbulence Separation. PIA1 Improved Airport Operations through Airport –CDM	B0-RSEQ B0- WAKE B0 ACDM

						PIA2 Service improvement through Digital Aeronautical Information Management	B0-DIAM
						PIA 2 Meteorological information supporting enhanced operational efficiency and safety.	B0-MET
						PIA2 Increased interoperability efficiency and capacity through ground-ground integration.	BO-ICE
						PIA 3 Improved operations through Enhanced En-Route Trajectories.	BO-FRTO
						PIA3 Improved flow performance through planning based on Network-wide view.	B0-NOPS
						PIA3 Air Traffic Situational awareness (ATSA)	B0-ASEP
						PIA3 Improved access to optimum Flight levels through Climb/Descent Procedures using ADS-B.	B0-OPF
						PIA3 Increased effectiveness of ground –	B0-SNET

						based safety Nets. PIA4.Improved flexibility and Efficiency in Decent profiles(CDO). PIA4Improved safety and efficiency through the initial application of Data link En –Route PIA4 Improved Flexibility and Efficiency Departure profiles-Continuous Climb Operations (CCO	B0-CDO B0-TBO B0-CCO
