

APPENDIX 4.3.8D1
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	BO-FICE BO-DAIM

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

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

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

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

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

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

						PIA2 Meteorological information supporting enhanced operational efficiency and safety	B0-AMET
						PIA3 Air Traffic Situational Awareness(ATSA	B0- ASEP
			Implementation of HF DL(data)		x	PIA 1 Improve Traffic flow through runway Sequencing (AMAN/DMAN)	B0-RSEQ
				PIA1 Increased Runway Throughput through optimized Wake Turbulence Separation.		B0-WAKE	
				PIA1 Improved Airport Operations through Airport –CDM		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-FICE	

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

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

						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
--	--	--	--	--	--	---	------------------------------------
