## MID REGION ASBU Threads & Elements (Block 0 & 1) Monitoring Table

**Priority 1**: Elements that have the highest contribution to the improvement of air navigation safety, capacity and/or efficiency in the MID Region. These elements should be implemented where applicable and will be used for the purpose of regional air navigation monitoring and reporting.

**Priority 2**: Elements recommended for implementation based on identified operational needs and benefits.

**Priority 1 Thread**: Any thread with at least 1 priority 1 element.

	APTA	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
APTA B0/1	PBN Approaches (with basic capabilities)	All RWYs ENDs at International Aerodromes	Priority 1	Indicator: % of runways ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV)  Supporting metric: Number of runways ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV)		
APTA B0/2	PBN SID and STAR procedures (with basic capabilities)	All RWYs ENDs at International Aerodromes	Priority 1	Indicator: % of runway ends at international aerodromes provided with PBN SID and STAR (basic capabilities).  Supporting Metric: Number of runways ends at international aerodromes provided with PBN SIDs and STAR (basic capabilities).		
APTA B0/4	CDO (Basic)	OBBI, HESH, HEMA, HEGN, OIIE, OIKB, OIFM, OJAI, OJAQ, OKBK, OLBA, OOMS, OTHH, OEJN, OEMA, OEDF, OERK, HSSS, HSPN, OMAA, OMDB, OMDW,	Priority 1	Indicator: % of International Aerodromes/TMA with CDO implemented as required.  Supporting Metric: Number of International Aerodromes/TMAs with CDO implemented as required.		

	АРТА	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
APTA B0/5	CCO (Basic)	OMSJ OBBI, HESN, HESH, HEMA, HEGN, HELX, OIIE, OIKB, OIFM, ORER, ORNI, OJAM, OJAI, OJAQ, OKBK, OLBA, OOMS, OOSA, OTHH, OEJN, OEMA, OEDF, OERK, HSNN, HSOB, HSSS, HSPN, OMAA, OMDB, OMDW, OMSJ	Priority 1	Indicator: % of International Aerodromes/TMA with CCO implemented as required.  Supporting Metric: Number of International Aerodromes/TMAs with CCO implemented as required.		
АРТА ВО/7	Performance based aerodrome operating minima – Advanced aircraft	TBD	Priority 1	Indicator: % of International Aerodromes with PB AOM implemented for Advanced aircraft as required.  Supporting Metric: Number of International Aerodromes with PB AOM implemented for Advanced aircraft as required.		

	FRTO	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
FRTO B0/2	Airspace planning and Flexible Use of Airspace (FUA) Level 1 Strategic	All States	Priority 1	Indicator: % of States that have implemented FUA.  Supporting metric*: number of States that have implemented FUA.		
	Airspace planning and Flexible Use of Airspace (FUA) Level 2 Pre-tactical	All States	Priority 1	Indicator: % of States that have implemented FUA Level 1		

				Supporting metric*: number of States that have implemented FUA Level 1	
	Airspace planning and Flexible Use of Airspace (FUA) Level 3 Tactical	All States	Priority 1	Indicator: % of States that have implemented FUA Level 2  Supporting metric*: number of States that have implemented FUA Level 2	
FRTO B0/4	Basic conflict detection and conformance monitoring	In high traffic density areas	Priority 1	Indicator: % of States that have implemented conflict detection tools (Medium Term Conflict Detection Tool- MTCD) and conformance monitoring warnings.  Supporting metric*: number of States that have implemented conflict detection tools (Medium Term Conflict Detection Tool- MTCD) and conformance monitoring warnings.	

	NOPS	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
NOPS B0/1	Initial integration of collaborative airspace management with air traffic flow management	All States	Priority 1	Indicator: % of States integrating collaborative airspace management with air traffic flow management  Supporting metric: number of States that have integrated collaborative airspace management with air traffic flow management		

	DAIM	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
DAIM	Provision of quality-			Indicator: % of States provide for quality-		
B1/1	assured aeronautical data			assured aeronautical data and information		
	and information	All States	Priority 1			
				Supporting Metrics:		
				1- Number of States that have		

				implemented QMS for AIS/AIM  2- Number of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD) and have implemented WGS-84 Geoid Undulation  3- Number of States that have implemented an AIXM-based AIS database (AIXM V5.1+)  4- Number of States that have established formal arrangements with at least 50% of their AIS data originators
DAIM	Provision of digital terrain			Indicator: % of States that provide required
B1/3	data sets			Terrain digital datasets
		All States	Priority 1	
				Supporting Metric: Number of States that
				provide required Terrain digital datasets
DAIM	Provision of digital			Indicator: % of States that provide required
B1/4	obstacle data sets			Obstacle digital datasets
		All States	Priority 1	
				Supporting Metric: Number of States that
				provide required Obstacle digital datasets

	FICE	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
FICE B0/1	Automated basic inter facility data exchange (AIDC)	As per the AIDC/OLDI Applicability Table	Priority 1	Indicator: % of priority 1 AIDC/OLDI Interconnection have been implemented  Supporting metric: Number of AIDC/OLDI interconnections implemented between adjacent ACCs.	,	

	ASUR	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
ASUR BO/1	Automatic Dependent Surveillance – Broadcast (ADS-B)	TBD	Priority 1	Indicator: % of States that have implemented ADS-B to supplement surveillance coverage  Supporting Metric*: Number of applicable States that have implemented ADS-B		
ASUR BO/2	Multilateration cooperative surveillance systems (MLAT)	TBD	Priority 1	Indicator: % of States that have implemented Mulitlateration as required  Supporting Metric*: Number of applicable States that have implemented Mulitlateration		
ASUR BO/3	Cooperative Surveillance Radar Downlink of Aircraft Parameters (SSR- DAPS)	All States	Priority 1	Indicator: % of States that have enabled the downlink of the aircraft parameter (DAPS)  Supporting Metric*: Number of States enable ATM System to obtain DAPS from the cooperative surveillance radars		

	SNET	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
				Indicator: % of States that have implemented Short-term conflict alert (STCA)		
SNET BO/1	Short Term Conflict Alert (STCA)	All States	Priority 1	Supporting metric*: number of States that have implemented Short-term conflict alert (STCA)		
SNET BO/2	Minimum Safe Altitude Warning (MSAW)	All States	Priority 1	Indicator: % of States that have implemented Minimum safe altitude warning (MSAW)  Supporting metric*: number of States that have implemented Minimum safe altitude warning (MSAW)		
SNET B0/3	Area Proximity Warning (APW)	TBD	Priority 1	Indicator: % of States having implemented APW.		

		Supporting metric*: number of States having	
		implemented APW.	

	GADS	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
GADS				Indicator: % of States provided Point of Contact		
B1/2				information		
	Contact directory service	All states	Priority 1			
				<b>Supporting metric:</b> number of States that have		
				implemented directory service.		

	AMET	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
AMET B0/1	Meteorological observations products	All states	Priority 1	Indicator: % of States that provides the following Meteorological observations products, as required:  1. Automatic Weather Observation System (AWOS) information (including real-time exchange of wind and RVR data)  2. Local reports (MET REPORT / SPECIAL)  3. Aerodrome reports (METAR / SPECI)  4. Lightning information  5. Ground-based weather radar information  6. Meteorological satellite imagery  7. Aircraft meteorological report (ie. ADS-B, AIREP, AMDAR etc.)  8. Vertical wind and temperature profiles  9. Volcano Observatory Notice for Aviation (VONA)  10. Wind shear alerts  Supporting metric: number of States that provides the above Meteorological observations products, as required.		

AMET B0/2	Meteorological forecast and warning products	All states	Priority 1	Indicator: % of States that provides the following Meteorological forecast and warning products, as required.  1. World Area Forecast System (WAFS) gridded products  2. Significant Weather (SIGWX)  3. Low-level Area Forecast (GAMET)  4. Aerodrome Forecast (TAF)  5. Trend Forecast (TREND)  6. Take-off Forecast  7. Tropical Cyclone Advisory (TCA)  8. Volcanic Ash Advisory (VAA)  9. AIRMET  10. SIGMET  11. Aerodrome Warning  12. Wind Shear Warning  Supporting metric: number of States that provides the above Meteorological forecast and warning products, as required.	
AMET BO/3	Climatological and historical meteorological products	All states	Priority 1	Indicator: % of States that provides Climatological and historical meteorological products, as required.  Supporting metric: number of States that provide Climatological and historical meteorological products, as required.	
AMET B0/4	Dissemination of meteorological products	All states	Priority 1	Indicator: % of States that disseminating Meteorological products using a variety of formats and means (TAC, Gridded, Graphical, BUFR code, IWXXM)  Supporting metric: number of States that disseminating Meteorological products using the above formats and means.	

	ACAS	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
ACAS B1/1	ACAS Improvements Operational	All States	Priority 1	Indicator: % of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons  Supporting metric: Number of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons		

	COMI	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
COMI B0/7	ATS Message Handling System (AMHS)	All States	Priority 1	Indicator: % of States have implemented AMHS connections with all adjacent COM Centres as required  Supporting metric: Number of required AMHS interconnections established in the COM Centre		
COMI B1/1	Ground-Ground Aeronautical Telecommunication Network/Internet Protocol Suite (ATN/IPS)	All States	Priority 1	Indicator 1: % of States that established National IP Network for voice and data communication  Supporting metric: Number of States that established National IP Network for voice and data communication  Indicator 2: % of States that joined the MID IP Network  Supporting metric: Number of States that joined the MID IP Network		

NAV Applicability Priority	Performance Indicators/Supporting Metrics Targets Timeline
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NAVS BO/3	Aircraft Based Augmentation Systems (ABAS)			Indicator: % of States requiring aircrafts' equipage with the Aircraft Based Augmentation System (ABAS) to enable PBN Operations	
		All States	Priority 1	Supporting metric: Number of States requiring aircrafts' equipage with the Aircraft Based Augmentation System (ABAS) to enable PBN Operations	
NAVS B0/4	Navigation Minimal Operating Networks (Nav. MON)	All States	Priority 1	Indicator: % of States developed the plan of rationalized conventional navaids network to ensure the necessary levels of resilience for navigation	
			Friority 1	Supporting metric: Number of States developed the plan of rationalized conventional navaids network to ensure the necessary levels of resilience for navigation	

	SURF	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
SURF- B0/1	Basic ATCO tools to manage traffic during ground operations		Priority 1			
SURF- B0/2	Comprehensive situational awareness of surface operations		Priority 1			
SURF- B0/3	Initial ATCO alerting service for surface operations		Priority 1			

	ACDM	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
ACDM-	Airport CDM		Priority 1			
B0/1	Information Sharing					
	(ACIS)					

ACDM-	Integration with ATM	Priority 1		
B0/2	Network function			
ACDM-	Airport Operations Plan	Priority 1		
B1/1	(AOP)			

	RSEQ	Applicability	Priority	Performance Indicators/Supporting Metrics	Targets	Timelines
RSEQ-	Arrival Management	TBD	Priority 1			
B0/1						

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