Third Meeting of the Air Navigation System Implementation Group (ANSIG/3)

Cairo, Egypt, 3-5 July 2018

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Outline

➤ Brief on the [SUDAN] National ASBU Implementation Plan

➤ Overall Progress in ASBU Implementation

➤ Success Story(ies)/Initiatives

➤ Lessons Learned

➤ Challenges

➤ Recommendations

➤ Outlook 2020

Attachment A: Status of ASBU Implementation

[SUDAN] National ASBU Implementation Plan

➢ Provide brief on your State National ASBU Implementation Plan in accordance to national air navigation plan , priorities in ATM :-

✓ PBN plan imp. as infrastructure

✓ AIM road map imp.

➢ MET : (QMS, SADIS,SIGMET)(block o)

➢ Targets: To meet regional office priorities .AS far as possible.

Overall Progress in ASBU Implementation

➢ Provide brief progress on the ASBU Block 0 implementation in your State. Detailed status of implementation is to be provided through the Attachment (word file)

Outlook 2020
(Status of ASBU Block 0 Modules by 2020)

B0 – APTA: Optimization of Approach Procedures including vertical guidance				
Elements	**Applicability**	**Status**	**Action Plan/Timelines**	**Remarks**
States' PBN Implementation Plans	State	Implemented.	Since 2015	
LNAV	All RWYs Ends at International Aerodromes	Implemented in Khartoum A/P since Oct 2017	HSPN DEC 2018. HSOB DEC 2018. HSNN DEC 2018.	Waiting for approval process.
LNAV/VNAV	All RWYs Ends at International Aerodromes	Ongoing.	End of 2018.	Waiting for approval process.

B0-SURF: Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)				
Elements	**Applicability**	**Status**	**Action Plan/Timelines**	**Remarks**
A-SMGCS Level 1	As per the MID Air Navigation Strategy	Not implemented.	Not available	
A-SMGCS Level 2	As per the MID Air Navigation Strategy	Not implemented.	Not available	

B0 – ACDM: Improved Airport Operations through Airport-CDM

Elements	Applicability	Status	Action Plan/Timelines	Remarks
A-CDM	As per the MID Air Navigation Strategy	Not applicable.	Not available.	Khartoum A/p not req. in MID strategy

B0 – FICE: Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration

Elements	Applicability	Status	Action Plan/Timelines	Remarks
AMHS capability	State	Implemented since 2015	Implemented.	
AMHS Impl. /interconnection	State	Implemented with Jeddah since 2015 Ongoing with Cairo	Cairo DEC 2018	Waiting for connection with adjacent countries
Impl. of AIDC/OLDI between adjacent ACCs	ACC(s)	Available in the ATM system.	DEC 2018	AIDIC ready for implement with any adjacent country. OLDI ready waiting for system solution.

B0 – DATM: Service Improvement through Digital Aeronautical Information Management				
Elements	Applicability	Status	Action Plan/Timelines	Remarks
National AIM Roadmap	State	Ongoing.	Dec 2019	Remaining 5 steps: -Terrain -Obstacles -A/D mapping. -Electronic chart. -Communication network.
AIXM	State	Ongoing.	DEC 2018	Remaining connection with IFPD.
eAIP	State	Ongoing.	June 2018	Remaining connection with IFPD.
QMS	State	Implemented.	Since Oct 2015	ISO 9001/2008 ON Oct 2015.
WGS-84	ENR AD TMA GUND	Implemented.	Since 1998	
eTOD	Area 1 Terrain Area 1 Obstacle Area 4 Terrain Area 4 Obstacle	Ongoing.	Déc. 2018.	Have policy. Conduct three workshops on 14/15 Nov 2017.

B0 – AMET: Meteorological information supporting enhanced operational efficiency and safety				
Elements	**Applicability**	**Status**	**Action Plan/Timelines**	**Remarks**
SADIS 2G or Secure SADIS FTP	State	Available SADIS FTP	End of 2019 waiting for integration with TOPSKY system.	SCAA starts system upgrade.
QMS	State	Implemented	Since 2012	ISO 9001/2008
SIGMET	All MWOs in MID Region	Implemented.	Since 2015	

B0 – FRTO: Improved Operations through Enhanced En-Route Trajectories				
Elements	**Applicability**	**Status**	**Action Plan/Timelines**	**Remarks**
Flexible use of airspace (FUA)	State	Ongoing	End of 2018.	SCAA signed LOA with military authority it contains FUA.
Flexible routing	State	Ongoing.	End of 2019.	Will be implemented with Khartoum new structure.

B0 – NOPS: Improved Flow Performance through Planning based on a Network-Wide view				
Elements	**Applicability**	**Status**	**Action Plan/Timelines**	**Remarks**
ATFM Measures implemented in collaborative manner	State	Ongoing.	End of 2020	- Establish ATFM unit. Start training.

B0 – ACAS: ACAS Improvements				
Elements	**Applicability**	**Status**	**Action Plan/Timelines**	**Remarks**
State Regulation on carriage of ACAS (TCAS v7.1)	State	Implemented	Since July 2017	SUCAR (Sudan Civil Aviation Regulations)

B0 – SNET: Increased Effectiveness of Ground-based Safety Nets				
Elements	**Applicability**	**Status**	**Action Plan/Timelines**	**Remarks**
Short-Term Conflict Alert (STCA)	State	Implemented.	Since 2005	
Minimum Safe Altitude Warning (MSAW)	State	Implemented.	Since 2005	

B0 – CDO: Improved Flexibility and Efficiency in Descent Profiles (CDO)

Elements	Applicability	Status	Action Plan/Timelines	Remarks
PBN STARs	As per the MID Air Navigation Strategy	Implemented for Khartoum A/P	HSPN DEC 2018. HSOB DEC 2018. HSNN DEC 2018.	By DEC 2018 will be implemented for the other three international A/Ps
International aerodromes/TMAs with CDO	As per the MID Air Navigation Strategy	Ongoing.	Will be implemented at HSPN A/P by the end of 2018.	

B0 – CCO: Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)

Elements	Applicability	Status	Action Plan/Timelines	Remarks
PBN SIDs	As per the MID Air Navigation Strategy	Implemented for Khartoum A/P	HSPN DEC 2018. HSOB DEC 2018. HSNN DEC 2018.	By DEC 2018 will be implemented for the other three international A/Ps
International aerodromes/TMAs with CCO	As per the MID Air Navigation Strategy	Ongoing.	Will be implemented at HSPN A/P by the end of 2018.	

Module	Module Title	Status	Action Plan/Timelines	Remarks
B0-WAKE	**Increased Runway Throughput through Optimized Wake Turbulence Separation**	Not implemented	Not available.	Due to runway/taxiway configuration at Khartoum airport (R/W occupancy time) we apply more than specified minima.
B0-RSEQ	**Improve Traffic flow through Runway Sequencing (AMAN/DMAN)**	Not implemented	End of 2020	Implementation depends on traffic demand.
B0-ASUR	**Initial capability for ground surveillance**	Not applicable	Not applicable.	
B0-ASEP	**Air Traffic Situational Awareness (ATSA)**	Implemented	Since 2010	
B0-OPFL	**Improved access to optimum flight levels through climb/descent procedures using ADS-B**	Implemented.	Since 2014	SCAA has16ADS-B stations. 4 integrated with the system. 4 waiting for integration. 8 stations under installation.
B0-TBO	**Improved Safety and Efficiency through the initial application of Data Link En-Route**	Ongoing.	Jan 2020	Waiting for integration with ATM system (TOPSKY)

Challenges

➢ The High cost

Recommendations

➢ make use of the go team

➢ Increase the reg. office assistance by organizing more workshops and seminars'

Thank you