



Progress report on Air Navigation Priorities & Targets

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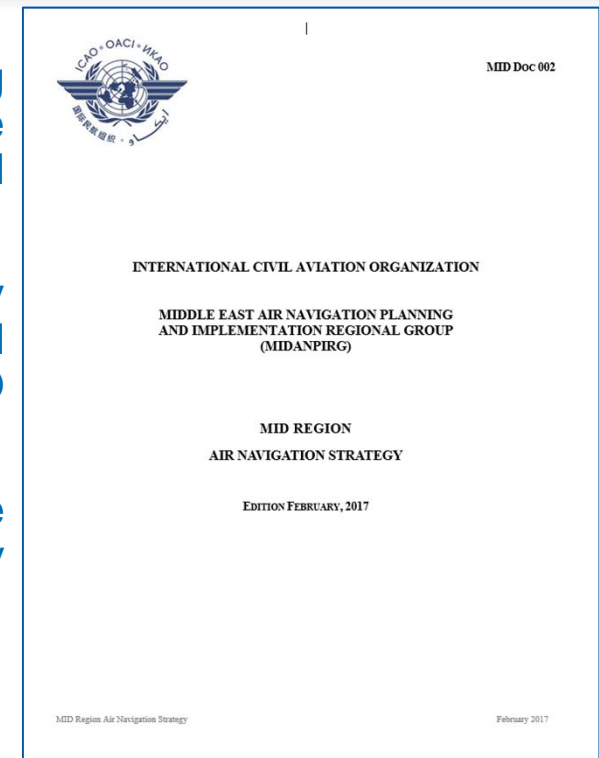
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DGCA-MID/4 – PPT/4
(Muscat, Oman, 17-19 October 2017)



Background

- The MID AN Strategy was endorsed by MSG/4 meeting (Cairo, 24-26 November 2014), based on the outcome of the relevant MIDANPIRG subsidiary bodies and inputs received from stakeholders.
- The Strategy was further reviewed and updated by MIDANPIRG/15 (Bahrain, 8-11 June 2015), and endorsed as ICAO MID Doc 002, which is available on the ICAO secure portal.
- Some additional amendments to the Strategy were approved by MIDANPIRG/16 (Kuwait, 13-16 February 2017).





The Strategy for the implementation of the ASBU Modules in the MID Region is in accordance with the GANP:

- **Near-term Objectives (2013 - 2018): ASBU Block 0**
- **Mid-term Objectives (2019 - 2024): ASBU Block 1**
- **Long-term Objectives (2025 - 2030): ASBU Block 2 and (2031 and onward): ASBU Block 3**



The MID Region Air Navigation Strategy includes 12 ASBU Block 0 Modules identified as priority for implementation in the MID Region

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

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

***Note.** States should develop their national performance framework, including action plans for the implementation of relevant priority 1 ASBU Modules and other modules according to the State operational requirements.*



Performance Improvement Areas (PIA)	Module	Priority	Module Name
PIA 1: Airport Operations	APTA	1	Optimization of Approach Procedures including vertical guidance
	WAKE	2	Increased Runway Throughput through Optimized Wake Turbulence Separation
	RSEQ	2	Improved Traffic Flow through Sequencing (AMAN/DMAN)
	SURF	1	Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)
	ACDM	1	Improved Airport Operations through Airport-CDM
PIA 2: Globally Interoperable Systems and Data - Through Globally Interoperable System Wide Information Management	FICE	1	Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration
	DATM	1	Service Improvement through Digital Aeronautical Information Management
	AMET	1	Meteorological information supporting enhanced operational efficiency and safety
PIA 3: Optimum Capacity and Flexible Flights – Through Global Collaborative ATM	FRTO	1	Improved Operations through Enhanced En-Route Trajectories
	NOPS	1	Improved Flow Performance through Planning based on a Network-Wide view
	ASUR	2	Initial Capability for Ground Surveillance
	ASEP	2	Air Traffic Situational Awareness (ATSA)
	OPFL	3	Improved access to Optimum Flight Levels through Climb/Descent Procedures using ADS-B
	ACAS	1	ACAS Improvements
	SNET	1	Increased Effectiveness of Ground-based Safety Nets
	CDO	1	Improved Flexibility and Efficiency in Descent Profiles (CDO)
PIA 4: Efficient Flight Path – Through Trajectory-based Operations	TBO	2	Improved Safety and Efficiency through the initial application of Data Link En-Route
	CCO	1	Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)



B0 – APTA: Optimization of Approach Procedures including vertical guidance			
Elements	Applicability	Performance Indicators/Supporting Metrics	Targets
States' PBN Implementation Plans	All	Indicator: % of States that provided updated PBN implementation Plan Supporting metric: Number of States that provided updated PBN implementation Plan	100% by Dec. 2018
LNAV	All RWYs Ends at International Aerodromes	Indicator: % of runway ends at international aerodromes with RNAV(GNSS) Approach Procedures (LNAV) Supporting metric: Number of runway ends at international aerodromes with RNAV (GNSS) Approach Procedures (LNAV)	All runway ends at Int'l Aerodromes, either as the primary approach or as a back-up for precision approaches by Dec. 2016
LNAV/VNAV	All RWYs ENDS at International Aerodromes	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)	All runway ends at Int'l Aerodromes, either as the primary approach or as a back-up for precision approaches by Dec. 2017



B0-SURF: Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)

Elements	Applicability	Performance Indicators/Supporting Metrics	Targets
A-SMGCS Level 1*	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEDF, OEJN, OERK, OMDB, OMAA, OMDW	Indicator: % of applicable international aerodromes having implemented A-SMGCS Level 1 Supporting Metric: Number of applicable international aerodromes having implemented A-SMGCS Level 1	70% by Dec. 2017
A-SMGCS Level 2*	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEJN, OERK, OMDB, OMAA, OMDW	Indicator: % of applicable international aerodromes having implemented A-SMGCS Level 2 Supporting Metric: Number of applicable international aerodromes having implemented A-SMGCS Level 2	50% by Dec. 2017

*Reference: Eurocontrol Document – “Definition of A-SMGCS Implementation Levels, Edition 1.2, 2010”



B0 – DATM: Service Improvement through Digital Aeronautical Information Management			
Elements	Applicability	Performance Indicators/Supporting Metrics	Targets
1- National AIM Implementation Plan/Roadmap	All States	Indicator: % of States that have National AIM Implementation Plan/Roadmap Supporting Metric: Number of States that have National AIM Implementation Plan/Roadmap	90% by Dec. 2018
2-AIXM	All States	Indicator: % of States that have implemented an AIXM-based AIS database Supporting Metric: Number of States that have implemented an AIXM-based AIS database	80% by Dec. 2018
3-eAIP	All States	Indicator: % of States that have implemented an IAID driven AIP Production (eAIP) Supporting Metric: Number of States that have implemented an IAID driven AIP Production (eAIP)	80% by Dec. 2020
4-QMS	All States	Indicator: % of States that have implemented QMS for AIS/AIM Supporting Metric: Number of States that have implemented QMS for AIS/AIM	90% by Dec. 2018
5-WGS-84	All States	Indicator: % of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD) Supporting Metric: Number of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD) Indicator: % of States that have implemented WGS-84 Geoid Undulation Supporting Metric: Number of States that have implemented WGS-84 Geoid Undulation	Horizontal: 100% by Dec. 2017 Vertical: 90% by Dec. 2018
6-eTOD	All States	Indicator: % of States that have implemented required Terrain datasets Supporting Metric: Number of States that have implemented required Terrain datasets Indicator: % of States that have implemented required Obstacle datasets Supporting Metric: Number of States that have implemented required Obstacle datasets	Area 1 Terrain: 70% by Dec. 2018 Area 1 Obstacles: 60% by Dec. 2018 Area 4 Terrain: 100% by Dec. 2018 Area 1 Obstacles: 100% by Dec. 2018
7-Digital NOTAM*	All States	Indicator: % of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM Supporting Metric: Number of States that have included the implementation of Digital NOTAM into their National Plan for the transition from AIS to AIM	90% by Dec. 2020



B0 – NOPS: Improved Flow Performance through Planning based on a Network-Wide view

Elements	Applicability	Performance Indicators/Supporting Metrics	Targets
ATFM Measures implemented in collaborative manner	All States	Indicator: % of States that have established a mechanism for the implementation of ATFM Measures based on collaborative decision Supporting metric: number of States that have established a mechanism for the implementation of ATFM Measures based on collaborative decision	100% by Dec. 2017



a) the MID Region Air Navigation Strategy:

- i. is endorsed as the framework identifying the regional air navigation priorities, performance indicators and targets; and*
- ii. be published as MID Doc 002*

b) MID States be urged to:

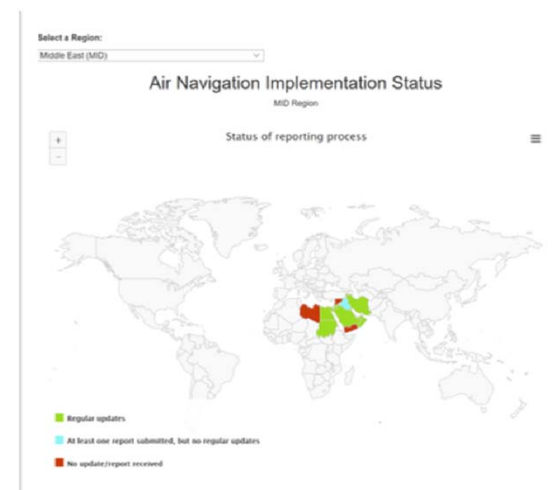
- i. develop their National ASBU implementation Plan, ensuring the alignment with and support to the MID Region Air Navigation Strategy; and*
- ii. provide the ICAO MID Office, with relevant data necessary for the development of the MID Region Air Navigation Report-2017, by **1 November 2017**.*



Monitoring mechanism - Tools

REGIONAL
AIR
NAVIGATION
PLAN
(eANP)
Volume III

- B0-APTA
- B0-CCO
- B0-CDO
- B0-SURF (A-SMGCS)
- B0-ACDM
- B0-FICE
- B0-DATM
- B0-AMET
- B0-FRTO
- B0-SNET
- B0-NOPS (TBD)



Data collection, processing, storage and reporting activities are fundamental to the success of performance-based approaches.



Monitoring Bodies

Module Code	Monitoring		Remarks
	Main	Supporting	
B0-APTA	PBN SG	ATM SG, AIM SG, CNS SG	
B0-SURF	ANSIG	CNS SG	Coordination with RGS WG
B0-ACDM	ANSIG	CNS SG, AIM SG, ATM SG	Coordination with RGS WG
B0-FICE	CNS SG	AIM SG, ATM SG	
B0-DATM	AIM SG		
B0-AMET	MET SG		
B0-FRTO	ATM SG		
B0-NOPS	ATM SG		
B0-ACAS	CNS SG		
B0-SNET	ATM SG		
B0-CDO	PBN SG		
B0-CCO	PBN SG		



Collection of Data

EXPLANATION OF THE TABLE

Column	
1	Name of the State / International aerodromes' Location Indicator
2	Runway Designator
3, 4, 5	Conventional Approaches (ILS / VOR or NDB)
6, 7, 8	APTA (Status of PBN Plan and implementation of LNAV, LNAV/VNAV), where: Y – Yes, implemented N – No, not implemented
9, 10	CCO (Status of implementation of RNAV SID, CCO), where: Y – Yes, implemented N – No, not implemented
11, 12	CDO (Status of implementation of RNAV STAR, CDO), where: Y – Yes, implemented N – No, not implemented
13	Remarks

State/Aerodrome Location Indicator	RWY	Conventional Approaches			APTA			CCO		CDO		Remarks
		Precision		VOR or NDB	PBN PLAN Update date	LNAV	LNAV / VNAV	RNAV SID	CCO	RNAV STAR	CDO	
		ILS	CAT									
1	2	3	4	5	6	7	8	9	10	11	12	13
EGYPT												
HEBA	14											
	32	ILS	I			Y		Y				
HESN	17			VORDME		Y		Y		Y		
	35	ILS	I	VORDME		Y		Y		Y		
HECA	05L	ILS	I	VORDME		Y						
	05C	ILS	II	VORDME		Y						
	05R	ILS	I									
	23L	ILS	I	VORDME								
	23C	ILS	II	VORDME		Y						
	23R	ILS	I	VORDME		Y						
HEGN	16			VORDME		Y		Y		Y		
	34	ILS	I	VORDME		Y		Y		Y		
HELX	2	ILS	I	VORDME		Y		Y		Y		
	20	ILS	I	VORDME		Y		Y		Y		
HEMA	15			VORDME								
	33			VORDME								
HESH	04L	ILS	I	VORDME		Y		Y		Y		
	04R			VORDME		Y		Y		Y		
	22L			VORDME		Y		Y		Y		
	22R			VORDME		Y		Y		Y		
Total	20	12		17	Y	15	2	11	0	10	0	
%		60		85	Jan. 2015	75	10	55	0	50	0	



- **Section 1:** Introduction
- **Section 2:** Status of implementation of the priority 1 ASBU Block 0 Modules.
- **Section 3:** ASBU Block 0 implementation outlook for 2020
- **Section 4:** Environmental protection (*status of State's CO2 action plans and the operational improvements that had been/would be implemented in the MID Region*).
- **Section 5:** Success stories related to the implementation of ASBU Block 0 Modules.
- **Section 6:** Conclusion

Appendix A provides detailed status of the implementation of Priority 1 Block 0 Modules and their associated Elements for the MID States.

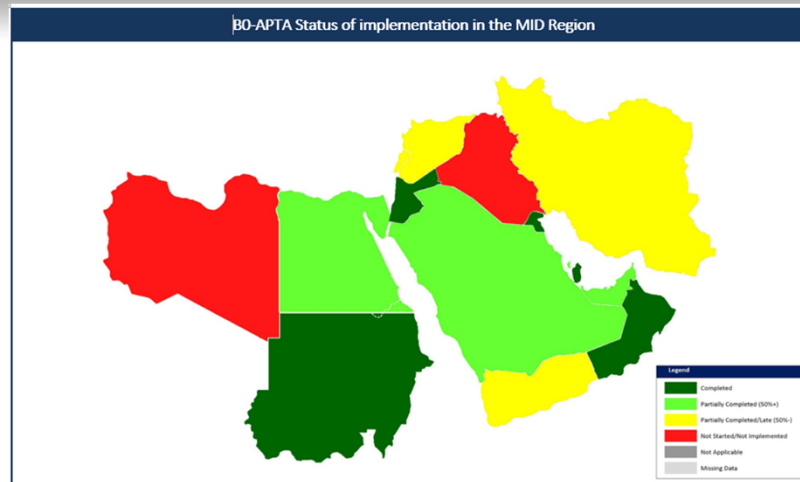
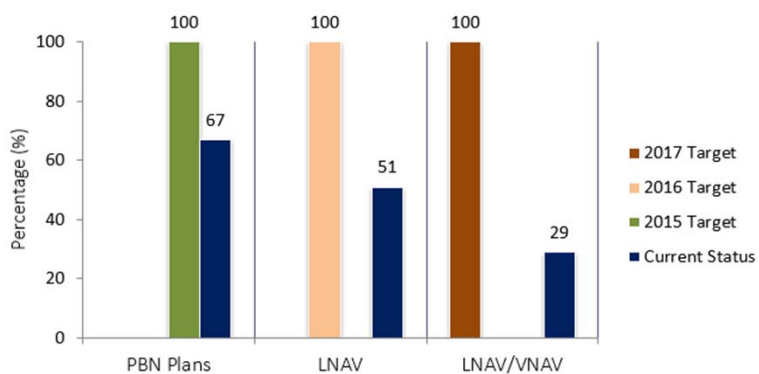
Appendix B illustrates the detailed status of implementation of ASBU Block 0 Modules in the MID States by 2020.





B0-APTA

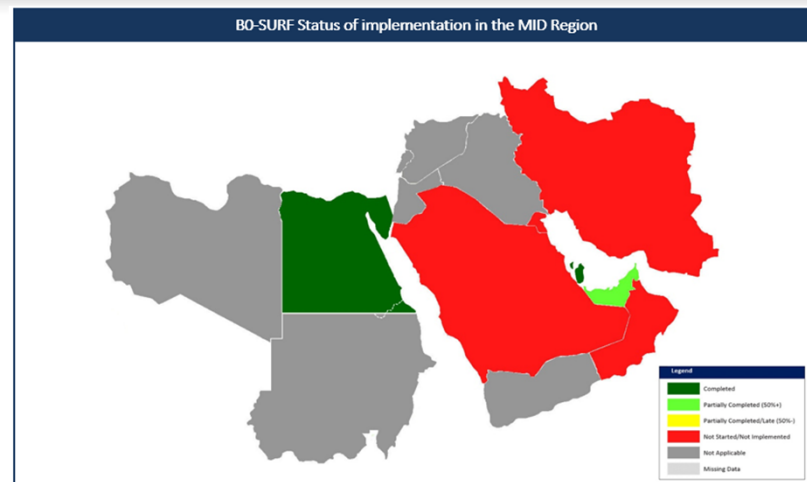
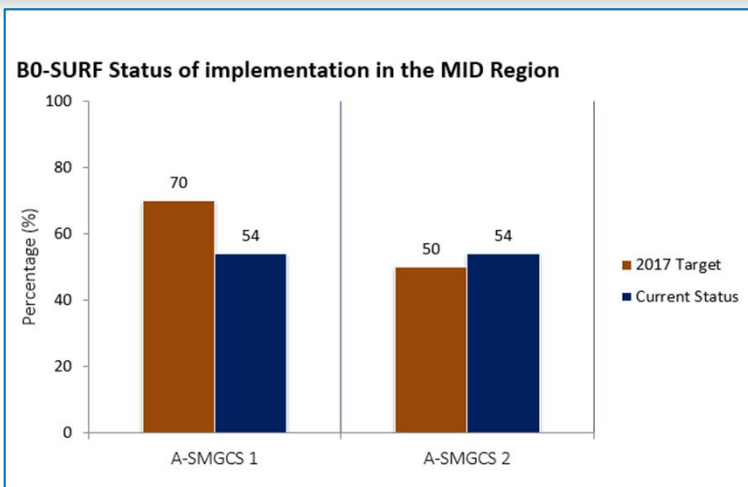
B0-APTA Status of implementation in the MID Region



Module	Elements	Country														
		Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
B0-APTA	PBN Plan	Completed	Completed	Completed	Not Started/Not Implemented	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed
	LNAV	Completed	Partially Completed (80%+)	Partially Completed (20%)	Partially Completed (20%)	Completed	Completed	Completed	Completed	Completed	Completed	Partially Completed (20%)	Completed	Partially Completed (20%)	Partially Completed (80%+)	Partially Completed (20%)
	LNAV/VNAV	Not Started/Not Implemented	Partially Completed (20%)	Partially Completed (20%)	Not Started/Not Implemented	Completed	Completed	Completed	Completed	Completed	Completed	Not Started/Not Implemented	Completed	Partially Completed (20%)	Partially Completed (80%+)	Partially Completed (20%)



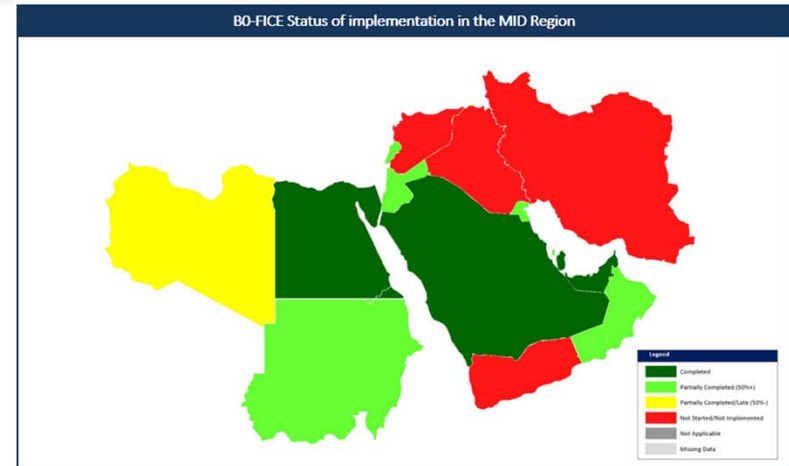
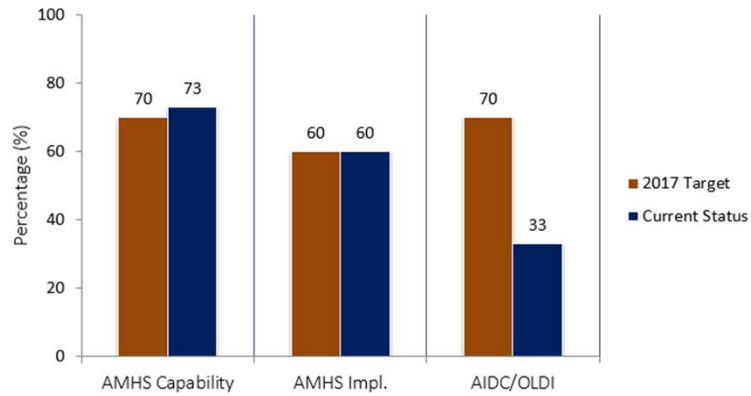
B0-SURF



Module	Elements	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
B0-SURF	A-SMGCS Level 1	Completed	Completed	Not Started/Not Implemented	Not Applicable	Not Applicable	Not Started/Not Implemented	Not Applicable	Not Applicable	Not Started/Not Implemented	Completed	Not Started/Not Implemented	Not Applicable	Not Applicable	Completed	Not Applicable
	A-SMGCS Level 2	Completed	Completed	Not Started/Not Implemented	Not Applicable	Not Applicable	Not Started/Not Implemented	Not Applicable	Not Applicable	Not Started/Not Implemented	Completed	Not Started/Not Implemented	Not Applicable	Not Applicable	Partially Completed (>20%)	Not Applicable



B0-FICE Status of implementation in the MID Region

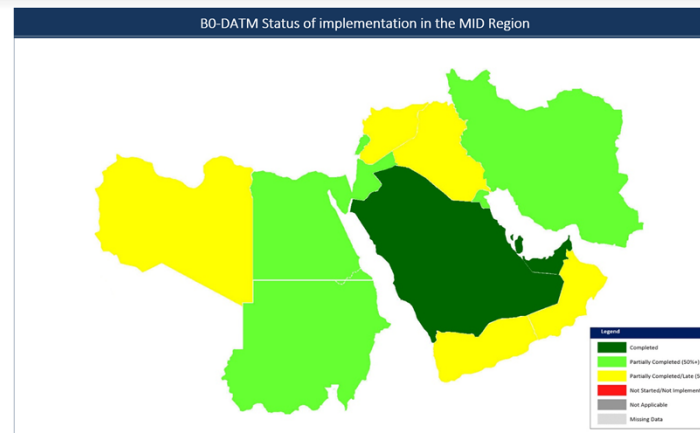
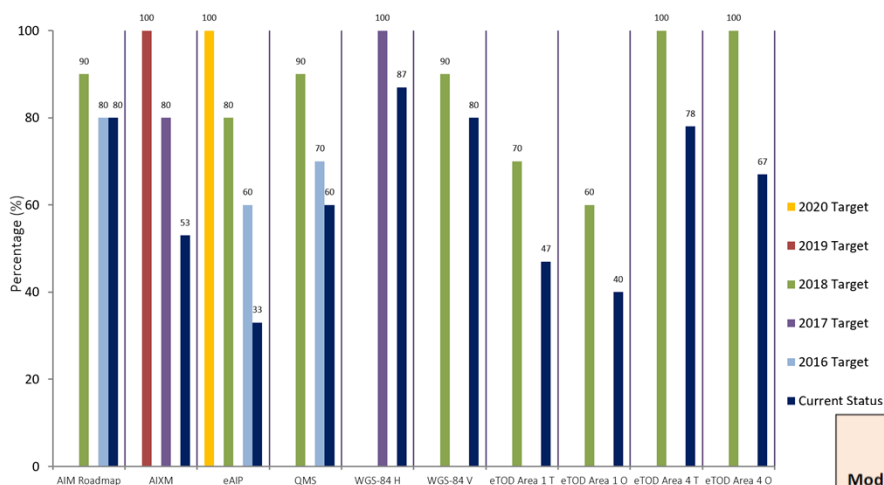


Module	Elements	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
B0-FICE	AMHS capability	Green	Green	Red	Red	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red
	AMHS impl. /interconnection	Green	Green	Red	Red	Green	Green	Red	Red	Green	Green	Green	Green	Red	Green	Red
	Implementation of AIDC/OLDI between adjacent ACCs	Red	Green	Red	Red	Red	Red	Green	Red	Red	Green	Green	Red	Red	Green	Red



B0-DATM

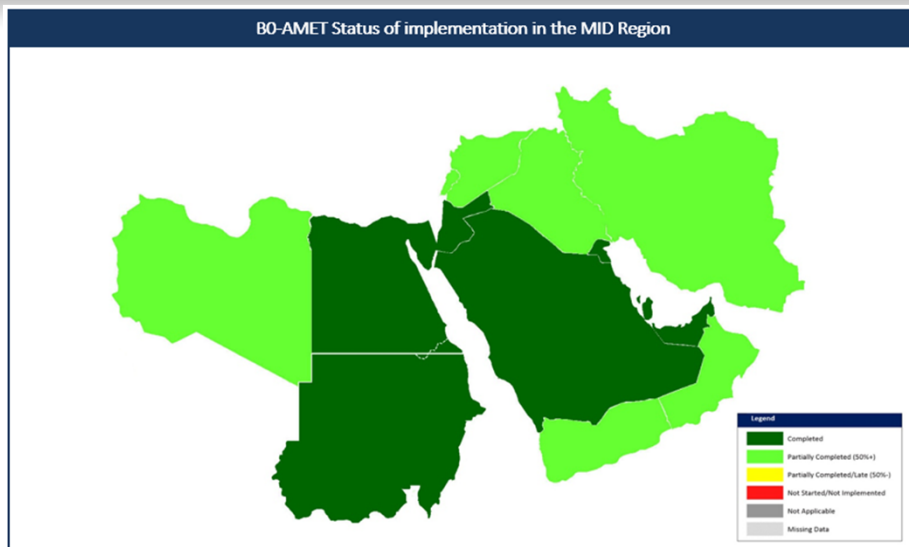
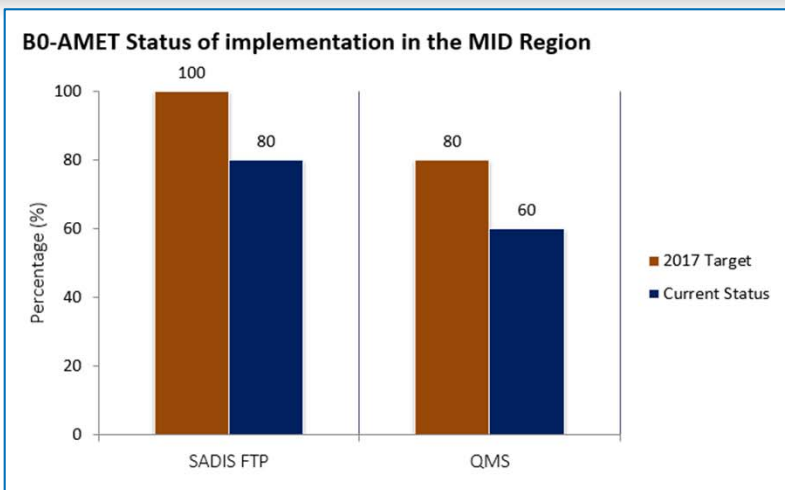
B0-DATM Status of implementation in the MID Region



Module	Elements	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
B0-DATM	National AIM Roadmap	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	AIXM	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	eAIP	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	QMS	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	WGS-84 - H	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green
	WGS-84 - V	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	eTOD Area 1 Terrain	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	eTOD Area 1 Obstacles	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	eTOD Area 4 Terrain	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
	eTOD Area 4 Obstacles	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green



B0-AMET



Module	Elements	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
B0-AMET	SADIS 2G/Secure SADIS FTP	Completed	Completed	Not Started/Not Implemented	Completed	Completed	Completed	Completed	Not Started/Not Implemented	Completed	Completed	Completed	Completed	Not Started/Not Implemented	Completed	Completed
	QMS	Completed	Completed	Completed	Not Started/Not Implemented	Completed	Completed	Completed	Not Started/Not Implemented	Not Started/Not Implemented	Completed	Completed	Completed	Not Started/Not Implemented	Completed	Not Started/Not Implemented



State	BO-APTA				BO-SURF		BO-ACDM	BO-FICE				BO-DATM							BO-AMET		BO-FRTO		BO-INOPS	BO-ACAS		BO-CDO		BO-CCO												
	PBN Plan	LNAV	LNAV/NAV	TOTAL	A-SMGCS 1	A-SMGCS 2	TOTAL	AIM/HS Cap	AIM/HS Imp.	AIDC/OLDI	TOTAL	AIM Plans	AIMM	eAIP	OMS	WGS-84 H	WGS-84 V	eTOD area 1 T	eTOD area 1 O	eTOD area 4 T	eTOD area 4 O	TOTAL	SADIS 2G/FTP	OMS	TOTAL	FUA	Flex Routing	TOTAL	TOTAL	TOTAL	PBN STARS	CDO	TOTAL	PBN SIDS	CCO	TOTAL				
Bahrain																																								
Egypt																																								
Iran																																								
Iraq																																								
Jordan																																								
Kuwait																																								
Lebanon																																								
Libya																																								
Oman																																								
Qatar																																								
Saudi Arabia																																								
Sudan																																								
Syria																																								
UAE																																								
Yemen																																								






TBD



Outlook for 2020

Module	Current Status of implementation (approximate rate)	Projected Status of implementation by 2020* (approximate rate)
B0-APTA	33%	96%
B0-WAKE	(Priority 2)	71%
B0-RSEQ	(Priority 2)	55%
B0-SURF	46%	67%
B0-ACDM	0%	50%
B0-FICE	55%	83%
B0-DATM	61%	87%
B0-AMET	70%	92%
B0-FRTO	14%	71%
B0-NOPS	(Priority 2)	46%
B0-ASUR	(Priority 2)	70%
B0-ASEP	(Priority 2)	69%
B0-OPFL	(Priority 2)	60%
B0-ACAS	73%	100%
B0-SNET	(Priority 2)	92%
B0-CDO	10%	67%
B0-TBO	(Priority 2)	44%
B0-CCO	19%	63%

Legend

-  Good (75%+)
-  Acceptable (50%-75%)
-  Slow (25%-50%)
-  Very Slow (25%-)
-  Missing Data

Note – projected status for 2020 is calculated based on information received from 12 States (out of 15).



Outlook for 2020

State	BO-APTA	BO-WAKE	BO-RSEQ	BO-SURF	BO-ACDM	BO-FICE	BO-DATM	BO-AMET	BO-FRTO	BO-NOPS	BO-ASUR	BO-ASEP	BO-OPFL	BO-ACAS	BO-SNET	BO-CDO	BO-TBO	BO-CCO
Bahrain	Green	Grey	Yellow	Green	Yellow	Green	Green	Green	Yellow	Yellow	Green	Yellow	Grey	Green	Green	Green	Yellow	Green
Egypt	Green	Green	Grey	Green	Yellow	Green	Green	Green	Green	Green	Green	Grey	Grey	Green	Green	Yellow	Grey	Yellow
Iran	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Iraq	Yellow	Grey	Grey	Grey	Red	Green	Green	Yellow	Yellow	Red	Red	Red	Grey	Green	Green	Red	Red	Red
Jordan	Green	Grey	Red	Red	Yellow	Yellow	Yellow	Green	Red	Red	Green	Grey	Grey	Green	Green	Yellow	Red	Yellow
Kuwait	Green	Yellow	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Green	Yellow	Yellow
Lebanon	Green	Grey	Red	Grey	Yellow	Yellow	Green	Yellow	Yellow	Red	Red	Green	Red	Green	Green	Yellow	Yellow	Red
Libya	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Oman	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Grey	Green	Green	Yellow	Grey	Yellow
Qatar	Green	Red	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Grey	Grey	Green	Green	Green	Yellow	Green
Saudi Arabia	Green	Grey	Yellow	Yellow	Yellow	Green	Green	Green	Green	Grey	Green	Green	Green	Green	Green	Green	Green	Green
Sudan	Green	Yellow	Green	Grey	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow
Syria	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
UAE	Green	Green	Yellow	Yellow	Yellow	Green	Green	Green	Green	Yellow	Green	Grey	Grey	Green	Green	Green	Yellow	Green
Yemen	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Green	Grey	Grey	Grey	Grey



Implemented Operational Improvements

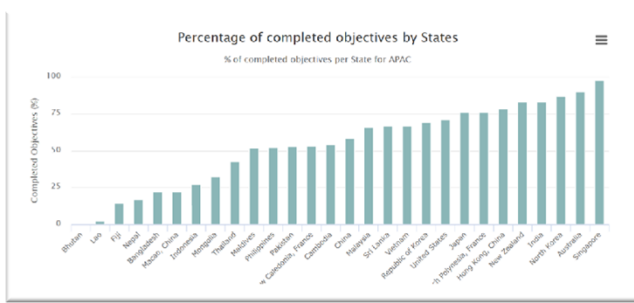
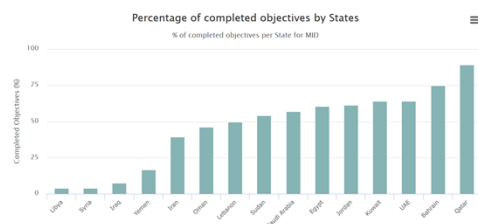
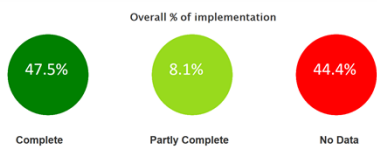
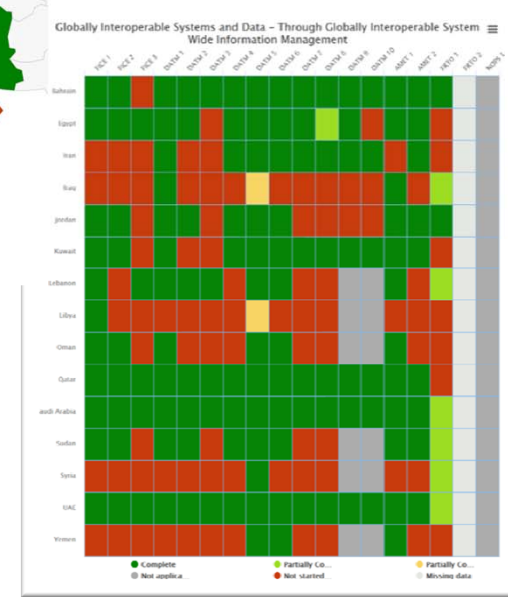
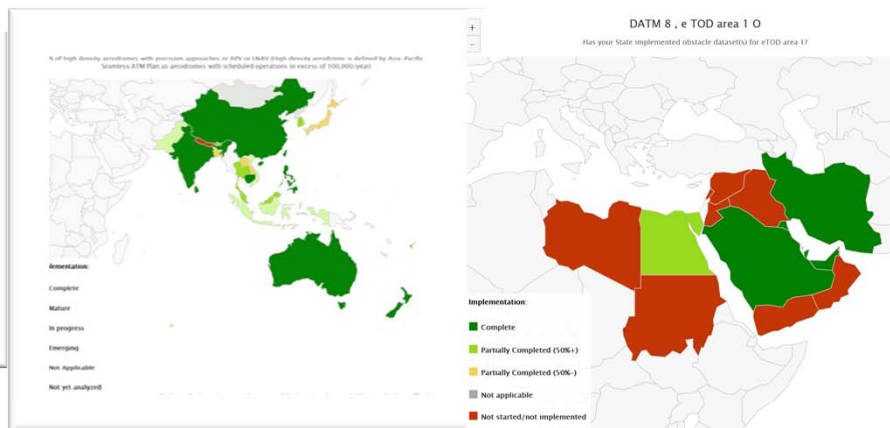
- Vast improvements in the regional ATS route network and the implementation of RNAV routes through close cooperation between neighboring States (Bahrain, Egypt, Iran, Iraq, Jordan, Libya and UAE)
- Establishment of new PBN SIDs and STARs (Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia and UAE)
- CCO/CDO implementation (Bahrain and Qatar)
- Implementation of LNAV/VNAV (Egypt, Iran, Jordan, Kuwait, Oman, Qatar, Jordan and UAE)
- Implementation of A-SMGCS (Bahrain, Egypt, Qatar and UAE)
- FUA implementation (Bahrain and Jordan)
- Implementation of Arrival Manager (AMAN) (Bahrain and UAE)
- Implementation of Departure Flow Manager (DFLOW) Web Interface (UAE)
- Improvement of airside structure including enhancing aprons, taxiways (rapid exit taxiways, etc.) (Bahrain)
- Implementation of Single-engine taxi operation (Bahrain, Qatar, UAE)
- Improving situational awareness using modernized aeronautical and MET information management systems (Bahrain, Qatar, Saudi Arabia and UAE)
- Modernization of CNS/ATM infrastructure and equipment (Oman, Qatar, Saudi Arabia, UAE)

Planned Operational Improvements

- Further improvements of the regional ATS route network and the implementation of RNAV1 routes
- Establishment of new PBN SIDs and STARs
- CCO/CDO implementation
- Implementation of LNAV/VNAV
- Implementation of A-SMGCS (Iran and Saudi Arabia)
- FUA implementation (Egypt, Iran, Jordan, Saudi Arabia, Sudan and UAE)
- Implementation of RNP AR approach (UAE)
- Further Modernization of CNS/ATM infrastructure and equipment (Iran, Kuwait, Saudi Arabia, Sudan)



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- Some States are still facing difficulties to develop a National ASBU Implementation Plan based on the GANP and regional strategy
- ICAO could support (National ASBU Implementation Workshop)
- Planning for ASBU Block 1 would start soon
- The progress for the implementation of some priority 1 Block 0 Modules in the MID Region has been acceptable/good; such as **B0-ACAS, B0-AMET and B0-DATM**. Nevertheless, some States are still facing challenges to implement the majority of the Block 0 Modules.
- The status of implementation of the ASBU Block 0 Modules also shows that Bahrain, Egypt, Jordan, Kuwait, Qatar, Saudi Arabia and UAE made a good progress in the implementation of the priority 1 ASBU Block 0 Modules
- Looking into the States' plans for 2020 (outlook), the focus/priority of States is to complete the implementation of **B0-APTA, B0-FICE, B0-DATM, B0-AMET, B0-CCO and B0-CDO**.



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