



# Third Meeting of the Aeronautical Information Management Sub-Group (AIM SG/3)

Cairo, Egypt, 15-18 May 2017

**Sultanate of Oman** 

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### **Outline**

- > Sultanate of Oman National AIM Implementation Roadmap
- > Status of B0-DATM Implementation
- Outlook 2020
- > Status of AIM Deficiencies
- > Lessons Learned
- Challenges
- > Recommendations





# **Sultanate of Oman National AIM Implementation Roadmap**

OMAN NATIONAL AIM IMPLEMENTATION ROADMAP TEMPLATE

Phase/Step	Step			Timeline			Start	End	Remarks
	No.	2014	2015	2016	2017	2018			
Phase I									
AIRAC adherence	P-03						-	-	Implemented since 2011
WGS-84 implementation	P-05						-	_	Implemented since 1999
QMS	P-17						2016	2017	On going
Phase II									
Data Quality Monitoring	P-01						-	-	Implemented
Data Integrity Monitoring	P-02						-	-	Implemented
AIXM	P-06						2016	2018	The target is to have 70%
Unique identifiers	P-07						2016	2018	part of the ORAT project
Aeronautical information conceptual model	P-08						2016	2018	part of the ORAT project
eAIP	P-11						2016	2018	
Terrain A-1	P-13						2016	2018	
Obstacle A-1	P-14						2016	2018	
Terrain A-4	P-13						2016	2017	
Obstacle A-4	P-14						2016	2017	
Terrain A-2	P-13						2016	2018	Area 2a, 2b will be available by end of 2017, 2c & 2d by 3Q 2018





# **Sultanate of Oman National AIM Implementation Roadmap**

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Obstacle A-2	P-14	AND THE REAL PROPERTY.											2016	2018	Area 2a, 2b will be available by end of 2017, 2c & 2d by 3Q 2018
Terrain A-3	P-13										9		2016	2017	
Obstacle A-3	P-14									1			2016	2017	
AD Mapping	P-15	AND DESCRIPTION OF THE PERSON											2017	2018	part of the ORAT project
Phase III	•			•		ų.	 •	,	·			Ţ,			
Aeronautical data exchange	P-09	And the control of th	THE REAL PROPERTY AND A THE RE	and the same of th				# 1					2017	2018	part of the ORAT project
Communication networks	P-10	100 - 1	100 cm		1 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					The same of the sa	# 100 H 100		2016	2017	part of the ORAT project
Aeronautical information briefing	P-12	The second secon	Description and the second sec								COTTO I TARREST MATERIAN MATERIAN		2016	2018	part of the ORAT project
Training	P-16					å E					AVIANTA I I I		2014	2017	part of the ORAT project
Agreement with data originators	P-18	West come come come											2016	2018	The target is to have 65% by 2Q of 2018
Interoperability with meteorological products	P-19	A CONTRACTOR CONTRACTO									# 1 1 101 1 1 101 1 1 101 1 1 101 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2016	2018	part of the ORAT project
Electronic aeronautical charts	P-20	No.							THE PERSON NAMED AND THE PERSO			2	2017	2018	
Digital NOTAM	P-21	7				i i							2018	2020	





## Status of B0-DATM Implementation

#### **Abbreviations used in Status Tables:**

NI: Not implemented

PI: Partially Implemented

FI: Fully Implemented

**NC: Not Compliant** 

PC: Partially Compliant

FC: Fully Compliant

N/A: Not Applicable

Note – NC/PC/FC is used for the provisions required by SARPS; NI/PI/FI are regionally agreed requirements



Provision of AIS/AIM p	Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID)							
Elements	Status	Action Plan	Remarks					
Integrated Aeronautical Information Database (IAID)	NI	December 2018	AIXM Database is installed					
AIXM 5.1	NI	The target to have 70% by December 2018	Waiting for the data migration (expecting in September 2017)					
eAIP (IAID-based)	NI	December 2018	Staff training completed, refresher course expecting in September 2017					
NOTAM (IAID-based)	NC	December 2018						
SNOWTAM (IAID- based)	NC	December 2018	refresher course expecting before end of 2017					
PIB (IAID-based)	NC	December 2018						
Charting (interoperable with IAID)	NC	December 2018	Charting Section has established, basic course has completed, expecting advance course this year.					
Procedure Design (interoperable with IAID)	NI	December 2018	Staff training completed, soon will have PANDA software					
ATS (interoperable with IAID)	NI	June 2019						





Aeronautical Data Quality									
Elements	Status	Action Plan	Remarks						
Quality Management System (QMS)	NC	December 2017	On going						
Formal agreement with originators	NC	The target is to have 65% by December 2018							
Digital data exchange with originators	NI	Expecting in December 2019							
Metadata	NC	December 2018							
Data quality monitoring	FC								
Data integrity monitoring	FC								
AIRAC adherence	FC								





WGS-84									
Elements	Status	Action Plan	Remarks						
FIR/ENR	FC								
Terminal	FC								
AD	FC								
Geoid Undulation (GUND)	FC								





electronic Terrain and Obstacle Datasets (eTOD)								
Elements	Status	Action Plan	Remarks					
Area 1 Terrain	NC	December 2018						
Area 1 Obstacles	NC	December 2018						
Area 4 Terrain	NC	December 2018	No cat 2 ops at Muscat INTL					
Area 4 Obstacles	NC	December 2018	No cat 2 ops at Muscat INTL					
Area 2a Terrain	NC	December 2018						
Area 2a Obstacles	NC	December 2018						
Area 2b Terrain	NI	December 2018						
Area 2b Obstacles	NI	December 2018						
Area 2c Terrain	NI	December 2018						
Area 2c Obstacles	NI	December 2018						
Area 2d Terrain	NI	December 2018						
Area 2d Obstacles	NI	December 2018						
Area 3 Terrain	NI	December 2018						
Area 3 Obstacles	NI	December 2018						
AMDB	NI	December 2018						



#### Outlook 2020



#### (Status of B0-DATM by 2020)

<b>B0 – DATM: Service Improvement through Digital Aeronautical Information Management</b>								
Elements	Elements Applicability		Action	Remarks				
			Plan/Timelines					
National AIM Roadmap	State	FI						
AIXM 5.1	State	NI	The target to have 70% by December 2018	The database is installed, waiting for data migration				
eAIP	State	NI	December 2018					
QMS	State	NC	To be completed by December 2017	On going				
WGS-84	ENR	FC						
	AD	FC						
	TMA	FC						
	GUND	FC						
eTOD	Area 1 Terrain	NC	December 2018					
	Area 1 Obstacle	NC						
	Area 4 Terrain	NC						
	Area 4 Obstacle	NC						





#### **Status of AIM Deficiencies**

AIM Deficiency	Status	Action Plan/Timelines	Remarks
Lack of implementation of QMS	on going	December 2017	Not completed
Lack of AIXM-based AIS Database	on going	The target is to have 70% of the data by June 2018	Not completed
Lack of the required Terrain Datasets for eTOD Area 1		December 2018	
Lack of the required Obstacle Datasets for eTOD Area 1		December 2018	





### **Lessons Learned**

- AIP data migration contract shall be part of the main contract when buying the system.
- The only compatible software for procedure design with Comsoft equipment is PANDA software.





# Challenges

➤ lack of staff.





### Recommendations

Installation of AIM equipment shall be prior to any theoretical training.





# Thank you