

# eAIP

## From Initiation to Implementation

**Aeronautical Information Management - AIMD**  
**Civil Aviation Authority - CAA**  
**Sultanate of Oman**

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caaomn

[www.caa.gov.om](http://www.caa.gov.om)

22JAN'25

- 1 Previous AIP publication process and limitations
- 2 ICAO and MIDANPIRG requirements
- 3 Going Digital - Implementation of eAIP
- 4 Journey
- 5 Learnings

# Flow of Discussion

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# Previous AIP Production

## Cons

Database was not owned by AIM

Distribution only through email and downloaded files.

AIP available only in Paper and PDF formats

## Pros

Fully Automated process by previous vendor

No risk of altering the integrity of data

Digital data error detection techniques

# ICAO Requirements

## Annex 15:

- 2.3.10 Globally interoperable aeronautical data and aeronautical information exchange models shall be used for the provision of data sets.
- 3.5.1 Automation shall be applied in order to ensure the quality, efficiency and cost-effectiveness of aeronautical information services.
- 3.5.3 In order to meet the data quality requirements, automation shall:
  - a) enable digital aeronautical data exchange between the parties involved in the data processing chain; and
  - b) use AIXM and data exchange models designed to be globally interoperable.

# MIDANPIRG – ASBU Priority 1 Threads/Elements

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
Information Threads							
DAIM							
DAIM	B1/1	Provision of quality-assured aeronautical data and information	1	2021	AIM SG	RANP/ NANP TF	
	B1/3	Provision of digital terrain data sets	1	2021	AIM SG	RANP/ NANP TF	
	B1/4	Provision of digital obstacle data sets	1	2021	AIM SG	RANP/ NANP TF	

# MIDANPIRG – ASBU Priority 1

## Threads/Elements

Element	Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI	
Information Threads							
DAIM							
DAIM B1/1	Provision of quality-assured aeronautical data and information	All States	Indicator*: Regional average implementation status of DAIM B1/1 (provision of quality-assured aeronautical data and information).  Supporting Metrics: 1. Number of States that have implemented an AIXM-based AIS database (AIXM V5.1+) 2. Number of States that have established formal arrangements with at least 50% of their AIS data originators.	(2023) 53%	80%	Dec 2024	N/A

# Introduction to the Journey

- 1 Collaboration with the vendor**
- 2 Team from AIM CAA-Oman visited The vendor-HQ in Nov'23**
- 3 Evaluated the Vendor Technical Capabilities & Approach for eAIP**

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# Contracting Vender



Based on the team evaluation, the Vendor was Contracted to handle Oman's eAIP.



Partnership aimed at ensuring a professional and compliant eAIP

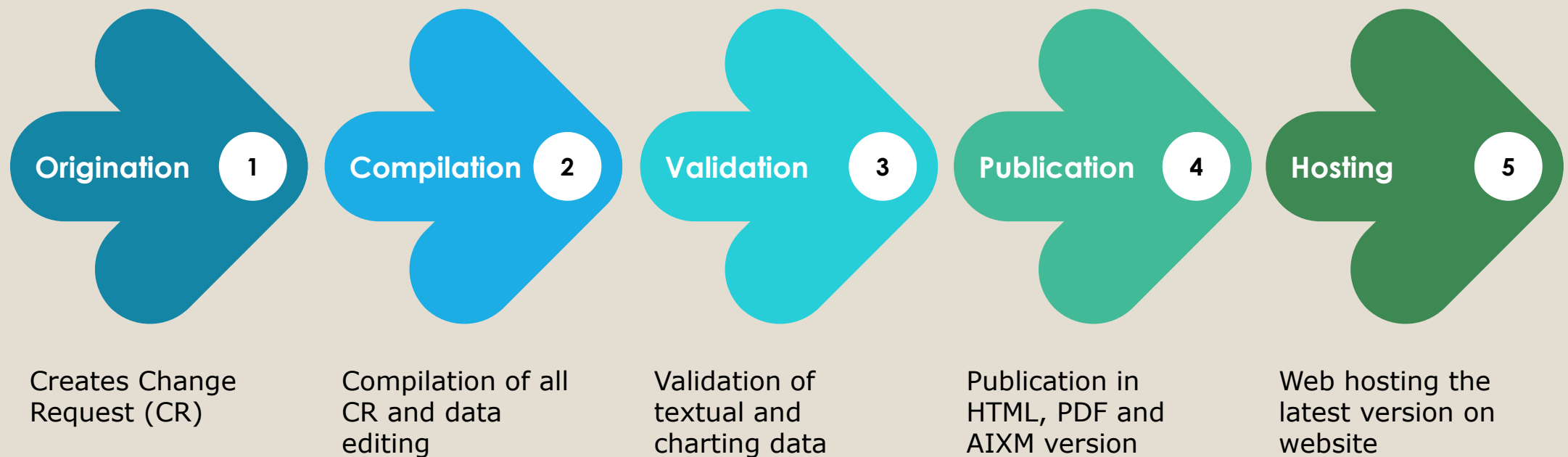


# Phase 1

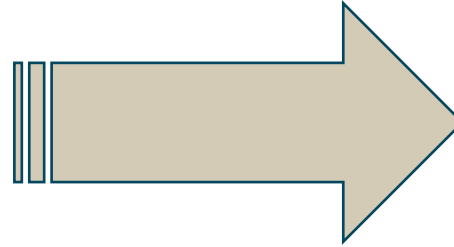
## **Migration / First Production**

- Data Migration and parsing into Database
- Role allocation (AIM team)
- Process Setup (during AIRAC Cycles)

# Process Setup for AIP Amendments



## Phase 1



## Phase 2

### **Migration / First Production**

- Data Migration and parsing into Database
- Role allocation (AIM team)
- Process Setup (during AIRAC Cycles)

### **Ongoing Publications**

- Eliminating Process Gaps
- Publications HTML, AIXM 5.1 & PDF

# Challenges & Solutions



**CHALLENGES IN  
AMENDING eAIP TO  
MEET STANDARDS**



**REGULAR REVIEWS  
AND AUDITS TO  
RECTIFY ERRORS**



**COLLABORATIVE  
EFFORT TO ELIMINATE  
DISCREPANCIES AND  
ENSURE QUALITY  
MEASURES ARE MET**

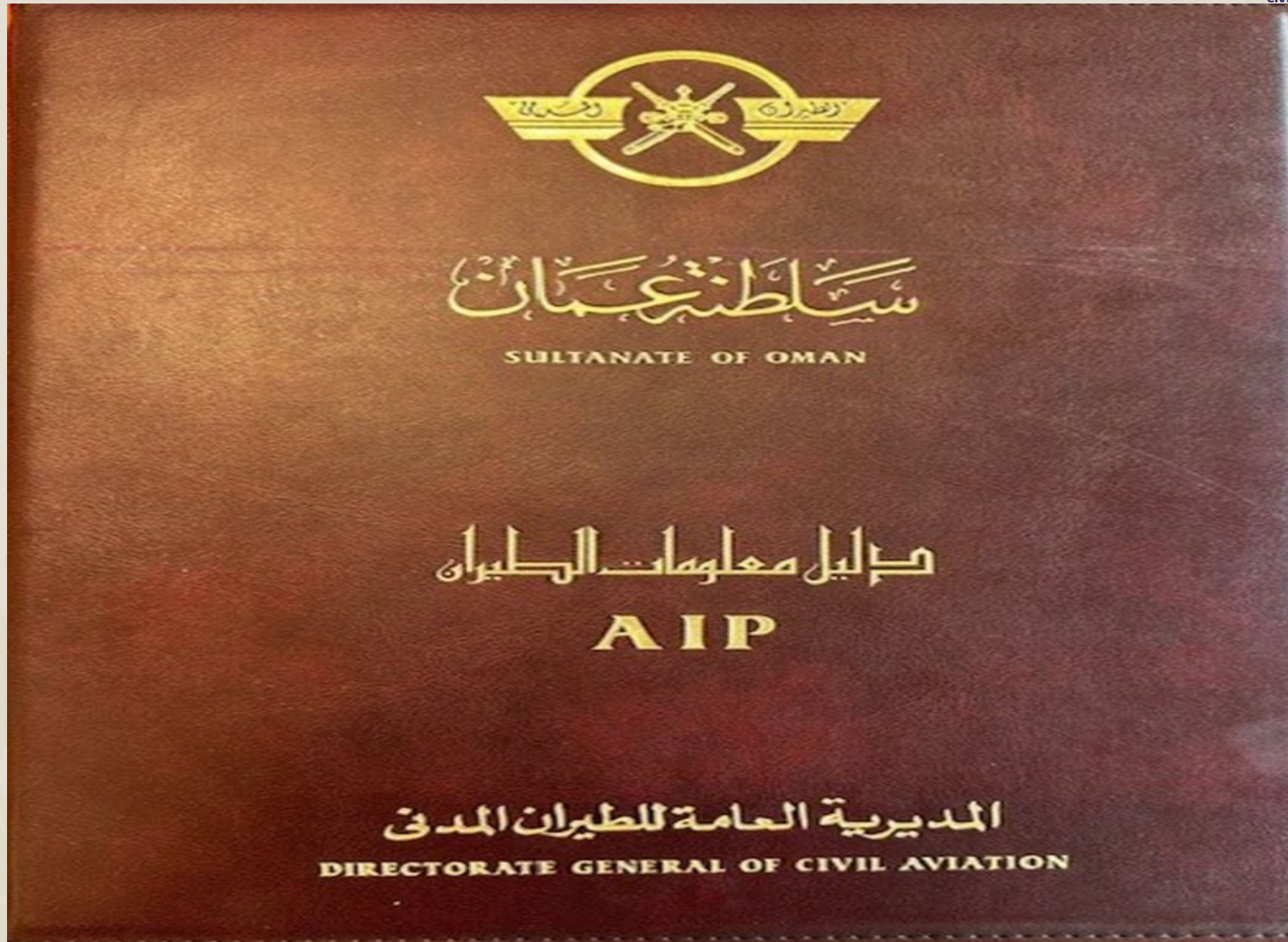


**ROOT CAUSE  
ANALYSIS  
(RCA)**

# Migration to Digital Format

- 1** Involved 271 pages and 126 Charts
- 2** Each page had approximately 700-1000 data points
- 3** Total Data points in these pages were 230350 (approx.)

# The Previous AIP





# Sample of the Previous AIP

**AIP  
OMAN**

**GEN 0.1-1  
21 APR 22**

## **PART 1 - GENERAL (GEN)**

### **GEN 0.**

#### **GEN 0.1 PREFACE**

##### **1. NAME OF THE PUBLISHING AUTHORITY**

The Oman Aeronautical Information Publication (AIP) is published by The Civil Aviation Authority (CAA).

Postal Address: Civil Aviation Authority  
(CAA)

Aeronautical Information  
Management Department (AIM)

P. O. Box 758  
POSTAL CODE 111  
MUSCAT  
Sultanate of Oman

AFS Address: OOMSYAYX

Telephone: (968) 24 354955

Email: [sdca@caa.gov.om](mailto:sdca@caa.gov.om)

##### **2. APPLICABLE ICAO DOCUMENTS**

This AIP has been prepared in accordance with the Standards and Recommended Practices (SARPs) of Annex 15 to the Chicago Convention and, in general, conforms to the guidance material in the Aeronautical Information Services Manual (ICAO Doc 8126 - AN/872). Charts contained in the AIP are produced in accordance with Annex 4 to the Chicago Convention and the Aeronautical Chart Manual (ICAO Doc 8697 - AN/889).

Differences from ICAO Standards, Recommended Practices and Procedures are given in Section GEN 1.7.

##### **3. THE AIP STRUCTURE AND ESTABLISHED REGULAR AMENDMENT INTERVAL**

###### **3.1 The AIP structure**

This AIP forms part of the Integrated Aeronautical Information Package, details of which are given at Section GEN 3.1. The principal AIP structure is shown in graphic form on page GEN 0.1-3.

The AIP is divided into three parts, General (GEN), En-route (ENR) and Aerodromes (AD), each divided into

##### *GEN 1. National regulations and requirements*

Designated Authorities; Entry, Transit and Departure of Aircraft; Entry, Transit and Departure of Passengers and Crew; Entry, Transit and Departure of Cargo; Aircraft Instruments, Equipment and Flight Documents; Summary of National Regulations; and Differences from ICAO Standards, Recommended Practices and Procedures.

##### *GEN 2. Tables and Codes*

Measuring System, Aircraft Marking, Holidays; Abbreviations; Chart Symbols; Location Indicators; List of Radio Navigation Aids; Conversion Tables; Sunrise-Sunset Tables.

##### *GEN 3. Services*

Aeronautical Information Services; Aeronautical Charts; Air Traffic Services; Communication Services; Meteorology; and Search and Rescue.

##### *GEN 4. Charges for aerodromes/heliports and air navigation services*

Aerodrome Charges; Air Navigation Services Charges; and Flight Safety Standards Fees.

##### **3.1.2 Part 2 - En-route (ENR)**

Part 2 consists of seven sections containing the information briefly described hereafter.

###### *ENR 0.*

Table of contents to Part 2.

###### *ENR 1. General Rules and Procedures*

General Rules; Visual Flight Rules; Instrument Flight Rules; ATS Airspace Classification; Holding, Approach and Departure Procedures; Radar Services and Procedures; Altimeter Setting Procedures; Regional Supplementary Procedures; Flight Planning; Addressing of Flight Plan Messages; Interception of Civil Aircraft; Unlawful Interference; and Air Traffic Incidents.

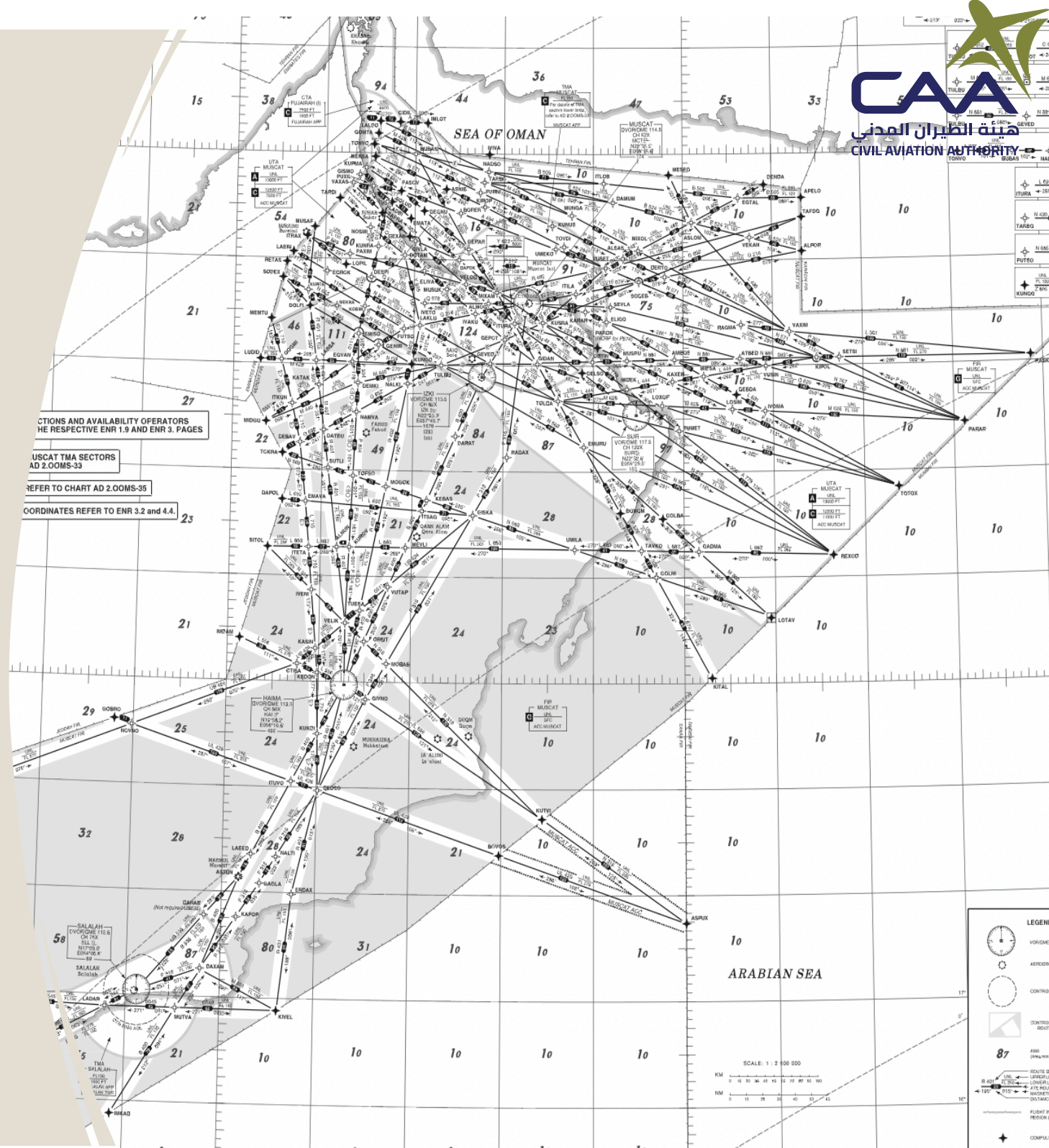
###### *ENR 2. Air traffic services airspace*

Detailed description of Flight Information Regions (FIR), Upper Flight Information Regions (UIR), Terminal Control Areas (TMA); and Other Regulated Airspace.

###### *ENR 3. ATS routes*

Detailed description of Conventional Navigation

# Sample of the previous Chart





eAIP  
Sultanate of Oman  
09<sup>th</sup> MAY'2024

**<https://aim.caa.gov.om>**



## Aeronautical Information Management



### Services

Oman eAIP

AIP Supplements

Aeronautical Information Circulars

Forms

# The existing eAIP

eAIP

SULTANATE OF OMAN  
CIVIL AVIATION AUTHORITY



Consult NOTAM for Latest Information


## New Publication

Publication date	Effective date	Short Description
31 OCT 2024	<a href="#">28 NOV 2024</a>	AIRAC AIP AMDT 3-24; 8 new Supplement(s); 1 new Circular(s); 6 cancelled Supplement(s); 0 cancelled Circular(s)

## Includes

Publication date	Effective date	Short Description
08 AUG 2024	<a href="#">05 SEP 2024</a>	AIRAC AIP AMDT 2-24; 4 new Supplement(s); 2 new Circular(s); 5 cancelled Supplement(s); 0 cancelled Circular(s)
16 MAY 2024	<a href="#">13 JUN 2024</a>	AIRAC AMDT 1-24; 0 new Supplement(s); 0 new Circular(s); 5 cancelled Supplement(s); 0 cancelled Circular(s)
09 MAY 2024	<a href="#">09 MAY 2024</a>	Non-AIRAC AMDT 1-24; 0 new Supplement(s); 0 new Circular(s); 0 cancelled Supplement(s); 0 cancelled Circular(s)

# Existing eAIP

**AIP SULTANATE OF OMAN**  
See [cover page](#) for details

[History](#)  
[PDF](#)

[Help](#)  
[About](#)

[AIP](#) [AMDT](#) [SUP](#) [AIC](#) [Search](#)

**Effective 28 NOV 2024**

**- Part 1 General (GEN)**  
+ GEN 0  
+ GEN 1 NATIONAL REGULATIONS AND REQUIREMENTS  
+ GEN 2 TABLES AND CODES  
+ GEN 3 SERVICES  
+ GEN 4 CHARGES FOR AERODROMES/HELIPORTS AND ENROUTE  
**- Part 2 EN-ROUTE (ENR)**  
+ ENR 0  
+ ENR 1 GENERAL RULES AND PROCEDURES  
+ ENR 2 AIR TRAFFIC SERVICES AIRSPACE  
+ ENR 3 ATIS ROUTES  
+ ENR 4 RADIO NAVIGATION AIDS/SYSTEMS  
+ ENR 5 NAVIGATION WARNINGS  
+ ENR 6 EN-ROUTE CHARTS  
**- Part 3 AERODROMES (AD)**  
+ AD 0  
+ AD 1 AERODROMES/HELIPORTS - INTRODUCTION  
+ AD 2 AERODROMES  
+ AD 3 HELIPORTS

## eAIP

### SULTANATE OF OMAN CIVIL AVIATION AUTHORITY



Consult NOTAM for Latest Information

#### Information on this eAIP

Publication date: 31 OCT 2024

#### Description

##### Content of this eAIS package

AIRAC AIP AMDT 03/24: [Click here to see the complete AIP in PDF](#)  
[Click here to see the complete amendment in PDF](#)

##### The following NOTAM is incorporated in this Amendment:

*No NOTAM incorporated by this eAIS package*

##### List of AIP Supplements

For the list of active AIP SUP, refer to  
<https://www.caa.gov.om/en/aim-publications>

##### List of Aeronautical Information Circulars (AICs)

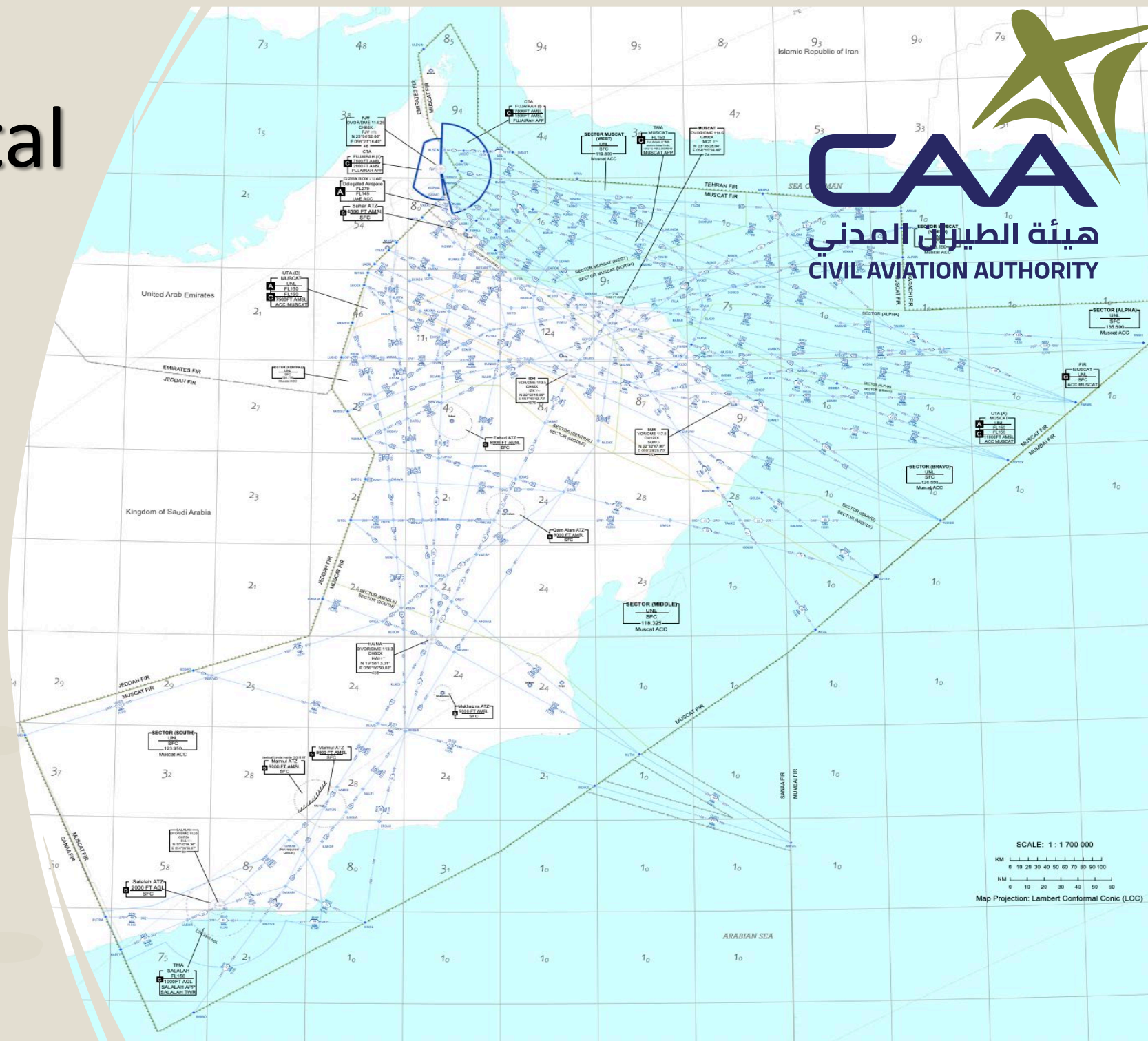
For the list of active AIC, refer to  
<https://www.caa.gov.om/en/aim-publications>

##### AIP Supplements added

- SUP 29/2024 IZK VOR/DME From 15 AUG 2024 to 02 MAR 2025
- SUP 30/2024 Radio Communication Failure From 15 AUG 2024 to 02 MAR 2025
- SUP 31/2024 Obstacle - Mobile Cranes From 05 SEP 2024 to 15 FEB 2025
- SUP 32/2024 Obstacle - Harbour Cranes From 14 SEP 2024 to 11 FEB 2025
- SUP 33/24 MDA(H) Increased 02 OCT 2024 to 31 DEC 2024
- SUP 34/24 Muscat Airport - South RWY 02 OCT 2024 to 31 DEC 2024
- SUP 35/24 MDA(H) Increased 02 OCT 2024 to 30 JUN 2025
- SUP 36/24 MDA(H) Increased 02 OCT 2024 30 JUN 2025
- SUP 37/24 Salalah Apron From 16 OCT 2024 to 16 OCT 2025



# The Digital Charts



# Key Learnings and Way Forward



Doing it right the first time is critical in digital environment.



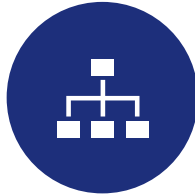
Ongoing reviews and collaboration to meet highest standards



Commitment to continuous improvement and operational excellence

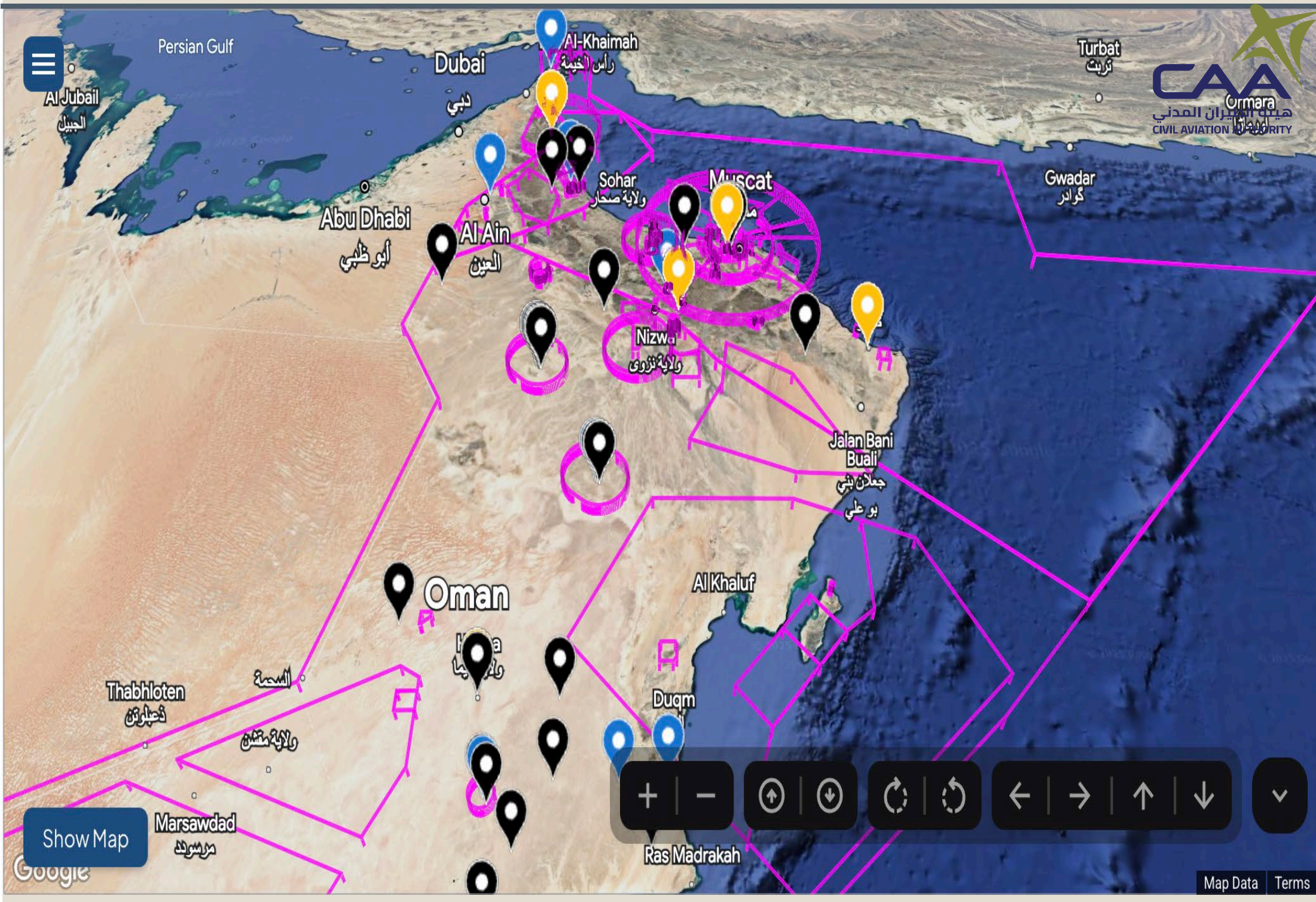


Process driven approach is more important than purely technology.



Alignment of processes and instilling process discipline amongst the whole ecosystem is a laborious journey.







# Questions





**THANK YOU!**