

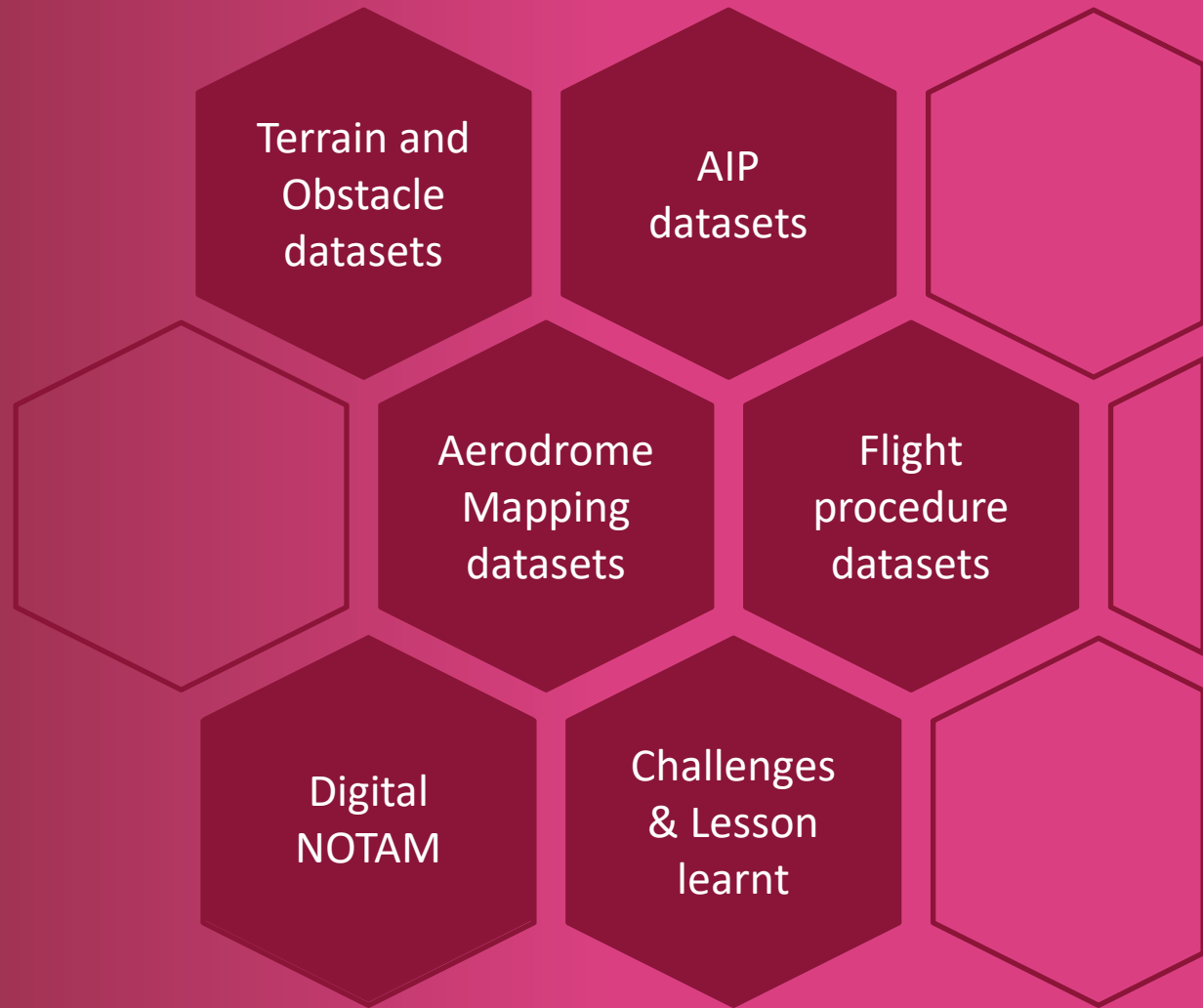
# AERONAUTICAL INFORMATION DIGITAL DATASETS

QATAR STATUS OF IMPLEMENTATION

Cairo, Egypt  
21-22 May 2023  
Air Navigation Department



# Presentation Content



# Terrain & Obstacle datasets

## DATA ACQUISITION

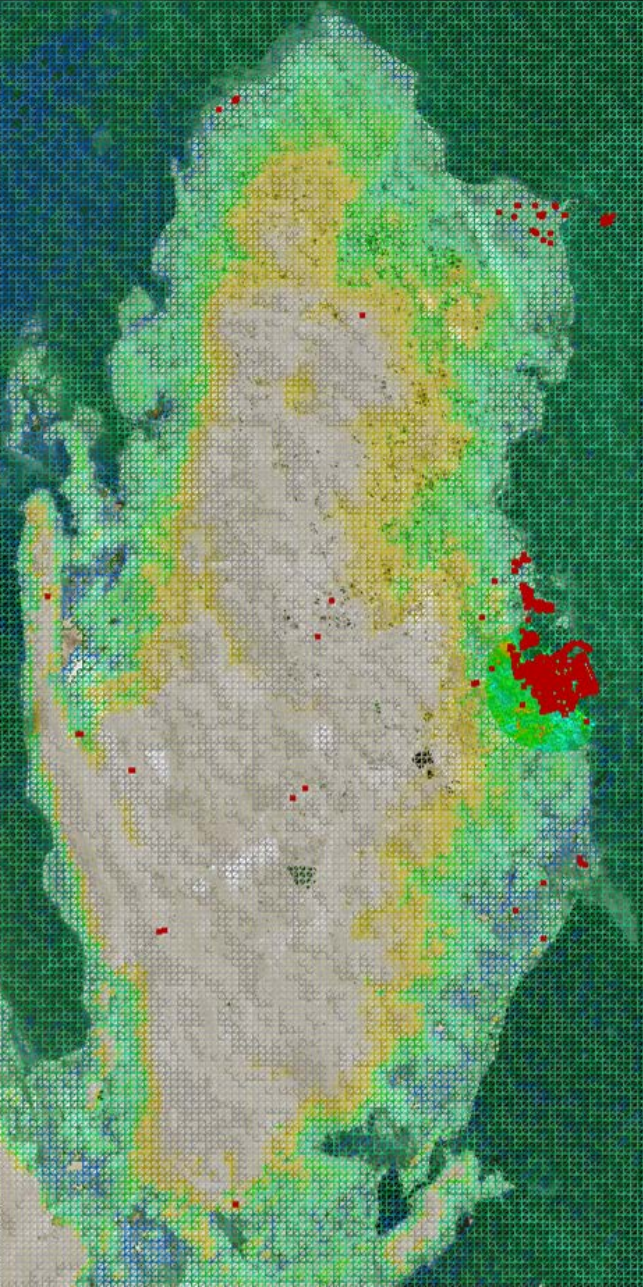
- eTOD Area 1, and Area 4 (2009)
- eTOD Area 2a, 2b, 2c, 2d and Area 3 (2013)

## VERIFICATION/VALIDATION

- completeness (aeronautical data attributes and quality requirements)
- duplication and consistency
- eTOD data surfaces

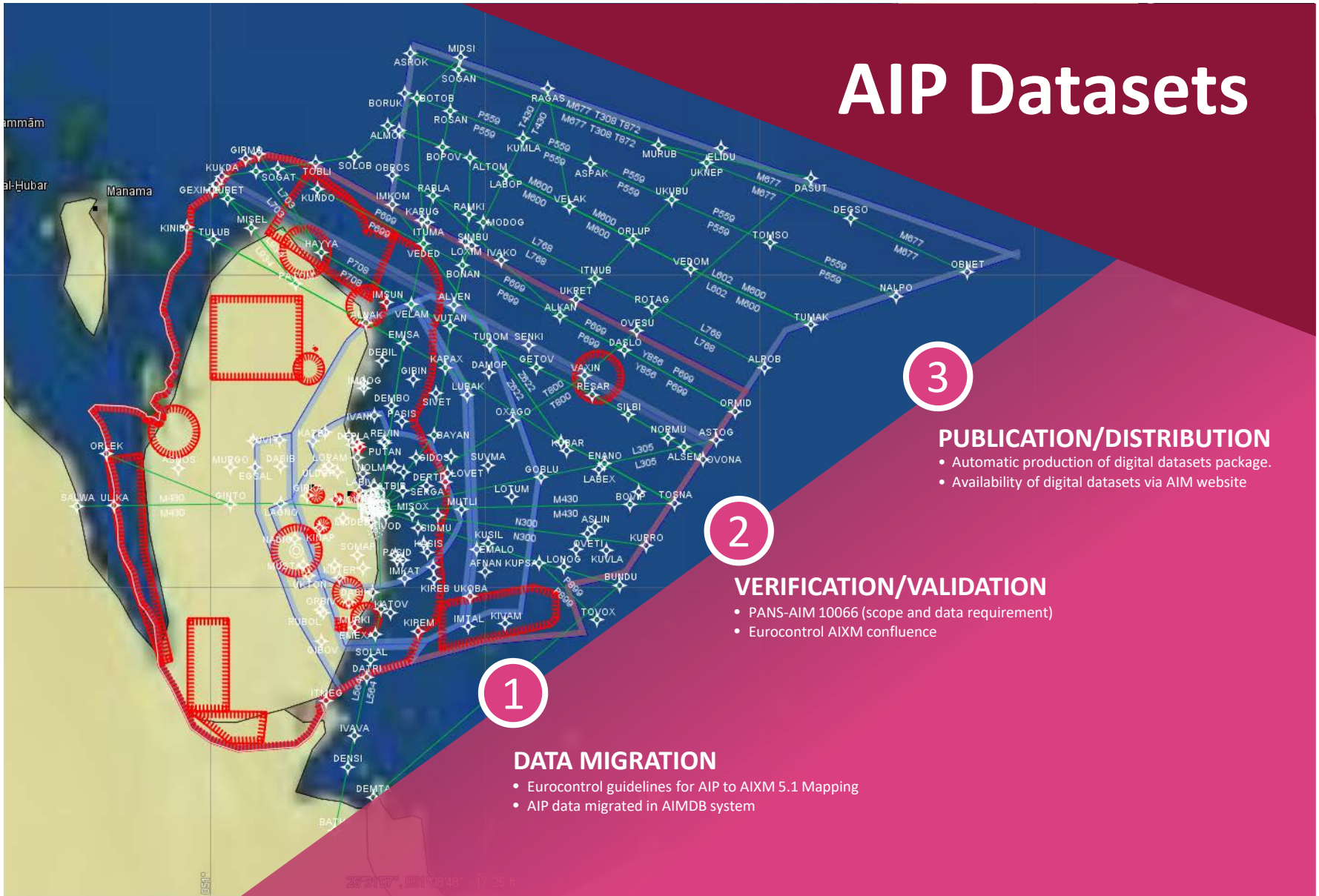
## PUBLICATION/DISTRIBUTION

- terrain data in an ASCII gridded data format (.xyz)
- obstacle data are provided in CRC
- automatic production of digital datasets package.
- availability of digital datasets via AIM website





# AIP Datasets



## 1 DATA MIGRATION

- Eurocontrol guidelines for AIP to AIXM 5.1 Mapping
- AIP data migrated in AIMDB system

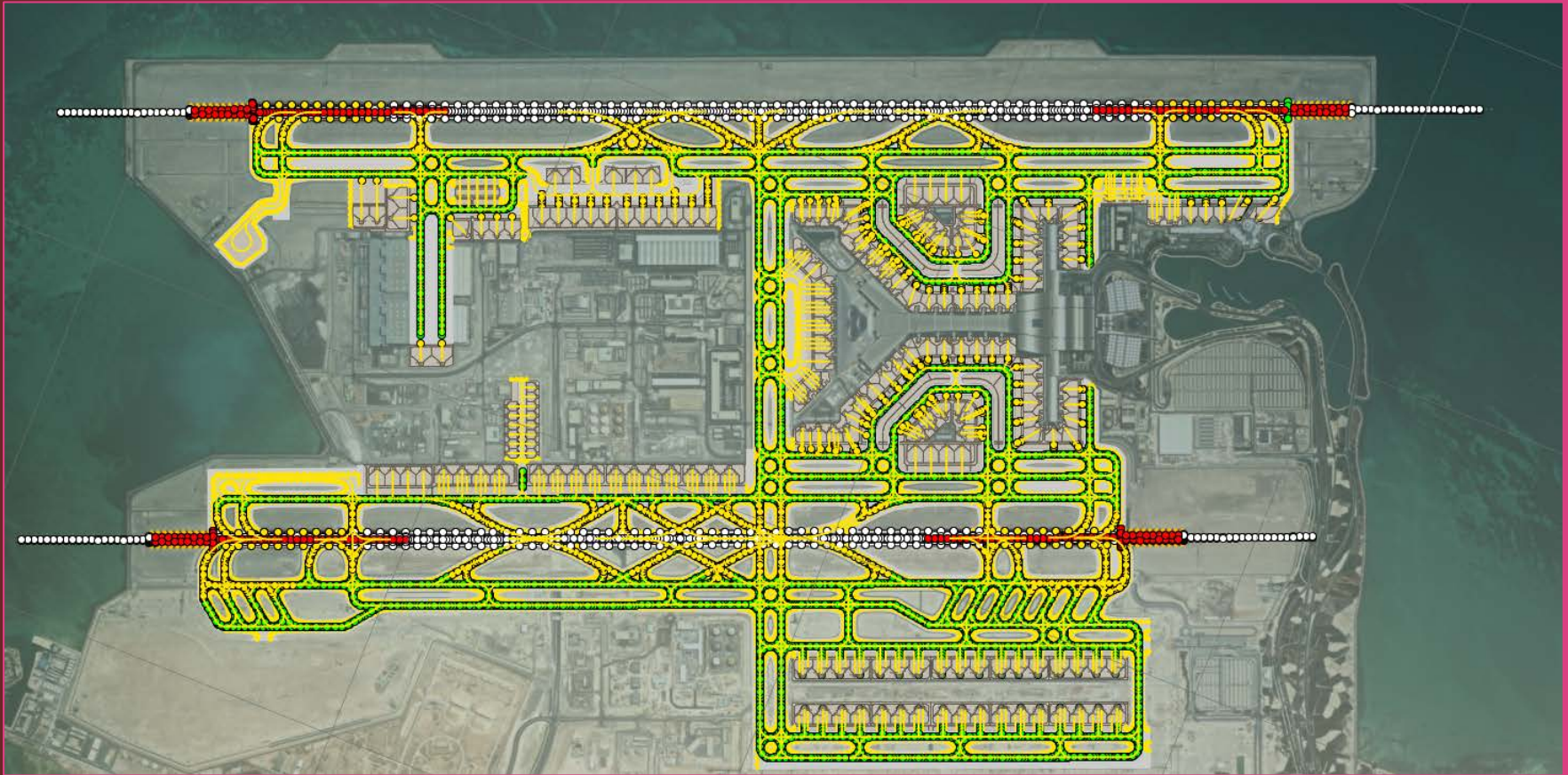
## 2 VERIFICATION/VALIDATION

- PANS-AIM 10066 (scope and data requirement)
- Eurocontrol AIXM confluence

## 3 PUBLICATION/DISTRIBUTION

- Automatic production of digital datasets package.
- Availability of digital datasets via AIM website

# Aerodrome Mapping Datasets



## DATA CAPTURING

- Aerodrome survey drawing file imported in the Global Mapper and QGIS to extract the aerodrome mapping data.

## DATA ENCODING

- Runway
- Taxiway
- Apron
- Aircraft stand
- Aerodrome ground lighting

## VERIFICATION/VALIDATION

- Visualization of encoded data using Luciad and QGIS.
- Digital data exchange within AIM system (Digital NOTAM, AIP and Charting system).

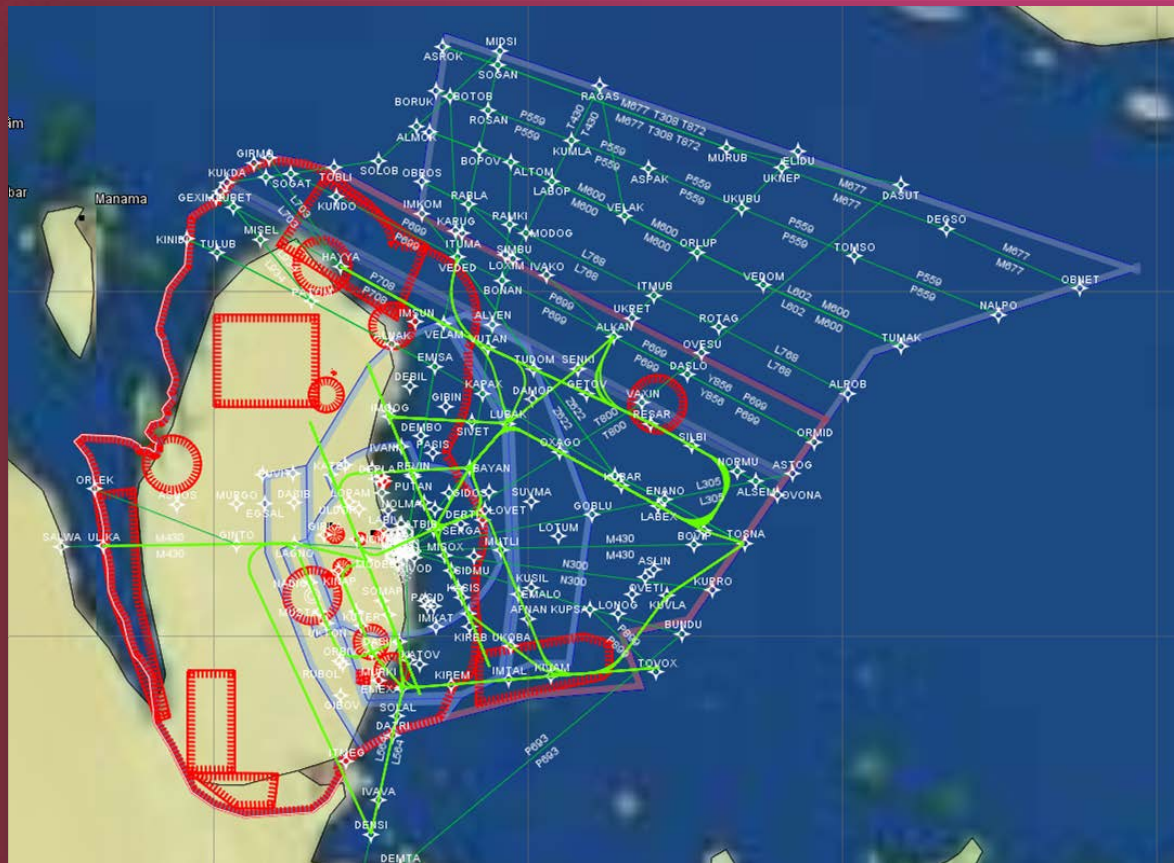
## PUBLICATION/DISTRIBUTION

- Automatic production of digital datasets package.
- Availability of digital datasets via AIM website





# Flight Procedure Datasets



## DATA ACQUISITION

- Acquired instrument flight procedure data in AIMX 5.1.
- Integrate PANS-OPS and AIMDB systems.



## VALIDATION & VERIFICATION

- Import the acquired AIMX 5.1 in the AIMDB
- Simulate digital data exchange within AIM systems



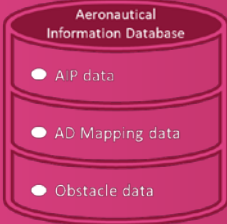
## PUBLICATION/DISTRIBUTION

- Publication of digital datasets package
- Flight procedure datasets will be made available via AIM website



# DIGITAL NOTAM

BASELINE



Digital NOTAM

Events

Airspace

SAA-NEW

SAA-NEW 2022-06-10 15:09

Event validity: 11.06.2022 - 11.06.2022

Schedule: 00:00 - 23:59 Est.

Type: [Dropdown]

Activity: [Dropdown]

Status: [Dropdown]

Geometry: Polygon

Lower limit: [Input] SFC

Upper limit: [Input]

Excluded airspace (0)

DATA ORIGINATOR

Digital NOTAM

NOTAM

Accept Reject Cancel verification

Event name: 0074722

Event validity: 19.07.2022 - 31.07.2022

Airport: OTHH

Series: [Dropdown] Type: NOTAMIN

A) OTHH

B) 2207191745 C) 2207311400

D) [Input]

E) VOIDS NOT AVAIL AT ACFT STAND 501 502 503 504 505 506 507 508

TXT

DATA APPROVER (AIM)

Object selection

Event name: A0616/23 R

Event validity: 06.05.2023 10:35 - 23.05.2023 14:00

Event XML

NOTAM TXT Message(s):

A0616/23 NOTAMR A0540/23  
Q)OTDR/QHPLC/IV/BO/A/000/999/2515005137E005  
A)OTHH  
B)2305091035  
C)2305231400  
E)ACFT STAND C13 CLSD DUE WIP.

DIGITAL NOTAM VIEWER (AIM Website)



# Challenges & Lesson Learnt



## Challenges

- Data availability according to aeronautical exchange format (AIXM 5.x).
- Different interpretation on AIXM schema.
- Legacy system requires upgrade due to evolving requirement.



## Lesson Learnt

- Data provider should be kept up-to-date on AIM evolving requirement by conducting regular awareness seminar/workshop.





- THANK YOU -

