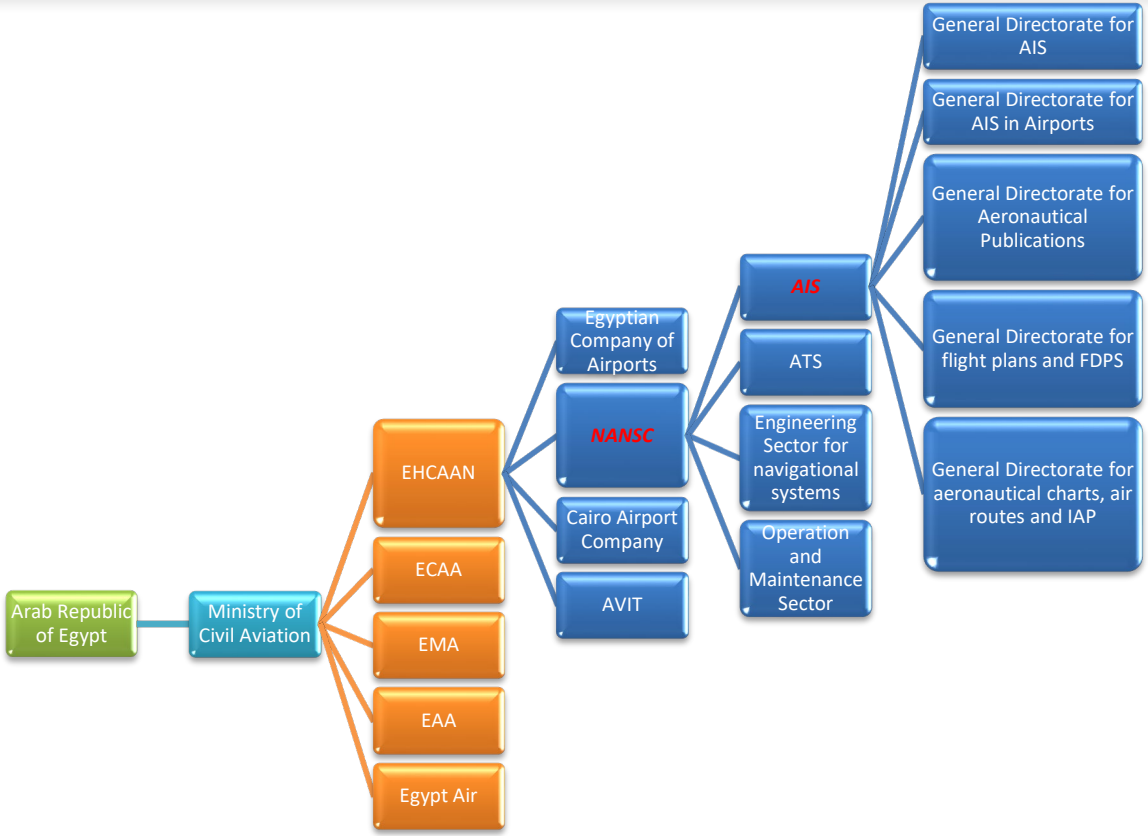
# New AIM System Implementation

# Introduction

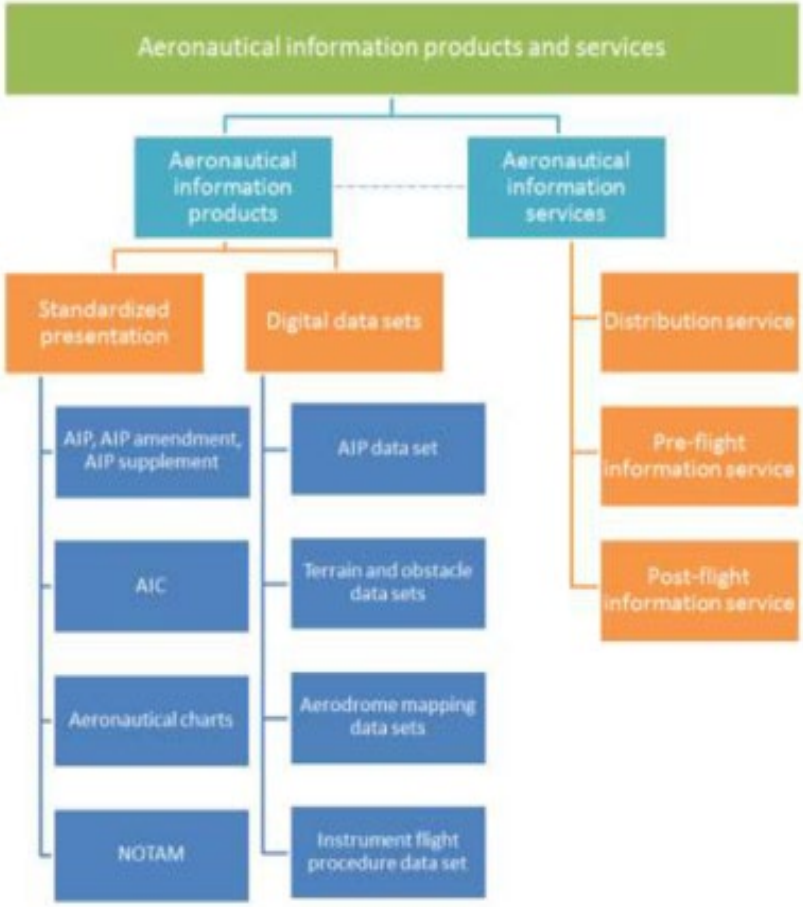



NANSC is responsible for preparing and operating Air Traffic Services, Navigational Aids and Safe guarding Air Navigation Services within The Egyptian Airspace and in all Egyptian airports.

# Introduction

The policy of the Egyptian AIS is to provide the highest level of aeronautical information necessary for the safety, regularity and efficiency of international air navigation and the full compliance with national and international regulations. This policy is carried out through collection, collation, edition and distribution of aeronautical information in compliance with ICAO standards and recommended practices and national regulations.

Aeronautical information shall be provided in the form of aeronautical information products and associated services.



# Forward to DAIM

**GLOBAL TECHNICAL**

Supports technical managers in planning the implementation of basic air navigation services and new operational improvements in a cost-effective manner.

ASBUs & PF | AN-SPA | BBBs

- BBBs
- ASBU framework

**DAIM**

**REGIONAL**

Addresses regional and sub-regional needs aligned with the global objectives

AFI ANP | APAC ANP
EUR ANP | MID ANP
NAM ANP | NAT ANP
CARSAM ANP

**NATIONAL**

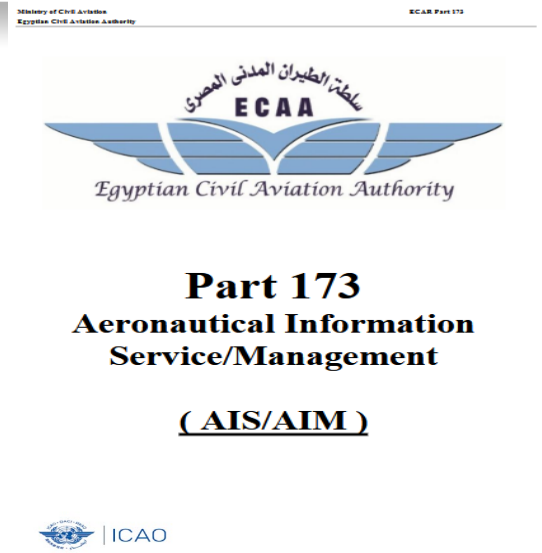
Development by States, in coordination with relevant stakeholders, of air navigation plans aligned with regional and global plans.

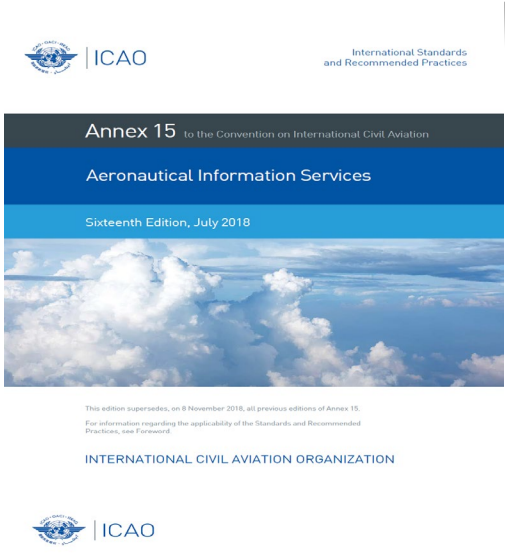
NANP TEMPLATE | CBA CHECKLIST

# Forward to DAIM

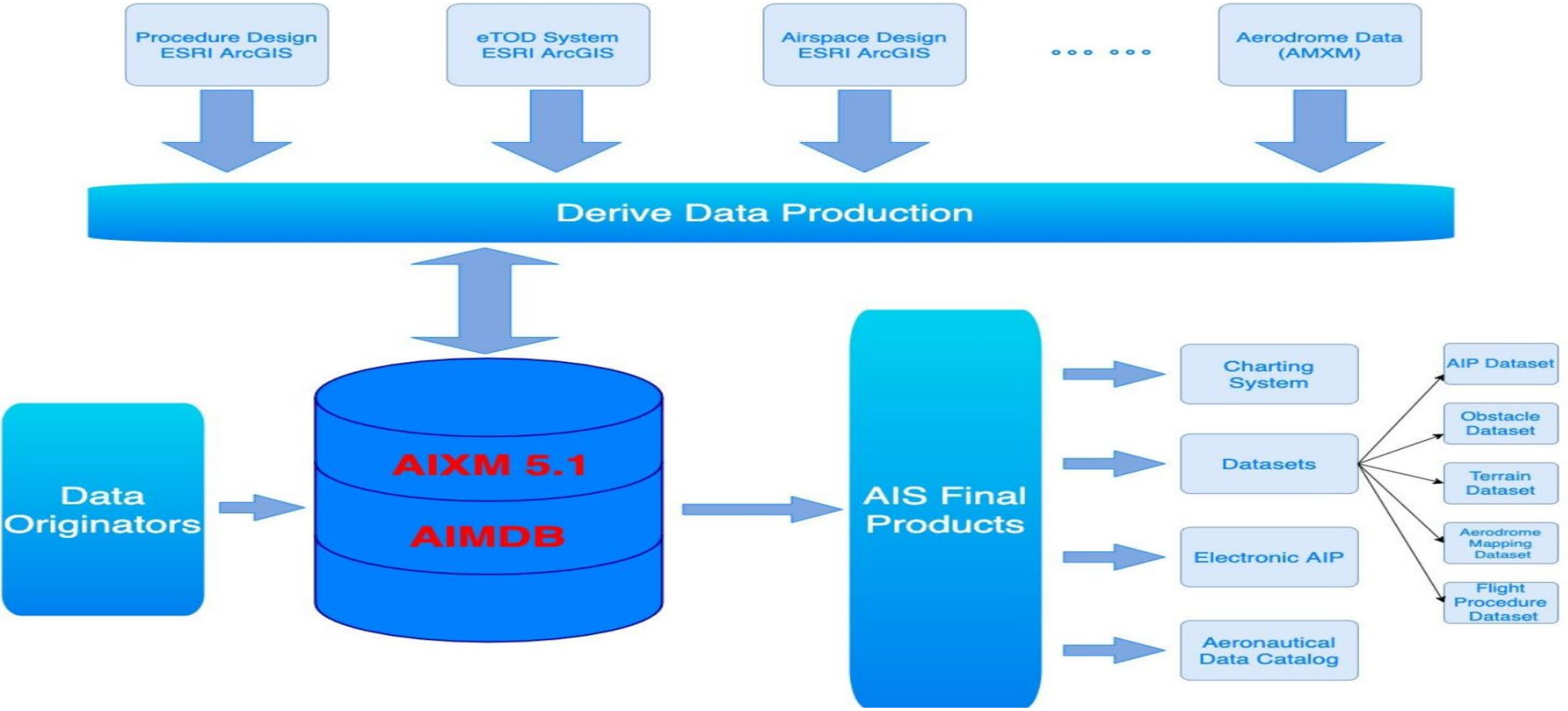
The current AIS system installed since 2012 will be replaced by a new AIM automated system to fully comply with ECAA Regulation PART 173 requirements and ICAO Annex 15 SARPs, PANS-AIS (Doc 8126), PANS-AIM (Doc 10066) and Information Management Doc 10166 requirements considering ICAO MID Roadmap AIS to AIM.

An important step towards this goal and towards an integrated, responsive global ATM system is the migration of product-centric and paper-based AIS to data-centric digital AIM.



# New AIM System



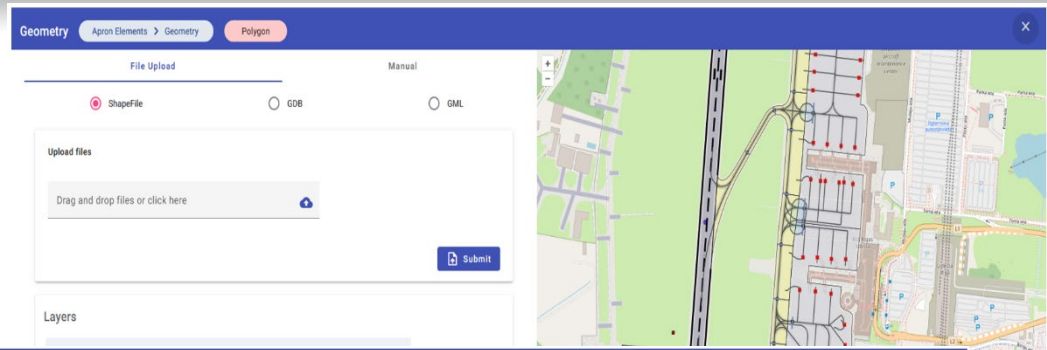
# New AIM System

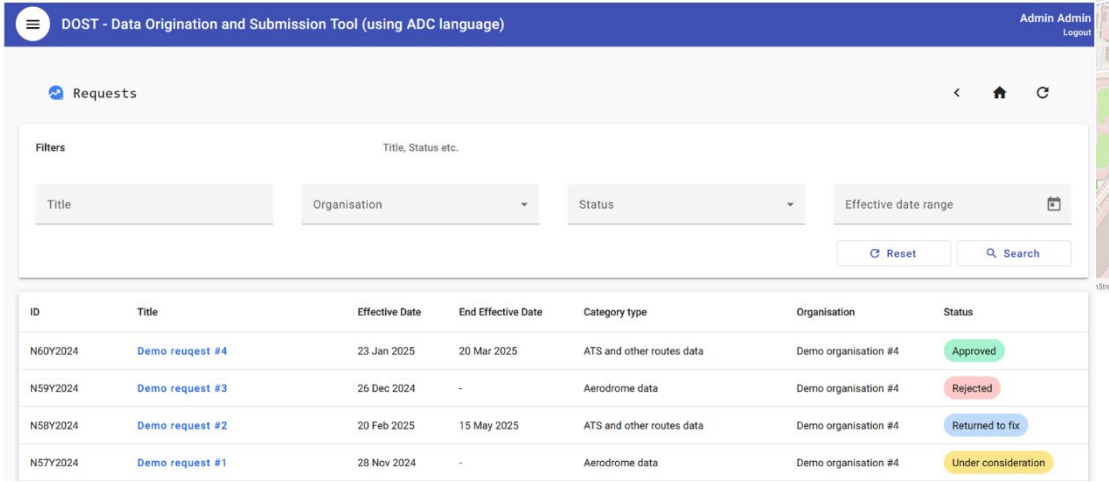
## The main capabilities of the new AIM system can be summarized as follows:

### 1. A web-based Data Submission Tool for Data Originator based on ICAO ADC

The New AIM System will facilitate Data Feeding, save the data in the central Database, after checking the quality of submitted data and duly assembling of it .

Time limit: JUN 2025



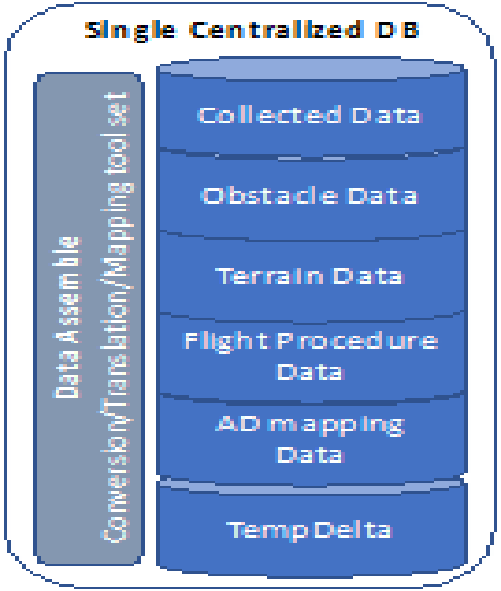



# New AIM System

**2. AIXM 5.1 based central AIM Database (AIMDB)**

The New AIM System will establish an integrated aeronautical information database based on AIXM 5.1 and the content of the Electronic AIP will be generated from the digital database. The new AIM System has the capabilities to ensure the exchange of aeronautical data as required by ICAO Annex 15 and PANS-AIM (Doc 10066).

Time limit: JUN 2025



# New AIM System

## 3. Electronic AIP Publishing Tool

The New AIM System includes eAIP production system which will produce eAIP both in text and tables format including electronic charts.

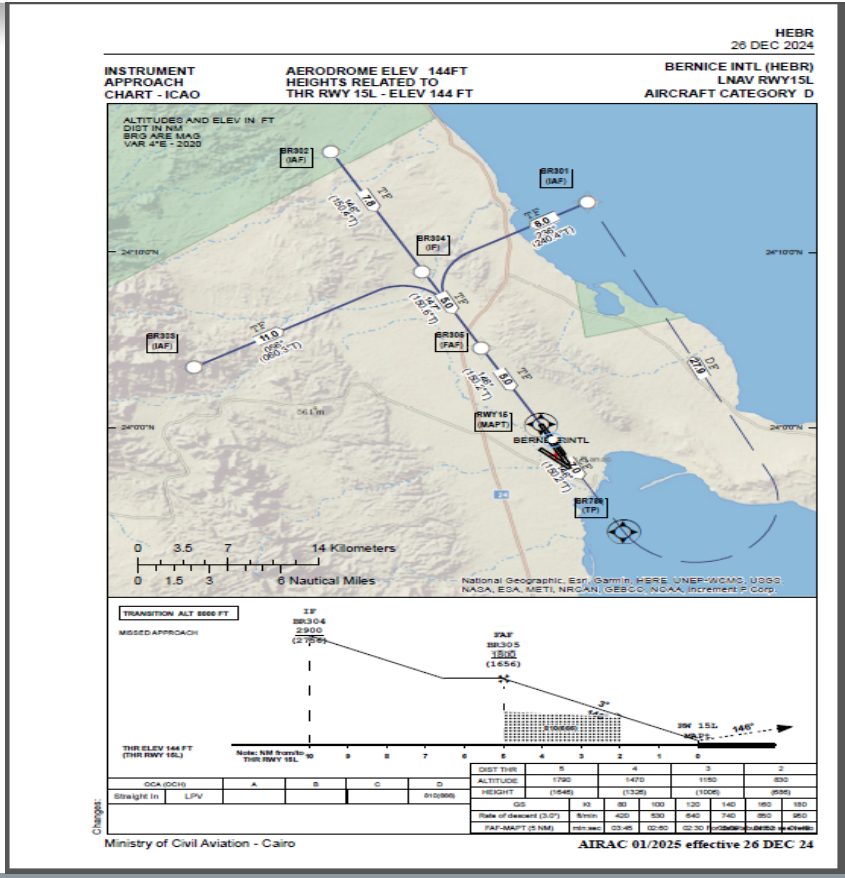
Time limit: JUN2025

# New AIM System

**4. Fully data driven Aeronautical Charting Tool**

The Integrated Cartographic Environment is a GIS (Graphical Information System) based on ArcGIS platform for automated creation and maintenance of aeronautical charts directly from centralized AIXM 5.1 DB as per the ICAO Annex 4 and the roadmap from AIS to AIM.

Time limit: DEC 2025

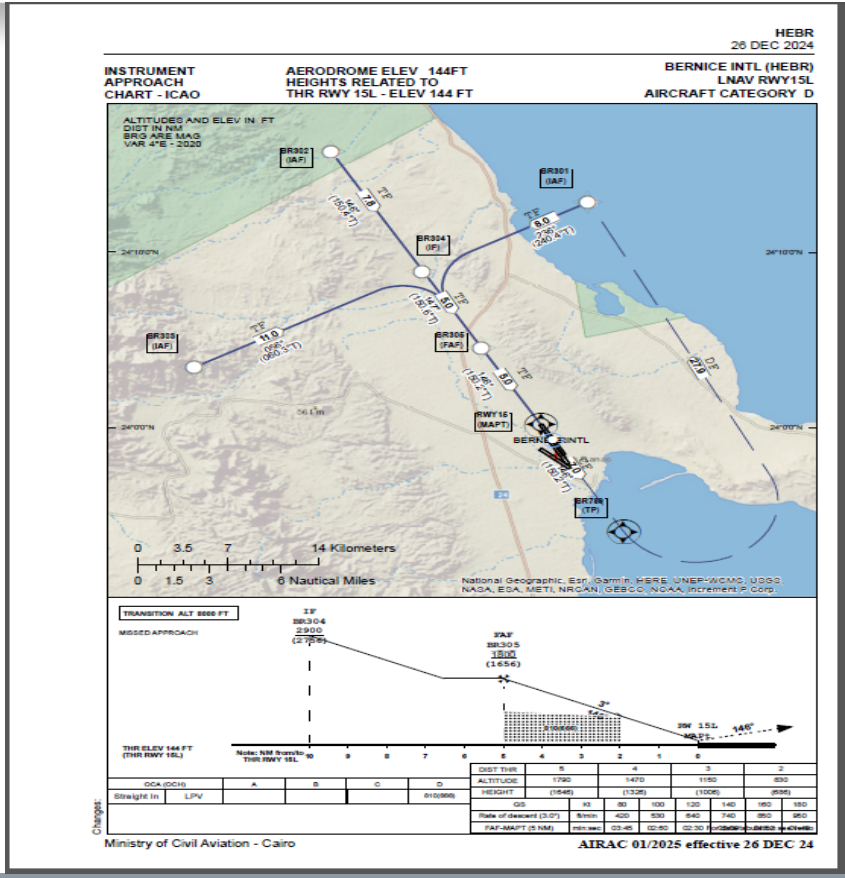


# New AIM System

**5. Instrument Flight Procedures Design and Airspace elements and Design Tool**

It creates and designs all types of IFP either conventional or RNP , SID/STAR, etc. and then converts and stores them in AIXM 5.1 DB automatically

Time limit: DEC 2025

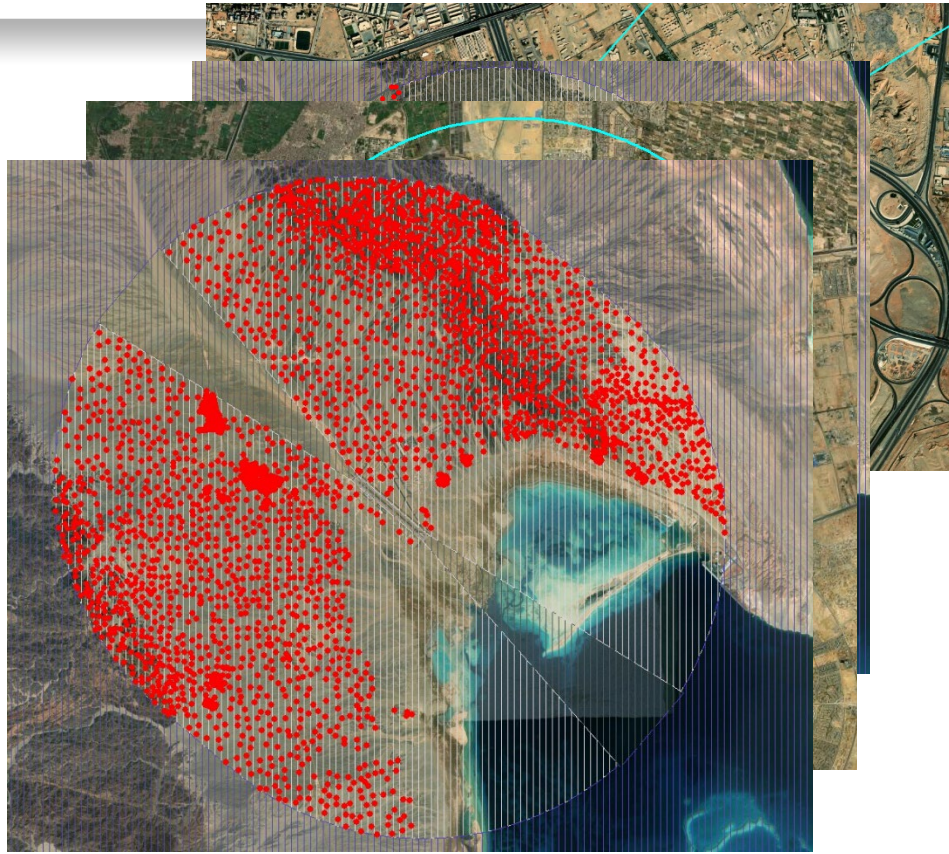


# New AIM System

**5. Electronic Terrain and Obstacle Data eTOD**

e-TOD tool provides all the necessary tools to import, integrate, manage and deliver obstacle and terrain data in accordance with ICAO Docs 9881, 10066 and Annex 15. It can assist the user in managing the lifecycle of data, validating and detecting ambiguous and conflicting data as well as supporting data export and report.

Time limit: Ready as soon as raw materials are availalbe



# New AIM System

## 6. Datasets management

The new AIM system will ensure the management of the following data sets:

1. AIP data sets:
   - ✓ air traffic services (ATS) airspace
   - ✓ special activity airspace
   - ✓ ATS route and other Route
   - ✓ route segment
   - ✓ waypoint – en-route
   - ✓ aerodrome/heliport
   - ✓ runway
   - ✓ runway direction
   - ✓ final approach and take-off (FATO)
   - ✓ touchdown and lift-off (TLOF)
   - ✓ radio navigation aids
2. Terrain and obstacle data sets.
3. Instrument Flight Procedure data set.
4. Aerodrome mapping data sets will be implemented in the next phase.

Time limit: JUN 2025

# New AIM System

Next phase of the automation project, AIS Sector will develop:

- Digital NOTAM,
- Electronic Briefingو
- The interoperability with the meteorological service,
- Dissemination of aeronautical information in a SWIM-enabled environment,
- User-defined products and
- The decommissioning of current distribution mechanisms.

# Thank You

## Any Questions?