ICAO CAPACITY & EFFICIENCY

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ICAO

NCLB
AIM Workshop

MID Office, Cairo, 11-13 September 2017

# National AIM Planning


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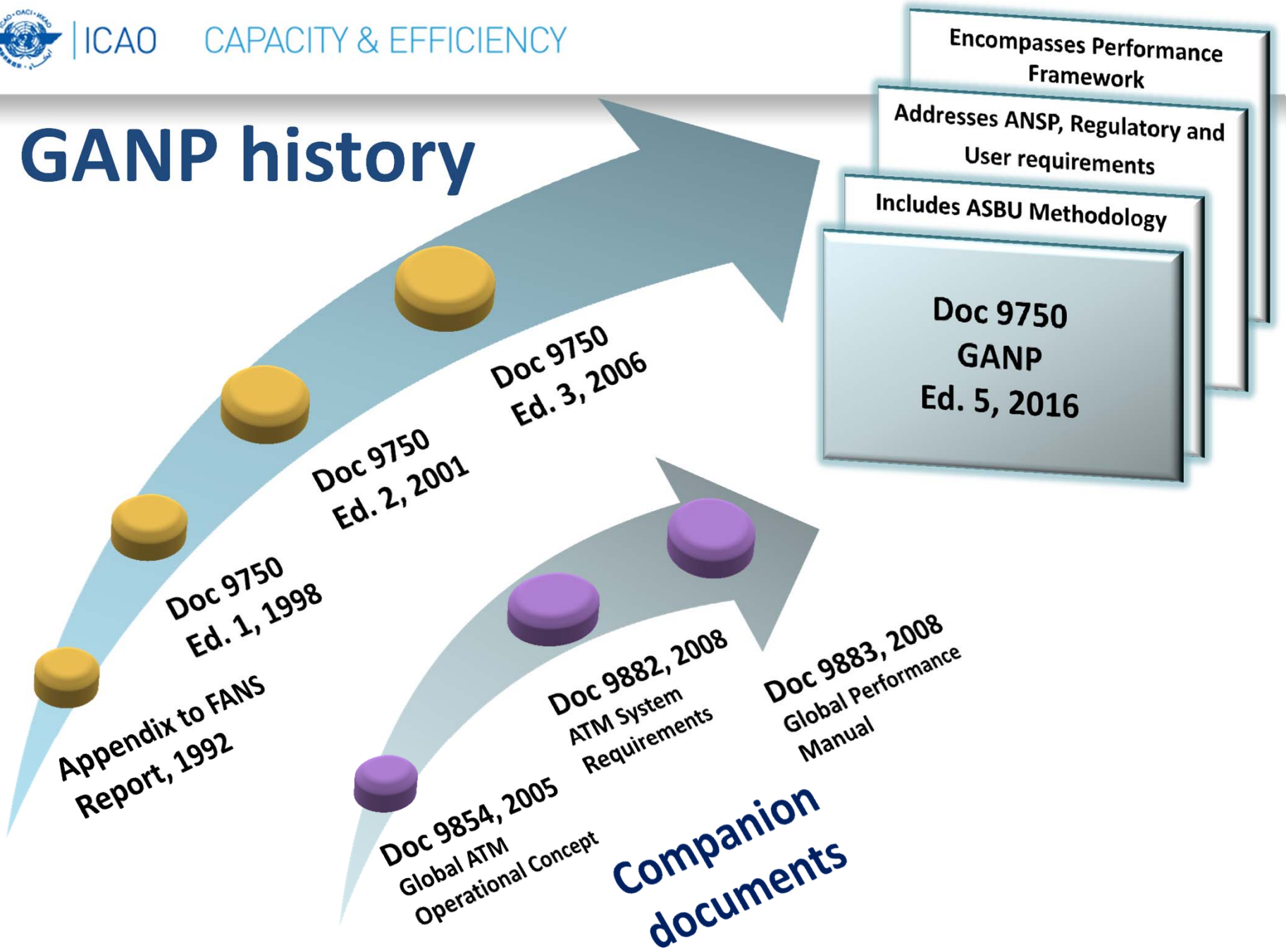
# Global Air Navigation Plan

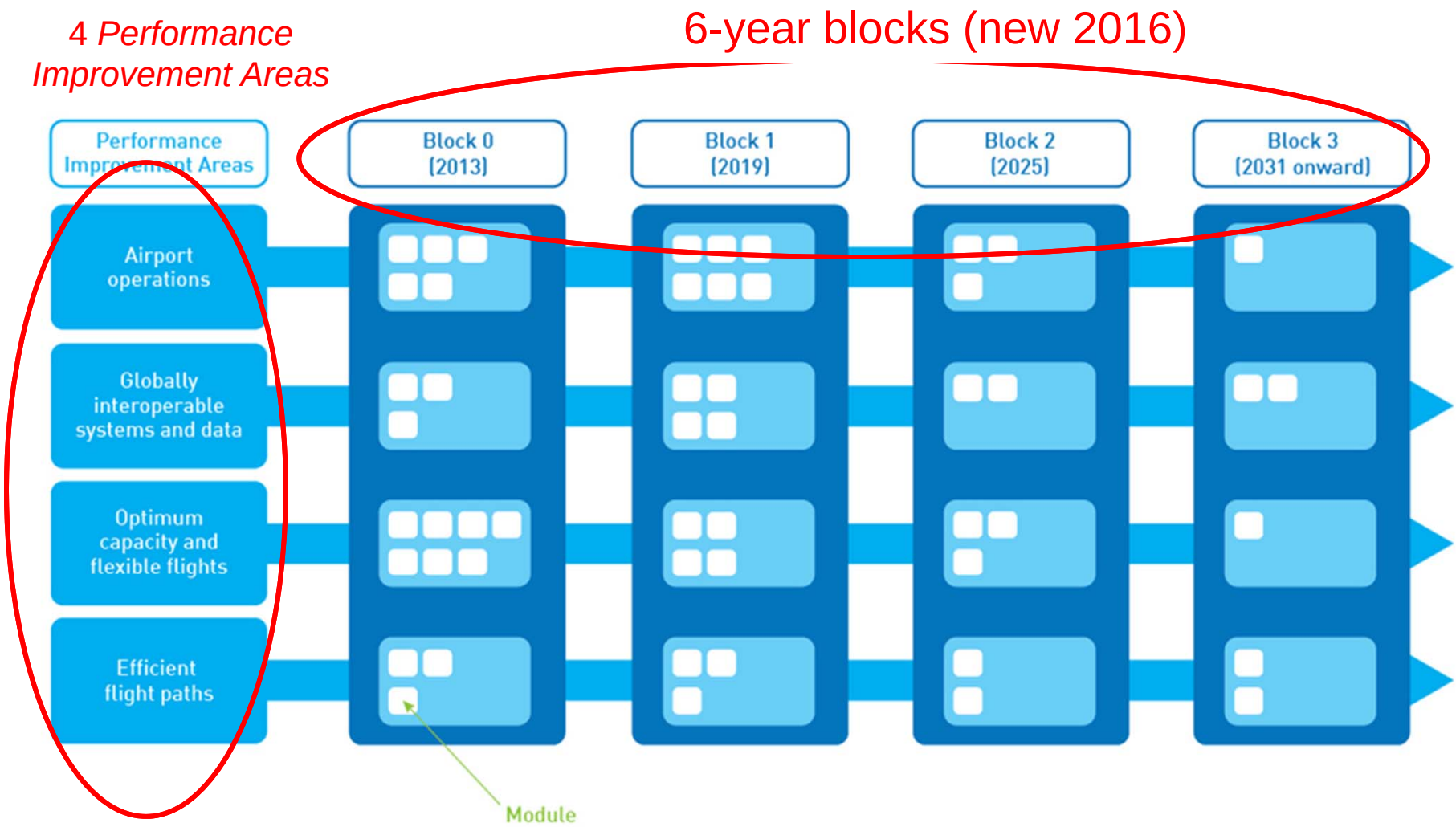
## What is the GANP?

- Supports a harmonized global Air Navigation System
- It is an overarching framework
- Addresses key civil aviation policy principles
- Assists ICAO Regions and States to establish air navigation priorities for the next 15 years
- Assists ICAO Regions and States to prepare their navigation plans

# GANP history



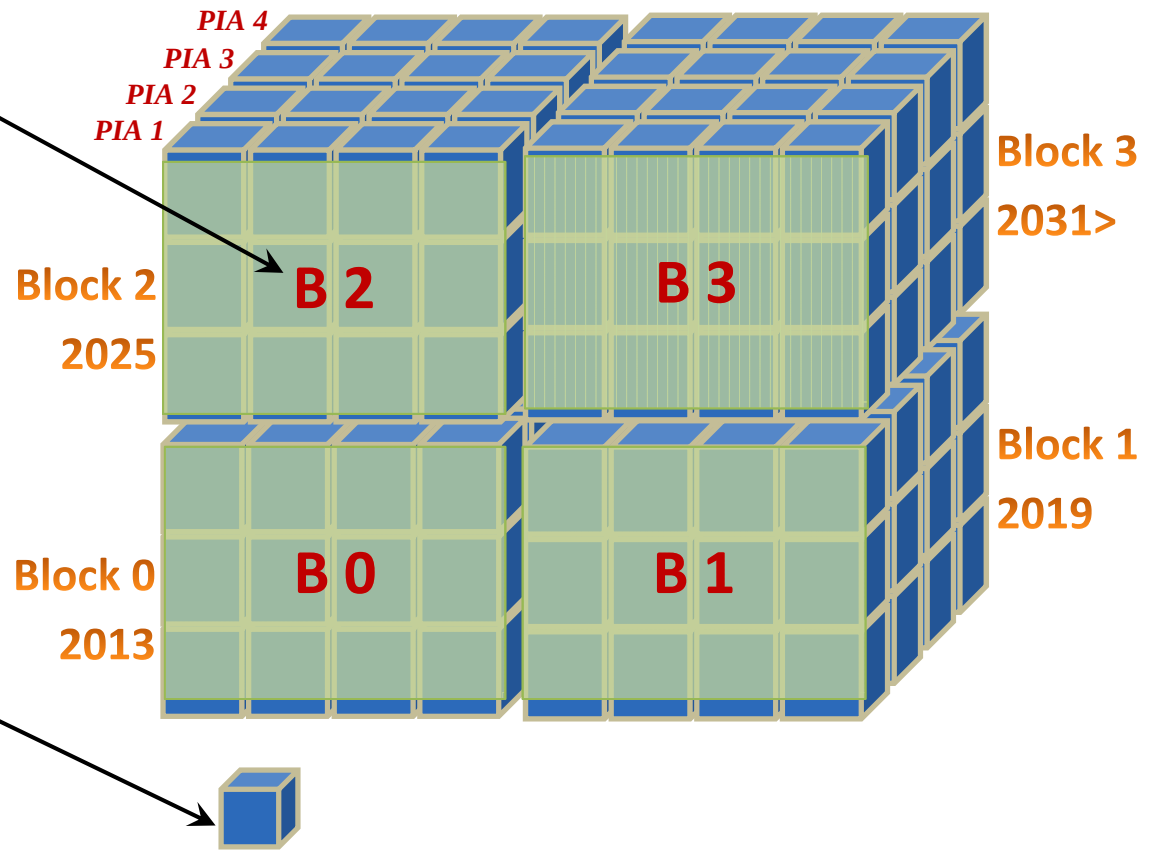
# ASBU Framework

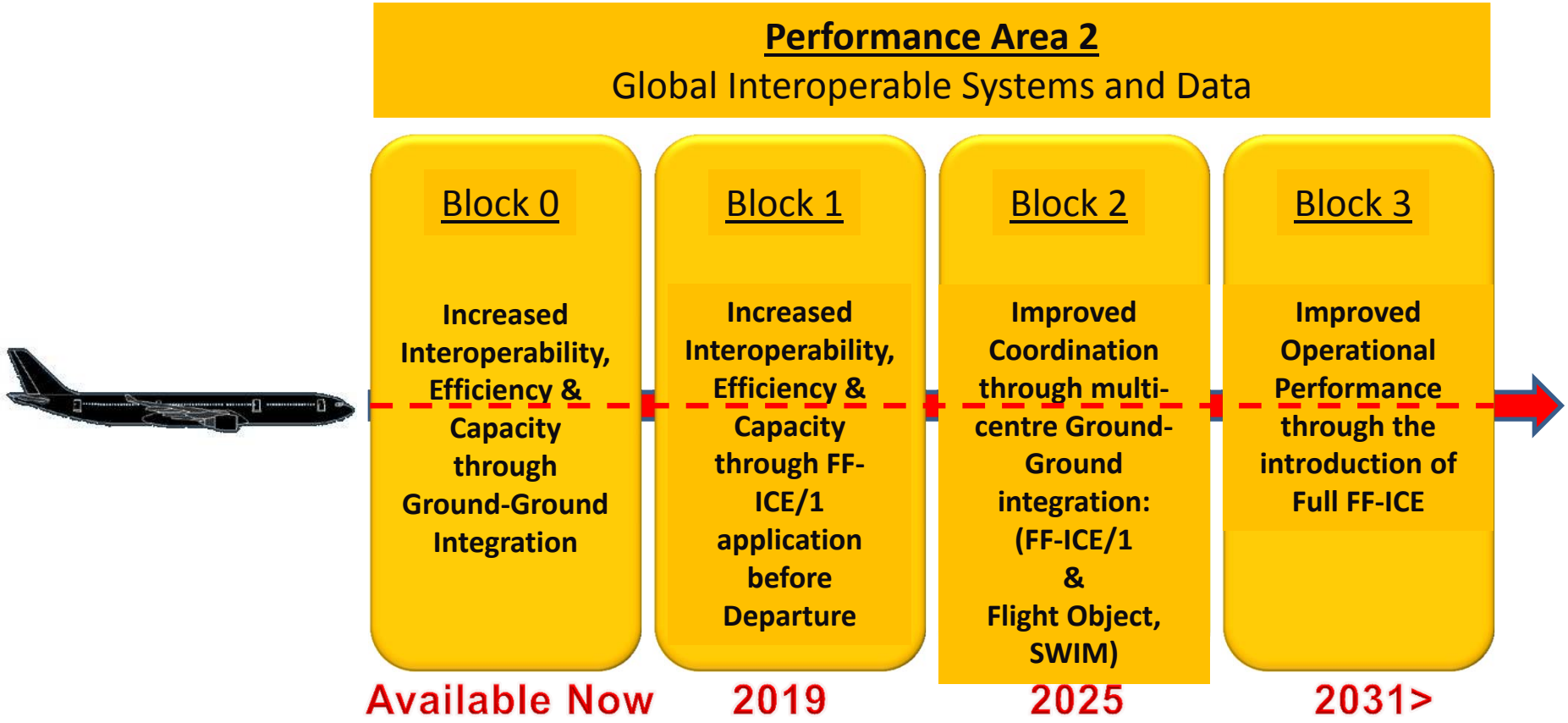


# Blocks & Modules

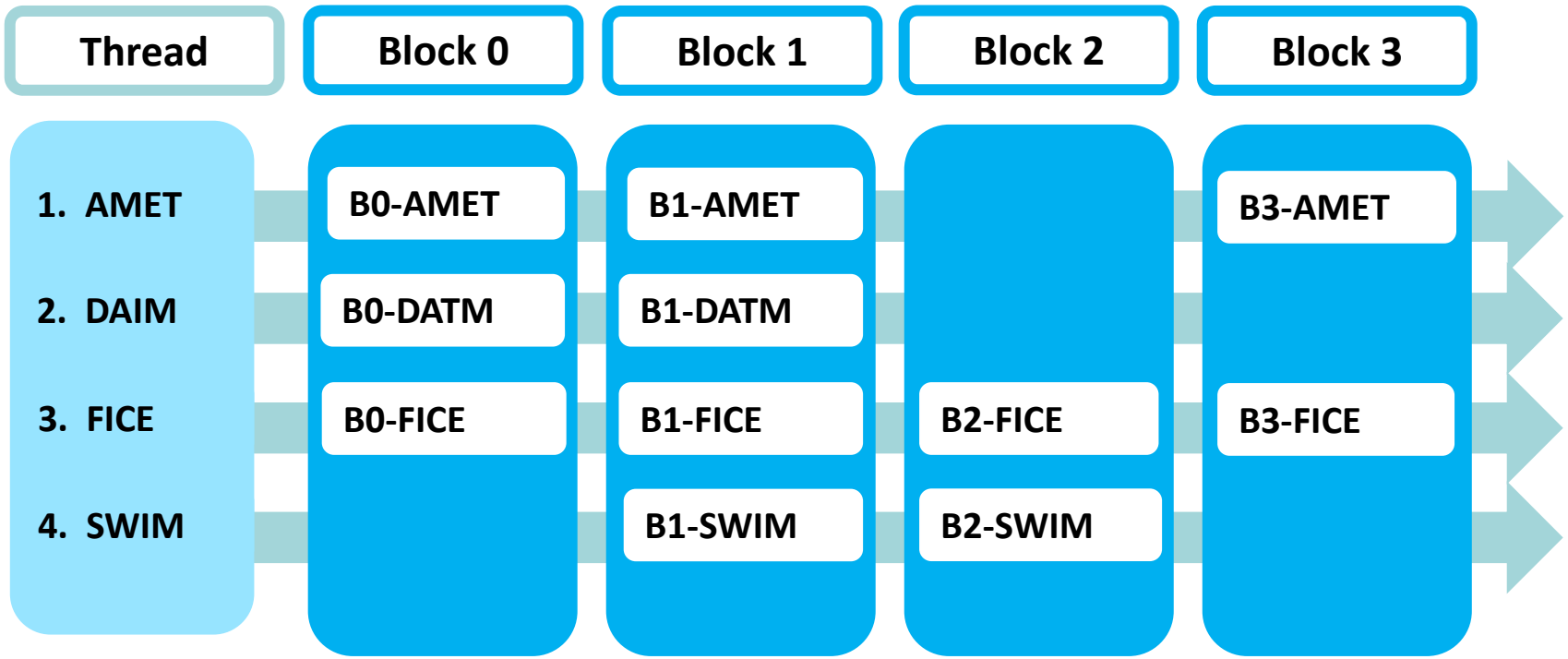
**Block**—is made up of modules that, when combined, enable significant improvements and benefits (within a defined time frame).

**Module** — a deployable package based on performance or capability. It offers a clear operational benefit, supported by procedures, technology, regulation/standards as necessary, and a business case. A module will be also characterized by the operating environment within which it may be applied.




Performance Area 2
Global Interoperable Systems and Data
Block 0
Increased Interoperability, Efficiency & Capacity through Ground-Ground Integration
Block 1
Increased Interoperability, Efficiency & Capacity through FF-ICE/1 application before Departure
Block 2
Improved Coordination through multi-centre Ground-Ground integration: (FF-ICE/1 & Flight Object, SWIM)
Block 3
Improved Operational Performance through the introduction of Full FF-ICE
Available Now
2019
2025
2031>

# PIA 2: Globally Interoperable Systems and Data



# AIM Definition

- The dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties. (ICAO Annex 15)
- AIM: the right digital Aeronautical Information, at the right place, at the right time.

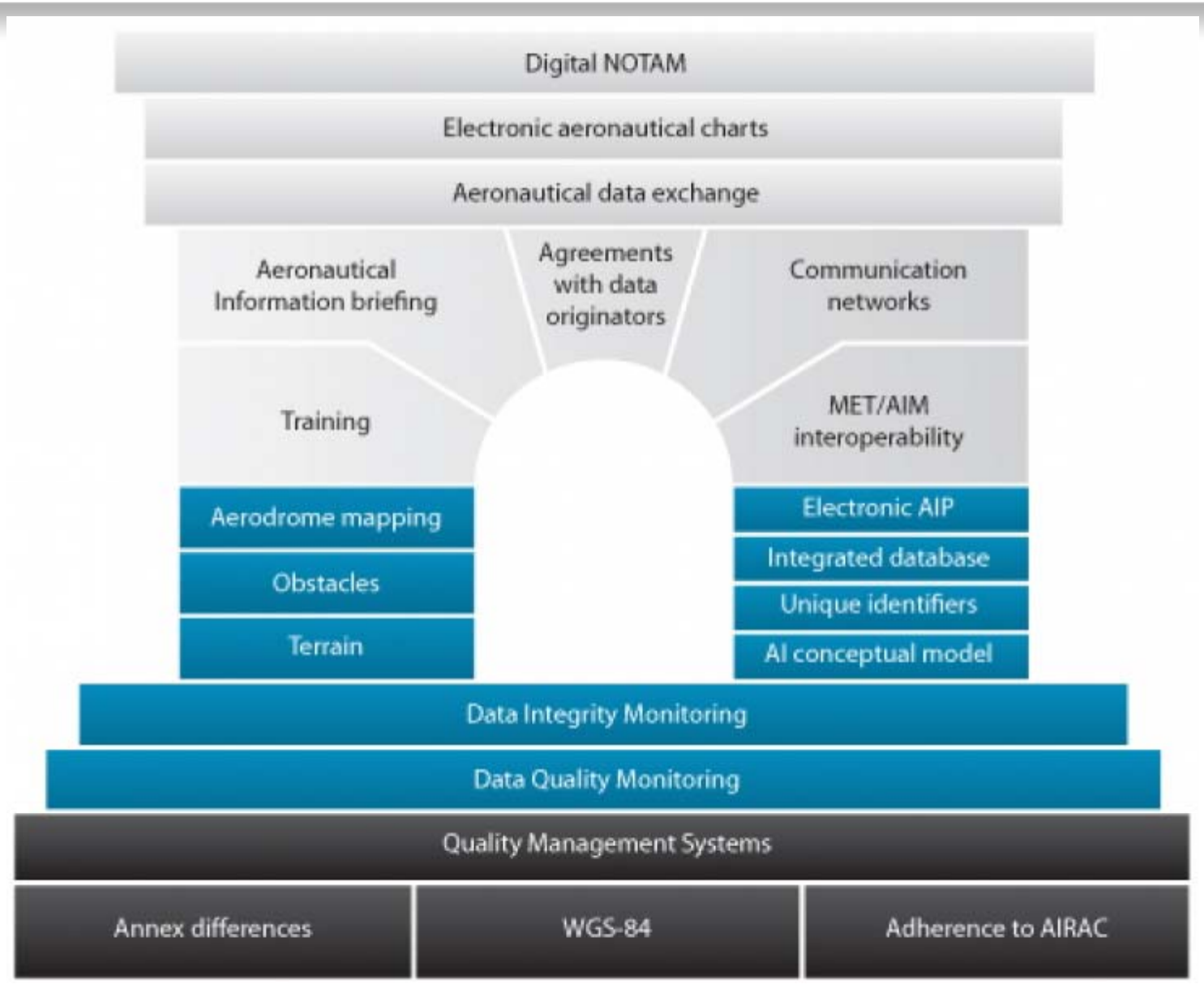
# How to get there?

- *ICAO Roadmap for the Transition from AIS to AIM*
  - ICAO has developed in 2009 a roadmap to reflect the importance of the evolution and to address the required changes from AIS to AIM.
  - The roadmap identifies major milestones for a uniform evolution, the specific steps that need to be achieved and timelines for implementation.

**Phase 3**
**Information management**

**Phase 2**
**Going digital**

**Phase 1**
**Consolidation**



# MID Region AIM implementation Roadmap

| | Related Steps | 2016 | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | Priority | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | | |
| AIXM | P07, P08 | | | | | | | | | | | | | | | 1 | Target: 80% by 2018 |
| eAIP | P11 | | | | | | | | | | | | | | | 1 | Target: 80% by 2020 |
| Integrated Aeronautical Information Database | P06 | | | | | | | | | | | | | | | 2 | |
| Aeronautical Data Exchange | P09 | | | | | | | | | | | | | | | 2 | |
| Interoperability with MET | P19 | | | | | | | | | | | | | | | 3 | |
| Aeronautical Information Briefing | P12 | | | | | | | | | | | | | | | 3 | |
| Agreement with data originators | P18 | | | | | | | | | | | | | | | 1 | |
| Data Quality Monitoring | P01 | | | | | | | | | | | | | | | 1 | |
| Data Integrity Monitoring | P02 | | | | | | | | | | | | | | | 1 | |
| Terrain A-1 | P13 | | | | | | | | | | | | | | | 2 | Target: 70% by 2018 |
| Obstacle A-1 | P14 | | | | | | | | | | | | | | | 2 | Target: 60% by 2018 |
| Terrain A-4 | P13 | | | | | | | | | | | | | | | 2 | Target: 100% by 2018 |
| Obstacle A-4 | P14 | | | | | | | | | | | | | | | 2 | Target: 100% by 2018 |
| Terrain A-2a | P13 | | | | | | | | | | | | | | | 2 | |
| Obstacle A-2a | P14 | | | | | | | | | | | | | | | 2 | |
| Training | P16 | | | | | | | | | | | | | | | 1 | Continuous |
| Communication networks | P10 | | | | | | | | | | | | | | | 3 | |
| Digital NOTAM | P21 | | | | | | | | | | | | | | | 3 | |
| Electronic Aeronautical Charts | P20 | | | | | | | | | | | | | | | 3 | |
| Terrain and Obstacle for Areas 2b, 2c, 2d and 3 | P13, P14 | | | | | | | | | | | | | | | 3 | Optional based on the States' decision to be reflected in the States' national Regulations and AIM National Plans, in accordance with operational needs |
| Aerodrome Mapping | P15 | | | | | | | | | | | | | | | 3 | Optional based on the States' decision to be reflected in the States' national Regulations and AIM National Plans, in accordance with operational needs |

***White**: Planning* ***Light Green**: Initial/On-going Implementation* ***Dark Green**: Implemented (Performance Target achieved)*

# National AIM implementation Roadmap Template

| | |
|---|---|
| STATE | |
| DATE | |

| Phase/Step | Step No. | Timeline 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Start | End | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Phase I** | | | | | | | | | | | |
| AIRAC adherence | P-03 | | | | | | | | | | |
| WGS-84 | P-05 | | | | | | | | | | |
| QMS | P-17 | | | | | | | | | | |
| **Phase II** | | | | | | | | | | | |
| Data Quality Monitoring | P-01 | | | | | | | | | | |
| Data Integrity Monitoring | P-02 | | | | | | | | | | |
| AIXM | P-06 | | | | | | | | | | |
| Unique identifiers | P-07 | | | | | | | | | | |
| Aeronautical Information Conceptual Model | P-08 | | | | | | | | | | |
| eAIP | P-11 | | | | | | | | | | |
| Terrain Area 1 | P-13 | | | | | | | | | | |
| Obstacle Area 1 | P-14 | | | | | | | | | | |
| Terrain Area 4 | P-13 | | | | | | | | | | |
| Obstacle Area 4 | P-14 | | | | | | | | | | |
| Terrain Area 2 | P-13 | | | | | | | | | | Please specify implementation of Area 2a, 2b, 2c and/or 2d |
| Obstacle Area 2 | P-14 | | | | | | | | | | Please specify implementation of Area 2a, 2b, 2c and/or 2d |
| Terrain Area 3 | P-13 | | | | | | | | | | |
| Obstacle Area 3 | P-14 | | | | | | | | | | |
| AD Mapping | P-15 | | | | | | | | | | |
| **Phase III** | | | | | | | | | | | |
| Aeronautical data exchange | P-09 | | | | | | | | | | |
| Communication networks | P-10 | | | | | | | | | | |
| Aeronautical information briefing | P-12 | | | | | | | | | | |
| Training | P-16 | | | | | | | | | | |
| Agreement with data originators | P-18 | | | | | | | | | | |
| Interoperability with METproducts | P-19 | | | | | | | | | | |
| Electronic aeronautical charts | P-20 | | | | | | | | | | |
| Digital NOTAM | P-21 | | | | | | | | | | |

| | | |
|---|---|---|
| **Legend** | | Not Started |
| | | In Progress |
| | | Implemented |

# Planning considerations

- Technical needs/requirements
- AIS personnel training
- Financial issues
- Organizational issues
- Other issues that need to be addressed

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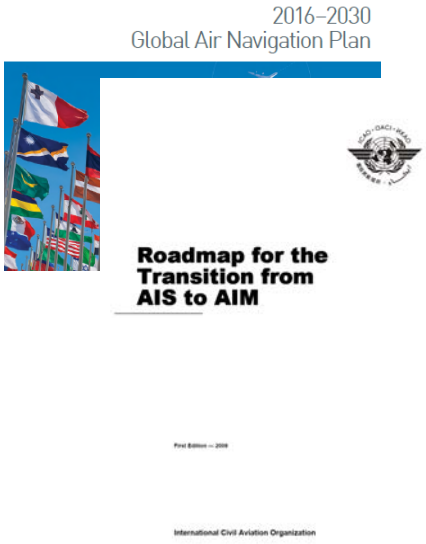
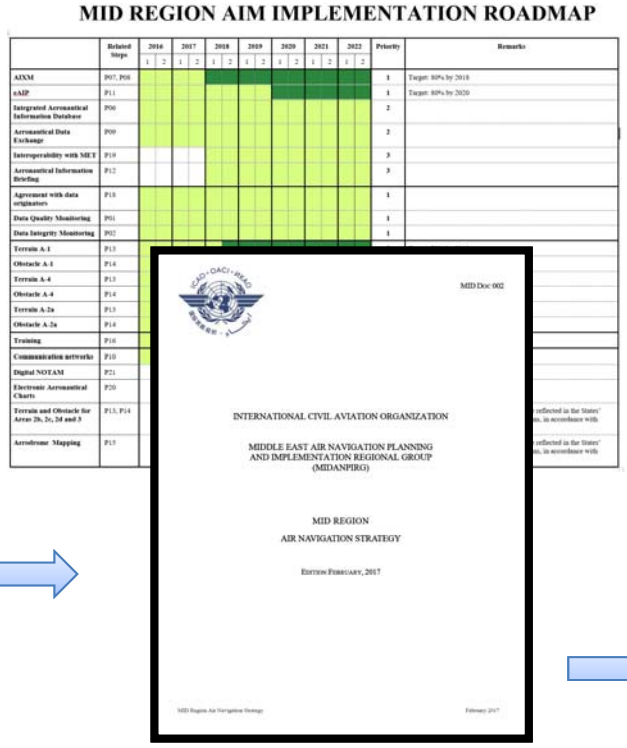
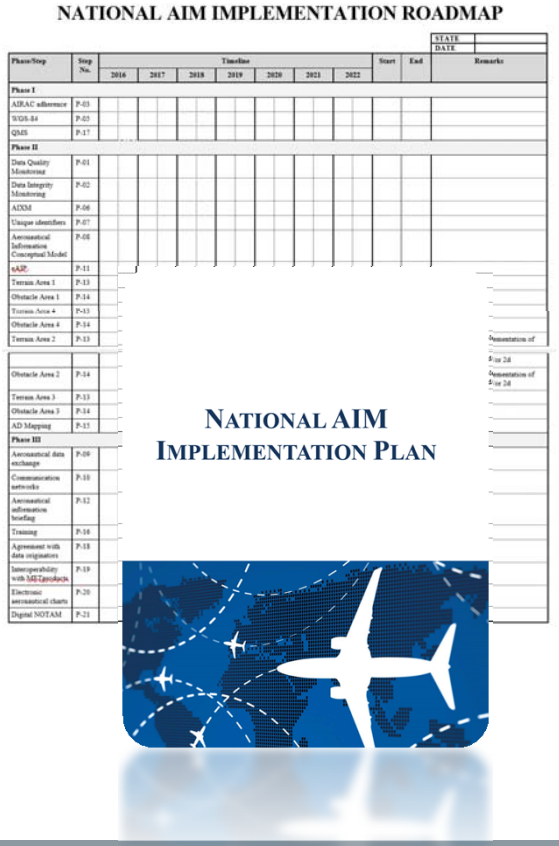
# Summary



ICAO

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THANK YOU