



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

*ASECNA Seminar on the Implementation of
requirements for the provision of Space
Weather Information to Aviation: From
Awareness to Operational Readiness*

Dakar, 8-12 December 2025, Dakar, Senegal

Session 4 : Advisory Interpretation – Hands-on Exercises

The Secrétariat

Bureau WACAF

2.2 Integration into GANP



EIGHTH EDITION OF THE GANP WAS ENDORSED BY ICAO A42

MULTILAYER STRUCTURE OF THE GANP

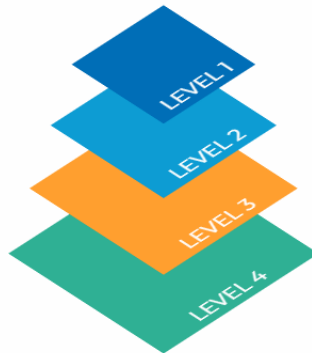
Click a level to navigate

GLOBAL STRATEGIC

GLOBAL TECHNICAL

REGIONAL

NATIONAL



Global Strategic Level

- Deliverable 1 – Update of the GANP Strategy

Global Technical Level

- Deliverable 2 - update to the Aviation System Block Upgrade framework
- Deliverable 3 - a mapping between the strategic and technical levels
- Deliverable 4 – Simplified guidance on the application of a performance-based approach
- Deliverable 5 - update of the GANP performance framework on environment and resilience

- **Regional and national levels**
 - Latest developments

GLOBAL AIR NAVIGATION PLAN



GLOBAL TECHNICAL ✕

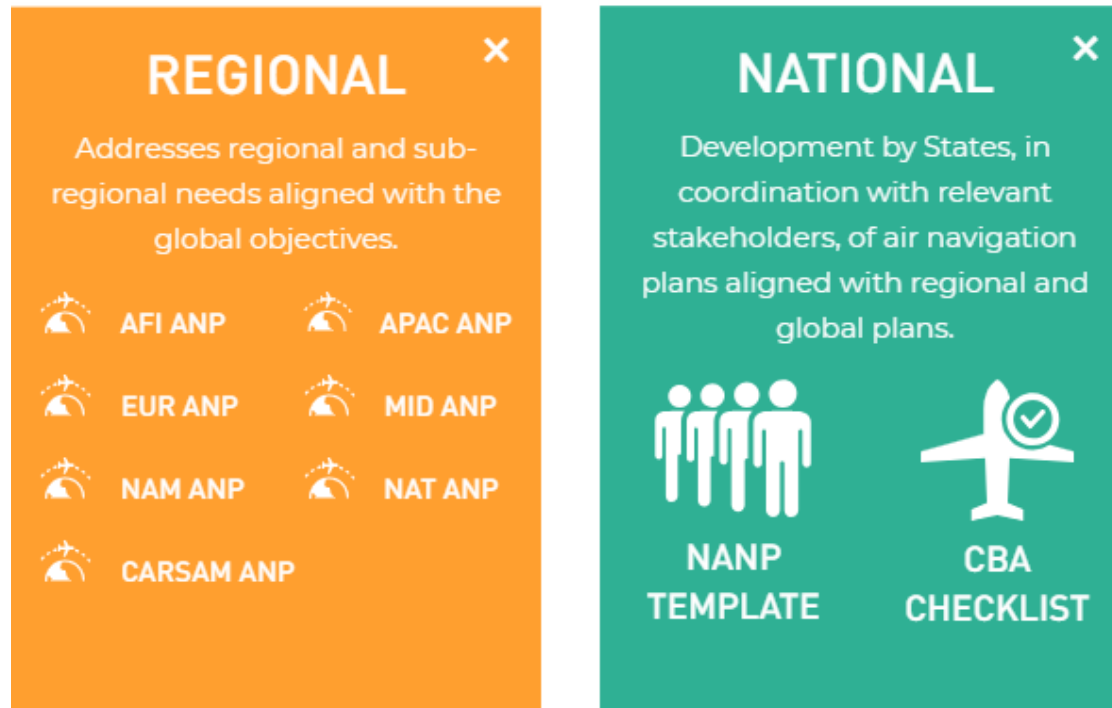
Supports technical managers in planning the implementation of basic air navigation services and new operational improvements in a cost-effective manner.

ASBUs & PF AN-SPA BBBs

The graphic features three icons: a person with a suitcase and an airplane, a dotted path with an airplane, and a solid path with an airplane.

- Deliverable 2 - update to the Aviation System Block Upgrade framework
 - Integrate new concepts (new entrants, use of AI/ML)
- Deliverable 3 - a mapping between the strategic and technical levels
- Deliverable 4 – Simplified guidance on the application of a performance-based approach
- Deliverable 5 - update of the GANP performance framework
 - Resilience focus area
 - Environment KPA
 - Focus areas: CO2 emissions, LAQ and noise
 - Reflect all ICAO initiatives but focused on operational measures/improvements

GLOBAL AIR NAVIGATION PLAN



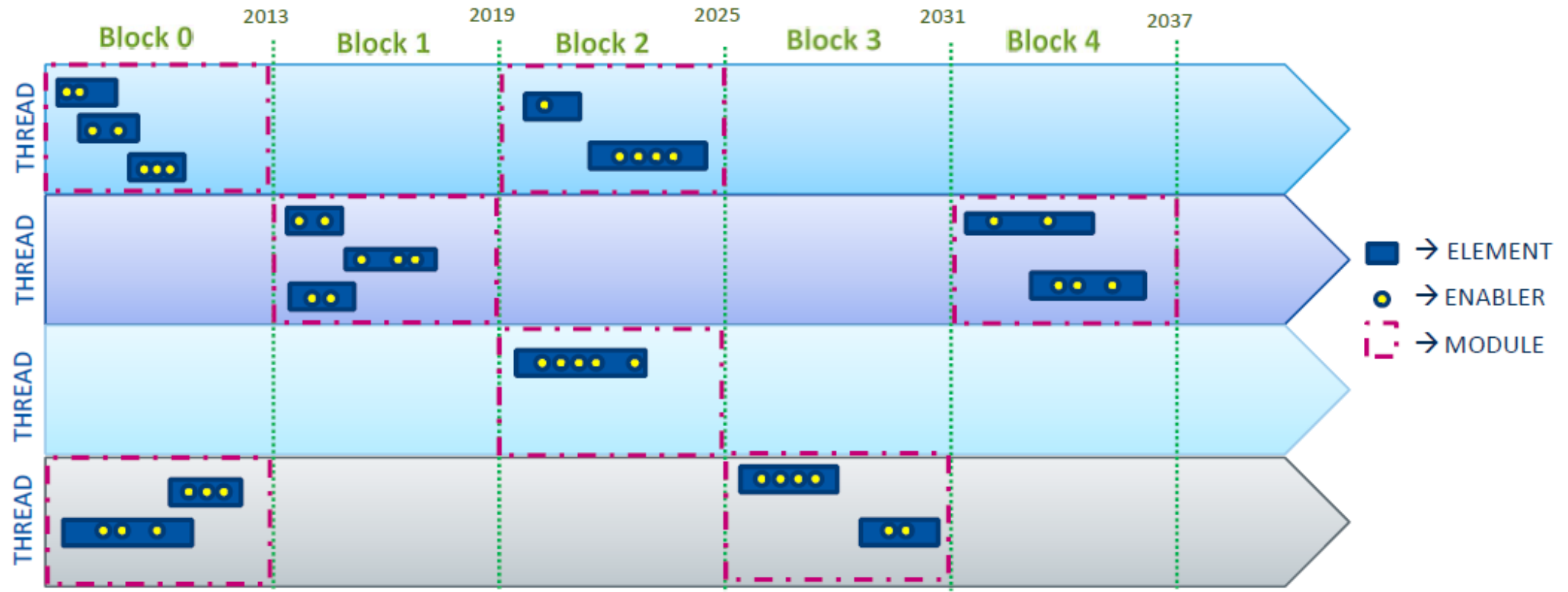
- eANP tool
 - Support the management of the ANPs
 - Under development
- National template and associated guidance
 - Support the States on national planning
 - Under development

ASBU (Aviation Systems Block Upgrades)

The **ASBU framework** is a part of Global Technical Level of the GANP, describing evolutionary steps of the developments of ConOPS in different areas of air navigation systems.

- **ASBU Threads** – identified areas that consist of future air navigation systems
- **ASBU Blocks** – 6-year timelines for the evolution of air navigation systems (Block 0 = 2013)
- **ASBU Modules** – Groups of ASBU elements to be available for implementation within the defined timelines in the ASBU Blocks
 - **ASBU elements** – Specific operational Improvements translated from ConOPS in ASBU Thread
 - **ASBU enablers**- Components (e.g., technology, training and regulatory provisions, as well as the stakeholders) required for the implementation of ASBU elements.

ASBU (Aviation Systems Block Upgrades)



ASBU AMET Modules

AMET Block 0 (- 2013)

Global, regional and local meteorological information to support flexible airspace management, improved situational awareness, collaborative decision-making and dynamically optimized flight trajectory planning.

AMET Block 1 (-2019)

Meteorological information supporting automated decision process or aids, involving meteorological information, meteorological information translation, ATM impact conversion and ATM decision support.

AMET Block 2 (-2025)

Integrated meteorological information in support of enhanced operational ground and air decision-making processes, particularly in the planning phase and near-term.

AMET Block 3 (-2031)

Integrated meteorological information in support of enhanced operational ground and air decision-making processes, for all flight phases and corresponding air traffic management operations.

AMET Block 4 (-2037)

Integrated meteorological information supporting both air and ground decision making for all phases of flight and ATM operations, especially for implementing immediate weather mitigation strategies.

Commencement of Space Weather Information Service is included in the ASBU AMET B1/2

AMET	/1	/2	/3	/4
B0	Meteorological observations products	Meteorological forecast and warning products	Climatological and historical meteorological products	Dissemination of meteorological products
B1	Meteorological observations information	Meteorological forecast and warning information	Climatological and historical meteorological information	Dissemination of meteorological information
B2	Meteorological observations information	Meteorological forecast and warning information	Climatological and historical meteorological information	Meteorological information service in SWIM
B3	Meteorological observations information	Meteorological forecast and warning information	Climatological and historical meteorological information	Meteorological information service in SWIM
B4	Meteorological observations information	Meteorological forecast and warning information	Climatological and historical meteorological information	Meteorological information service in SWIM



Thank You!