



WELCOME TO THE GLOBAL AIR NAVIGATION PLAN PORTAL

The GANP Portal is a web portal where all aviation stakeholders will be able to find the most relevant information related to the GANP



information related to the GANP
able to find the most relevant



Overview

- GLOBAL PLANNING

- Inside view

- High level guidance
 - GANP Lifecycle
 - Sixth edition GANP major edition
 - Seventh edition GANP current edition, minor edition
 - Eighth edition GANP major edition

- GANP Portal

- REGIONAL PLANNING

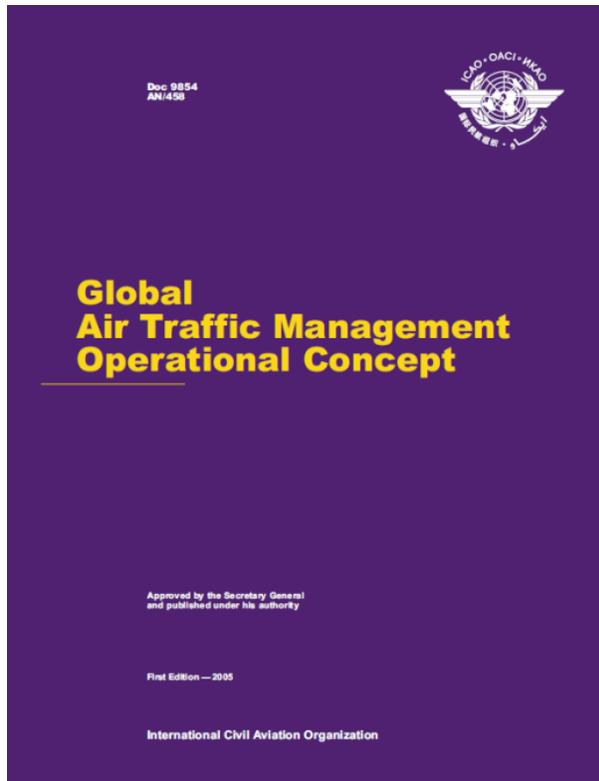
- ICAO Regional Air Navigation Plans

Global Air Navigation Planning

HIGH LEVEL GUIDANCE



HIGH LEVEL GUIDANCE



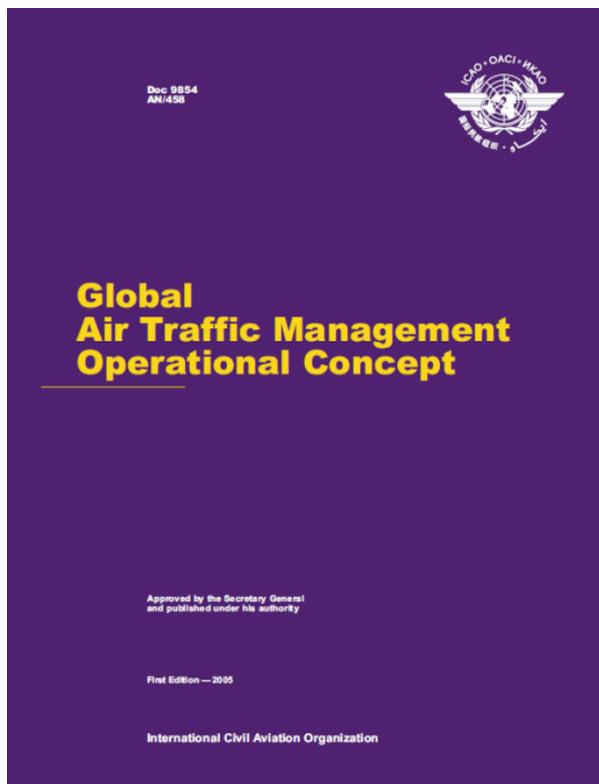
- **Vision Statement**

- To achieve an interoperable global air traffic management system, for all users during all phases of flight, that meets agreed levels of safety, provides for optimum economic operations, is environmentally sustainable and meets national security requirements

- **Guiding Principles**

- Safety
- Human
- Technology
- Collaboration
- Continuity
- Information

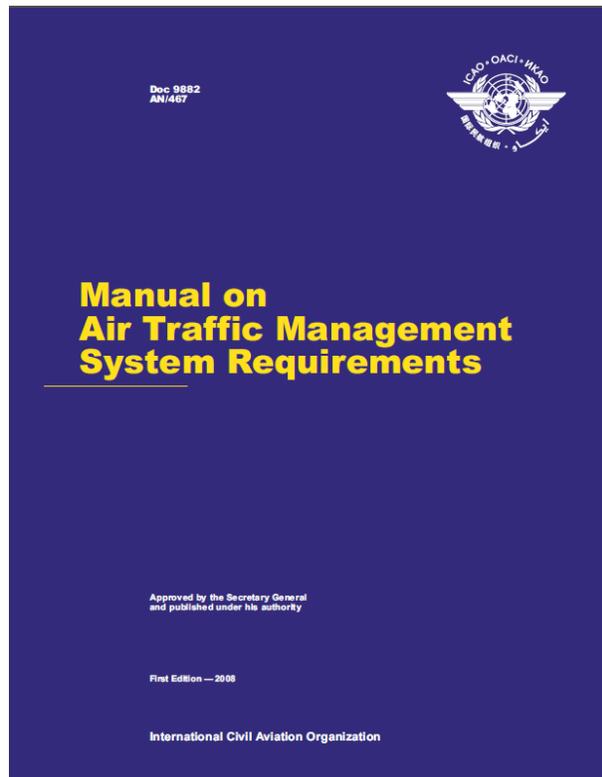
HIGH LEVEL GUIDANCE



- **Concept components**

- AOM — Airspace organization and management
- DCB — Demand/capacity balancing
- AO — Aerodrome operations
- TS — Traffic synchronization
- CM — Conflict management
- AUO — Airspace user operations
- ATM SDM — ATM service delivery management

HIGH LEVEL GUIDANCE



- Performance and expectations
- Information management and services
- System design and engineering
- ATM system components

GLOBAL AIR NAVIGATION PLAN

- The Global Air Navigation Plan (Doc 9750) is the ICAO's highest air navigation strategic document and the plan to drive the evolution of the global air navigation system, in line with the Global Air Traffic Management Operational Concept (GATMOC, Doc 9854) and the Manual on Air Traffic Management System Requirements (Doc 9882).
- Developed in collaboration with and for the benefit of stakeholders, the GANP is a key contributor to the achievement of ICAO's Strategic Objectives and has an important role to play in supporting the United Nations 2030 Agenda for Sustainable Development.

Global Air Navigation Planning
GANP LIFECYCLE



GANP Lifecycle



- The ICAO Assembly, at its 39th Session, agreed on the expansion of the GANP lifecycle through **three year minor and six-year major updates**, as relevant, in order to provide for stability.
- ICAO Air Navigation Global Events schedule

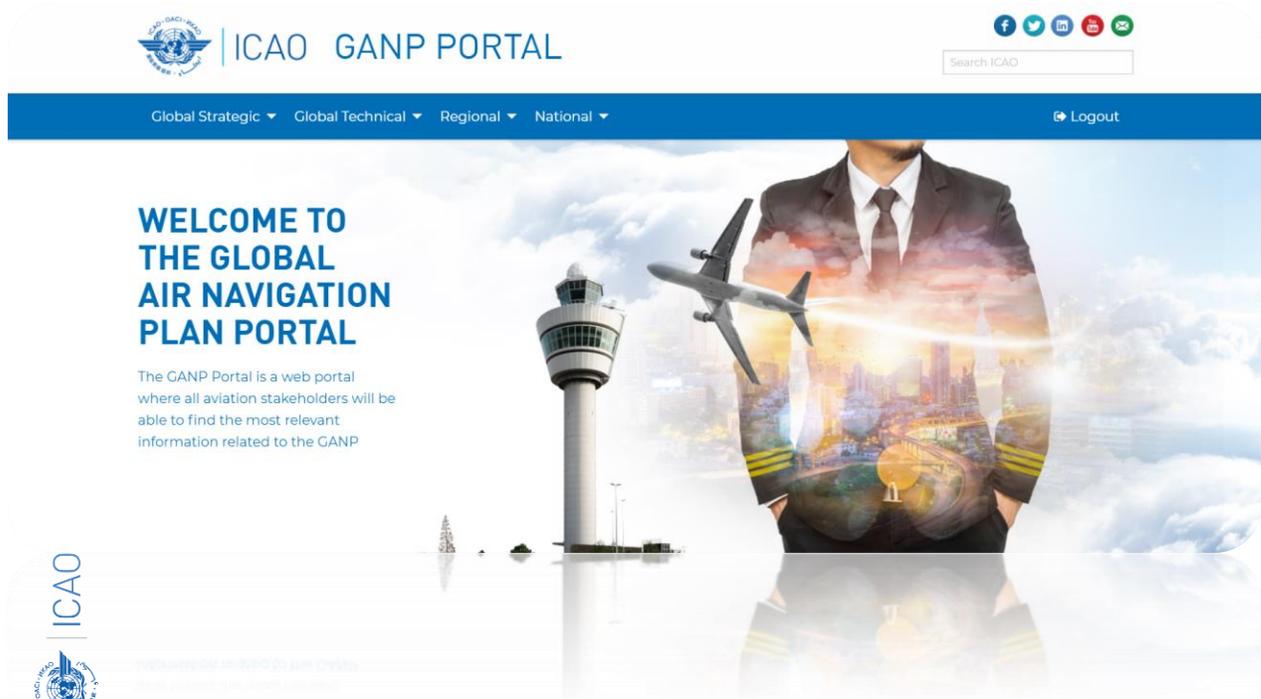
Exception: Due to the COVID-19 pandemic the HLSC of 2021 has been cancelled, therefore the GANP updates were presented directly to the ICAO Assembly in 2022. The HLCC did not address air navigation matters.

Global Air Navigation Planning

SIXTH EDITION OF THE GANP



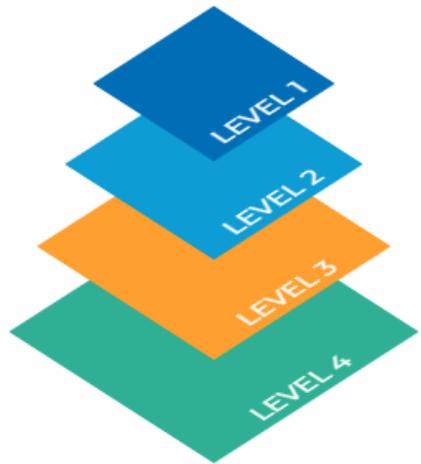
The Sixth Edition of the GANP- 2019



MULTILAYER STRUCTURE OF THE GANP

Click a level to navigate

- GLOBAL STRATEGIC
- GLOBAL TECHNICAL
- REGIONAL
- NATIONAL



[Click: Home - ICAO GANP Portal](#)

Sixth Edition of the GANP (Major update)

- Major update of the GANP
 - Multilayer Structure
 - Electronic format
 - GANP Portal ([Home - ICAO GANP Portal](#))
 - Maintenance process

GLOBAL AIR NAVIGATION PLAN

MULTILAYER STRUCTURE OF THE GANP

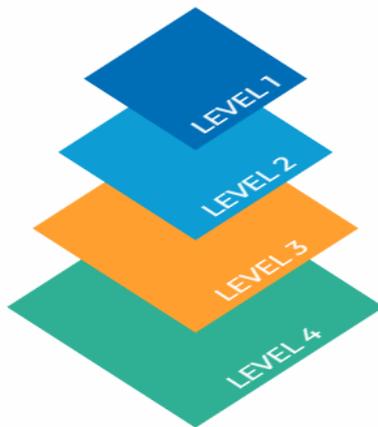
Click a level to navigate

GLOBAL STRATEGIC

GLOBAL TECHNICAL

REGIONAL

NATIONAL



<https://www4.icao.int/ganpportal/>

GLOBAL STRATEGIC LEVEL

- Electronic document
- Target audience: decision-makers
- Seven chapters:
 1. Intro
 2. Roles and responsibilities
 3. Challenges and opportunities
 4. The vision
 5. Performance ambitions
 6. The conceptual Roadmap
 7. From concept to operations

GLOBAL STRATEGIC



Provides high-level strategic directions for decision makers to drive the evolution of the global air navigation system towards a common agreed vision.



GANP DOCUMENT

GLOBAL TECHNICAL LEVEL

- Web-based platform
- Target audience: technical experts and implementers
- 2 Global frameworks
 - BBBs
 - ASBUs
- Associated Performance Framework
 - Catalogue of performance objectives
 - List of KPIs
- Performance Management process
 - AN-SPA

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

REGIONAL & NATIONAL LEVELS

- eANP tool
 - Under development
 - Available for the Eighth edition
- National template
 - Under development
 - Available for the Eighth edition

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
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Global Air Navigation Planning

THE SEVENTH EDITION OF THE GANP





Seventh Edition of the GANP (Minor update)

- No Symposium
 - Not discussed in a Conference
 - Minor input from HLCC due to cancelation of HLSC in 2021
 - No Secretariat paper
 - Endorsed by the 41th Session of the ICAO Assembly in 2022
-

SEVENTH EDITION OF THE GANP

MULTILAYER STRUCTURE OF THE GANP

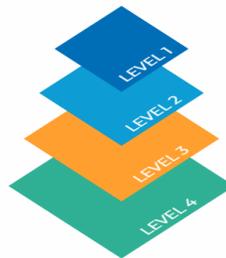
Click a level to navigate

GLOBAL STRATEGIC

GLOBAL TECHNICAL

REGIONAL

NATIONAL



- Update of the GANP performance framework
 - Safety KPA - Strengthen the link to the GASP
 - Maintenance process for the performance framework
- The Basic Building Blocks (BBBs) and the Universal Safety Oversight Audit Programme (USOAP)
- The Aviation System Block Upgrade (ASBU) framework and the Basic Building Block (BBB) framework
 - Update following the maintenance process



Safety KPA



- Encompassing safety performance framework that could be shared by the whole aviation community
 - Global Strategic Level:
 - A reviewed Safety ambition
 - Global Technical Level:
 - Safety focus areas
 - Safety objectives and subobjectives
 - Safety Key Performance Indicators
-

Safety ambition



“Achieve continual safety improvement in aviation in each ICAO region”

- Is challenging but realistic with a focus on success observed through trend over time and addresses the challenges of changes and innovation potentially threatening current safety levels;
- Is in the spirit of and contributes to many of the United Nations Sustainable Development Goals (SDGs);
- Addresses the combined scope of the GANP and the GASP;
- No longer states a theoretical aspiration but instead communicates the more pragmatic ambition to achieve continual improvement that focuses on all facets of safety outcomes, e.g. accidents, incidents, fatalities, injuries, damage and its secondary impact, over a long period of time with a focus on safety risk management;
- Is comprehensive, strategic and future-proof, in that it implicitly covers:
 - a) at least the next 20 years, not just in terms of the target date, but also in terms of the expected aviation environment at that time horizon;
 - b) all aviation segments, i.e. not just commercial operations, but all currently existing other airspace user segments, all new entrants such as low altitude operations (drones, urban air mobility etc.) and high altitude operations (including space launch and re-entry);
 - c) all aircraft operating environments, ground as well as airspace;
 - d) all safety risk categories;
 - e) all operational planning horizons, not just tactical/flight-ops (safety nets as well as normal ops), but also pre-tactical (planning several days ahead), strategic (annual planning), longterm planning (multi-year, including institutional setup);
 - f) "standard" operating environments as well as "enhanced" environments (with operational changes);
- Recognises different regional contexts and the need to improve safety performance regionally, as well as globally.



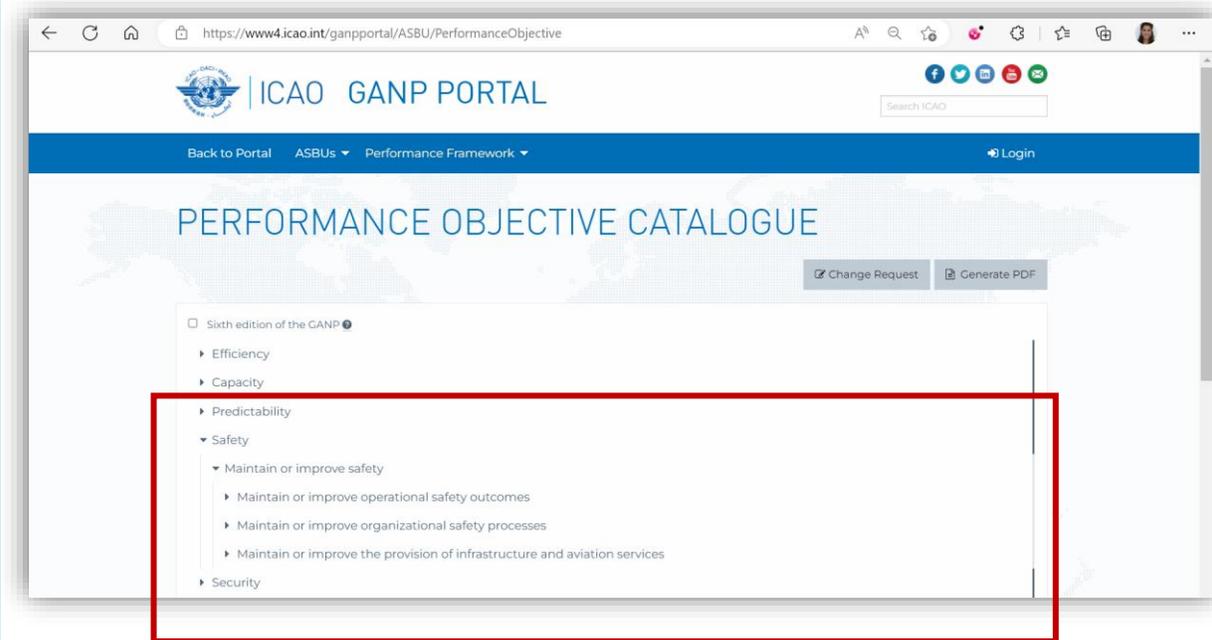
Safety focus areas

- FA: OPERATIONAL SAFETY OUTCOMES
 - Flight operations safety
 - Safety of traditional operations
 - Safety of new entrants
 - Safety of very low level operations
 - Safety of high level operations
 - Safety of urban air mobility
 - Aerodrome operations safety
 - Air navigation service provision safety
 - Aircraft maintenance safety
 - Design and manufacturing safety
- FA: ORGANIZATIONAL SAFETY PROCESSES
 - State Safety Programme (including safety oversight)
 - Safety Management System
 - Safety Collaboration
- FA: PROVISION OF INFRASTRUCTURE AND AVIATION SERVICES
 - Basic Building Blocks
 - Operational safety improvements

Safety performance objectives and sub-objectives



- Performance Objective Catalogue - ICAO GANP Portal



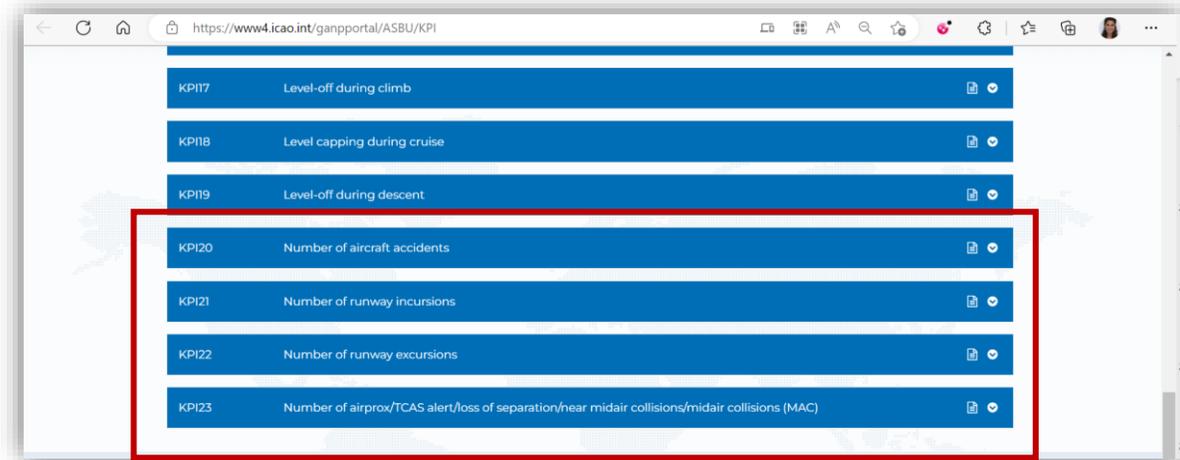


Mapping of the GASP goals to the safety objectives and sub-objectives

- In order to provide an integrated tree for the GANP and the GASP, the goals in the GASP were mapped to the performance objective tree. One of the six goals of the GASP relates to operational safety outcomes:
 - The scope of Goal 1 of the GASP “Achieve continuous reduction of operational safety risks” was not limited to the set of five High Risk Categories (HRC), but covered all risk categories (the HRC are a subset of the full set of risk categories). Goal 1 therefore was mapped to the safety performance sub-objective “Maintain or improve safety of traditional flight operations”.
- The rest of the goals in the GASP address organizational safety processes and provision of air navigation services, and were mapped to the tree as follows:
 - Goal 2 of the GASP “Strengthen States oversight capabilities” was mapped to the sub-objective “Strengthen State safety oversight capabilities”;
 - Goal 3 of the GASP “Implement effective State Safety Programmes” was mapped to the sub-objective “Increase the implementation of States’ Safety Programmes”;
 - Goal 4 of the GASP “Increase collaboration at the regional level” was mapped to two sub-objectives “Increase safety enhancement initiatives” and “Improve safety collaboration at global, regional and national levels”;
 - Goal 5 of the GASP “Expand the use of industry programmes and safety information sharing networks by service providers” was mapped to two sub-objectives: “Improve safety management systems implementation” of the industry and “Improve safety collaboration at global, regional and national levels”; and
 - Goal 6 of the GASP “Ensure the appropriate infrastructure is available to support safety operations” was mapped to the sub-objectives: “Strengthen States’ safety oversight capabilities”, as well as “Enhance the implementation of the Basic Building Blocks” and “Optimize the implementation of operational safety improvements within the ASBU framework” under the sub-objective “Maintain or improve the provision of infrastructure and aviation services”.

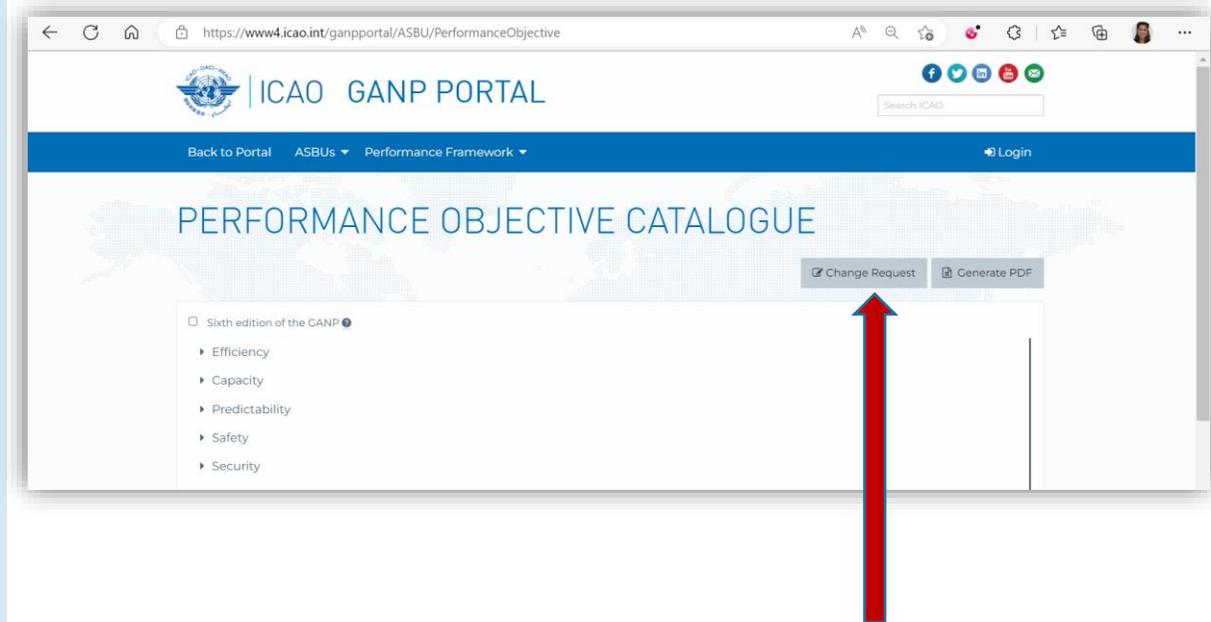
Safety Key Performance Indicators

- KPI OVERVIEW - ICAO GANP Portal



Maintenance process for the performance framework

- [Performance Objective Catalogue - ICAO GANP Portal](https://www.icao.int/ganportal/ASBU/PerformanceObjective)



The Basic Building Blocks (BBBs) and the Universal Safety Oversight Audit Programme (USOAP)

- [BBBs USOAP PQs \(icao.int\)](https://www.icao.int/audit/BBBs_USOAP_PQs)
 - The mapping in this hyperlink provides the link between two fundamental aspects of any robust air navigation system:
 - The provision of essential air navigation services (BBBs); and
 - the capability to oversee them (related PQs).
-

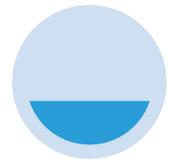
The Aviation System Block Upgrade (ASBU) framework and the Basic Building Block (BBB) framework

- An update of the BBB framework
 - [BBBs \(icao.int\)](#)
 - AIM
- An update of the ASBU framework
 - [ASBU Elements - ICAO GANP Portal](#)
 - Result of a campaign following the maintenance process endorsed by the 40th session of the ICAO Assembly ([Repository \(icao.int\)](#))

Global Air Navigation Planning

THE EIGHTH EDITION OF THE GANP

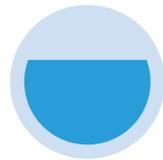
GLOBAL AIR NAVIGATION EVENTS



Symposium:
AN World

28-31 August 2023

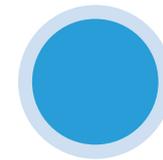
Industry technical
input



14th Air Navigation
Conference

Sept 2024

State technical
input



42nd Session General
Assembly

September 2025

Decisions

EIGHTH EDITION OF THE GANP

- **Global Strategic Level**

- Review of the GANP Strategy
 - New entrants
 - Themes
 - Principles

- **Global Technical Level**

- Performance Framework
 - Environment
 - Resilience
 - Manual on ANS Performance Management
 - Performance Assessment of the ASBU framework
- ASBU framework
 - Update of the BBB and ASBU frameworks
 - Update of the TBO tree
 - Integrate new concepts (UTM, HAO, AI/ML, New flight rules)
 - Develop credible benefit driven approach
 - How to package improvements?
 - How to assess investments against monetized benefits?
 - Operational incentives for ASBU elements
 - Identify Quick Wins

EIGHTH EDITION OF THE GANP

- **Regional Level**
 - System in the GANP Portal to manage the ANP
- **National Level**
 - Manual on National Air Navigation Planning
 - Includes a template aligned with the ANP.

REGIONAL PLANNING

ICAO REGIONAL AIR NAVIGATION PLAN



REGIONAL AIR NAVIGATION PLAN

- Till 2014 → Basic & FASID
- Council Approved template with Vol I, Vol II & Vol III → ALIGNEMENT AND FLEXIBILITY
- Vol I
 - Former Basic
 - Stable elements, approved by Council
 - FIR boundaries (requires Council approval)
- Vol II
 - Former FASID
 - Traditional Service and Facilities, approved based on regional agreement
 - Navigation aids
- Vol III
 - New
 - Performance-based modernization of the air navigation system, approved by the PIRGs
 - ASBUs

REGIONAL AIR NAVIGATION PLAN

- Structure Vol I & Vol II

- Introduction
- Generic aspects
 - Regional traffic flows
- Aerodromes
 - General Regional Requirements
 - Specific Regional requirements
- CNS
 - General Regional Requirements
 - Specific Regional requirements
- ATM
 - General Regional Requirements
 - Specific Regional requirements
- MET
 - General Regional Requirements
 - Specific Regional requirements
- SAR
 - General Regional Requirements
 - Specific Regional requirements
- AIM
 - General Regional Requirements
 - Specific Regional requirements



GANP: BBBs

REGIONAL AIR NAVIGATION PLAN

- Structure Vol III

- Introduction
- Generic aspects
- Air Navigation Implementation

→ Evolution to a performance-based planning

GANP: PF and ASBUs

eANP Project

- **Goal: To have an electronic system for the publication and amendment of the Regional ANPs.**
 - Shift in the way we manage the ANPs. No more State Letters but system notifications and electronic approvals for instance.
- **Project Development**
 - Phase 1
 - Electronic Vol I and Vol II
 - Expected timeframe: 24th AN Conf
 - Phase 2
 - PfA flow
 - Expected timeframe: 42nd Session of the ICAO Assembly
 - Phase 3
 - Vol III
 - 2025-2028



Stakeholders

- States
- International Organizations
- Regional Offices
- ICAO HQ



Thank You!