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Global Aviation Safety Plan (GASP) & Global Air Navigation Plan (GANP)



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What is the GASP?

- Global strategy for safety improvement
- Framework for regional & national plans
- Promotes harmonization & coordination of efforts





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Comprehensive Process

GASP-SG
AHWG

SANIS

State
Consultation

AN-Conf

ANC

Council

State
Consultation

Assembly

GASP-Study Group





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Basic Principles for 2020-2022 Edition

- Contains vision, mission and values
- Restructured in different parts
- Clearly delineates responsibilities
- Aspirational Goal + Goals, Targets & indicators
- Applies risk-based approach (HRC)
- Roadmap more predominant





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GASP Vision

To achieve and maintain the goal of zero fatalities in commercial operations by 2030 and beyond



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GASP Mission

To continually enhance international aviation safety performance by providing a collaborative framework for States, regions and industry



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GASP Values

GASP values include:

- ✓ promoting positive safety culture
- ✓ promoting sharing & exchange of safety information
- ✓ taking data-driven decisions
- ✓ prioritizing actions through risk-based approach



GASP Goals, Targets & Indicators





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6 Proposed GASP Goals

1. Achieve continuous reduction of ops safety risks
2. Strengthen States' safety oversight capabilities
3. Implement effective State safety programmes
4. Increase collaboration at regional level
5. Expand the use of industry programmes
6. Ensure appropriate infrastructure is available to support safe ops





National, Regional and Global HRC





Next Steps

- **ANC Final Review**
 - April 2019
- **Council Approval**
 - May 2019
- **Issue WP for A40**
 - June 2019
 - With final 2020-2022 GASP
- **Feedback, email: GASP@icao.int**



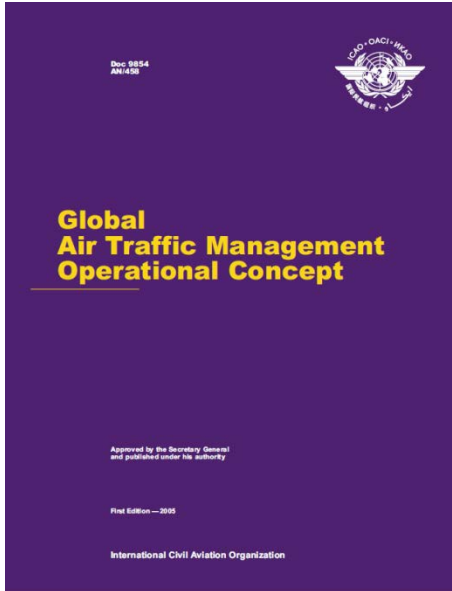


Global Air Navigation Planning (GANP)

- The vision
- A Plan to realize the vision
- Collaboration
- A look to the future
- Opportunity
- Conclusion



The Vision

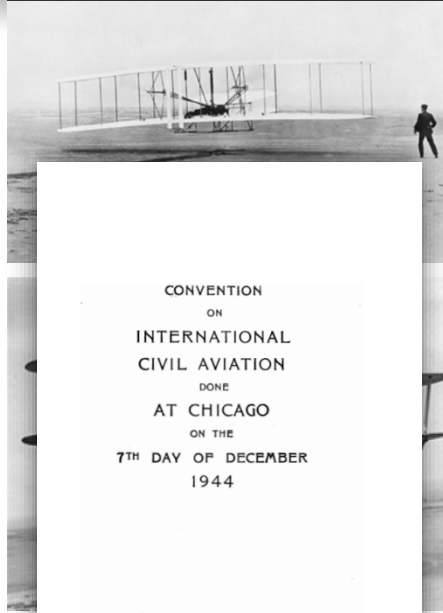


To achieve an **interoperable** global air traffic management system, **for all users during all phases of flight**, that meets agreed levels of **safety**, provides for **optimum economic operations**, is **environmentally sustainable** and **meets national security requirements**



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Global Air Navigation Planning

A PLAN TO REALIZE THE VISION





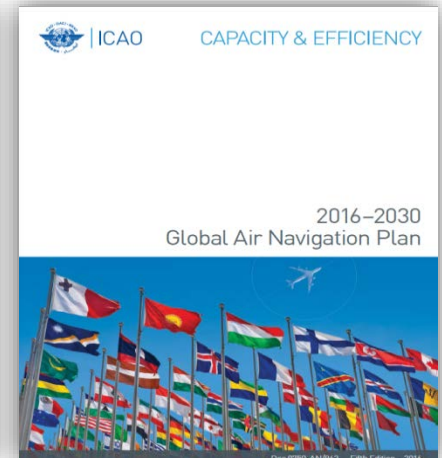
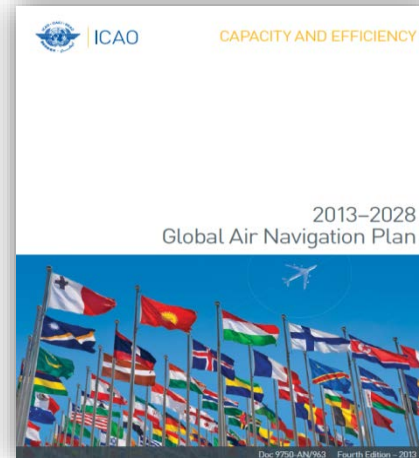
Global Air Navigation Planning

2002

2007

2013

2016





GANP 2013

“Increase the capacity and improve the efficiency of the global civil aviation system”

- Through the **GANP**, offer a long-term vision to assist all aviation stakeholders, and ensure continuity and harmonization among modernization programmes
- Through the **Aviation System Block Upgrades (ASBU)**, provide a consensus-driven modernization framework for integrated planning based on performance

The image shows the cover of the 2013-2028 Global Air Navigation Plan (GANP) and a diagram of the Aviation System Block Upgrades (ASBU) framework. The GANP cover features the ICAO logo, the title "CAPACITY AND EFFICIENCY", and the subtitle "2013-2028 Global Air Navigation Plan". The ASBU diagram is a grid with four columns representing Block 0 (2013), Block 1 (2015), Block 2 (2020), and Block 3 (2025 onward), and four rows representing Performance Improvement Areas: Airport Operations, Globally Interconnected Systems and Data, Optimum Capacity and Flexible Flights, and Efficient Flight Paths. Each cell in the grid contains a small grid of dots, indicating the scope of the upgrades for each area and block.

| Performance Improvement Area | Block 0 (2013) | Block 1 (2015) | Block 2 (2020) | Block 3 (2025 onward) |
|--|----------------|----------------|----------------|-----------------------|
| Airport Operations | 4 dots | 4 dots | 4 dots | 4 dots |
| Globally Interconnected Systems and Data | 4 dots | 4 dots | 4 dots | 4 dots |
| Optimum Capacity and Flexible Flights | 4 dots | 4 dots | 4 dots | 4 dots |
| Efficient Flight Paths | 4 dots | 4 dots | 4 dots | 4 dots |



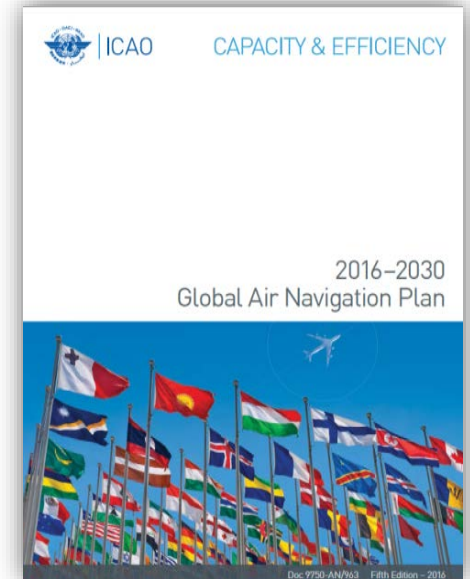
GANP 2016

- **Objectives**

- **International and overarching framework** of a global investment plan: make it more usable towards implementation
- Keep it **stable** while making the necessary updates/additions
- Adjust the **periodicity** to the Assembly and ICAO editing cycles

- **A Planning Document for Implementation**

- GANP should serve as a comprehensive planning tool to **support the development and implementation** of a harmonized global air navigation system





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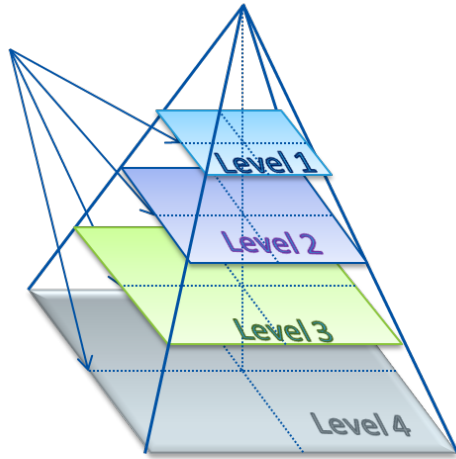




2019 Update of the GANP

Multilayer Structure

LAYERS



COMPONENTS





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Main Goals of the 2019 GANP

- **Evolution of the global air navigation system**
 - Promote investment in **innovation** through research and development activities
 - Align Regional **Research and Development Programmes**
- **Support implementation**
 - **ASBU framework**
 - Alignment global, regional and national planning
 - **Performance-based** decision making method
 - Optimize **allocation and use of resources** for air navigation



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Main Purpose

- **ENHANCE THE PERFORMANCE OF THE AIR NAVIGATION SYSTEM**
 - High social visibility
 - Safety
 - Security
 - Environment
 - Medium social visibility: Operational
 - Capacity
 - Efficiency
 - Predictability
 - Flexibility
 - Cost- Effectiveness
 - Low social visibility: basis
 - Access and equity
 - Interoperability
 - Participation by the ATM community



Collaboration is key to succeed

- **“No State or stakeholder left behind”**
 - Regulators, air navigation service providers, aerodrome operators, airspace users
- **Advantages**
 - Achievement expected results
 - Maximize benefits
 - Optimum use and allocation of resources





A future full of opportunities

- **Upper atmosphere**
 - Balloons, RPAS, space activities
 - Single homogenous region
- **Low density areas**
 - Different type of aircraft
 - Different missions
- **High density areas**
 - Traffic will continue to increase
 - Same or enhanced level of performance expected





Manned vs. Unmanned traffic



- + 362,000 aircraft
- 23,000 airliners
- Growth of 750 /year



- + 4,000,000 drones
- Expected 400k commercial
- Growth of 150,000 /year



In a time of change...

- Transformational change is needed

- Information Management
 - Digital data MET, AI, FICE,...
 - Information exchange over IP
- Management by trajectory
 - Time based management
 - Synchronization
 - Automation





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Global Aviation Safety & Air Navigation Update

Upcoming Event

40th Assembly

Montreal, Canada

24 September – 4 October 2019



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THANK YOU!