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

Comprehensive Process

GASP-SG AHWG

SANIS

State Consultation

AN-Conf

ANC

Council

State Consultation

Assembly

GASP-Study Group

AIRPORTS COUNCIL INTERNATIONAL · canso · EUROCONTROL · FLIGHT SAFETY FOUNDATION · IATA · IBAC International Business Aviation Council · IFALPA The Global Voice of Pilots · IFATCA

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

GASP Vision

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

GASP Mission

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

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

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

Our
Aspirational
Safety Goal

ICAO

Conte

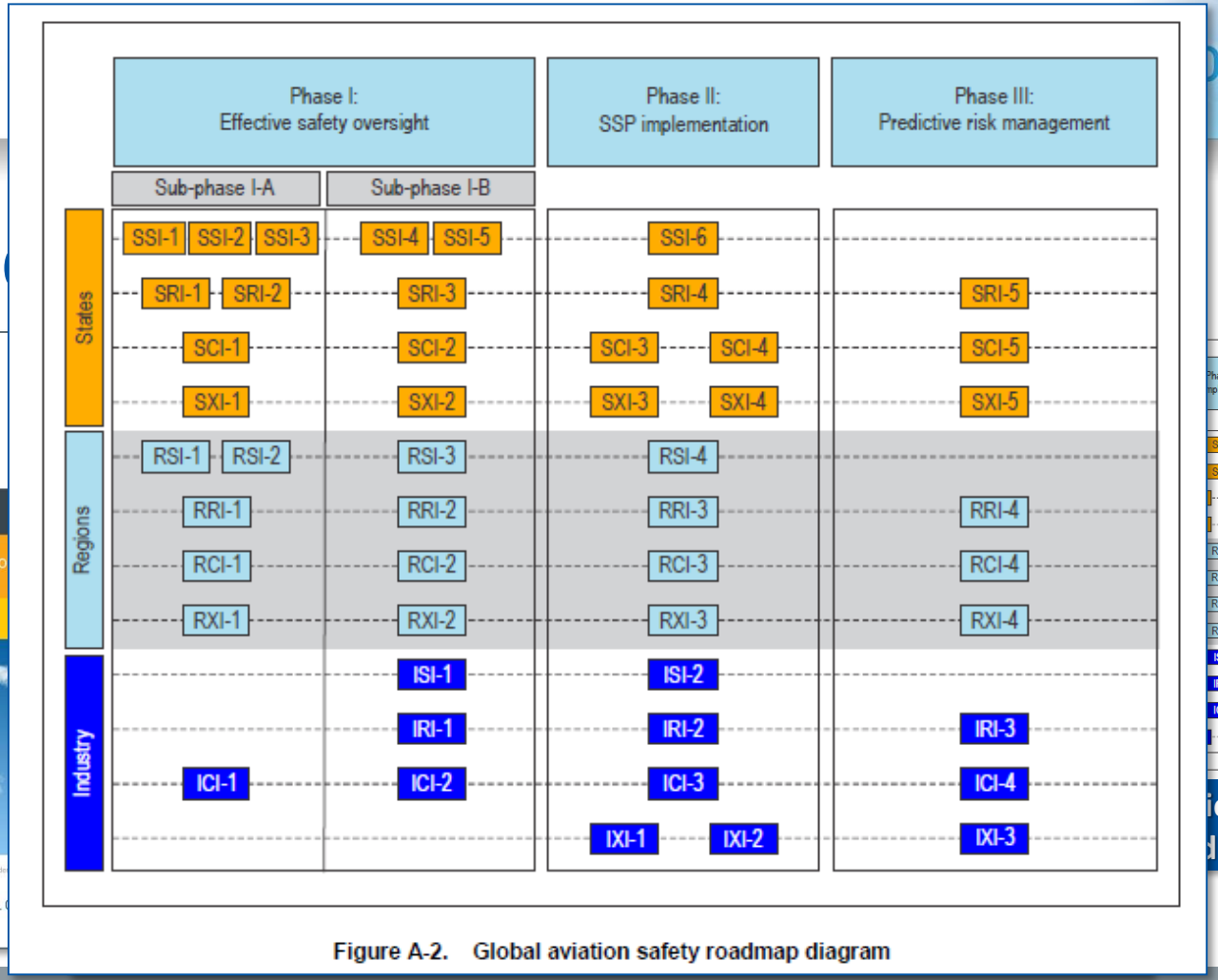
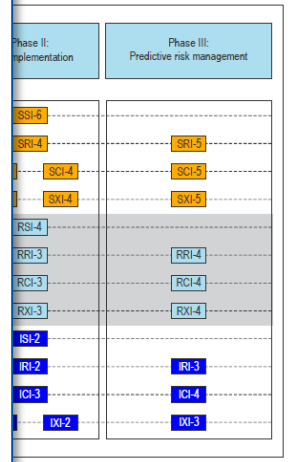


Figure A-2. Global aviation safety roadmap diagram



ion safety
diagram

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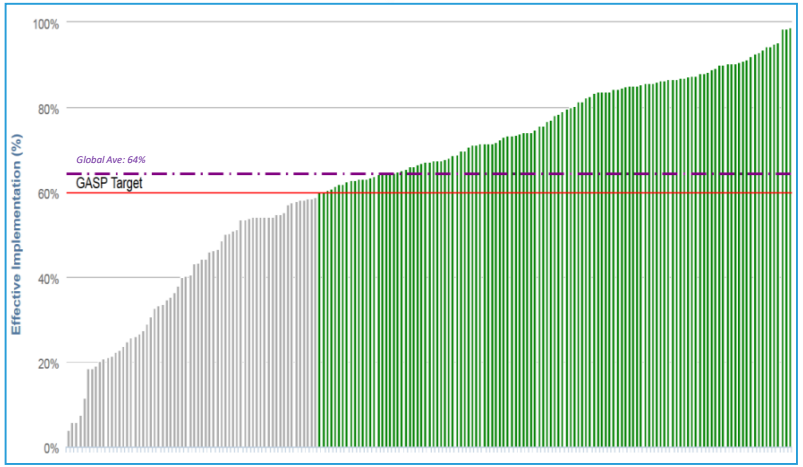
PROPOSAL FOR NEXT GASP

Effective Implementation



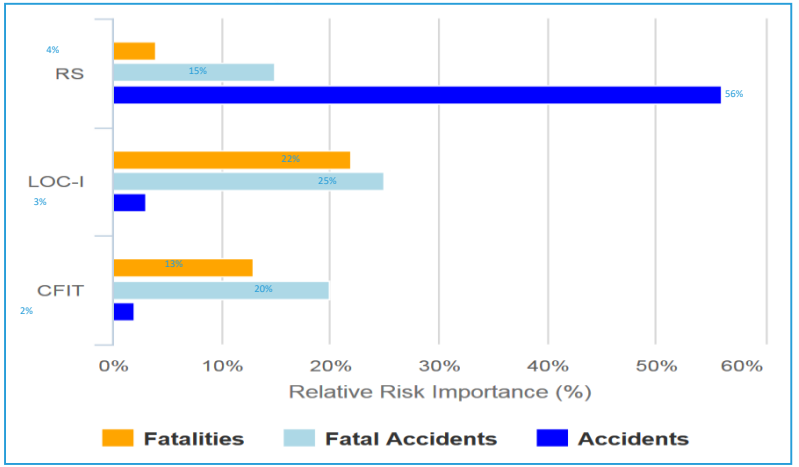
USOAP Audit Results

GANP

ASBU

BBBs

Operational Risks



Scheduled Commercial flights on airplanes above 5.7t 2012-2016

TARGET 4.1	TARGET 2.1	TARGET 2.2	TARGET 3.1	TARGET 3.2	TARGET 6.1	TARGET 1.1	TARGET 5.1	TARGET 5.2	TARGET 4.2	TARGET 4.3
ICAO **Recognized** functions	Implement **Safety Oversight**	Positive **Safety Margin**	Sustainable **SSP**	Effective **SSP**	Appropriate **Infra-structure**	Reduced **Accident rate**	**INDUSTRY** assessment programmes	Harmonized KPIs in **SMS**	Safety risk information to **RASG**	**RASG** Risk mgmt. activities
2020	2022+	2022	2022	2025	2022	Yearly	2020	2022	2022	2022

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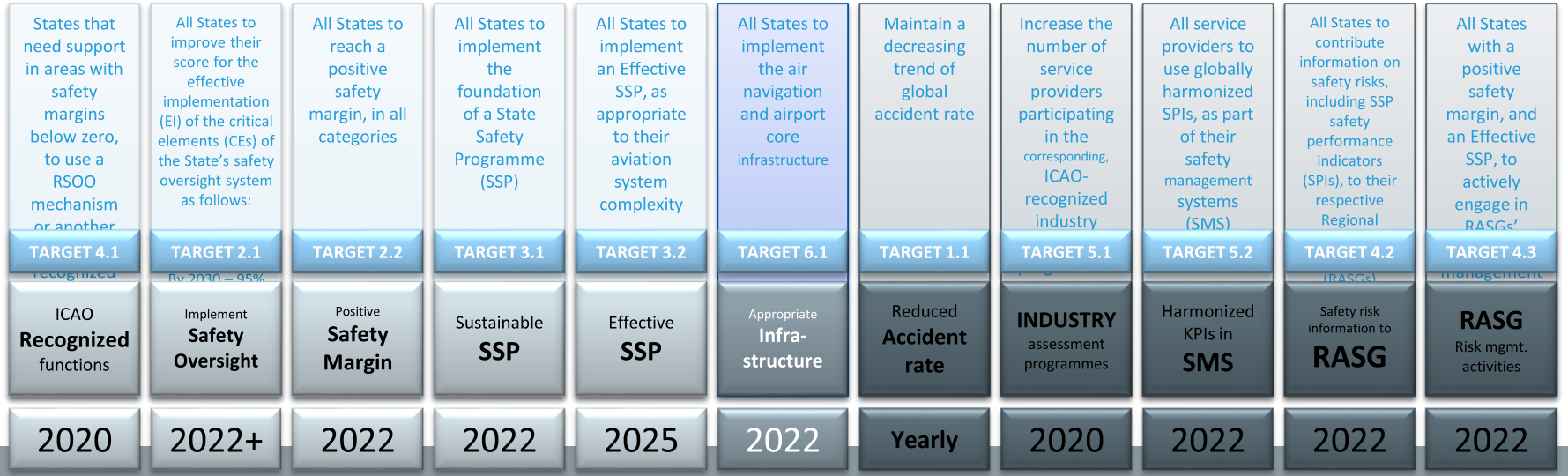
PROPOSAL FOR NEXT GASP

Effective Implementation

BBBs

Operational Risks



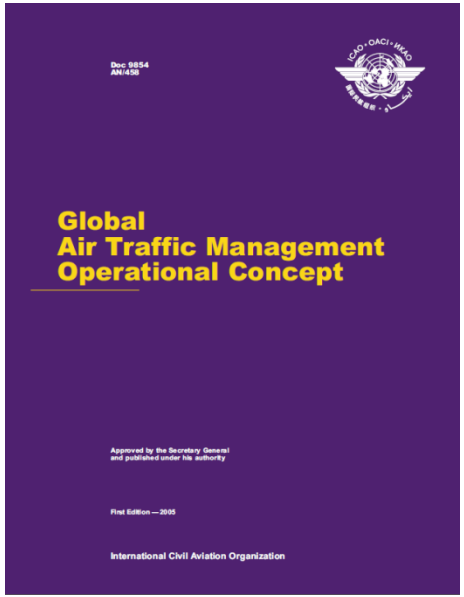
Recent Developments

- ANC Final Review
  - April 2019
- Council Approval
  - May 2019
- Issue WP for A40 (WP/51)
  - June 2019
  - With final 2020-2022 GASP
- Feedback, email: GASP@icao.int

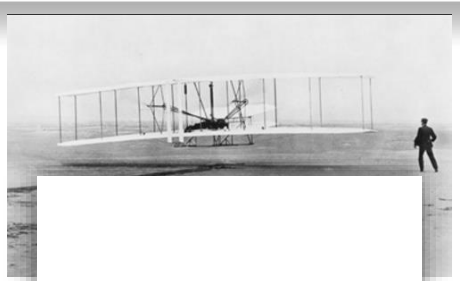
Global Air Navigation Planning （GANP）

- 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**



CONVENTION
ON
INTERNATIONAL
CIVIL AVIATION
DONE
AT CHICAGO
ON THE
7TH DAY OF DECEMBER
1944

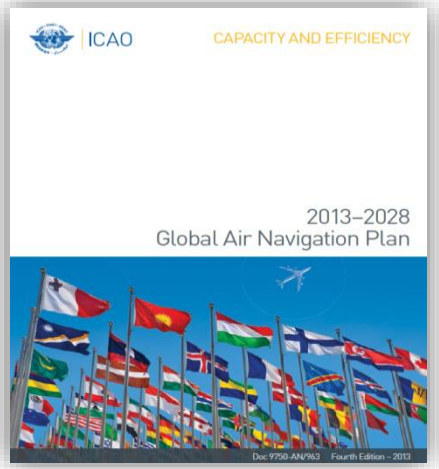
Airbus A380
A380

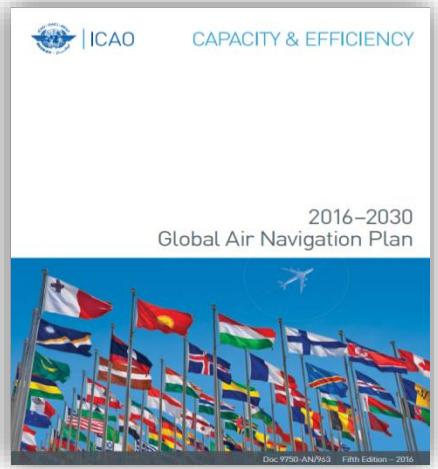
Global Air Navigation Planning

A PLAN TO REALIZE THE VISION

Global Air Navigation Planning

2002 2007 2013 2016





GANP 2013

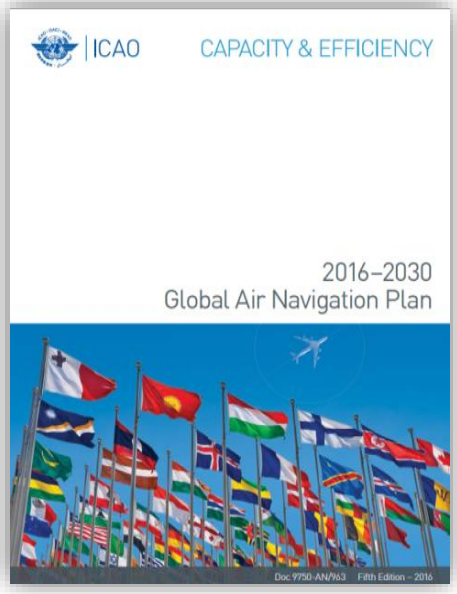
"Increase the capacity and improve the efficiency of the global civil aviation system"

- 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

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

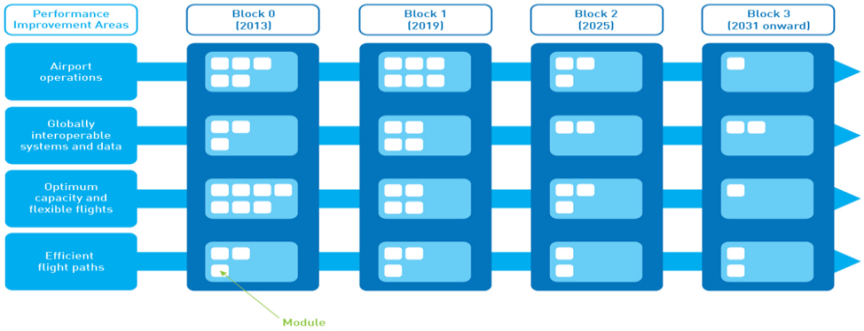
- **A Planning Document for Implementation**
  - GANP should serve as a comprehensive planning tool to **support the development and implementation** of a harmonized global air navigation system

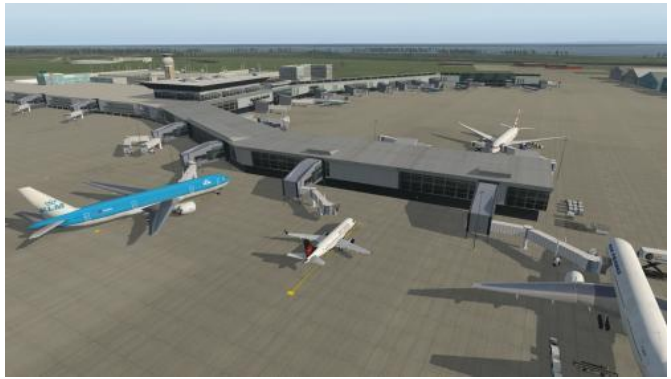


Aviation System Block Upgrades Framework

- Global interoperable scalable implementation enabled by technological innovation

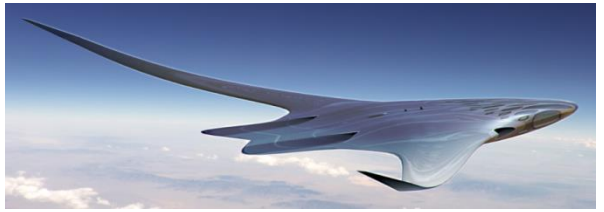
  "ONE SIZE DOES NOT FIT ALL"





WHAT'S NEXT?

Airbus A380
A380

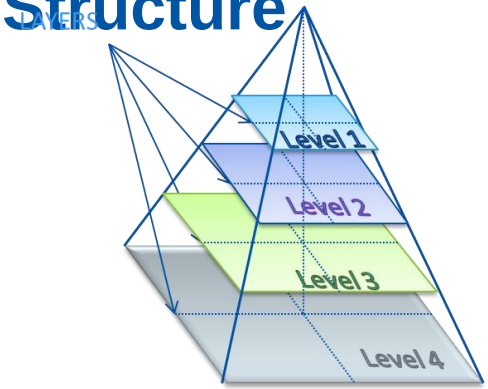


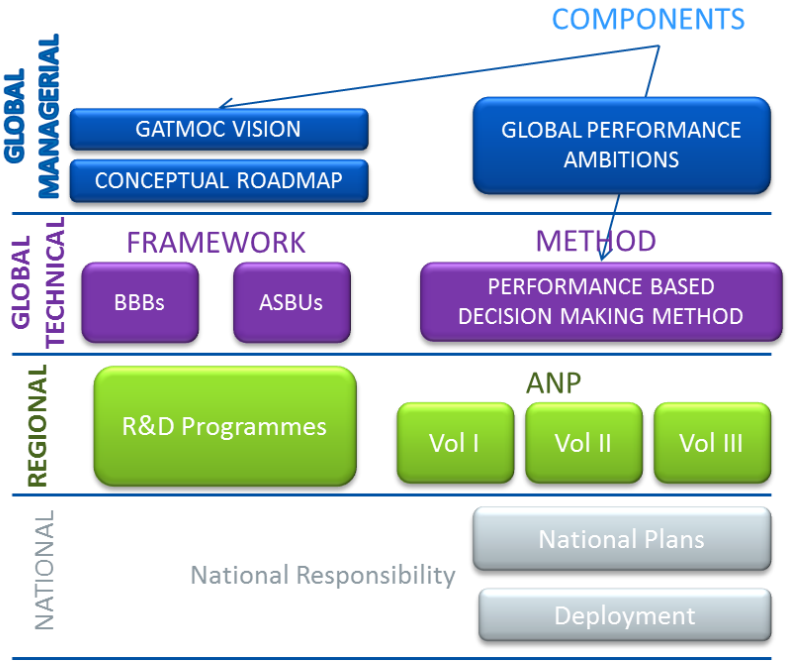
PROPOSAL FOR NEXT GANP

Proposals for Enhancement

2019 Update of GANP:

Creating a Multilayer Structure





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**

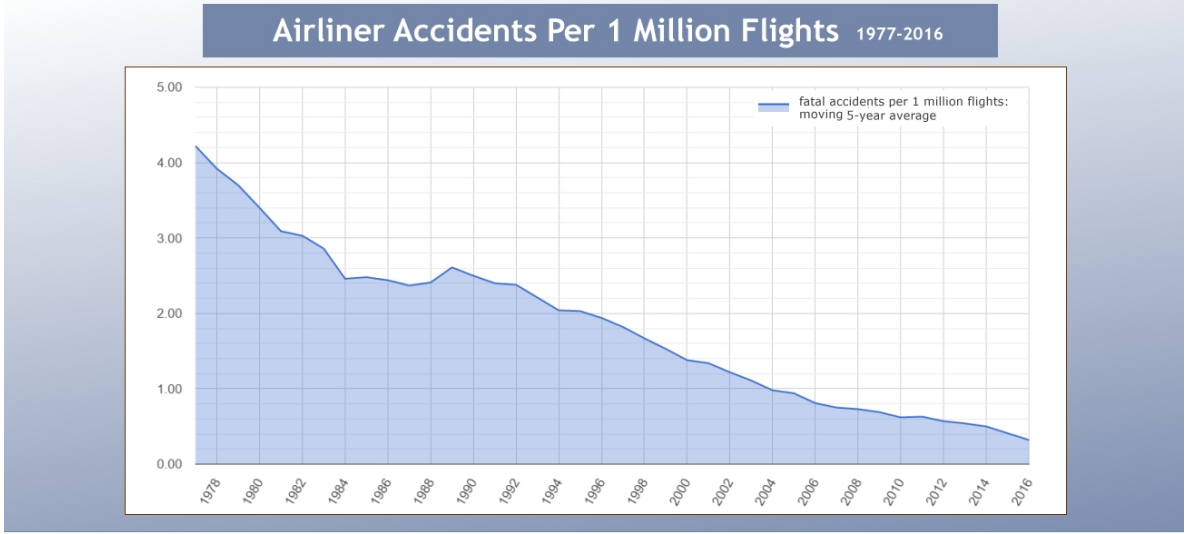
- **Support implementation**
  - **ASBU framework**
  - Alignment global, regional and national planning
  - **Performance-based** decision making method
  - Optimize **allocation and use of resources** for air navigation

Main Purpose

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

social well-being all peoples of the world

- More quiet
- Cleaner
- Safer
- More resilient
- More profitable



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

Global Aviation Safety & Air Navigation Update

Upcoming Event

40th Assembly
Montreal, Canada
24 September – 4 October 2019

ICAO UNITING AVIATION

NO COUNTRY LEFT BEHIND

THANK YOU!