



International Civil Aviation Organization

ASBU/SIP/Lima/2012-WP/8

# **System of Systems (DRAFT)**

## **To be approved by the ICAO Council**

Workshop on preparations for ANConf/12 – ASBU methodology  
(Lima, 16-20 April 2012)



International Civil Aviation Organization

# **Council Briefing Winter Session, Safety Week**

# ICAO's Safety Framework



## Policy & Standardization

- GASP Update

## Safety Monitoring

- USOAP to Continuous Monitoring

## Safety Analysis

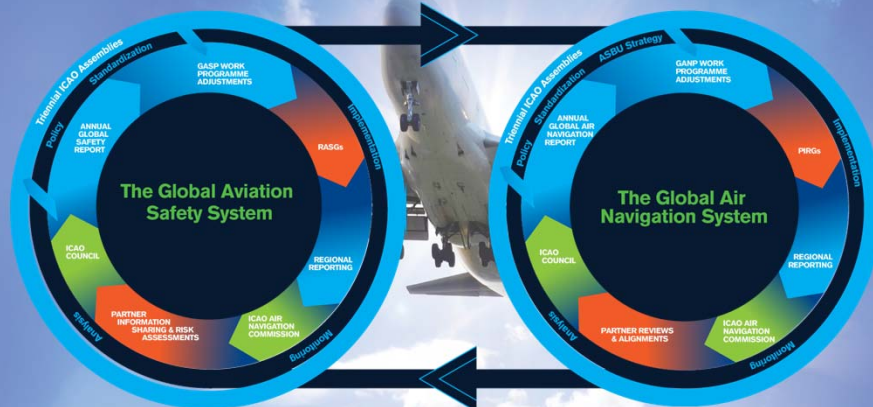
- Establishes Priorities

## Implementation

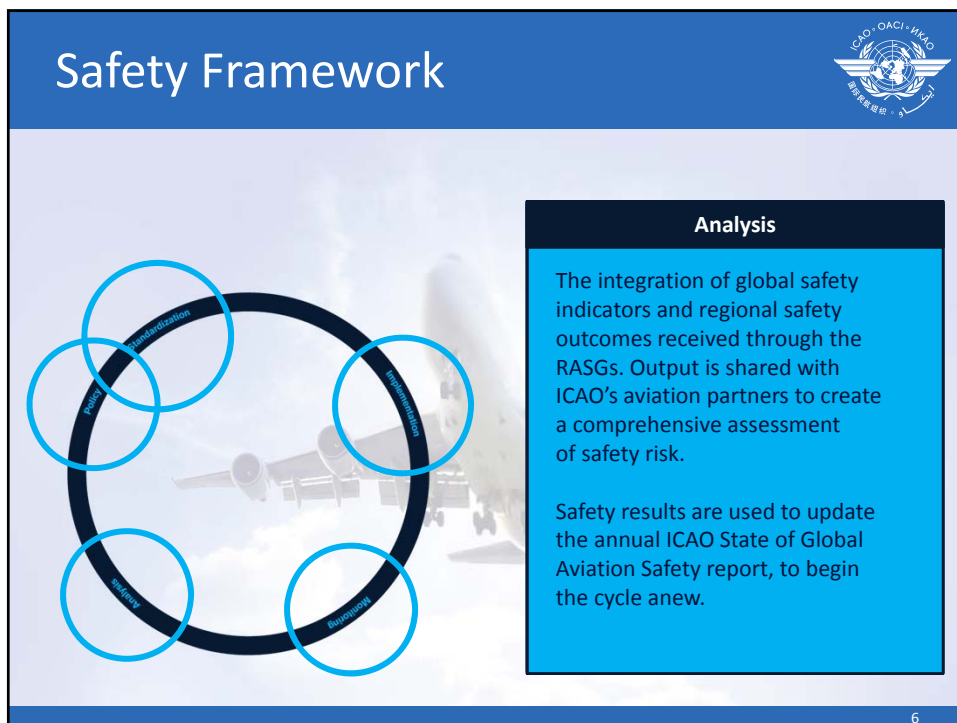
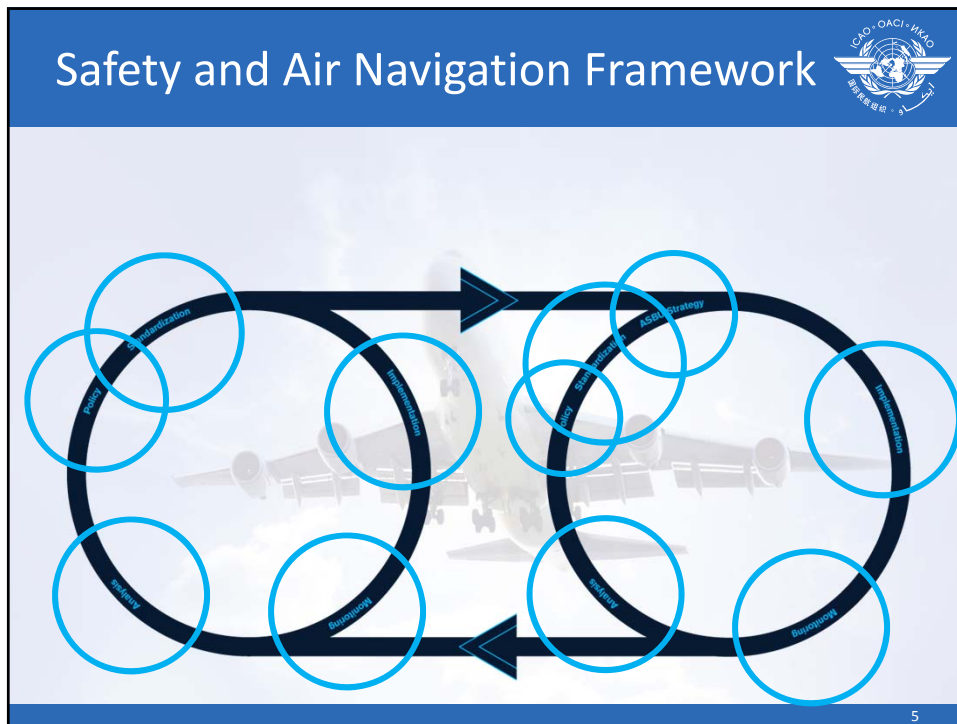
- Annual Safety Report

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# Aviation's System of Systems



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## Air Navigation Framework



### Analysis

Analysis of reporting data is carried out collaboratively with ICAO's partners. Results are then published in the annual ICAO Global Air Navigation Report (GANR), which then helps determine the tactical regional work programme's annual adjustments to start the cycle again.

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## Strategic Plans for the Future



Stressin  
Partners  
Prioritiza  
Transpar

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## Safety Partnerships



This slide illustrates various safety partnerships and events. At the top right is the ICAO logo. Below it, a grid of logos includes ACI, canso, EUROCONTROL, FEDERAL AVIATION ADMINISTRATION, FLIGHT SAFETY FOUNDATION, IATA, ICAO, ICAO OACI, IFALPA, and IFATCA. On the left, three event banners are shown: 'GLOBAL RUNWAY SAFETY SYMPOSIUM' (ICAO Montreal, Canada, 31-30 May 2011), 'FATIGUE RISK MANAGEMENT SYSTEMS SYMPOSIUM' (ICAO Headquarters, Montreal, Canada), and 'Symposium on Regional Safety Oversight Organizations' (ICAO Headquarters, Montreal, Canada, 26-28 October 2011). On the right, several overlapping document covers are displayed, including 'World Bank Group', 'United States', 'European Investment Bank', 'The Flight Safety Foundation', 'Boeing', and 'ICAO's Technical Cooperation Bureau'.

## Air Navigation Partnership



This slide displays a collection of logos for air navigation partnerships. The logos are arranged in three rows. The top row includes the FEDERAL AVIATION ADMINISTRATION, SESAR, IATA, and ICAO OACI HKAO. The middle row features EUROCONTROL, canso, ACI, IFALPA, and IFATCA. The bottom row shows EUROCAE, RTCA, EUROCAE, ilbac, and NextGen INSTITUTE. At the bottom center, a banner for the 'Global Air Navigation Industry Symposium' is shown, held at ICAO Headquarters, Montreal, Canada, from 28-29 September 2011.



## FOCUS ON POLICY:

# 2012 GASP

**GASP**  
Global Aviation Safety Plan  
**CHAPTER 1**  
Current State of Aviation Safety  
• Global Priorities

ICAO - OACI - ИКАО

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FOCUS ON POLICY:  
**2012  
GASP**

**CHAPTER 2**

**Global Aviation Policy**

- Aviation System of Systems
- Progress through Partnership
- Practising Safety Management
- Next Generation of Aviation Professionals

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FOCUS ON POLICY:  
**2012  
GASP**

**CHAPTER 3**

**Standardization**

- New Safety Annex
- Aviation System Block Upgrades (ASBUs)

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FOCUS ON POLICY:  
**2012  
GASP**

**CHAPTER 4**

**Monitoring**

- Evolution of USOAP to CMA for Regulators

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FOCUS ON POLICY:  
**2012  
GASP**

**CHAPTER 5**

**Analysis**

- Aviation Safety Report
- Aviation Safety Index through data sharing agreements: EU, US, IATA, ACI and CANSO
- Safety Data Tools

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FOCUS ON POLICY:  
**2012  
GASP**

**CHAPTER 6**

**Implementation:  
Ideas into Action**

- Regional Aviation Safety Groups (RASGs)
- Integrating Industry Roadmap
- Special Support to MARB States

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FOCUS ON POLICY:  
**2012  
GASP**

**CHAPTER 7**

**Contingency, Crisis  
and Capacity**

- Contingency Planning
- Crisis Management
- Disaster Recovery
- Capacity Building

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# FOCUS ON POLICY: 2012 GANP

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# FOCUS ON POLICY: 2012 GANP

## CHAPTER 2

### Global Air Navigation Policy

- Aviation: System of Systems
- Integrated Planning
- Progress thru Partnership

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## FOCUS ON POLICY: 2012 GANP

### CHAPTER 3

#### Standardization: Aviation System Block Upgrades

- Block '0' Introduction
- Block '1' – Module by Module
- Technology Roadmaps

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## FOCUS ON POLICY: 2012 GANP

### CHAPTER 4

#### Continuing R&D

- Block '2' – Module by Module
- Block '3' – Module by Module

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## FOCUS ON POLICY: 2012 GANP

### CHAPTER 5

#### Implementation: Near-term Action Plan

- Planning and Implementation Regional Groups (PIRGs)
- Special Projects
- Block '0' Module roll outs

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## FOCUS ON POLICY: 2012 GANP

### CHAPTER 6

#### Aviation System Performance

- Annual Global Air Navigation Report

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## Transparency

<u>POLICY</u> GASP and GANP	<u>STANDARDIZATION</u> ICAO Website Standards Look Ahead	<u>MONITORING</u> Significant Safety Concerns to the Public
<u>ANALYSIS</u> Safety Report (2011 Forward) Annual Air Navigation Report (2012 Forward)	<u>IMPLEMENTATION</u> Online Reporting for Priorities: each Regional Office	

**Discussing This Week**

- A Mechanism for the Sharing of significant Safety Concerns with the Public (C-WP 13801)
- Consolidated Report on the Planning and Implementation Regional Groups (PIRGs; C-WP 13802)
- Progress Report on the Electronic Filing of Differences (C-WP 13803)

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## Bottom line:

- This forward leaning framework for Safety and Air Navigation provides ICAO, its states and partners the strategy, methodology and transparency to enable high level aviation decisions for the foreseeable future

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