No Country Left Behind and Partnerships in Aviation Safety

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Air Navigation Bureau - ICAO
Chief - Aviation Safety Implementation Planning and Support

MID SAFETY SUMMIT, Doha
24 – 25 May 2016
The size of the industry in 2015

- 3.5 billion passengers
- 51 million tonnes of freight
- 1,400 commercial airlines
- 26,700 aircraft in service
- 4,130 airports
- 173 air navigation service providers

Traffic is for scheduled services

NO COUNTRY LEFT BEHIND
Global Traffic Forecast

- Air traffic is predicted to double in the next 15 years
- Our collective responsibility is to allow the aviation system to realize this growth with sustainable development
- Safe, secure, efficient, economically viable, and environmentally sound air transport system
Universal Safety Oversight Audit Programme

Overall EI
0%  50%  100%
GLOBAL ACCIDENT RATE
NUMBER OF ACCIDENTS PER MILLION DEPARTURES

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>4.1</td>
</tr>
<tr>
<td>2012</td>
<td>3.2</td>
</tr>
<tr>
<td>2013</td>
<td>2.9</td>
</tr>
<tr>
<td>2014</td>
<td>3.0</td>
</tr>
<tr>
<td>2015</td>
<td>2.8</td>
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GLOBAL ACCIDENT RATE CONTINUES TO BE STABLE
Percentage of all Accidents*: 2015

FOR TOP HIGH-RISK OCCURRENCE CATEGORIES (RS, LOC-I, CFIT)

- Loss of Control In-Flight:
  - % of Accidents: 3%
  - % of Fatal Accidents: 33%
  - % of Fatalities: 9.5%

- Runway Safety:
  - % of Accidents: 53%
  - % of Fatal Accidents: 17%
  - % of Fatalities: 0.2%

* Note: no CFIT accidents for SCHEDCOM in 2015
Safety Update

REGIONAL STATUS
Risk Distribution for the Top 3 Safety Priorities

Scheduled commercial above 5 700kg for 2010 - 2015

<table>
<thead>
<tr>
<th>Priority</th>
<th>Accidents - RASG-MID</th>
<th>Fatal Accidents - RASG-MID</th>
<th>Fatalities - RASG-MID</th>
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<tbody>
<tr>
<td>RS</td>
<td>0.30%</td>
<td>14.28%</td>
<td>50%</td>
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<tr>
<td>LOC-I</td>
<td>6.25%</td>
<td>28.57%</td>
<td>31.28%</td>
</tr>
<tr>
<td>CFIT</td>
<td>3.12%</td>
<td>14.28%</td>
<td>19.18%</td>
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Source: SPACE (iSTARS v2) (https://portal.icao.int/space)

Continue focus on the Top Safety Priorities
ICAO Safety Audit Results for RASG-MID

Effective implementation of safety oversight systems by State

GASP Target
Global Aviation Safety Plan - Update

- No significant changes to technical content
- Simplify document to improve comprehension and usability
- GASP objectives and framework remain the same
- Clarifies expected roles of International, Regional, and National users of the GASP (Objectives, priorities, etc.)
- NCLB Initiative
- New roadmap
- Council approval and Assembly endorsement
NO COUNTRY LEFT BEHIND (NCLB)

SUSTAINABLE DEVELOPMENT GOALS
ICAO NCLB Initiative

- Reflects ICAO’s current mandate and operations
- For **ALL States** and **ALL five Strategic Objectives**
- Focus on **increased State implementation** of ICAO policies, plans and SARPs and enhanced ICAO support for States with prioritised needs
- **Raise awareness** on the importance and benefits of improved global air connectivity and aviation system access for sustainable growth, development and socio-economic prosperity
  - Develops travel, trade, tourism sectors
  - Benefits employment, education, health sectors
NCLB Objectives

- Provide enhanced support for States in the effective implementation of ICAO’s policies, plans and SARPs in a more coordinated, comprehensive and harmonized manner.
- Promote the State resolution of significant safety concerns (SSCs) and significant security concerns (SSeCs) and other deficiencies.
Means to Achieve NCLB Objectives

- Advocating the benefits of aviation for States at high levels of Government
- Developing implementation support tools and services
- Prioritizing assistance needs and assessing risks
- Facilitating and support implementing capacity-building initiatives
- Establishing and enhancing partnerships
- Mobilizing resources for aviation-related projects
- Recognizing progress by States
New ICAO NCLB-related efforts

- ICAO contribution to achieving and measuring UN Sustainable Development Goals (SDGs)
- ICAO World Aviation Fora (IWAF)
- ICAO Resource Mobilisation Policy
- ICAO Programme for Aviation Volunteers (IPAV)
- ICAO Next Generation of Aviation Professionals (NGAP) Programme
- ICAO Council President Certificates
STATE IMPLEMENTATION & CAPACITY BUILDING

Awareness

Support

Resources

IWAF
SDGs
CP Certs.

Technical Cooperation (TCB)
Technical Assistance
Planning & Coordination

NGAP
Funds
IPAV
Partnerships

Training & HR Development (GAT)
ICAO Assistance & Cooperation Types

- Advice & Guidance, Plans of Action, Assistance Missions, PIRG/RASGs, Seminar/Workshops, Supporting RSOOs (Regional Offices)
- Guidance Material, Applications/Tools, Indicators/Metrics (ANB & ATB)
- Training (GAT)
- Projects – national and regional (TCB)
  - Deployment of experts – Advisers and OPAS Experts
  - Procurement of Consulting services and equipment
- Global coordination with partners and resource mobilization (ANB & ATB)
TECHNICAL CO-OPERATION PROGRAMME 2015

Total Programme implementation: USD 130 million
87 individual projects and 28 regional projects
TRAINAIR Members exchanging STPs
Global Implementation Support Programmes (Safety & AN)

Runway Safety
Safety Management
LOC-I/UPRT
PBN
CAPSCA
NGAP
Regional Implementation Support Programmes (Safety & AN) - in addition to PIRGs and RASGs

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<thead>
<tr>
<th>NACC</th>
<th>SAM</th>
<th>WACAF</th>
<th>ESAF</th>
<th>MID</th>
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<td>• ICAO PBN Go-Team</td>
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<td>• • AFI Plan</td>
<td>• • COSCAP-SADC</td>
<td>• • COSCAP-SADC</td>
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iMPLEMENT is

- An No Country Left Behind initiative
- A set of tools as decision aids for implementation
- Integrated into the iSTARS System
- Providing relevant and sustainable solutions
Evolving Safety Performance

- **iMPLEMENT** is a data-driven decision making process that:
  - produces a High-level report showing State information
  - facilitates the enhancement of a State’s implementation rate by helping prioritize activities based on data
  - provides a business case for the economic and social impact of aviation development.

A ‘NO COUNTRY LEFT BEHIND’ Initiative:

Facilitating **Data-Driven** Decisions for Aviation

All stakeholders should come up with a strategy to complement NCLB
Executive-level Briefings

State Safety Briefing
Regional Safety Briefing
Aerodrome Briefing
Airspace Briefing
Airline Briefing

Work-in-Progress

* Accessible through iSTARS/SPACE
Cooperation in Safety & Air Navigation

- **Aviation Safety Implementation Assistance Partnership (ASIAP)**
  - Canada, China, France, Japan, Malaysia, ROK, UK, US, ACI, Airbus, Boeing, CANSO, EASA, IATA, World Bank

- **Regional Aviation Safety Groups (RASGs) & Planning and Implementation Regional Groups (PIRGs)**
  - State CAAs & Service Providers, International and Regional Organizations, industry

- **Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs), Regional Safety Oversight Organizations (RSOOs) & AFCAC AFI Cooperative Inspectorate Scheme (CIS)**
  - States, International and Regions Organizations, industry

- **Runway Safety Programme**
  - International Organizations
Aviation Safety Implementation Assistance Partnership (ASIAP)

- Platform for ICAO and Partners to coordinate efforts for the provision of assistance to States
- Objectives
  - information sharing; prioritization of States and assistance needs; coordination, cooperation and collaboration on assistance activities between partners
- Members
  - Canada, China, France, Japan, Malaysia, Republic of Korea, UK, US, ACI, Airbus, Boeing, CANSO, EASA, IATA, World Bank
- Priority States selected for assistance
  - Bahamas, Belarus, Cambodia, Egypt, Gabon, Guyana, Indonesia, Nepal, Tanzania, Viet Nam, and SSC States: Angola, Djibouti, Eritrea, Haiti, Kyrgyzstan, Malawi, Nepal, Thailand

http://www.icao.int/safety/scan/Pages/Aviation-Safety-Implementation-Assistance-Partnership.aspx
Prioritization of States in Safety

- Assistance to States is prioritized by using multiple assessment variables
- Variables that increase the priority
  - State deficiencies
    - Lack of effective implementation of State safety oversight functions, SSCs
  - Risk exposure
    - Volume of aviation activity in the State
- Some variables that decrease the priority
  - Financial autonomy
    - GDP per capita of the State
  - Project risk
    - Worldwide Governance Indicator
Safety Fund (SAFE) Projects
Cooperative Development of Operational Safety and Continuing Airworthiness Programmes
Regional Safety Oversight Organizations
Cooperation in Safety & Air Navigation

- **Safety Management Programme**
  - SMP members

- **Performance-based Navigation (PBN) Programme**
  - International Organizations

- **Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA Programme)**
  - International and Regional Organizations

- **Next Generation of Aviation Professionals (NGAP Programme)**
  - States CAAs & Service Providers, International Organizations, Industry & Academia

- **Comprehensive Regional Implementation Plan for Aviation Safety in Africa (AFI Plan)**
  - States, International and Regional Organizations, Development Banks
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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| Jul 2016 | Amendment 1 of Annex 19 is Effective  
Webinar on A19 Amendment 1 Deployment |
Computer-based Training Update on Safety Management  
Safety Management Website Update |
| Jan 2018 | Voluntary Audits using the new ICAO USOAP Protocol Questions  
GASP Target: All States to implement SSP by end of 2022 |
<p>| Early 2018 | Safety Management Regional Seminars (Until 2020) |
| Nov 2019 | Amendment 1 of Annex 19 is Applicable |</p>
<table>
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<tr>
<th>TIME</th>
<th>2016</th>
<th>2017 - 2019</th>
<th>2020 - 2022</th>
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<tr>
<td><strong>SARPs</strong></td>
<td><strong>A19</strong> A19 Amdt 1 Effective 11 Jul 2016</td>
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<td>A19 Amdt 1 Applicable 7 Nov 2019</td>
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<td><strong>GUIDANCE &amp;</strong></td>
<td><strong>A19</strong> SMM 3rd Ed SM online course Today</td>
<td>SM for Practitioners Course update -- phase 1 SM for Practitioners Course update Webinar Jul 2016</td>
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<td><strong>TRAINING</strong></td>
<td><strong>A19</strong> Amdt 1 SM online course update -- phase 1</td>
<td>SMM 4th Ed + website SM online course update - phase 2 SSP gap analysis tool update Jul 2017</td>
<td>SM Symposia + Regional Seminars early 2018-2020</td>
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<td><strong>AUDIT</strong></td>
<td>No SM Audits (Voluntary Assessments using current PQs)</td>
<td>New SSP PQs Jul 2017</td>
<td>SM Audits using the new SSP PQs for All States Jan 2020+</td>
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<td><strong>GASP</strong></td>
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<tr>
<td><strong>Objectives</strong></td>
<td>All States &gt; 60% EI to implement SSP by end of 2017</td>
<td></td>
<td>All States implement SSP by end of 2022 Jan 2018 – Dec 2022</td>
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<td><strong>GASP</strong></td>
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<td><strong>2014-2016</strong></td>
<td><strong>A39 Endorsement GASP 2017-2019 Sep 2016</strong></td>
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<td><strong>2017-2019</strong></td>
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<tr>
<td><strong>2020-2022</strong></td>
<td><strong>A40 Endorsement GASP 2020-2022 Sep 2019</strong></td>
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**GASP 2020-2022 NEW TARGETS?**

**Audits on selected States using the new SSP PQs**

SM Audits using the new SSP PQs for All States Jan 2020+

SM Symposia + Regional Seminars early 2018-2020
Industry Declaration in support of Performance-based Navigation (PBN)

We, as representatives of the air transportation community,

- Affirming our joint responsibility to seek continual improvements to the safety, access, capacity, efficiency and environmental sustainability of the air transportation system,
- Recognizing that Performance-based Navigation (PBN) provides a catalyst for these improvements to air traffic operations, while enabling a seamless and cost-effective solution throughout the entire flight,
- Recognizing the work of ICAO in formulating and publishing globally harmonized Area Navigation (RNAV) and Required Navigation Performance (RNP) provisions, now known as Performance-based Navigation (PBN),
- Recalling that Resolution A36-23 of the 36th ICAO General Assembly whereby States are urged to implement PBN procedures in accordance with the established timetable,

We resolve:

- To support the timetable set out by ICAO for the global implementation of PBN,
- To collectively work to facilitate the implementation of PBN, and
- To assist States, regions and other stakeholders in their development and execution of a complete PBN implementation plan.

We call upon:

- All leaders of the civil aviation community, to fully support implementation of PBN into the air navigation system according to the ICAO provisions and established timetable.

PBN Partnerships

- Training
- Workshops
- Implementation support
- Promotion
- Go Teams
- Flight Procedure Programmes
PBN – Enhancing Safety

• State letter to be issued on Effective Regulatory Oversight for PBN
• Continued focus on A37-11 to implement APV’s to all runways
  – Reduction on CFIT and Runway Excursion
• Guidance and assistance in establishing effective oversight for PBN Operations
  – More rigorous approval process for PBN
  – Focus on training and operating procedures to ensure safe operation
• Establishment of MID-FPP
Organizations which support the Next Generation of Aviation Professionals (NGAP) Programme

States / Regulatory Authorities

International Organizations

Education / Training Providers

Industry/Others
AFI Plan Partners and Stakeholders

AFI STATES

ACAC

EUROPEAN COMMISSION

IFALPA

The Global Voice of Pilots

ENAC

The World Bank

canso

EASA (European Aviation Safety Agency)

ATNS

IATA

ICAO

AFRICA DEVELOPMENT BANK

AFECA

AFI

AIRBUS

ICAO OACI HKAC

AFI STATE

UNITING AVIATION

NO COUNTRY LEFT BEHIND
Global Ministerial Conference
Riyadh - Kingdom of Saudi Arabia
29th - 31st August 2016
NO COUNTRY LEFT BEHIND
ICAO NCLB Implementation

- Promoting and advising Governments on the benefits of aviation for their national aspirations and help generate the political will to support aviation improvements
- Facilitating the mobilization of resources in cooperation with States, UN system, International and regional organizations, industry, development banks, funds and other financial institutions
- Facilitating and coordinating the implementation of capacity building and improvements to cater for aviation growth and development with sustainable results
- Support, collaboration and assistance from States, international and regional organizations, industry and other stakeholders is essential to the success
- Building partnerships and pooling resources among States, international and regional organizations, development institutions and industry are essential for collaboration on and contribution to assistance and cooperation for the effective implementation by States
WORKING TOWARDS THE 39TH ASSEMBLY

Draft Resolution on NCLB