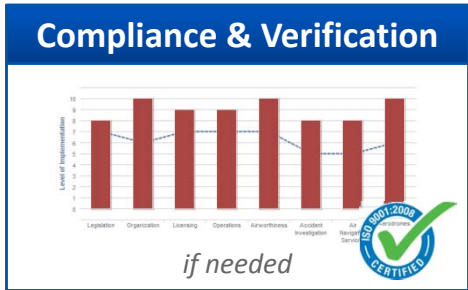ICAO | UNITING AVIATION

Outcomes from the Second High-level Safety Conference
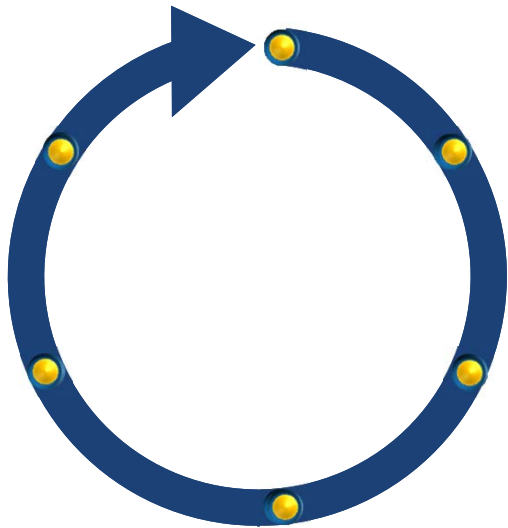## *and other ICAO Activities*

Catalin Radu

Deputy Director, Aviation Safety

Air Navigation Bureau, ICAO

RASG-MID /4, Jeddah, Saudi Arabia
30 March – 1 April 2015

Needs Analysis / Validation

Compliance & Verification

if needed

Global Plans

Global & Regional

Assess & Measure

SARPs & PANS

Implementation Planning

Training & Guidance

Second High-level Safety Conference

2nd High-level Safety Conference
2 – 5 February 2015, ICAO Headquarters, Montréal

- **4** Days

- **100** Working Papers

- **40** Information Papers

- **714** Delegates
  - **120** Member States
  - **35** Observers

- Attended by **States**, **Industry**, all **ICAO RDs** and **RASG** chairs

More information available at: **www.icao.int/Meetings/HLSC2015**

Second High-level Safety Conference

2nd High-level Safety Conference
2 – 5 February 2015, ICAO Headquarters, Montréal

- **HLSC Declaration and Recommendations**

  – Montreal Declaration on Planning for Aviation Safety Improvement

  – Conclusions and Recommendations

http://www.icao.int/Meetings/HLSC2015/Pages/declaration-and-recommendations.aspx

Some of the Major Outcomes during the HLSC

- **Global Tracking**

  – Member States endorsed the **GADSS Concept of Operations**

  – Plans for adoption of a new **15 minute aircraft tracking standard** was also endorsed

    - **Performance-based**, allowing airlines the choice of several available and planned technologies and procedures
    - Proposal was sent to Member States on 25 February
    - Expected to be adopted by ICAO Council this fall
    - **Applicability date of 2016**

  – ICAO is working with industry on an **implementation initiative**

    - To assist States, ANSPs, and airlines in the implementation of the standard and respond to abnormal flight behavior in an **integrated and multidisciplinary manner**

Some of the Major Outcomes during the HLSC

- **Conflict Zones**

  – HLSC supported ICAO's **comprehensive risk mitigation work programme**

  – **Including:**

    - **Online repository** hosted by ICAO, which will serve as a single public source for up-to-date risk assessments from States and International Organizations
    - **Harmonization of terminology** used for risk assessments
    - **Comprehensive review** of existing requirements and message formats
    - **Industry-led initiatives** to share operational information and be more transparent with passengers on conflict zone risk methodologies being applied

Some of the Major Outcomes during the HLSC

- **Effective and Efficient Regional Collaboration**

  – HLSC agreed on the importance of **regional collaboration** to improve safety

    • Recommended that aviation safety partners, including donor States, international organizations, industry and financial institutions, collaborate with ICAO to assist States to improve aviation safety

  – ICAO to lead the **alignment and coordination of regional initiatives** to improve safety, implement the GASP objectives, and achieve the regional safety targets.

    • Recommended that States, International Organizations and industry **increase their participation in and contributions** to the ICAO and partner regional safety mechanisms, including support to the activities of the RASGs with resources.

  – ICAO develop a **resource mobilization strategy and implementation plan** to increase resources, assistance activities and implementation assistance capacity.

    • ICAO to participate in the development of the **UN Sustainable Development Goals**.
    • States, international and regional organizations and industry **increase contributions to the ICAO Voluntary Funds** including the **Safety Fund (SAFE)** and Human Resources Development Fund (HRDF).

Ongoing Focus by ICAO

- The integration of **remotely piloted aircraft systems (RPAS)** into civilian airspace

- Continued adoption of proactive **safety management** approaches in States

- Provisions on the **sharing and protection of safety information**

- Full and expedited implementation of **Performance-based Navigation (PBN)** regulatory oversight

- Sustain the **Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA)** programme to assist States prepare for and respond rapidly to any new public health event

- The need for all ICAO States to be sufficiently assisted so as to reach **global minimum levels of effective safety oversight**
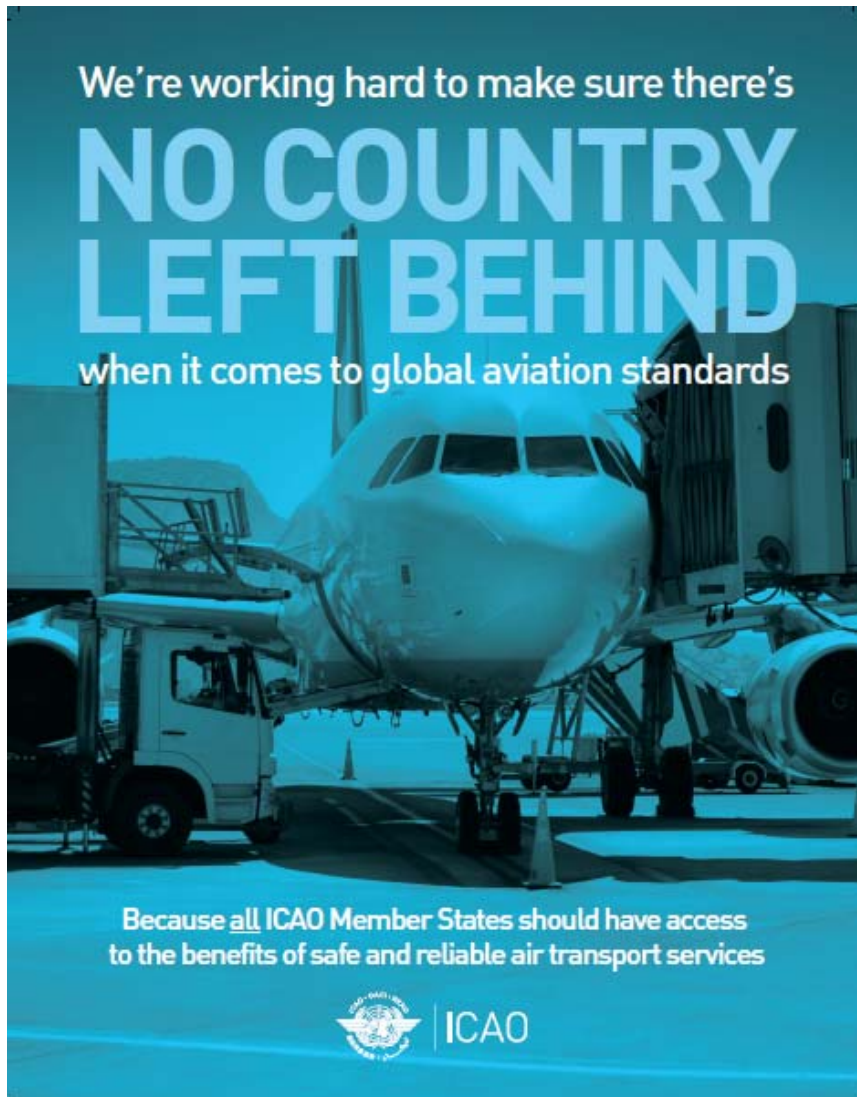
ICAO Campaign

NO COUNTRY LEFT BEHIND

NO COUNTRY LEFT BEHIND

- **Background**

  – A result of the first-ever ICAO Council off-site strategy session in 2014

    - Outlined that there was still a **large discrepancy** with the level of State implementation of ICAO SARPs

    - Determined that **ICAO should focus its activities** on States with higher safety risk or security threats and review what else can be done to better encourage assistance to developing nations

    - Resolved that ICAO should provide more direct assistance by playing an **active coordination role between States**, as well as generate the political will needed to pool resources, participate in regional efforts, earmark voluntary funds and build capacity.

- **No Country Left Behind (NCLB) Campaign**

  – Highlights ICAO's efforts to assist States in **implementing** ICAO SARPs.

  – Help ensure that SARP implementation is **more harmonized globally**

  – Promotes the resolution of Significant Safety Concerns (SSCs) as well as other safety, security and emissions-related objectives.

  – More information can be found at:
    www.icao.int/about-icao-NCLB

NO COUNTRY LEFT BEHIND

- **Other Related Resources**

  – Current status of State Safety through the **Safety Audits**
    http://www.icao.int/safety/Pages/USOAP-Results.aspx

  – Targets and Outcomes through the **Regional Dashboards**
    http://www.icao.int/safety/Pages/Regional-Targets.aspx

  – **Implementation Kits (iKITs)**
    http://www.icao.int/safety/Implementation/Pages/iKITs.aspx

Other ICAO
INITIATIVES
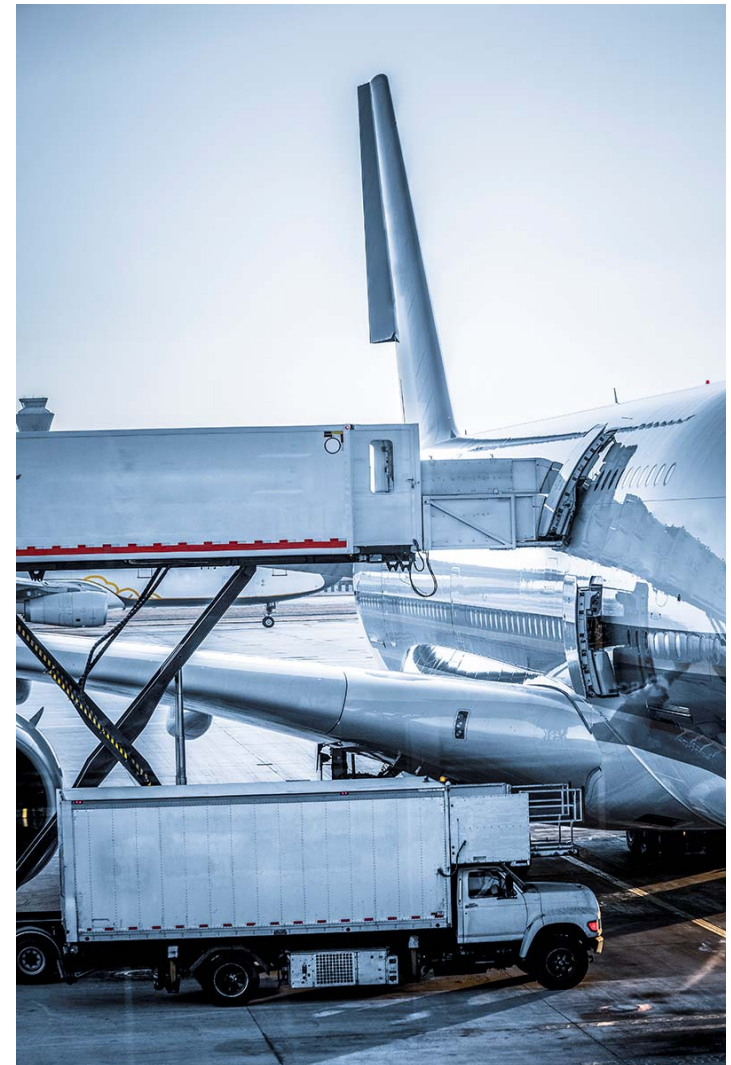
Global developments affecting PIRGs and RASGs

- **Planning**
  - GANP/GASP updates planned, new regional air navigation plans

- **Implementation**
  - Implementation Kits (iKITs), RASG/RSOO/COSCAP alignment, regional targets and performance indicators

- **Reporting**
  - Global Aviation Safety Reports/Global Air Navigation Reports, Regional Safety Reports, Regional Dashboards

NO COUNTRY LEFT BEHIND

Regional Implementation – *Safety*

GASP

Next GASP
2016

RASG-MID

RASGs ✔

Established Regional Priorities, Indicators & Targets

RSOOs

In progress

COSCAPs

Alignment of Regional Bodies

Annual Global Aviation Safety Report ✔

Annual Regional Aviation Safety Report ✔

Regional Dashboards ✔

Revised RASG Work Programme

Annual RASG Meeting Reports

Annual ANC/Council Review
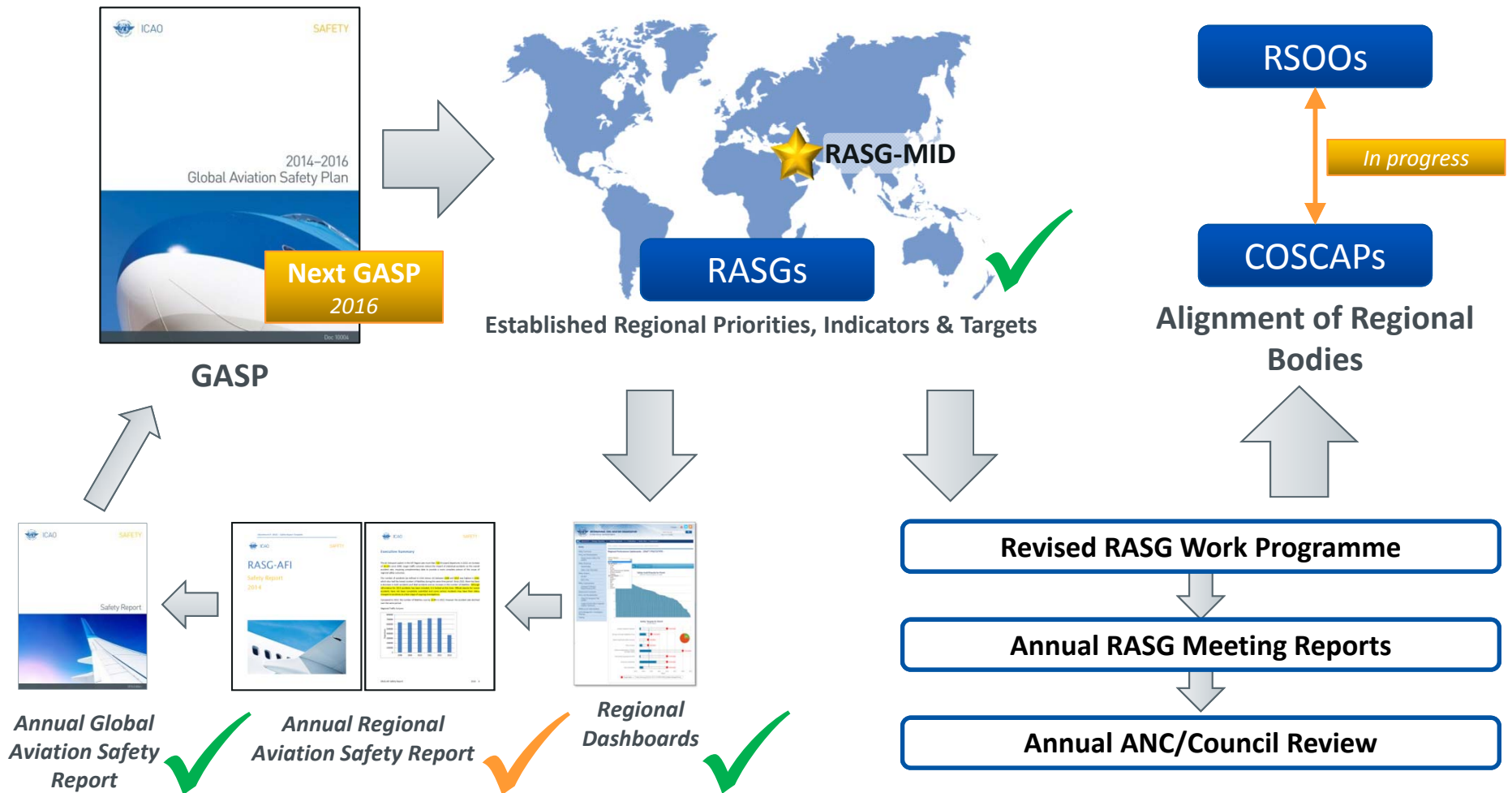
Regional Priorities and Targets
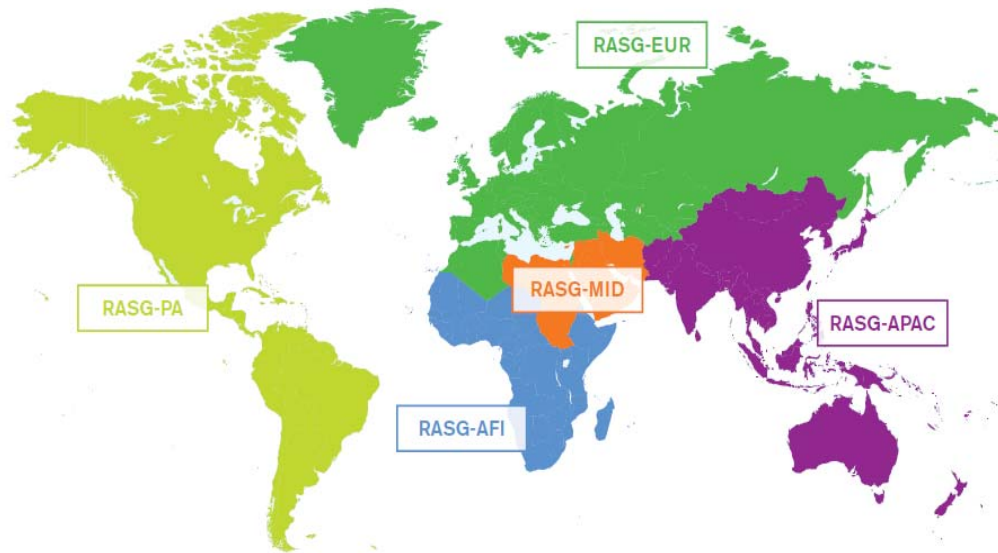
Common set of Indicators as a baseline

REGIONAL OFFICE	SAFETY
ESAF	**Aviation Safety Targets for Africa** (Abuja Ministerial – July 2012)
WACAF	
MID	**MID Region Safety Strategy** (DGCA-MID/2 May 2013)
APAC	**RASG-APAC Priorities and Targets** (RASG-APAC/4 – November 2014)
NACC	**Port-of-Spain Declaration** (NACC/DCA/5 – April 2014)
SAM	**Bogota Declaration** (RAAC/13 - December 2013)
EUR/NAT	**Priority Safety Targets for the EUR Region** (RASG-EUR/03 - February 2014)
	NAT Safety KPIs (NAT-SPG/50 – June 2014)

Using readily available data

2nd High-level Safety Conference
2 - 5 February 2015, ICAO Headquarters, Montréal

Recommendation 2/1 b) 3)
Implementing SSP

ICAO should improve and harmonize the defined SPIs taking into account those currently in use

ICAO Safety Audit Results for RASG-MID

Effective Implementation of safety oversight systems by State
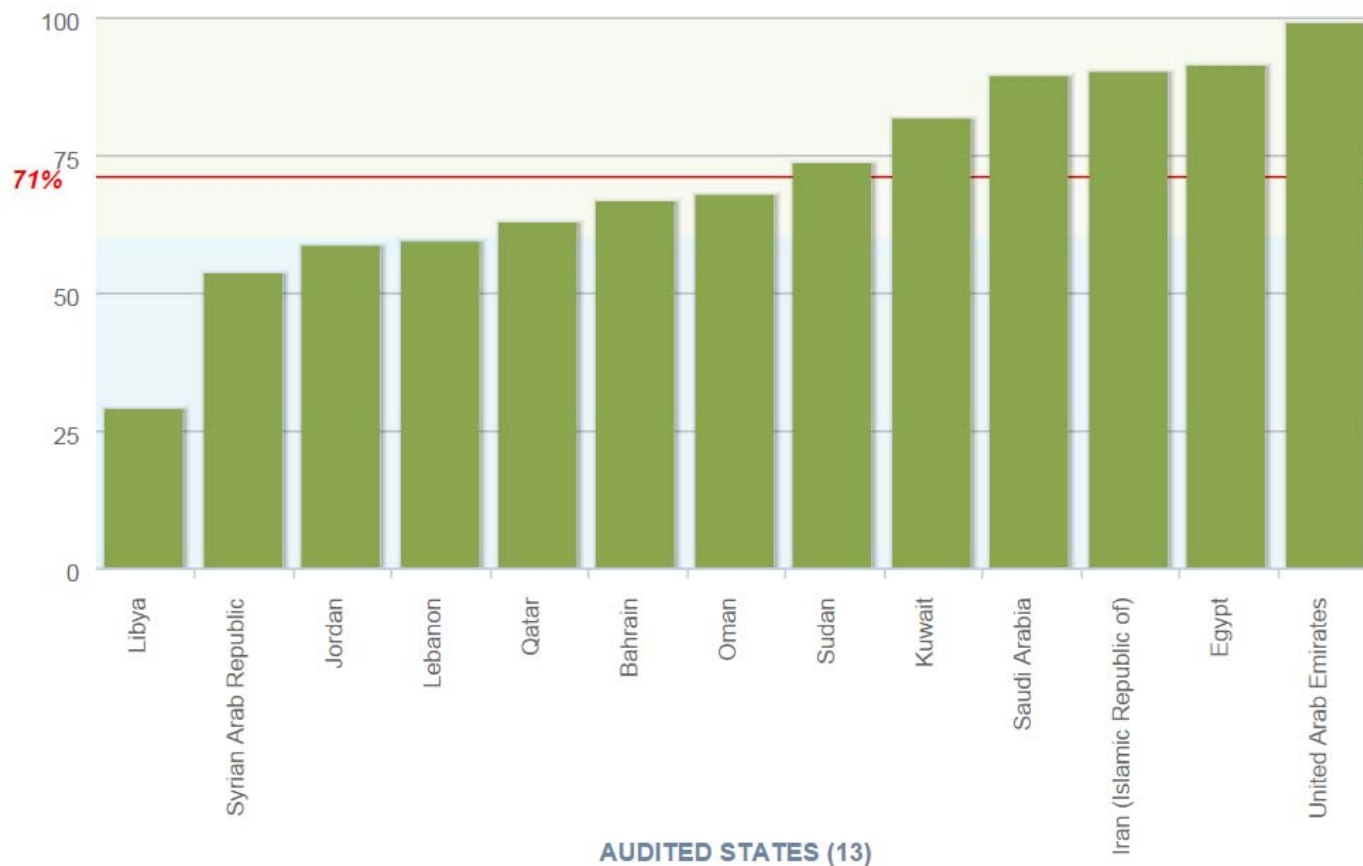
Note: *2 out of 15 MID States not audited (Iraq and Yemen) due to Security reasons*

NO COUNTRY LEFT BEHIND

Status of Safety for RASG-MID
According to the MID Region Safety (RASG-MID) and Air Navigation Strategy (MIDANPIRG)

Progressive increase of the USOAP EI score to 60%, with no more than 2 USOAP audit areas less than 60% — 31/12/2017

Resolution of all Significant Safety Concerns — 31/12/2016

Reduced accidents to be in line with the global average — 31/12/2016

Certification of International Aerodromes — 31/12/2017

Implementation of State Safety Programme (SSP) — 31/12/2017

Use of the IATA Operational Safety Audit (IOSA) to complement Safety Oversight Activities — 31/12/2015

2012   2014   2016   2018   2020   2022
Years

◆ Target dates -- Today 23-3-2015

Target Context:

States resolve identified Significant Safety Concerns as a matter of urgency and in any case within 12 months from identification, and no significant safety concern by end of 2016

Metric: Percentage of resolved SSCs

(More information about this metric)

OPS:
Unresolved: 1 (100%) for RASG-MID

OPS

AGA

AIR

ANS

0   1   2
Number of Significant Safety Concerns

*Source: **http://www.icao.int/safety/pages/regional-targets.aspx***

Existing Implementation Kits (iKITs)

- **2012**
  - Aviation System Block Upgrades (ASBU) Block 0
  - Performance-based Navigation (PBN)

- **2013**
  - Aircraft Operator Certificate (AOC)
  - Safety Management

- **2014**
  - Runway Safety

- **2015**
  - Remotely Piloted Aircraft Systems (RPAS)
  - Performance-based Navigation (PBN) – *Updated Version*

http://www.icao.int/safety/Implementation/Pages/IKits.aspx

Implementation Kits (iKITs) for 2016

- Initial steps to improve demand/capacity balancing

- Facilitate recognition through the harmonization of airworthiness regulatory approvals

- Improved Efficiency of Surface Operations

- Enhancing Safety at Aerodromes

- Improved Throughput at Aerodromes

- Early steps towards user-preferred routing

- Optimized aerodrome departure/arrival rates under all meteorological conditions

- Advanced ATM Procedures for TMA Efficiency (updated and expanded PBN iKit)

- In-Flight Accident Reduction Tool

2016
Advanced TMA Procedures for TMA Efficiency

Incorporating ASBU modules:
APTA, FRTO, NOPS, ASEP

Operational Improvement:
Improves the efficiency of terminal control area (TMA) operations

iKIT
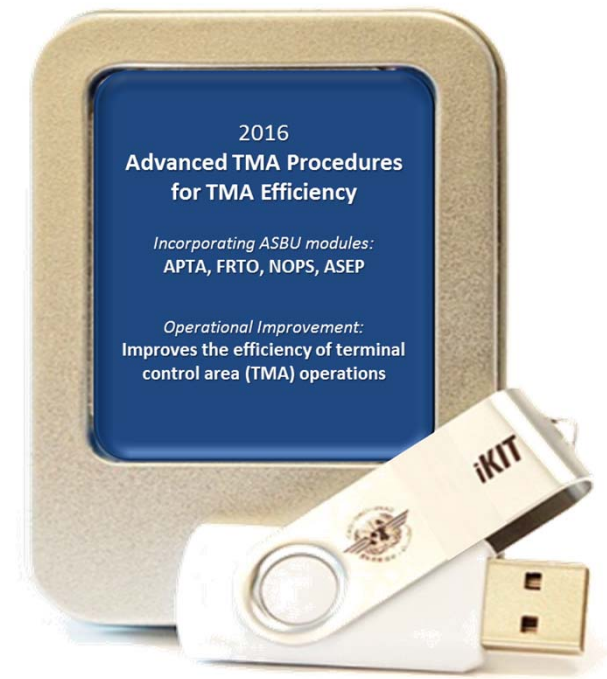
Global and Regional Nested Reporting

Global Plans

Annual Global Reports

Annual Regional Safety Reports

Regional Dashboards

SARPs & PANS

Information Feed

Proposed Safety Performance Indicators
(HLSC/15-IP/1 Appendix)

- Effective Implementation of Safety Oversight System
- Progress in SSP Implementation
- Progress in SMS Implementation
- Frequency and Severity of Accidents and Incidents
- Certification of Aerodromes
- Significant Safety Concerns
- Presence of notable hazardous conditions
- Fleet Modernization
- Effectiveness of Foreign Operator Safety Assessment Programmes
- Industry Certification
- Extent of Environmental Hazards

Proposed Safety Performance Indicators

(HLSC/15-IP/1 Appendix)

Regional AviationSafety Group-Middle East
RASG-MID

MID Region Safety Strategy
Revision 1, April 2014

MID Region Safety Strategy

⭐ Effective Implementation of Safety Oversight System	**Theme 5**
⭐ Progress in SSP Implementation	**Theme 7**
⭐ Progress in SMS Implementation	**Theme 7**
⭐ Frequency and Severity of Accidents and Incidents	**Theme 1-4**
• Certification of Aerodromes	**Theme 6**
• Significant Safety Concerns	**Theme 5**

- Presence of notable hazardous conditions
- ⭐ Fleet Modernization
- Effectiveness of Foreign Operator Safety Assessment Programmes
- ⭐ Industry Certification   **Theme 5**
- Extent of Environmental Hazards

⭐ *Proposed Core Safety Performance Indicators*

Expanding the Framework for Performance Measurement

Effective Implementation of State Safety Oversight System

Code	Country	USOAP EI Scores overall	USOAP EI Scores by technical area								USOAP EI Scores by critical element							
			LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA	CE1	CE2	CE3	CE4	CE5	CE6	CE7	CE8

(The table lists Effective Implementation scores for RASG-EUR States including Albania, Algeria, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The F.Y.R.O.M., Tunisia, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan.)

- **By the end of 2015, ICAO will establish a framework for:**

  – States to **start measuring** against a core set of indicators as a baseline

  – States to **choose** their applicable / related proposed Safety Performance Indicators

  – States to **validate** ICAO information related to the proposed Safety Performance Indicators

  – States to **report** to their respective RASGs and Regional Offices

- **Establish a framework for Regional and State performance measurement**
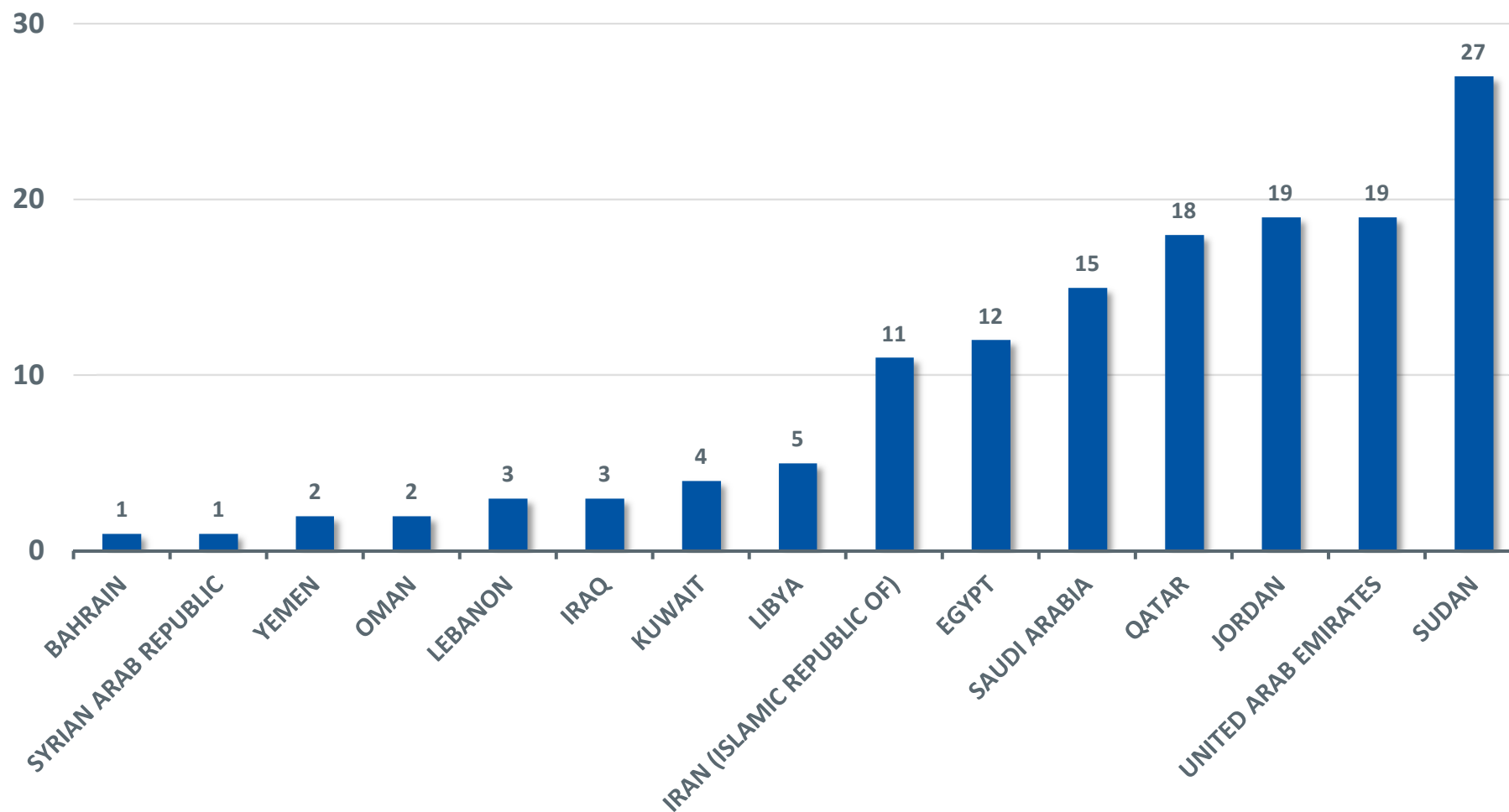
Global, Regional *and State* Nested Reporting

Global Plans

Annual Global Reports

Annual Regional Safety Reports

Regional Dashboards

Information Feed

Safety Status by State

iSTARS Users for: *RASG-MID*

Summary Recommendations for MID States

- Prioritize **resolution of SSCs**

- **State Plans of Action (PoA)** for priority States based on safety risk (EIs < 40)

- Prioritize actions to **support safety oversight improvements** (EIs < 60)

- **Implement SSP** and use **iSTARS/SPACE Gap Analysis tool** to keep ICAO informed of progress (EIs > 60%)

- **Alignment** of RO, RASG, COSCAP, partner organizations, etc. regional actions for priority States and implementing regional safety targets

- States to **request Technical Assistance** from ICAO if required

- Consider establishment of **RSOO**

- States to **request ICVM and/or off-site validation** once ready to improve EI score by validation of actions

- States to measure and report against **regional targets** and **safety performance indicators**

RECOMMENDED

GLOBAL EVENTS

ICAO / UNOOSA Aerospace Symposium (18 – 20 March 2015)

- **Symposium Outcomes:**

  – General consensus that commercial space transportation **will happen**
    - Initially from remote locations with segregated traffic, evolving to full integration

  – For the moment, **no international regulation** is required

  – **Strategy**: Preparation and education of all stakeholders

  – **How to engage on the subject with ICAO / UNOOSA**
    - **Be at the table** - join the ICAO / UNOOSA Space Learning Group at **www.icao.int/aeroSPACE**
    - **Share** your experience and concerns related to integration of airspace
    - Commitment is not resource intensive – high value for low cost

  – **Second ICAO / UNOOSA Aerospace Symposium** is scheduled for next year in 2016, hosted by the United Arab Emirates

Key Global Events *2015*

Global Aviation Development Implementation Symposium

- **Date and Location**: Montréal, 24 to 26 November 2015

- **Theme: No Country Left Behind**

- **Unique symposium focused on implementation, allowing:**
  - States to highlight their priority needs
  - ICAO to showcase available assistance and success stories

- **Participants:**
  - States, industry, international and regional organizations, and financial institutions

- **Objectives:**
  - Support ICAO Resource Mobilization Strategy
  - Secure collaborative support from donors and partners on voluntary contributions and ICAO coordination role
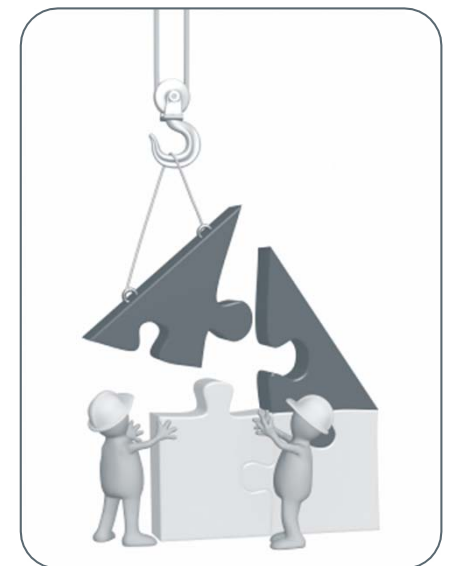
THANK YOU

BACKUP SLIDES

RPAS Symposium

23 – 25 March 2015

- **Symposium Outcomes:**

  - TO BE DETERMINED