



ICAO

UNITING AVIATION



Session 1

Sustainability of EI improvement and mitigation
of regression of EI levels achieved by States

Moderator: Mohamed Khalifa Rahma
Regional Director, ICAO/MID Office

Rapporteur: Ousman K. Manjang
Regional Officer - Airworthiness, ICAO/WACAF



Challenges to sustain EI enhancements in the Region



Mr. Simon Christopher Allotey
Director General, Civil Aviation Authority, Ghana
Chairman of RASG-AFI



Presentation Outline



- Improvements in Effective Implementation (EI) in ESAF & WACAF States between 2012-2015
- Role of ICAO and States in EI Improvements
- Challenges to Sustainability of EI Enhancements in Africa
 - Analysis using the 7s Model
 - Strategy
 - Structure
 - Systems
 - Shared Values
 - Skills
 - Style
- Conclusion



El Improvements



Source: ICAO



Role of ICAO & States in EI Enhancements



- ICAO develops SARPs & States are to IMPLEMENT SARPs
- ICAO provides technical support to States towards the improvement of Safety Management
- EIs can be enhanced & Sustained if both ICAO & States perform their complimentary roles efficiently and effectively





Challenges in Sustaining EI Enhancements



- Analysis of Challenges

Based on 7 internal elements:

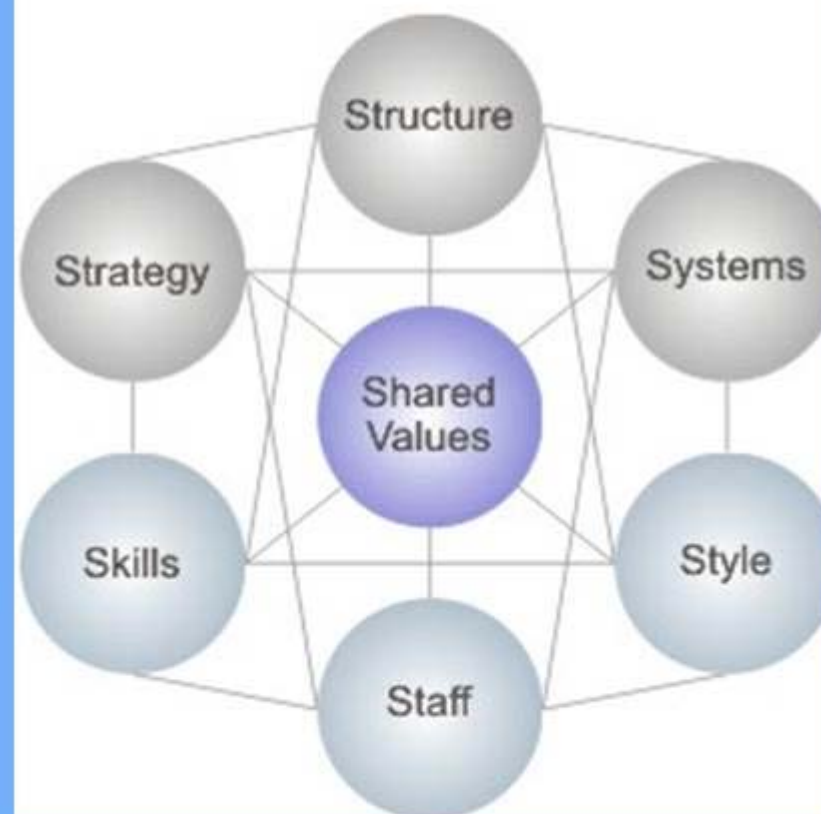
HARD ELEMENTS:

Strategy, Structure, Systems

SOFT ELEMENTS:

Shared Values, Skills, Style, Staff

Figure 1: The McKinsey 7S Model





El Sustainability Challenges - 1

OVERSIGHT STRATEGY



- Without a coherent oversight strategy and identifiable oversight objectives, the State will lack the needed focus to develop short and long term action plans to improve or sustain the level of EI of the Critical Elements. e.g. AFI States continue to have low scores in AGA & ANS Audit Areas despite the existence of these findings for over a decade now.
- Without a coherent oversight strategy, and there is no focused effort for employee training, qualification and development to ensure effective and timely implementation of Corrective Action Plans

States should consider:

- *developing a comprehensive set of oversight strategies, objectives & targets (in line with ICAO and Regional Objectives) with an annual review mechanism built into it.*
- *Providing adequate funding and other resources to support strategy implementation*



El Sustainability Challenges - 2 OVERSIGHT STRUCTURE



A number of States lack the basic Oversight Structure and Functions as defined in ICAO Doc 9734, Part A.

- No hierarchy of responsibility
- Poor accountability
- Poorly defined functions
- No separation of roles between Regulator and Service providers resulting in weak oversight

States should consider :

- *developing a comprehensive oversight structure to effectively fulfil its responsibilities. The State Civil Aviation System must be properly structured with clearly defined job functions, accountabilities and roles.*



El Sustainability Challenges - 3 OVERSIGHT SYSTEMS



- Documented Policies, Processes and Procedures (Manuals) are the mechanisms required to implement the critical elements in civil aviation oversight system in an effective and efficient manner. They help to guide actions of all staff, ensure consistency in safety oversight practices and form the basis for staff capacity development and EI enhancements.
- States are required to be equipped with current technical guidance materials and modern tools (including facilities and equipment) for the proper execution of its technical operations.

States should consider:

- *the implementation of Quality Management Systems to ensure improvements in their oversight systems*



El Sustainability Challenges - 4 EFFECTIVE LEADERSHIP (STYLE)



LACK OF EFFECTIVE LEADERSHIP

- With good leadership, staff understand the vision and goals of the oversight system, and are committed to it. Employees become certain of the oversight goals and objectives, buy-in and run with them.
- *“Great leaders are almost always great simplifiers, who can cut through argument, debate, and doubt to offer a solution everybody can understand.” —General Colin Powell*

States should:

- *invest in leadership development and good corporate governance practices in their Civil Aviation Administrations to engender staff buy-in to the State safety oversight programme*



El Sustainability Challenges - 5

STAFF ISSUES



Lack of committed staff in civil aviation oversight system could lead to most of the deficiencies identified in the USAOP- CMA programmes:

- Poor certification
- Inadequate surveillance activities
- Lack of identification and resolution of safety concerns

Employees are the most important resource for any oversight organisation and their level of motivation will have an impact on the performance of the oversight organisation. Workplace conditions of service, career development, work/life balance and remuneration are some issues that CAAs need to address to ensure a passionate & motivated workforce.

- ***States should put in appropriate strategies to motivate, remunerate, develop and retain staff***



El Sustainability Challenges - 6

STAFF SKILLS



- Highly skilled technical personnel are required for an effective Safety Oversight system and the sustainability of EI levels. Effective recruitment programmes, appropriate training (initial, on the job, recurrent) and qualification, sound technical skills and good job knowledge are essential for outstanding staff performance.
- Although training policies and procedures are in place in most African States they are not being adhered to.
- Training is ad-hoc (often dictated by external Agencies) and not often evaluated. As a result, the actual training programmes do not fully address the identified skill gaps in staff performance.



El Sustainability Challenges - 6

STAFF SKILLS (Contd)



States should consider the following:

- Enforce a transparent Recruitment process to ensure the engagement of the best candidates.*
- Training policy and procedures should be adhered to and aligned to equipping staff with the appropriate skills, knowledge and competencies for the effective discharge of the State's safety oversight functions.*
- Staff should be thoroughly conversant with ICAO's USOAP –CMA Online Framework (OLF) & implemented CAPs should be consistently uploaded to the OLF.*
- Introduce a Performance Management System for identifying skills gaps & to reward and motivate staff for good performance*
- Monitor and evaluate all training programmes for relevance*
- Establish mechanisms for the sharing of acquired skills and knowledge.*
- Enter into MoUs with States or RSOOs with the appropriate capabilities for technical assistance in staff training and development.*



El Sustainability Challenges - 7

SHARED VALUES



Effect of a Weak Corporate Culture

- Leads to poor team spirit
- Mistrust among the Leadership and the technical staff
- Lack of commitment and passion
 - Staff are often capable but apathetic towards the attainment of the strategic safety oversight objectives.
 - High Staff Turnover

States should consider:

- *building a strong corporate culture based on mutual respect & recognition, trust, diversity, strong core values, integrity, hard work and transparency.*



Conclusion



- The role of ICAO, development partners and International Organisations to enhance aviation safety within Africa is commendable and should be encouraged.
- The consequent improvements in the EI levels should be recognised. There is however room for further improvements.
- African States have a complimentary role to implement effective safety Oversight systems based on good corporate governance and shared values to ensure enhancements and sustainability of EI Levels.



End of Presentation



An Old Adage

"Where there is a will, there is always a way!"

Thank you.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Application of Safety Margins for State Safety Risk Analysis and Prioritization



Mr. Michiel Vreedenburgh,
Chief, Implementation Planning & Support Section –
Safety, ANB, ICAO HQ



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



RASG-AFI Conclusion 3/15 (Dec. 2015)

Taking Risk Analysis into account by States, in their drive to attaining effective implementation targets.

- That the RASG-AFI/3 Meeting encouraged States to take into account risk analysis in their drive to attain effective implementation targets.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Data-driven Decision Making

- Effective and informed decisions are based on the analysis of data and information.
- Using valid and relevant data helps place the “problem” in the right context and also determine a best-fit “solution”.
- It allows us to identify risks and opportunities.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Regional Safety Briefing - Africa

ICAO SAFETY BRIEFING Page 19

ICAO

Regional Safety Briefing
Africa

Automatically Generated by ICAO RSB 2017-05-12


Dashboard

Indicator	Value
State Safety Oversight - Group Average <small>Average USOAP Overall E1(%)</small>	50.18%
State Safety Oversight - State Levels <small>Percentage of States with USOAP Overall E1 above 60%</small>	51.92%
Significant Safety Concerns (SSCs) <small>Number of SSCs</small>	3
Accident Rate <small>Number of accidents per mil. departures over preceding 5 years</small>	6.4
IOSA - Airlines <small>Number of IOSA certified airlines in the region</small>	43
IOSA - State Levels <small>Percentage of States with IOSA certified airlines</small>	41.67%
EU Safety List <small>Number of States with restrictions</small>	15
FAA IASA <small>Number of States rated as Category 2</small>	1
PBN Implementation - Runways <small>Percentage of instrument runways with PBN approaches</small>	62.13%
PBN Implementation - State Levels <small>Percentage of States having PBN approaches on all instrument runways</small>	52.83%

Dashboard	
Indicator	Value
State Safety Oversight - Group Average <small>Average USOAP Overall E1(%)</small>	50.18%
State Safety Oversight - State Levels <small>Percentage of States with USOAP Overall E1 above 60%</small>	51.92%
Significant Safety Concerns (SSCs) <small>Number of SSCs</small>	3
Accident Rate <small>Number of accidents per mil. departures over preceding 5 years</small>	6.4
IOSA - Airlines <small>Number of IOSA certified airlines in the region</small>	43
IOSA - State Levels <small>Percentage of States with IOSA certified airlines</small>	41.67%
EU Safety List <small>Number of States with restrictions</small>	15
FAA IASA <small>Number of States rated as Category 2</small>	1
PBN Implementation - Runways <small>Percentage of instrument runways with PBN approaches</small>	62.13%
PBN Implementation - State Levels <small>Percentage of States having PBN approaches on all instrument runways</small>	52.83%



State Safety Briefing - Botswana


ICAO

STATE SAFETY BRIEFING

Page 17

State Safety Briefing

Botswana in Africa

Automatically Generated by ICAO/ASB 2017-05-19

Performance Dashboard

Indicator	Target	Value	Achieved
USOAP E1 (2016-2017)	80%	71.59%	■
Significant Safety Concerns (SSCs) Number of	0	0	■
Fatal Accidents Number of	0	0	■
Aviation Certification Issued rate of civil aircraft type certificates	Satisfactory	Satisfactory	■
State Safety Programme (SSP) Level of implementation	Level 2	Level 1	■
IOSA Passes of civil aviation operator	>0	1	■
FAA/IASA Accreditation	Cat 1	NR	■
EU Safety List Passes or pending assessment	Unsanctioned	Unsanctioned	■
FSN Compliance of standards and recommended practices with ICAO standards	70%	0%	■

Note: The target set is against global or regional performance targets, as applicable. These are used along with State of Compliance or State of Operation as indicators of operational performance and are not used for SSI (June 2012)

Performance Dashboard

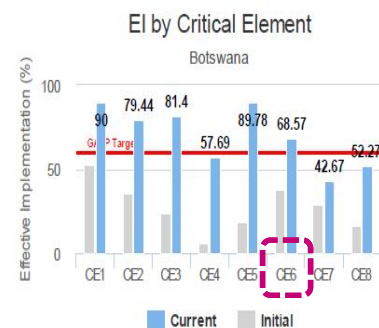
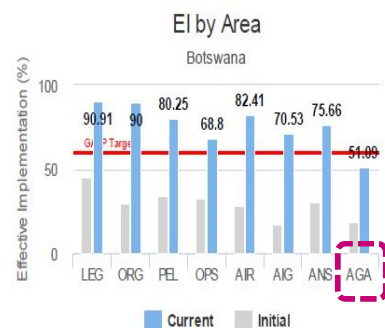
Indicator	Target	Value	Achieved
USOAP EI <i>USOAP overall EI(%)</i>	60%	71.58%	Yes
Significant Safety Concerns (SSCs) <i>Number of SSCs</i>	0	0	Yes
Fatal Accidents <i>Number of fatal accidents in last 5 years</i>		0	✓
Aerodrome Certification <i>Validated status of USOAP Protocol Questions (PQ) 8.081, 8.083 and 8.086</i>	Satisfactory	Satisfactory	Yes
State Safety Programme (SSP) <i>Level of SSP implementation</i>	Level 2	Level 1	No
IOSA <i>Number of IOSA certified operators</i>	>0	1	Yes
FAA IASA <i>IASA categorisation</i>	Cat 1	NR	
EU Safety List <i>Number of operational restrictions</i>	Unrestricted	Unrestricted	Yes
PBN <i>Percentage of international instrument runways with PBN approaches</i>	70%	0%	No

Note: The targets are agreed global or regional performance targets, as applicable. Fatal accidents are by State of Occurrence or State of Operator on scheduled commercial flights with aircraft over 5.7t since 2010.



USOAP Results by Area and Critical Element

7 areas and 5 critical elements are above the target of 60% EI.



Botswana currently has 218 open USOAP protocol findings. The highest number of protocol findings (35) concern Licensing, Certification, Authorization and Approval Obligations (CE-6) in the area of Aerodromes (AGA).

	LEG	ORG	PEL	OPS	AIR	AIG	ANS	AGA
CE-1	1					2		
CE-2	1		2	2	3	5	3	6
CE-3		1			1	7	6	1
CE-4			4	5	5	3	12	4
CE-5			1	2	2	7	1	1
CE-6			2	17	1		11	35
CE-7			4	9	5		10	15
CE-8			3	4	2	4	3	5

Protocol findings by Area and Critical Element intersection

Note: Due to ongoing work on our data management platform, the above results may slightly differ from the ones published on the CMA online framework. There may be differences in the protocol findings obtained from the OLF and iSTARS due to migration to the 2016 PQ version.



State Safety Programme (SSP) Implementation

Implementation of the State Safety Programme (SSP) is included in the priorities of the Global Aviation Safety Plan, in particular for States with an EI above 60%. ICAO tracks the implementation of SSPs via the SSP Gap Analysis tool on [iSTARS](#). States are invited to use this tool to perform their GAP analysis, define action plans and benchmark their progress.

ICAO measures SSP implementation in levels as follows:

Level 0: States not having started a GAP analysis

Level 1: States having started a GAP analysis

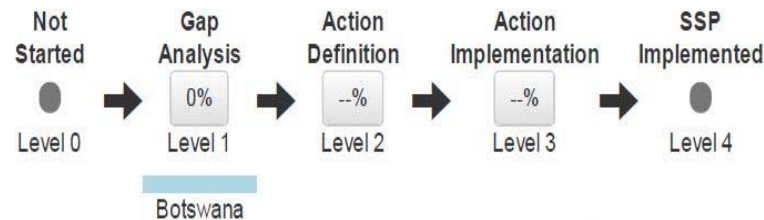
Level 2: States having reviewed all the GAP analysis questions

Level 3: States having defined an action plan for all non implemented questions

Level 4: States having closed all actions and fully implemented their SSPs



Botswana is at level 1.



The data used to evaluate those levels is self-reported by the State and not validated by ICAO.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Safety Margins

- Safety Margin is the value above or below target USOAP EI which is based on a global linear regression of air traffic versus EI of all audited States.
- Safety Margins application is available on the ICAO iSTARS - <http://www.icao.int/safety/iStars/pages/intro.aspx>



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Safety Margins App on iSTARS

- Tool for risk-based prioritization
- Target EI score calculated based on a global linear regression of traffic versus EI

The screenshot displays the iSTARS 3.0 interface. At the top, there's a header with the ICAO logo, the text 'iSTARS 3.0', and the subtitle 'Integrated Safety Trend Analysis and Reporting System'. Below this is a navigation bar with links: MY APPS, CATALOGUE, GROUP MANAGER, SPACE-EXCHANGE, WORKSHOP, NEWS, MY ACCOUNT, CONTACT US, and PROFILE. The main content area features a purple icon with a white crosshair and the title 'Safety Margins'. Below the icon, it states 'Risk-based prioritization for operations, air navigation and support functions'. A paragraph explains that the application allows for risk-based prioritization of operational, air navigation, and support related USOAP areas. It further details that in each of the 3 functional areas, a State is given a target effective implementation score calculated based on a global linear regression of traffic versus effective implementation of all ICAO Member States. A State with a positive safety margin would be considered to have sufficient regulatory controls in place to cover its existing traffic volume, while a State with a negative safety margin would be considered to have an insufficient oversight system. It also notes that operational safety margins are calculated taking into consideration only flights performed by carriers from the State, whereas other margins are calculated using all departures from the State. A final paragraph states that safety margins are best used in conjunction with the Solution Center which provides solutions for the various USOAP areas. At the bottom, there are three filters: 'Select a Region or Group' with a dropdown menu set to 'World', 'Show States with Margin' with a dropdown menu set to 'Any', and 'Show State Names' with an unchecked checkbox.

ICAO | iSTARS 3.0
Integrated Safety Trend Analysis and Reporting System

MY APPS | CATALOGUE | GROUP MANAGER | SPACE-EXCHANGE | WORKSHOP | NEWS | MY ACCOUNT | CONTACT US | PROFILE

Safety Margins
Risk-based prioritization for operations, air navigation and support functions

The below application allows to perform a risk-based prioritization of operational, air navigation and support related USOAP areas.

In each of the 3 functional areas, a State is given a target effective implementation score which is calculated based on a global linear regression of traffic versus effective implementation of all ICAO Member States. A State with a positive safety margin would be considered to have sufficient regulatory controls in place to cover its existing traffic volume. A State with a negative safety margin would be considered to have an insufficient oversight system taking into consideration its traffic volume.

The operational safety margins are calculated taking into consideration only flights performed by carriers from the State, whereas the other margins are calculated using all departures from the State.

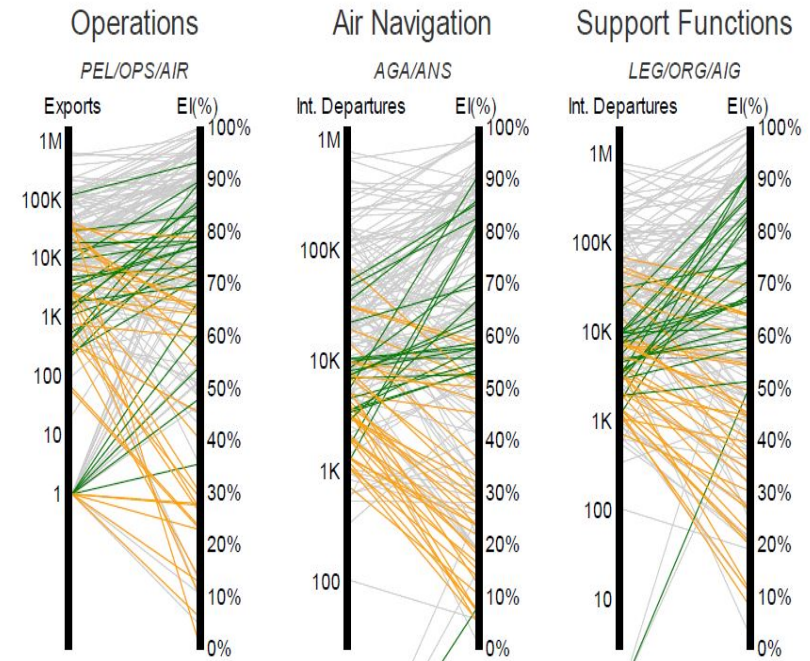
Safety margins are best used in conjunction with the Solution Center which provides solutions for the various USOAP areas.

Select a Region or Group **World** ▼
Show States with Margin **Any** ▼
Show State Names ☐



Regional Priorities - Africa

- States are prioritized by considering the EI as well as the related activity at risk in operations, air navigation and support functions
- The profile of each State is benchmarked against all other ICAO member States
- Priority is given to the least performing areas in ascending order



Top-5 States in each Priority area

Djibouti Safety margin: -73.87%	Angola Safety margin: -40.48%	Djibouti Safety margin: -37.22%
Guinea-Bissau Safety margin: -51.37%	Seychelles Safety margin: -37.8%	Central African Republic Safety margin: -34.96%
Seychelles Safety margin: -45.52%	Djibouti Safety margin: -34.96%	Lesotho Safety margin: -34.49%
Democratic Republic of the Congo Safety margin: -45.3%	Gabon Safety margin: -33.96%	Seychelles Safety margin: -34.14%
Libya Safety margin: -41.31%	United Republic of Tanzania Safety margin: -29.89%	Eritrea Safety margin: -25.25%



Source: *iSTARS 3.0 – Regional Safety Briefing* (<https://portal.icao.int/space>)



ICAO

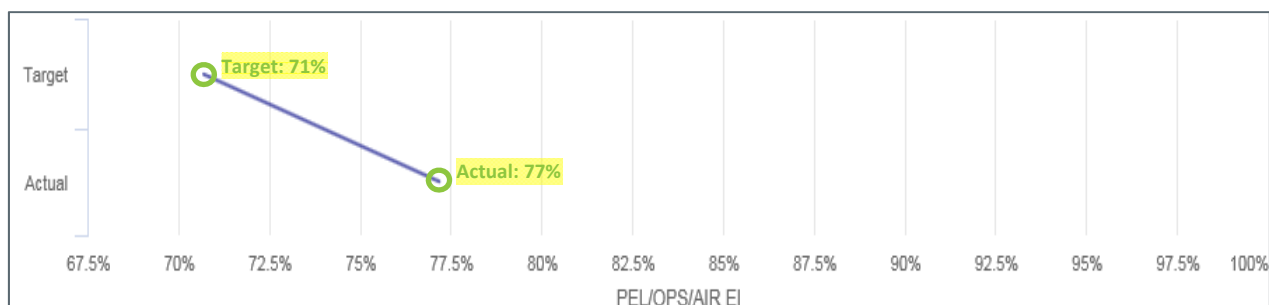
SAFETY

NO COUNTRY LEFT BEHIND

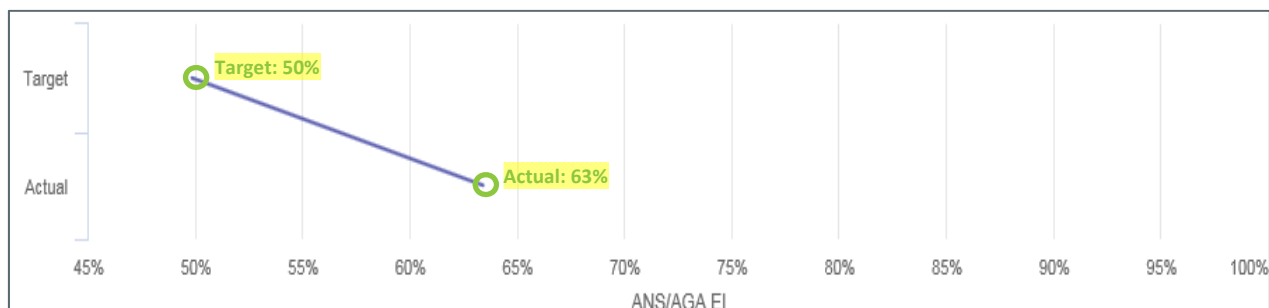


Safety Margins - Botswana

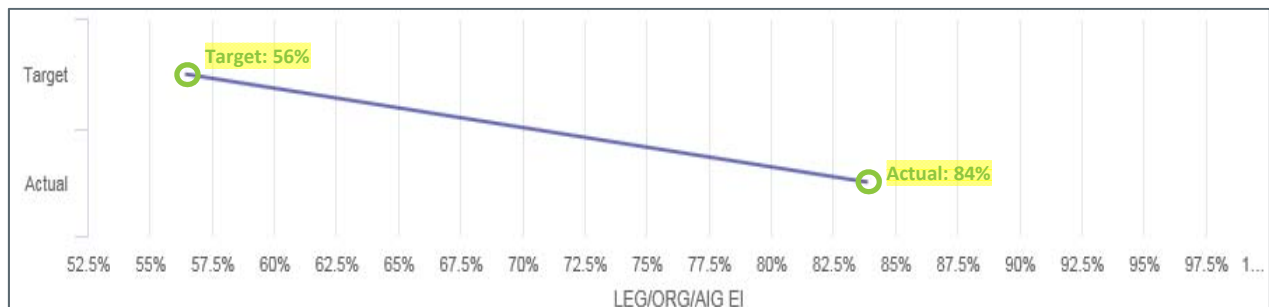
Margins in
Operations



Margins in Air
Navigation



Margins in
Support
Functions





- In each of the 3 functional areas, a State is given a target EI score which is calculated based on a global linear regression of traffic versus EI of all States.
- A State with a positive safety margin would be considered to have sufficient regulatory controls in place to cover its existing traffic volume.
- A State with a negative safety margin would be considered to have an insufficient oversight system taking into consideration its traffic volume.

State	Departures	Flag-carrier Flights	Operations		Air Navigation		Support	
			EI (%)	Margin (%)	EI (%)	Margin (%)	EI (%)	Margin (%)
Botswana	8888	8563	77.15	6.49	63.38	13.58	83.81	27.4



Source: *ISTARS 3.0 – Safety-Margins* (<https://portal.icao.int/space>)



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Data-driven Decision Making

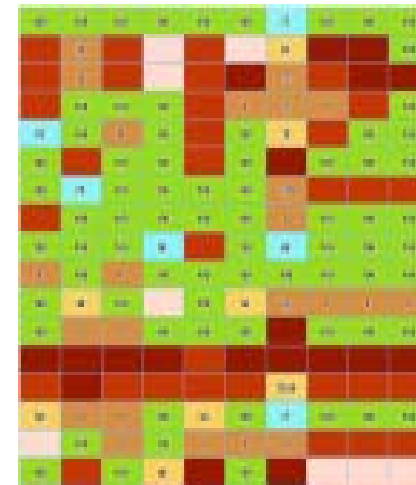
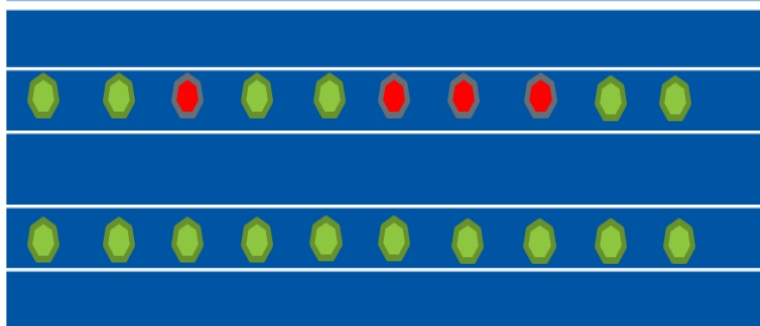
- Using the safety margins tool is an example of integrating data to build a more comprehensive picture that supports setting priorities and making decisions.



SSP pre-requisites

Identifies pre-requisites to an effective and sustainable SSP implementation

USOAP PQ Prerequisites – Safety Oversight Foundation



A subset of the approx. 1,096 USOAP PQs with more granularity than the 60% EI threshold;



Refining the Pre-requisites

- ✓ Approximately 380 USOAP PQs identified as pre-requisites
- ✓ Grouped by topic
- ✓ Existing USOAP PQ data can be imported to create App
- ✓ SSP implementation plan should address pre-requisites

USOAP PQ Prerequisites	#	Topic
	1	Primary aviation legislation
	2	Specific operating regulations
	3	State system functions
	4	Qualified technical personnel
	5	Accident and incident investigation



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Sustainable & Effective SSP

- Sustainable SSP refers to addressing the SSP pre-requisites that ICAO is in the process of identifying by selecting specific USOAP PQs that are more directly linked to SSP implementation (approx. 380). This is intended to replace the 60% EI currently used as a threshold to progress into SSP. The intent is that these PQs be included in the SSP implementation planning to ensure sustainability.
- Effective SSP refers to an SSP that actually achieves the objectives that it is intended to achieve – this will be measured by the SSP-related PQs which will eventually use a maturity model with the higher level identified by “Effective”. The SSP-related PQs will evolve to this by November 2019.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Prioritisation Tool

- Prioritisation in an automated mode and interactive presentation using real-time data sourced from the ICAO USOAP, iSTARS Safety Margins App, and the World Bank Worldwide Governance Indicators
- Safety Margin is the value above or below target USOAP effective implementation (EI) based on a global linear regression of air traffic versus EI of all audited States
- States with negative SM (below target EI) and overall EI < 80% by technical area; namely, operations (OPS/AIR/PEL), air navigation (AGA/ANS) and support (LEG/ORG/AIG)
- Political stability and control of corruption conditions
- Above average GDP per capita
- www.icao.int/asiap



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



ASIAP Prioritization App on iSTARS

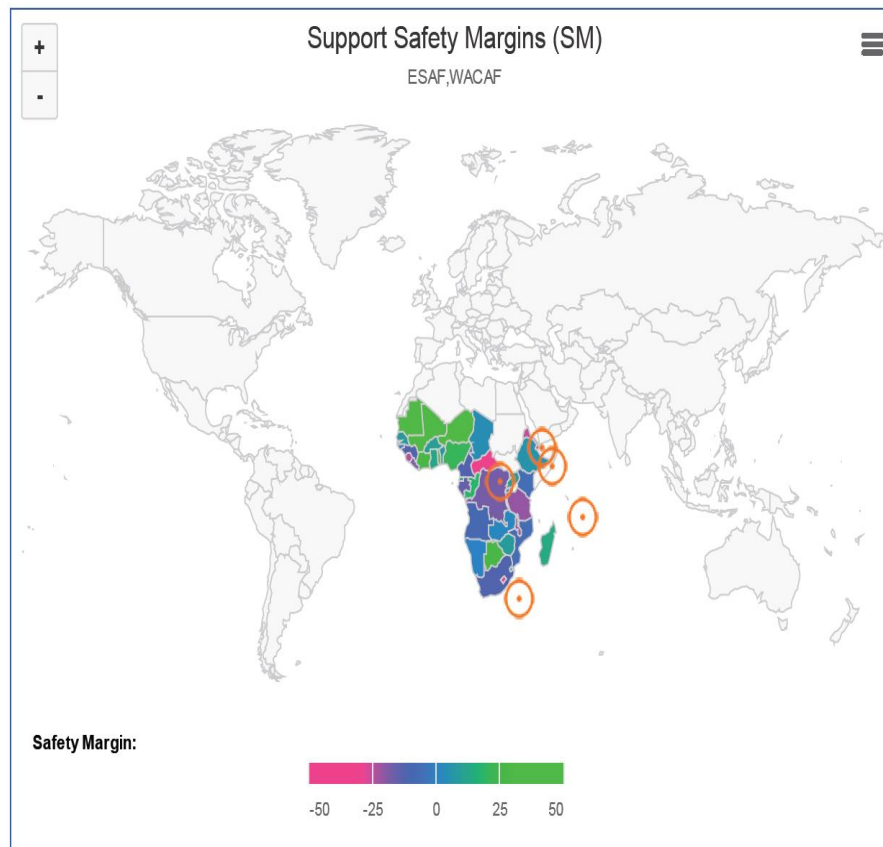
- Prioritization tool for the Aviation Safety Implementation Assistance Partnership (ASIAP)
- Uses safety margins integrated with other indicators and factors to identify and prioritize States for technical assistance

The screenshot displays the iSTARS 3.0 interface. At the top, the ICAO logo and 'iSTARS 3.0' are visible, along with the text 'Integrated Safety Trend Analysis and Reporting System'. Below this is a navigation bar with links: MY APPS, CATALOGUE, GROUP MANAGER, SPACE-EXCHANGE, WORKSHOP, NEWS, MY ACCOUNT, CONTACT US, and PROFILE. The main content area features a large icon for the ASIAP Prioritisation tool, which depicts a globe with a dollar sign and a bar chart. To the right of the icon, the text 'ASIAP Prioritisation' and 'Prioritisation of Assistance Needs' is displayed. Below the icon, a paragraph explains the tool's purpose: 'The Aviation Safety Implementation Assistance Partnership (ASIAP) Prioritization Tool is designed to identify States prioritised for technical assistance using the ASIAP methodology in an automated mode and interactive presentation using real-time data sourced from the ICAO Universal Safety Oversight Audit Programme (USOAP), integrated Safety Trend Analysis and Reporting System (iSTARS) Safety Margins App, and the World Bank Worldwide Governance Indicators (WGI). The Safety Margin is the value above or below target USOAP effective implementation (EI) which is based on a global linear regression of air traffic versus EI of all audited States. The top 5 States with negative SM (below target EI) and overall EI < 80% per ICAO Regional Office accreditation area and by technical area; namely, operations (OPS/AIR/PEL), air navigation (AGA/ANS) and support (LEG/ORG/AIG) are identified. Political stability and control of corruption conditions are identified by State. SSC States are also highlighted.' Below this paragraph, a link is provided: 'For more information on the Aviation Safety Implementation Assistance Partnership, please click on the following link: <http://www.icao.int/safety/scan/Pages/Aviation-Safety-Implementation-Assistance-Partnership.aspx>'. At the bottom, there is a 'Select a Region:' dropdown menu with 'All Member States (World)' selected, and a 'Send PDF by email' button.



ASIAP Prioritization ESAF, WACAF

Support (LEG/ORG/AIG)



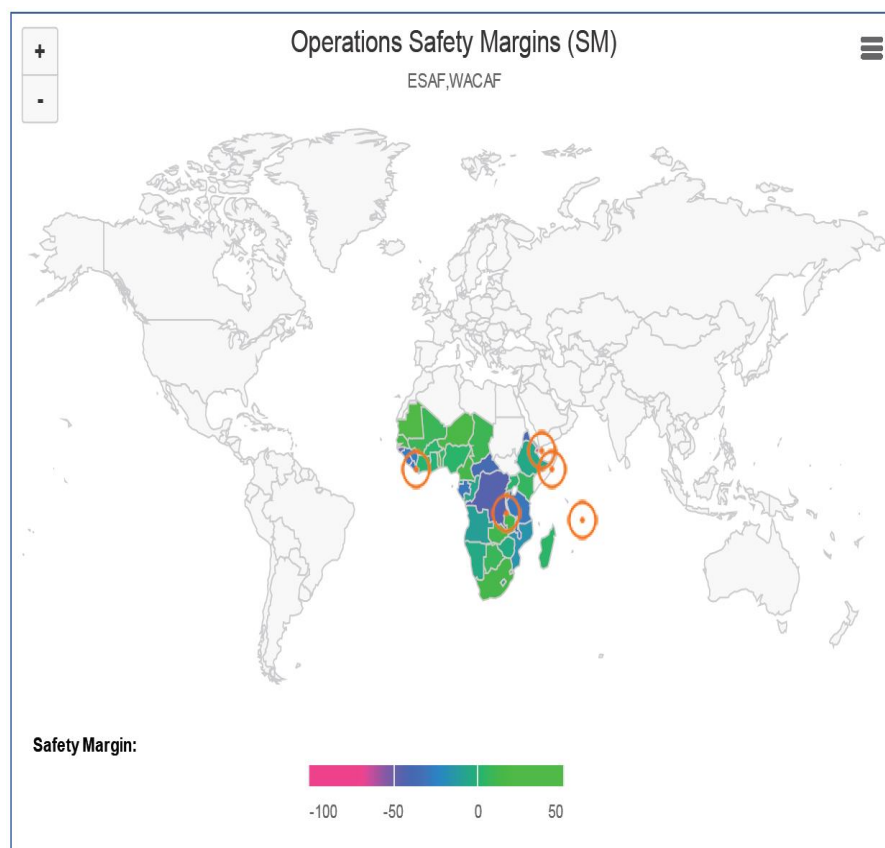
List of Priority States

Djibouti	⚠ Negative Safety Margin	
Central African Republic	⚠ Negative Safety Margin	⚖ Politically Unstable ⚡ High Corruption Concerns
Lesotho	⚠ Negative Safety Margin	
Seychelles	⚠ Negative Safety Margin	💰 Above Average GDP per Capita
Eritrea	⚠ Negative Safety Margin	⚖ Politically Unstable ⚡ High Corruption Concerns



ASIAP Prioritization ESAF, WACAF

Operations (OPS/AIR/PEL)



List of Priority States

Malawi



Significant Safety Concern



Negative Safety Margin



High Corruption Concerns

Djibouti



Significant Safety Concern



Negative Safety Margin

Guinea-Bissau



Negative Safety Margin



High Corruption Concerns

Seychelles



Negative Safety Margin



Above Average GDP per Capita

Democratic Republic of the Congo



Negative Safety Margin



Politically Unstable



High Corruption Concerns

Eritrea



Significant Safety Concern



Negative Safety Margin



Politically Unstable

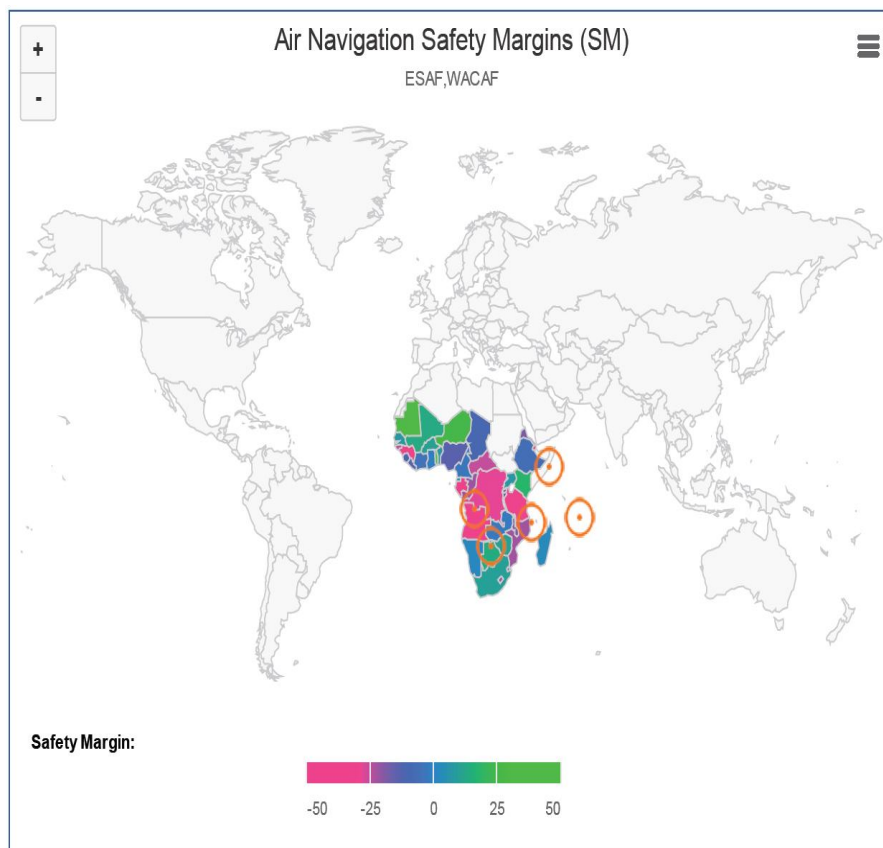


High Corruption Concerns



ASIAP Prioritization ESAF, WACAF

Air Navigation (ANS/AGA)



List of Priority States

Angola	⚠ Negative Safety Margin	⚠ High Corruption Concerns
Seychelles	⚠ Negative Safety Margin	⚠ Above Average GDP per Capita
Djibouti	⚠ Negative Safety Margin	
Gabon	⚠ Negative Safety Margin	
United Republic of Tanzania	⚠ Negative Safety Margin	



ICAO

SAFETY

NO COUNTRY LEFT BEHIND



Safety Information Monitoring Service (SIMS)

What is SIMS

Benefits

Modules

Ramp Inspection (RI)

- comprises safety data from national ramp inspection programmes in accordance with ICAO Doc 8335

Air Navigation Monitoring (ANM)

- processing of safety data collected through Automatic Dependent Surveillance-Broadcast (ADS-B), radar surveillance systems and other types of flight parameter monitoring systems.

Operational Safety Data (OSD)

- comprises of data collected through flight data monitoring and other types of flight parameter monitoring systems.

Safety Indicator Dashboard (SID)

- allows States to monitor and have their State activity and operational indicators and metrics visualized for decision making.



ICAO

SAFETY

NO COUNTRY LEFT BEHIND

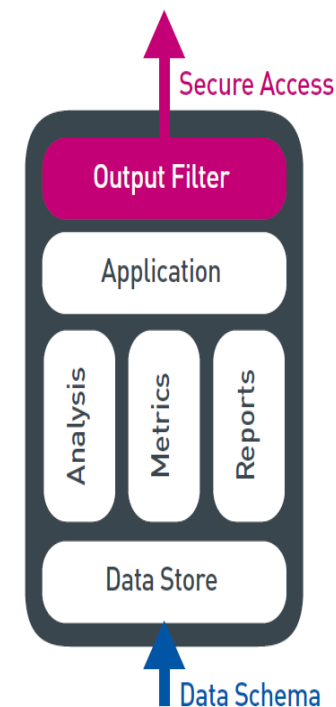
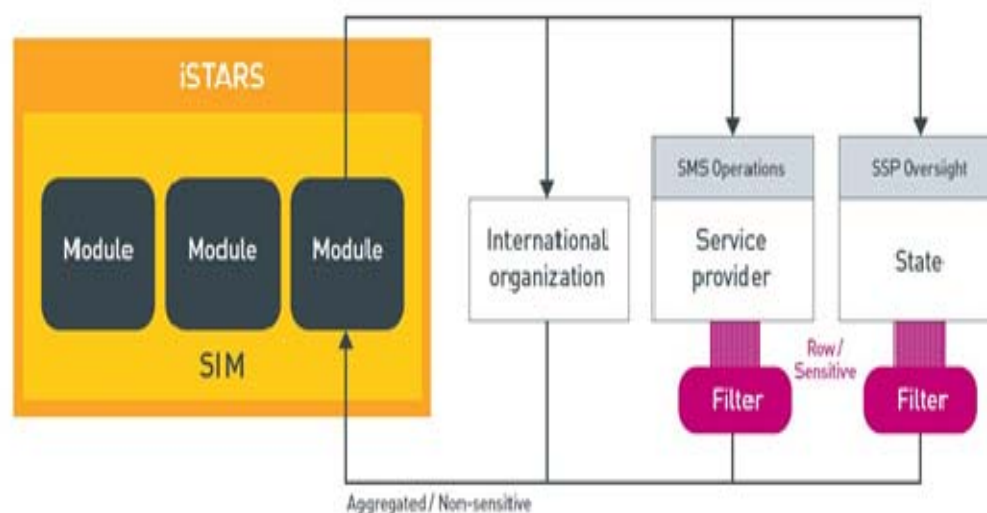


Safety Information Monitoring Service (SIMS)

What is SIMS

Benefits

Modules





ICAO

SAFETY

NO COUNTRY LEFT BEHIND



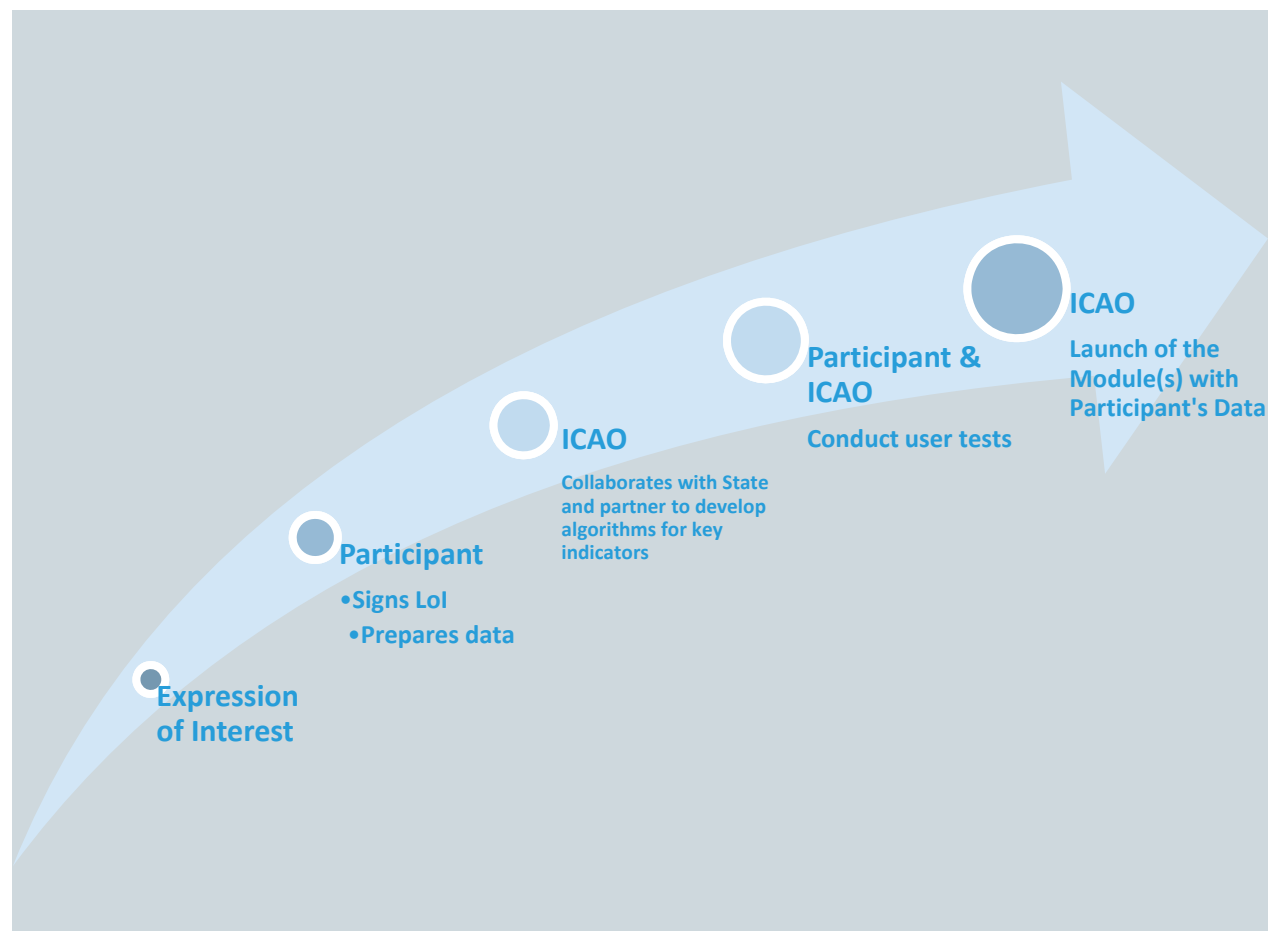
SIMS Implementation

What is SIMS

Benefits

Modules

Implementation
Process





ICAO

SAFETY

NO COUNTRY LEFT BEHIND



State Safety Risk Analysis Principles

- Safety goals & targets (global, regional, national)
- Risk based prioritisation
- Data driven analysis
- Safety margin targets
- Fatality risk reduction
- Layered risk mitigation
- Safety Information Monitoring
- Transparency



ICAO

UNITING AVIATION



ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU



ICAO UNITING AVIATION

Outcome of the ICAO/EASA Forum on RSOO for Global Aviation Safety - (Swaziland, March 2017)



Ms. Suzette Nieuwoudt
Acting Executive Director, iSASO



ICAO UNITING AVIATION

RSOO Forum Outcomes



AFI AVIATION WEEK



3-Day Forum

- ✈ Two days of global discussions
- ✈ One day dedicated to the Africa region at Ministerial level.



Attendance

- ✈ 200 participants
- ✈ 48 States
- ✈ 32 international organizations
- ✈ Ministers responsible for Civil Aviation from 13 States in the AFI Region.



Global RSOO Discussions

- ✈ Theme 1 RSOO State-of-Play – Global Update
 - Report on the actions and achievements since the last ICAO RSOO Symposium
 - RSOO pitch I: **new RSOOs**
- ✈ Theme 2 RSOO State-of-Play – RSOO Update
 - RSOO pitch II: **existing RSOOs** - updates on main activities, developments in competences, recognition and challenges



✈ Theme 3 Practical Aspects of Operating Regional Mechanisms :

- **What** they can offer and perform for States
- **Financing and sustainability**: Which possibilities exist? How sustainable are they? Presenting the views of RSOOs, their donors, States and industry.

✈ Theme 4 Institutional Aspects of Operating Regional Mechanisms

- The **relationship** between **RSOOs and their Member States**
- The **relationship** between **RSOOs and ICAO**: recognition, audits and integration into ICAO activities.



Proposed Cooperative Platform

- facilitate inter-RSOO Communication
- become an information hub and facilitate the exchange of information and sharing of best practices, including the establishment of common or harmonised definitions, standards and
- specifications relevant to RSOOs
- facilitate the exchange of data and common data analysis
- facilitate the supply of technical assistance and support to RSOO
- interface with ICAO on topics of mutual interest for RSOO
- receive tasks from ICAO that concerns development of the RSOO community
- provide an RSOO pool of experts
- nurture the continued stability and progression of RSOO



RSOO Forum Outcome

- ✈ **Global Strategy and Action Plan** for the Improvement of Regional Safety Oversight Organizations (RSOOs) and the Establishment of a Global System for the Provision of Safety Oversight





GASOS

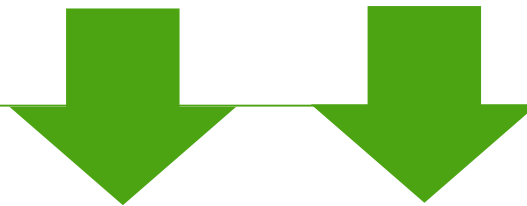
*a new Global Aviation Safety Oversight System
for the provision of safety oversight*

- **Improvement and strengthening of RSOOs**
- Development and implementation of an RSOO **cooperative platform**
- Development and implementation of a global aviation safety oversight system (**GASOS**)



AFI Ministerial Event Outcome

✈ **Regional Ministerial Declaration** HOW States will work to refine their collaborative efforts and improve aviation safety oversight





EZULWINI DECLARATION ***endorsement***

GASOS

a new Global
Aviation Safety Oversight
System

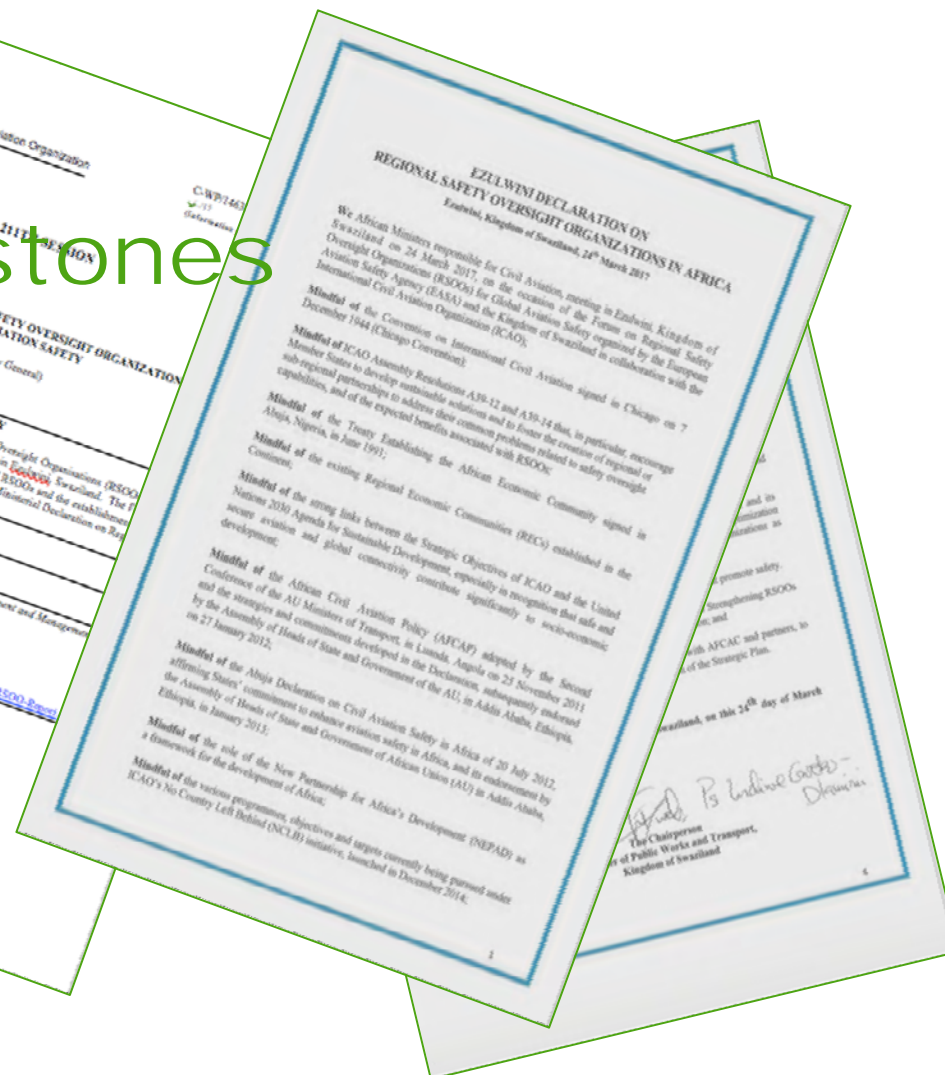
for
the provision of safety
oversight

Global Strategy
and Action Plan

for
the improvement of RSOOs



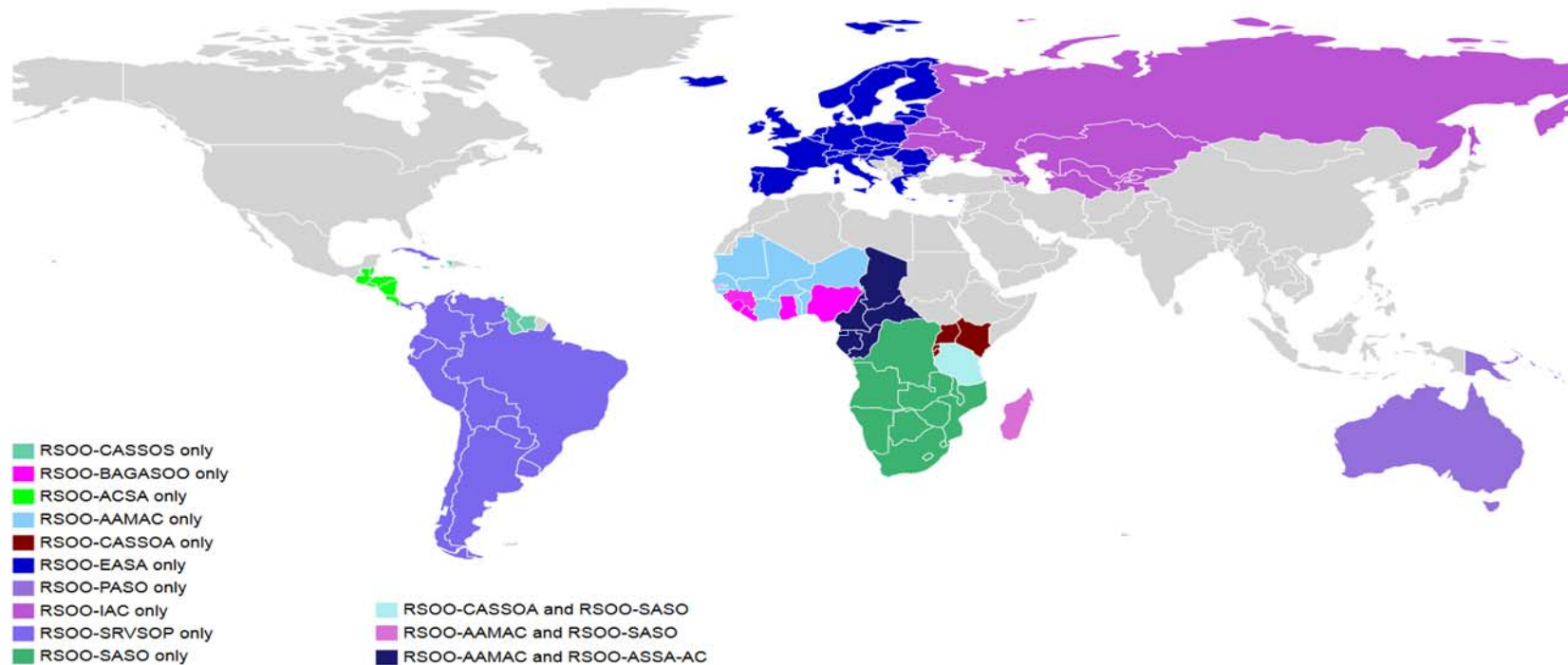
Milestones





Thank you!

Regional Safety Oversight Organizations (RSOOs)



AFI AVIATION WEEK



ICAO | UNITING AVIATION



Improvements in the AFI Region



Mr. Peter Bombay
European Commission, DG MOVE
Chair of the EU Air Safety Committee





Cooperation ICAO - EU

- EU experiences good cooperation with ICAO
- Synergies exist and more coordination and cooperation could be achieved to avoid duplication of efforts
- Development of ICAO tools provides for better safety analysis

EU Air Safety List

AFI region makes good progress, removal of airlines from the ASL:

- 2012: Mauritania (all)
- 2014: Swaziland (all)
- 2016: Zambia (all), Air Madagascar, TAAG (less restrictions), Botswana (managed to stay off the list with timely improvements)
- 2017: Benin (all), Mozambique (all)



Sustainability of improvements

None of removed airlines re-entered the ASL

Important elements:

- Recognition of safety problems
- No quick fixes
- Re-build the aviation safety system



ICAO

UNITING AVIATION



Sustainability of improvements

Civil Aviation Authorities:

- Independency
- Solid funding mechanisms
- Enforcement powers
- Good governance
- Cooperation at regional level



ICAO

UNITING AVIATION



Aviation growth

The expected growth of aviation in Africa requires that:

- CAA's have to be prepared and keep up with this growth in oversight capabilities
- Airlines should demand good safety oversight from their authorities



Third Country Operators

- Since 26 April 2014 the foreign operator rules in Europe are complemented by the new Third Country Operators (TCO) authorization system
- Majority of African TCO applications succeeded and some were among the first authorizations issued by EASA.

Technical cooperation projects

Name	Zone	Amount
SATA	Sub-Saharan Africa (closed)	9.0 M€
CAASP	Central Africa	2.2 M€
IASOM	Malawi (closing)	2.5 M€
ASSP	Zambia (closed)	3.0 M€
Euromed III	Northern Africa (+ Middle East)	2.0 M€
Twinning	Algeria (closed)	1.4 M€
Twinning	Morocco	1.5 M€
Twinning	Tunisia	1.2 M€
TOTAL		22.8 M€

EU implementing partner



The EU institutions mandated EASA to carry out cooperation activities



EASA is the preferred partner from the EC for aviation-related TA



Some of the project specifically targeted countries with low EI



SIASA

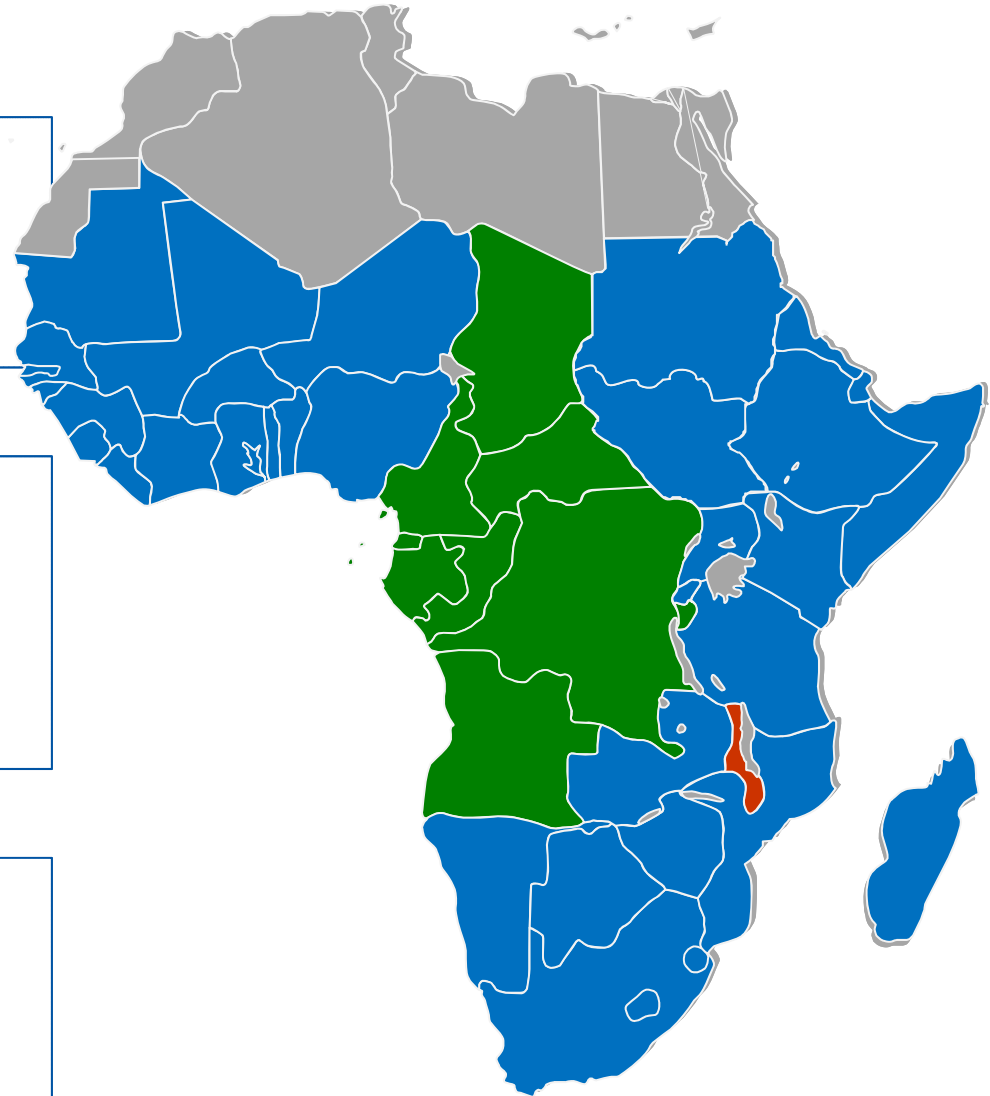
- Support to the Improvement of Aviation Safety in Africa

CAASP

- Central Africa Aviation Safety Project (also known in French as ATA-AC)

IASOM

- Improvement of Aviation Safety Oversight in Malawi



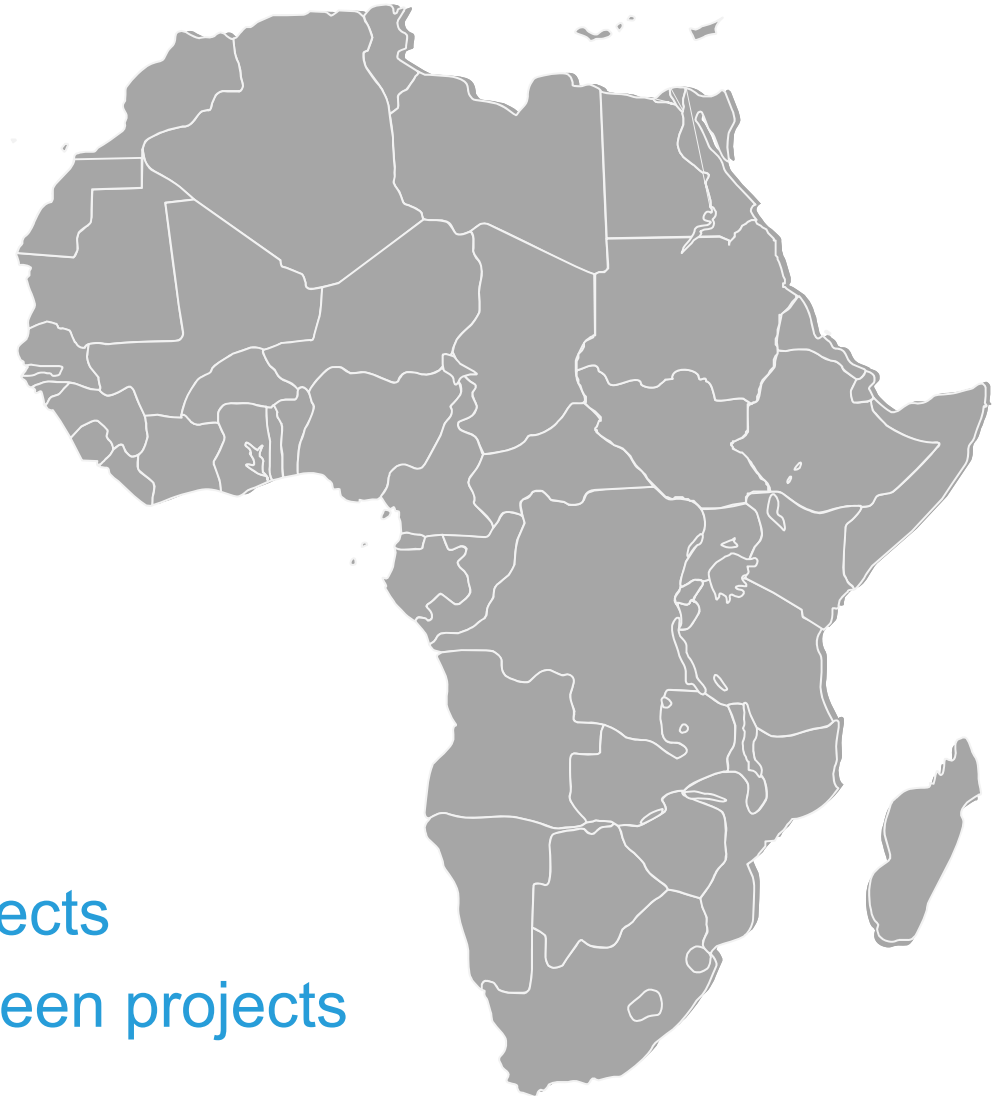
Two key words

- **Cooperation**

- Europe will pursue its cooperation with Africa

- **Coordination**

- Deliver qualitative projects
- Avoid duplication between projects and misuse of funds





“When the right, capable people are put on the right spot and are allowed to do their job properly, progress become a reality”

And this progress IS a reality in Africa

AFI Region improvements

- Significant Safety Concerns are being resolved
- Effective Implementation of international safety standards improves
- For foreign operators to Europe:
 - Many African carriers received a TCO authorisation from EASA
 - Ever more African states/carriers released from the EU ASL
- All partners should cooperate in their efforts to improve the situation in the region



Through hard work of many capable people, it will
be possible to ensure that “No Country is Left
Behind”

Thank you!



ICAO

UNITING AVIATION



Questions ?



ICAO UNITING AVIATION



Session 1

Sustainability of EI improvement and mitigation
of regression of EI levels achieved by States

Moderator: Mohamed Khalifa Rahma
Regional Director, ICAO/MID Office

Rapporteur: Ousman K. Manjang
Regional Officer - Airworthiness, ICAO/WACAF