

Forum



**On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety Theme FOUR:** Institutional Aspects of Operating **Regional Mechanisms** Moderator: Dr. Vahid Motevalli, Associate Dean of Engineering, **Tennessee Tech University** 







### Preamble



- Regional cooperation organizations are a proven approach in many fields outside aviation. We have several decades of regional aviation cooperation mechanisms.
- All regional cooperation mechanism must as a minimum:
- Have an established organization, be effective and sustainable
- Developing a RSOO requires as a minimum:
  - (a) Political commitment at the highest levels
    (b) A foundation in law, both internal and multilateral
    (c) Requires initial and ongoing resources
    (d) Benefits from existing economic/political structures and treaties; and
  - (e) Requires a leader/champion.







#### Forum

### On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety

# **Theme FOUR – Part 1:** The Relationship Between RSOOs and their Member States











### Presentations Made to Introduce Topics and Initiate Dialogue

- Four Pairings on the panel RSOO executive and an RSOO Member State representative
- These RSOOs represent different levels of collaboration and authority
  - Advisory, consultancy and coordinating tasks and functions
  - Operational assistance tasks and functions
  - Certifying agency tasks and functions

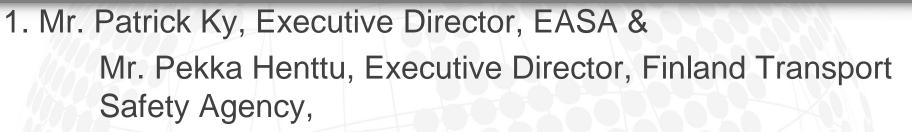






### **Panel Members**





2. Mr. Julio Martinis Guerra, Secretary General, CAA, Panama & Mr. Franklin Hoyer, Regional Director for South American Region, ICAO and General Coordinator, SRVSOP 3. Mr. Emmanuel Akatue, Executive Director, BAGASOO -Mr. Simon Allotey, Executive Director, CAA, Ghana 4. Mr. Sadou Marafa, Executive Secretary of AAMAC -Mr. Jean Charles Ranaivoson, Dir. of Quality, CAA, Madagascar



Forum



### On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety

#### Theme FOUR The Relationship between RSOOs and its Member States

#### Mr Patrick Ky, Executive Director, EASA









#### The EU system

- is one of cooperation and partnership between EASA and its Member States
- has a distribution of competencies and responsibilities > both, EASA and Member States hold key responsibilities
- EASA and Member States competencies are complementary, which require us to cooperate and work together
- Member States retain their international responsibilities under ICAO
- Member States are part of EASA's Management Board







#### EASA

- acts when centralization is more effective and efficient
- acts as one authority for all 31 EASA Member States
- is a center of technical expertise
- supports States in fulfilling their ICAO obligations
- oversees implementation in States and ensures level playing field
- Member States
  - are consulted at policy, planning and technical level
  - conduct tasks within their responsibility
  - maintain their ICAO representation and remain accountable to ICAO







### RSOO in Europe – added value for member states

#### Mr Pekka Henttu

Director General for the Aviation Sector of the Finnish Transport Safety Agency (Trafi)



@PekkaHenttu





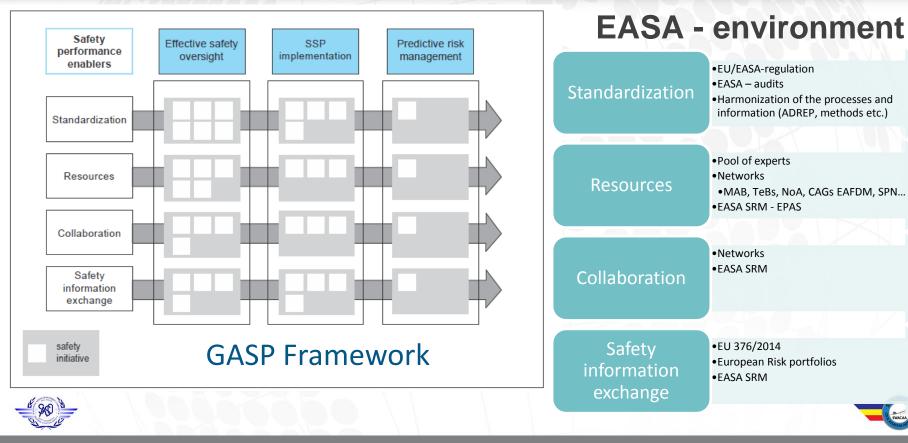


#### RSOO in Europe –



#### ICAO SAFETY

#### added value for member states

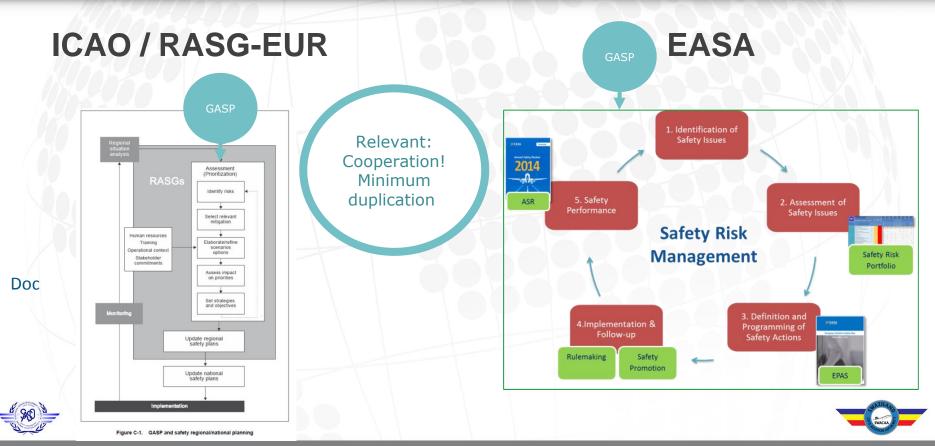




RSOO in Europe – added value for member states











#### RELATIONSHIP BETWEEN THE REGIONAL SAFETY OVERSIGHT COOPERATION SYSTEM - SRVSOP (LIMA, PERU) AND THE STATE OF PANAMA

Julio Martinis Guerra Secretary General, CAA, Panama















### RELATIONSHIP BETWEEN THE SRVOP (LIMA, PERU) AND THE STATE OF PANAMA

- Strategies Technical assistance of ICAO
  - Objectives: short and long term
    - Strategies
    - Activities









# On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety Franklin Hoyer,

Forum

Regional Director for South American Region, ICAO and General Coordinator, SRVSOP









The relationship between SRVSOP and its member States

- The success of our relationship with our States is mainly based on:
  - Regulatory harmonization; and
  - Regional Office and RSOO Symbiosis
  - USD 35,450,000 direct benefit 80% Effective Implementation (EI)

•Only possible within a highly harmonized environment









#### **Examples of successful relationship**

- Delegation of duties (Performed by multinational inspectors)
- Technical support (Both remote and in-situ)
- Pool of experts (Aeronautical engineers and FFS Qualification experts)
- Data collection (Ramp inspections and DG inspections)
- Development of regulations, procedures and advisory material
- Development and provision of technical training
- Enable of multinational recognition agreements (AMO and TO)

#### **Cooperation with non-member States (NMS)**

- RO-RSOO symbiosis has led us provide assistance to NMS
- SRVSOP is open to all Americas











#### **RSOO-RSOO Cooperation opportunities**

- Mutual recognition of certificates
- Data aggregation and data exchange
- Exchange of expertise and best practices
- Language based cooperation

#### Conclusions

- RSOO does make financial sense
- RSOOs should focus on regulatory harmonization
- RO-hosted RSOO generates symbiosis











Emmanuel Akatu Executive Director BAGASOO



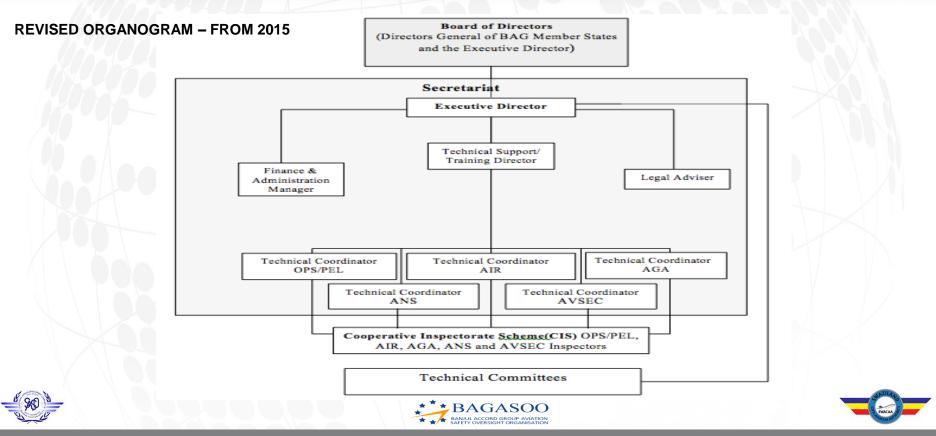






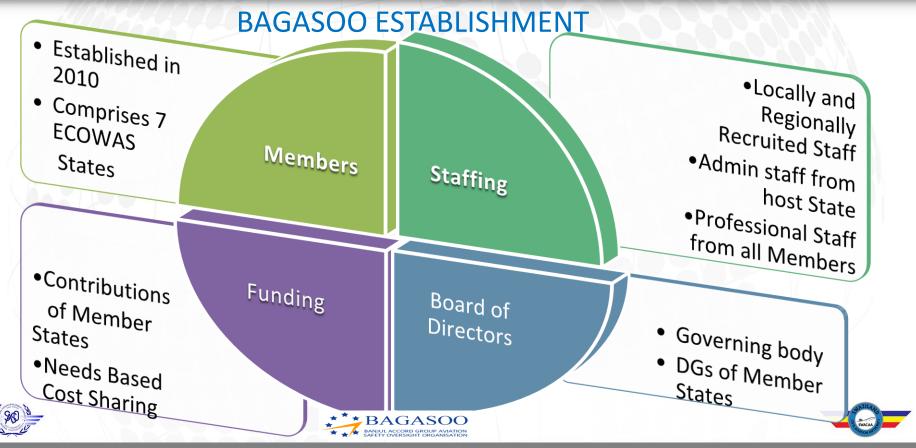






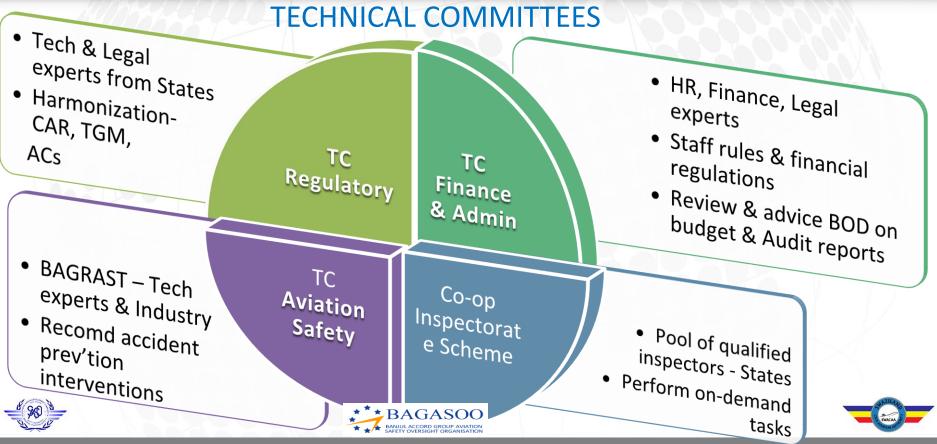














#### Relationship between RSOO & Its Member States

Presentation by Ing. Simon Allotey Director-General, Ghana Civil Aviation Authority

Ezulwini, Swaziland



## Benefits of Membership of RSOO

- States have benefitted from several GSI and other Training programmes .e.g. FASAP ( Foreign Aircraft Safety Assessment Programme); Obstruction Evaluation and Land use management Workshop
  - (over 600 personnel trained)
  - IMPACT: Improved safety oversight capabilities; reduction in accident rate
  - Cost savings to GCAA from participation in FAA /BAGASOO Courses in 2015 – approx. \$ 1 million USD



Participants in a group photograph with officials of the Banjul Accord Group Aviation Safety Oversight Organisation (BAGASOO) after an Inspector Training Systems course in Accra



### Benefits of Membership of RSOO

- Support for various Audits & Technical Missions (BAGASOO Cooperative Inspectorate Scheme)
- Ready access to Technical support
- Harmonised Regulations Progressively working towards common regulations
- Common Safety Oversight Tools
- Easier access to technical support from partners e.g. FAA, EASA, AfDB
- Networking : Sharing of Experiences; safety data; informal peer to peer reviews





- Sovereignty Issues Perception of Role of RSOO
- Funding Challenges
- Lack of full commitment of some Member States





### Way Forward to Building a Sustainable RSOO

- Good Legal Framework
- Commitment
  - Active participation in programmes and activities of RSOO
  - Appropriate Financial mechanism to ensure sustainability
- Effective support mechanisms (No Country Left Behind)
  - BAGASOO to States
  - States to States





#### Forum

### On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety

### Sadou Marafa, Executive Secretary AAMAC





AUTORITES AFRICAINES ET MALGACHE DE L'AVIATION CIVILE (AAMAC)



#### **African and Malagasy Civil Aviation Authorities**

RSOO created in 2012 by a treaty between ASECNA members: Benin, Burkina-Faso, Cameroon, Central Africa Republic, Chad, Comoros, Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea Bissau, Madagascar, Mali, Mauritania, Niger, Senegal, Togo.

MOU signed in 2015 with other RSOO created by RECs (CEMAC for Central Africa states, UEMOA for West Africa states) under the aegis of ICAO to avoid overlap of functions and duplication: scope limited to ANS

#### **Objectives:**

- Establish and maintain an acceptable regional level of safety
- Assist States to meet theirs obligations with regard to Chicago Convention
- Harmonisation of regulation and procedures
- Environmental protection
- Missions:
  - Develop and maintain up-to-date common regulatory framework, procedures and guidance materials
  - Assist States in effective implementation thereof and ensure compliance of their systems with ICAO SARPs
  - Fulfil technical tasks in ANSPs surveillance and certification process, on behalf of member States
  - Establish cooperation with any other party that would help achieve objectives
- Funding:



Contributions of States Fees paid by ANSPs





#### AUTORITES AFRICAINES ET MALGACHE DE L'AVIATION CIVILE (AAMAC)



- Functions and responsibilities delegated by States; roadmap:
  - > Develop and maintain up-to-date common regulatory framework, procedures and guidance materials
  - Surveillance of ANSPs activities which cover more than one country; Ex: mains ACCs, PANS OPS office, AIS/MAP system, RCC..
  - Audit/Assist States to ensure they meet international and regional obligations and operational targets (Ex: Abuja, AFI DGCA, APIRG, RASG .....)
  - **Ongoing activities:** 
    - Activities conducted with a team of experts identified in member States; collaboration with ICAO and AFCAC
    - Development of harmonized common regulations, procedures and guidance materials (note assistance of EASA in this context)
      - ATM and PANS OPS: done
      - AIS, CNS, MAP, SAR : in 2017
      - Met: in 2018
    - Assistance to States:
      - Two missions in collaboration with ICAO ROST in 2016
      - Two missions scheduled in 2017
    - Surveillance of ANSPs:
      - Two inspections of ASECNA services scheduled in 2017
- Challenges:
  - Sustainable funding



- Strategy to promote AAMAC activities and facilitate joining of new members
- Cooperation with other RSOOs in general and particularly with AFI RSOOs







#### Forum

### On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety

**Theme FOUR – Part 2:** The Relationship Between RSOOs and ICAO: Recognition, Audits, and Integration into ICAO Activities









### **Panel Members**





1. Mr. Nari Williams-Singh, Chairman, Board of Directors, CASSOS

2. Mr. Fredrik Kämpfe, Manager, Agreements and External Representation, EASA

3. Mr. Catalin Radu, Deputy Director, Aviation Safety, Air Navigation Bureau, ICAO







### Theme 4: Institutional Aspects of Operating Regional Mechanisms

Caribbean Aviation Safety and Security Oversight System
A Caribbean Community (CARICOM) Institution

**IMPROVEMENTS OF EXISTING RSOOs** 

#### PRESENTER: MR. NARI WILLIAMS-SINGH, CHAIRMAN







### **IMPROVEMENTS FOR EXISTING RSOOs**

- Project Management approachresult oriented;
- Performance review;
- Safety Oversight- Authority;
- Members EI;
- Status- CE and deficient areas ;
- Support Members oversight activities/Inspectors;
- Regulations developmentupdates;

- Develop common guidance and procedures;
- Safety improvements;
- SSP promotion;
- Aerodrome certification/RST;
- Safety initiatives- RASG-PA;
- Maintenance/ support of Safety systems (PEL, OPS, etc.);







### **IMPROVEMENTS FOR EXISTING RSOOs-cont'd**

- Security Oversight
  - Members El
  - Status- CE and Areas of deficiency
  - Support Members oversight /Inspectors
  - Develop common guidance and procedures
  - Security-Facilitation improvements;
- Air Navigation Operations
  - Implementations

Air Navigation Operations cont'd

- Performance- Capacity and efficiency increase
- Develop common guidance and procedures
- Training
  - Inspectors
  - Officers
  - Common guidance and procedures







### **IMPROVEMENTS FOR EXISTING RSOOs**

For improvements to be effective an RSOOs performance must be assessed based on a prescribed strategy for improvement. RSOOs are faced with a number of challenges which must be overcome in order to effectively carry out their mandate and prove their:

- Relevance: mandates/missions, programmes, goals and activities must be aligned to that of their member States e.g. SSP promotion;
- **Effectiveness:** must have juridical personality, enter into Agreements with ICAO, Inter'l organisations, other States; must achieve harmonization within its Member States.







# **IMPROVEMENTS FOR EXISTING RSOOs**

- Efficiency: transnational inspector sharing, aligned activities between RSOOs and Member States-no duplication of activities, human and \$ resources are used efficiently;
  - **Sustainability:** have an independent strategy for long term funding of RSOO activities, programmes etc.; develop new ways of funding e.g. from levies and charges
    - Adaptability: must be able to adapt to changes in new technologies and processes and to the new role that RSOOs will play in safety oversight.



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#### On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety

Theme FOUR The Relationship between RSOOs and ICAO

Fredrik KÄMPFE, EASA

22 – 24 March 2017 Ezulwini, Swaziland











# EASA, MS and ICAO

EASA Member States





Forum on Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety







Efficiency gains

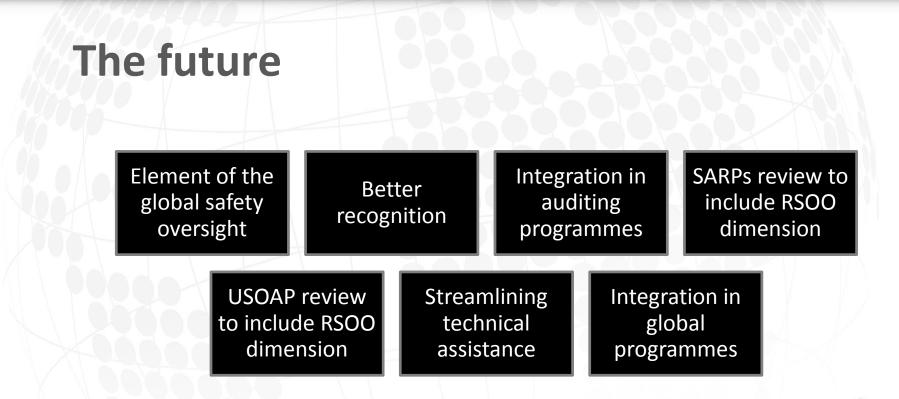
- Standards setting
- Participation in USOAP
- Joint rulemaking
  - Coordinated replies to state letters
  - EFOD compliance checklists
- Technical input to the common European positions in ICAO
- State of Design function
- Support to the technical work of ICAO
- EASP/EPAS ensure link with GASP



















**On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety PROPOSED GLOBAL AVIATION SAFETY OVERSIGHT SYSTEM Catalin Radu Deputy Director, Aviation Safety** ICAO Air Navigation Bureau

> 22 – 24 March 2017 Ezulwini, Swaziland







**The Challenges** 

• Air traffic will double in 15 years; aircraft ownership, registration and user business model is changing.

**NO COUNTRY LEFT BEHIND** 

- Safety oversight systems need to adapt to the future demands of a rapidly expanding aviation industry, new technologies and processes.
- Different regulatory systems, inefficient overlapping auditing and recertification programmes require a rethink of current safety oversight programmes.
- Alternative safety oversight models should be developed to resolve current inefficiencies and cater for future challenges.
- States should have access to practical and affordable options in the area of safety oversight.



### **The Solution**

- Explore the establishment and implementation of an integrated global system for the delivery of aviation safety oversight, as an alternative to the current safety oversight model.
- Suitably empowered and strengthened Regional Safety Oversight Organizations (RSOOs) and other safety oversight providers (commercial companies etc.) would constitute the building blocks of a global safety oversight system.
- ICAO would maintain an inventory of competent safety oversight providers, and the tasks and functions that they provide.
- RSOOs (and other safety oversight providers) would have to demonstrate competence in the tasks and functions that they provide, qualify as an ICAO recognized safety oversight provider.



#### The Solution (Cont'd)

- An *ICAO Recognized Safety Oversight Provider* would be any international, regional or sub-regional aviation safety oversight body that carries out tasks and functions on behalf of a State or group of States.
- Such safety oversight bodies could include:
  - civil aviation authority of a State that provides assistance to another State;
  - Corporatized entities that carry out safety oversight tasks and functions; and
  - RSOOs.



### **ICAO** Recognition

- Recognition would be granted in respect to the specific tasks and functions carried out by the safety oversight provider.
- Each task and function would be mapped to a USOAP CMA Protocol Question (PQ) or set of PQs.
- Provider's tasks and functions would be classified in accordance with the level of empowerment granted by a State or group of States.



#### ICAO Recognition (Cont'd)

• The following three levels of delegation/ empowerment are defined based on the complexity of tasks and functions performed:

**Level 1** – advisory, consultancy and coordinating tasks and functions.

Level 2 – operational assistance tasks and functions.

**Level 3** – certifying agency tasks and functions.



ICAO Recognition (Cont'd)

• For Levels 1 and 2 tasks and functions, ICAO recognition would be based on an initial assessment to evaluate the capabilities of the provider.

**NO COUNTRY LEFT BEHIND** 

- For a provider to receive ICAO recognition for Level 3 tasks and functions, it would have to first undergo an activity under the ICAO USOAP CMA.
- For Levels 1 and 2, ICAO recognition would be renewed at a determined frequency, on the basis of a re-assessment.
- For Level 3, ICAO recognition would be dependent on USOAP CMA results.



#### Level 1 – Basic advisory and consultancy assistance

- A safety oversight provider may provide consultancy and advisory assistance to a State or a group of States.
- No agreement is established directly between the provider and the State for the delegation of tasks and functions for regulating, certifying or supervising industry entities.
- Inspectors employed by a provider (or working under a coordinated inspector sharing scheme) can carry out inspections or audits for a State's CAA in their own individual capacity.
- The State grants all required authorizations; the provider only coordinates the use of the inspector.



### Level 2 – Operational assistance

- The safety oversight provider can carry out all Level 1 activities.
- The provider can also provide operational assistance to a State or group of States on the basis of a formal and binding delegation agreement.
- The operational assistance may include harmonization of standards and audits, inspections and other investigations conducted on industry entities.
- The State issues certificates, licences and approvals on the basis of the operational assistance provided.
- These services can also include surveillance over the respective document holders.



## Level 3 – Certifying Agency

- The safety oversight provider can carry out both Level 1 and 2 activities.
- In addition, under Level 3, both the conduct of the technical services and the issuance of certificates, licences and approvals are formally delegated to the provider in a legally binding manner.
- The State retains responsibility under the Chicago Convention for safety oversight and for any certificates, licences and approvals issued on its behalf.
- The State exercises this responsibility by monitoring a provider's capabilities.



# Level 3 – Certifying Agency (Cont'd)

- A certifying agency must be empowered to take legally binding decisions and accept legally binding delegations from States.
- Each State that has formally delegated tasks and functions to a safety oversight provider would have to provide written notification to ICAO.
- The scope of the activity under the USOAP CMA would be determined by the specific tasks and functions delegated by a State or group of States, which entail the direct oversight of industry entities.



## Level 3 – Certifying Agency (Cont'd)

- An MOU established between ICAO and the safety oversight provider, would govern the conduct of all activities under the USOAP CMA.
- Effective implementation (EI) of the USOAP Critical Elements (CEs) of the applicable tasks and functions would be monitored under the USOAP CMA.





#### Level 3 – Certifying Agency (Cont'd)

- Failure of the safety oversight provider to maintain a satisfactory EI level with respect to delegated tasks and functions, could result in an overall low EI or even an SSC for the State concerned.
- Where a group of States has formally delegated tasks and functions to a provider, failure of the provider to maintain a satisfactory EI level in any of the delegated tasks and functions could result in an overall low EI or even an SSC for all the States concerned.





#### Level 1 - Delegation/Empowerment Levels

Level of Delegation	Area of Activity	Typical Tasks and Functions
Level 1 Advisory		
	LEG	Develop a set of harmonized legislation and/or regulations for transposition into the national legislation/regulation of the State. <u>Track amendments and identifying differences to the ICAO SARPs and assist States to notify ICAO of the differences.</u>
	AIR, OPS, PEL, AGA, ANS, AIG	Training of inspectors. Develop inspector manuals, checklists and other guidance material. Establish and maintain a regional roster of qualified inspectors and implement a regional inspector sharing scheme. Provide expert advisory services to States in the areas of certification, surveillance and enforcement. Coordinate the use of OPAS inspectors by the States for certification and surveillance activities. Carry out audits on States in preparation for ICAO USOAOP CMA activities. Advise States on the establishment and implementation of their State Safety Programmes (SSPs). Contribute to ICAO regional programmes in support of the GASP.



#### Level 2 - Delegation/Empowerment Levels

Level of Delegation	Area of Activity	Typical Tasks and Functions
Level 2 Operational Assistance		
	LEG	Develop a set of harmonized legislation and/or regulations for transposition into the national legislation/regulation of the State. Track amendments and identifying differences to the ICAO SARPs and assist States to notify ICAO of the differences.
	AIR, OPS, PEL, AGA, ANS, AIG	<ul> <li>The regional aviation safety oversight body can carry out all Level 1 activities in the areas of OPS, AIR, PEL, AGA and ANS.</li> <li>The regional aviation safety oversight body is mandated by its membership to carry out specific technical tasks and functions to include: <ul> <li><u>Carry out certification tasks and functions for all member States.</u></li> <li>Provide direct assistance to all member in the areas of certification and surveillance States, to include the carryout of inspections required to support the issuance of certificates, licences and approvals by the States.</li> <li>Establish and implement regional ramp and foreign aircraft inspection programmes</li> <li>Collection and analysis of aviation safety and accident data to support the States' SSPs.</li> </ul> </li> </ul>





#### Level 3 - Delegation/Empowerment Levels

Level of Delegation	Area of Activity	Typical Tasks and Functions
Level 3 Certifying Agency		
	LEG	Develop a set of common legislation and/or regulations, promulgated/adopted through a regional legislative mechanism and directly binding on States. Track amendments and identifying differences to the ICAO SARPs and assisting States to notify ICAO of the differences.
	AIR, OPS, PEL, AGA, ANS, AIG	The regional aviation safety oversight body can carry out all Level 1 and 2 activities in the areas of OPS, AIR, PEL, AGA and ANS. Issue certificates, licences and approvals on mandate from all member States or by delegation from an individual State. The regional body must be empowered to take legally binding certification decisions. Carry out enforcement action on delegation from member States.



### **RSOO Improvements through a Global Aviation** Safety Oversight System

- RSOOs would be empowered and strengthened to effectively carry out tasks and functions on behalf of States.
- RSOOs would be fully integrated within the safety oversight safety management programmes and activities of their member States.
- RSOOs would be fully aligned with ICAO's regional and global programmes, to include the GASP and the safety management and USOAP CMA programmes.
- Efficiencies would be realized with respect to current regulatory systems and safety oversight audit and recertification programmes.





### Benefits to States of the Global Aviation Safety Oversight System

- Provides an alternative to having all safety oversight functions inhouse with the required staffing.
- Ability to maintain a more cost-efficient and effective CAA
- Flexibility to choose and combine from different safety oversight provider options for the various tasks and functions.
- Access to services beyond the conventional RSOOs, from outside of the State's sub-region to more global best practices.







## Benefits to States of the Global Aviation Safety Oversight System (Cont'd)

- Enhanced compliance by States with international safety requirements and enhanced uniformity in the implementation of safety requirements.
- Industry would no longer be subject to overlapping and duplicate audit and monitoring programmes and certifications.
- Enhanced and sustained compliance with international safety oversight requirements and effective im-plementation of the ICAO SARPs.
- Economic benefits derived from having safety compliant aviation industry.



**Next Steps** 

**Step 1:** Global strategy and action plan – March 2017 **Step 2:** AFI Ministerial Declaration and roadmap – March 2017 **Step 3:** Agreement on the conduct of a feasibility study on the implementation of an integrated global system for the delivery of aviation safety oversight – RSOO Forum – March 2017 Step 4: Establish a working group of stakeholder experts – May 2017 **Step5:**Conduct of a feasibility study into the establishment and implementation of an integrated global system for the delivery of safety oversight -October 2017

**NO COUNTRY LEFT BEHIND** 

Step 6: State consultation at DGCA meetings May – November 2017Step 7: Community awareness at SANIS – December 2017





#### Next Steps (cont'd)

**Step 8:** Develop Global Aviation Safety Oversight System mechanism – 2018 - 2019

- Step 9: Recommendation at AN-Conf/13 (ANC) November 2018
- **Step 10**: Inclusion in ICAO Business Plan and Budget for the next triennium January 2019
- **Step 11:** Prepare for launch December 2018 December 2019
- **Step 12**: Endorsement at A40 (Council) October 2019
- Step 13: State Letter November 2019
- Step 14: Launch January 2020









# Forum On Regional Safety Oversight Organisations (RSOOs) For Global Aviation Safety

22 – 24 March 2017 Ezulwini, Swaziland





