

FINAL DRAFT REPORT
AFI REGIONAL SAFETY OVERSIGHT ORGANIZATION (RSOO) STUDY
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1. ACRONYMS

AAMAC	Autorités Africaine et Malgache de l'Aviation Civile
ACAO	Arab Civil Aviation Organization
ACI	Airports Council International
ACSA	Agencia Centroamericana para la Seguridad Aeronáutica
ACSAC	Agence Communautaire de Supervision de la Sécurité et de la Sureté de l'Aviation Civile
AFCAC	African Civil Aviation Commission
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
AFI	Africa and the Indian-ocean (region)
AFRAA	African Airlines Association
AGA	Aerodromes and Ground Aids
AIB	Accident Investigation Bureau
AIG	Accident Investigation
AIR	Airworthiness of aircraft
AMO	Approved Maintenance Organization
AMU	Arab Maghreb Union
ANS	Air Navigation Service
ANSP	Air Navigation Service Provider
ASIAP	Aviation Safety Implementation Assistance Partnership
ASECNA	Agence pour la Sécurité de la Navigation Aérienne en Afrique et à Madagascar
ASSA-AC	Agence de Supervision de la Sécurité Aérienne en Afrique Centrale
ATO	Approved Training Organization
AU	African Union
BAG	Banjul Accord Group for the Accelerated Implementation of the YD
BAGAIA	Banjul Accord Group Accident Investigation Agency
BAGASOO	Banjul Accord Group Safety Oversight Organization
CAA	Civil Aviation Authority
CAP	Corrective Action Plan
CAPSCA	Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation
CART	Council Aviation Recovery Task Force
CASSOA	East African Community Civil Aviation Safety and Security Agency
CASSOS	Civil Aviation Safety and Security Oversight System
CE	Critical Element of a State Safety Oversight System
CEMAC	Economic & Monetary Community of Central Africa
CEN-SAD	Community of Sahel-Saharan States
CIS	Cooperative Inspectorate Scheme
CMA	Continuous Monitoring Approach
COMESA	Common Market for Eastern & Southern Africa
COSCAP	Cooperative Development of Operational Safety and Continuing Airworthiness Programme
COVID-19	Corona Virus Disease outbreak of 2019
EAC	East African Community
EASA	European Union Aviation Safety Agency
ECCAS	Economic Community of Central African States

ECOWAS	Economic Community of West African States
EI	Effective Implementation of state aviation safety
ESAF	Eastern and Southern Africa
FIR	Flight Information Region
GANP	Global Air Navigation Plan
GASOS	Global Aviation Safety Oversight System
GASP	Global Aviation Safety Plan
GRF	Global Reporting Format for Runway Surface Condition
ICAO	International Civil Aviation Organization
ICVM	ICAO Coordinated Validation Mission
IGAD	Intergovernmental Authority on Development
IMF	International Monetary Fund
iPADIS	International Partners for Aviation Development, Innovation and Sustainability
iSASO	Interim Southern African Development Community Aviation Safety Organization
LEG	Aviation Legislation
MENA	Middle East and North Africa
MSA	Management Services Agreement
OPS	Flight Operations
ORG	Organization of Civil Aviation
PASO	Pacific Aviation Safety Office
PASTA-CO	Programme D'appui au Secteur du Transport Aérien en Afrique Centrale et Occidentale
PEL	Personnel Licensing
QMS	Quality Management Systems
RAIO	Regional Accident Investigation Organization
RAIO-CP	RAIO Cooperative Platform
ROST	Regional Office Safety Teams
RSOO	Regional Safety Oversight Organization
RSOO CP	Regional Safety Oversight Organization Cooperative Platform
SAATM	Single African Air Transport Market
SADC	Southern African Development Community
SARPs	Standards and Recommended Practices
SIASA	Support to the Improvement of Aviation Safety in Africa
SRVSOP	Regional Safety Oversight Cooperation System
SSC	Significant Safety Concern
UEAC	Union Economique de l'Afrique Centrale
UEMOA	Union Economique Et Monétaire Ouest Africaine
URSAC	Unité Régional de Supervision de la Sécurité et de la Sûreté de l'Aviation Civile
USOAP	Universal Safety Oversight Audit Programme
WACAF	Western and Central Africa
WAEMU	West African Economic & Monetary Union

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3. EXECUTIVE SUMMARY

3.1. Under the Convention on International Civil Aviation, the primary responsibility of ensuring an effective aviation safety and security oversight system remains that of States. However, Regional safety Oversight Organizations (RSOO) play a critical role in assisting States meet their obligations and mandate in this respect, through collaborative sharing and pooling of resources. These organizations provide a platform for harmonization of regulations and guidance material to facilitate uniform compliance with requirements, application of capabilities and processes to address deficiencies.

3.2. In line with the Ministerial Declaration on RSOOs in Africa adopted by African Ministers responsible for Civil Aviation, in Ezulwini, on 24 March 2017, the AFI Comprehensive Implementation Plan for Aviation Safety in Africa conducted a study for the strengthening of RSOOs in the AFI region. The purpose of the study, conducted with the assistance of a Consultant between July and September 2021, was to identify the actions necessary for ensuring the effectiveness, efficiency and sustainability of the RSOOs and develop a Strategic Plan and Roadmap for implementation.

3.3. Information and data was collected regarding the establishment, operation and challenges of these entities through separate survey questionnaires to which 75.9% of States; all RSOOs and RAIO; and 38% of RECs responded. The study also took in to account the outcomes of similar RSOO and RAIO evaluations and surveys conducted in the region, as well as the work of the RSOO-CP. This report presents the outcome of the survey, analyses of the status and challenges of AFI RSOOs, and specific actions to strengthen these organizations. It contains relevant conclusions drawn from the study and recommendations that will lead to and inform the development of the strategic plan and implementation roadmap.

3.4. The study evaluated the impact of AFI RSOOs on improvement of safety oversight standards of States and their effectiveness and efficiency. It covered and considered establishment and membership of the RSOOs, funding arrangements, autonomy and independences, technical capacity and qualified personnel, delegation of functions and activities, and cooperation and collaboration in the area of safety oversight and accident investigation. In terms of resilience to emerging threats, the adverse impact of COVID-19 on the aviation sector, including RSOOs, provides useful lessons.

3.5. Currently, six RSOOs and one RAIO are in operation in the region, two of which are still in transition. About 80% of African States belong to an RSOO, and seventeen (over 30%) in fact belong to more than one. In addition, a number of North African States have joined the Middle East & North Africa RSOO. Four of the AFI RSOOs are specialized institutions of Regional Economic Communities. Such association with RECs has advantages arising from the mandate and decision-making powers of these bodies; their mission of regional cooperation and integration; their network of partnerships; and resource mobilization capacity. RSOOs should continue to leverage on these strengths.

3.6. Results of ICAO USOAP audits linked to GASP and regional targets were used to assess the safety performance and progress of States in terms of RSOO groupings. Although on region wide basis, the average overall level of safety oversight effective implementation has improved significantly, it still falls short of the world average. The development of strategic plans and inclusion of GASP and AFI safety regional targets in strategic objectives of RSOOs with clear goals, KPIs and annual targets should be encouraged for greater progress, more effectiveness and impact.

3.7. All AFI RSOOs have binding international agreements in place. Some of these agreements are however, deficient in detail on the precise objectives and functions of the organizations as well as the expectations of States. In general, the commitment of member States to their RSOO(s) is considered low or moderate. It is

important that the legal instruments are reviewed to ensure that they adequately serve as appropriate regional frameworks. Additional MOUs between the RSOOs and their members tailored to the needs and expectations of individual States will clarify in detail, the precise nature of services, expectations and quality control aspects.

3.8. The study has identified lack of adequate funding, insufficient qualified personnel, low commitment of States, limited services and non-delegation as the most pressing challenges faced by AFI RSOOs. In terms of financing, the majority of AFI RSOOs depend on direct State contributions, which are often inadequate and not readily available. Identified options for sustainable funding include RSOO service fees; airport and air navigation service charges; government funds; air safety charge; and grants and loans from donor States and regional financial institutions. The option of a community levy has been considered in the case of certain RSOOs associated with RECs although it is not without opposition. A combination of these options could be considered for application on regional or individual State basis under a *Joint collection of charges scheme*.

3.9. From the results of the survey, almost all AFI RSOOs have insufficient qualified technical personnel in-house. Meanwhile, whereas some national CAAs of States continue to build and expand their structures and technical personnel for the full scope of safety oversight functions, other States are struggling with challenges of recruiting, training and retaining sufficient qualified personnel. It is proposed that RSOOs and individual States conduct a Staff needs assessment; define minimum full time technical staff requirements; and encourage the sharing of human resources from States in / outside the RSOO. An enhanced and strengthened AFI CIS could fill in the gap on a region wide basis. That way, a minimum staff strength of one or two experts per area could be maintained full-time within the RSOOs and the rest of the capacity requirements addressed through the established pool and in coordination with member States.

3.10. In terms of functions, all AFI RSOOs are either providing advisory and coordinating services or, in addition, delivering operational assistance to their States. None of them is empowered to issue certificates, licenses and approvals on behalf of member States. Thus, in most cases, there is no formal delegation, and their interventions in State safety oversight activities are often based on simple requests for assistance issued to the RSOO by the CAA. As a minimum, it is recommended that all AFI RSOOs be encouraged and assisted to provide advisory services and operational assistance functions (i.e. Level-1 and Level-2 Delegation of functions). Empowerment for Level-3 Delegated functions of issuing certificates and licenses on behalf of member States is very much premature and is not a realistic option for now.

3.11. Two key aspects of RSOOs in the region is the overlapping of membership and variation in size. There is however no hard and fast rule in this regard and States should have flexibility to combine functions and services from different RSOOs according to their own needs and the capacity of RSOOs. Nonetheless, when a State decides to join an RSOO, there should be clear non-conflicting delegation of functions. Preferably, the multiple membership of RSOOs should be minimized in view of the challenges States face in meeting associated financial obligations. In terms of size, the need for critical mass of aviation activity and economies of scale for sustainability would tend to support the idea of larger and fewer entities in the region. Various scenarios have been proposed ranging from a composition of seven RSOOs and two RAIOS to reduction to four RSOOs and one continental RAIOS. A key feature in all options is the association of RSOOs with RECs.

3.12. The strengthening of AFI RSOOs for greater effectiveness, impact, efficiency and sustainability calls for a range of measures and actions. These relate to their existing legal and institutional frameworks; the need for flexible and durable funding arrangements that will be less burdensome on States; streamlining and ensuring absence of conflicting functions due to multiple memberships; effective sharing and complementarity of human resources capacity; and strong cooperation and collaboration at different levels amongst different parties and partners, accompanied by robust contingency plans to mitigate emerging threats and ensure resilience.

4. INTRODUCTION & BACKGROUND

4.1. In March 2017, ICAO and the European Aviation Safety Agency (EASA) jointly held a Forum on Regional Safety Oversight Organizations for Global Aviation Safety, in Ezulwini, Eswatini (Swaziland). On this occasion, African Ministers responsible for Civil Aviation met on 24 March 2017 and adopted the Ezulwini Ministerial Declaration on Regional Safety Oversight Organizations (RSOOs) in Africa.

4.2. The Forum adopted a Global Strategy and Action Plan for the improvement of RSOOs and the establishment of a global system for the provision of safety oversight. The Strategy was aimed at the improvement and strengthening of the capacity of RSOOs to carry out safety oversight functions and actively contribute to ICAO programmes and activities; the implementation of a global aviation safety oversight system (GASOS); and establishment of an RSOO Cooperative Platform.

4.3. The Ministerial Declaration endorsed the outcome of the Forum, including implementation of the Global Strategy and action plan to improve RSOOs and implementation of GASOS. It also, and amongst other things, consented to the development of a strategic plan for supporting and Strengthening RSOOs in the AFI Region and an action Plan for the implementation of the said Declaration.

4.4. The Declaration tasked the ICAO Regional Comprehensive Implementation Plan for Safety in Africa (AFI Plan), in collaboration with AFCAC and partners, to coordinate the development and implementation of the AFI RSOO Strategic Plan. For this purpose, this study was conducted from 1st July to 8 September 2021, specifically in relation to strengthening RSOOs in the AFI region. The beneficiaries of the study therefore include all AFI States and RSOOs (AAMAC, ASSA-AC, BAGASOO, BAGAIA, CASSOA, COSCAP-UEMOA/ACSAC, ISASO, etc.) This report presents the outcome of the survey conducted, analyses of the status and challenges of AFI RSOOs, and specific actions to strengthen these safety oversight organizations. It contains relevant conclusions drawn from the study and appropriate recommendations that will lead to and inform the development of the strategic plan and implementation roadmap.

5. OBJECTIVE AND SCOPE

5.1. A number of initiatives supported by ICAO through the AFI Plan have given rise to seven (7) RSOOs in the AFI Region. Some of these initiatives have occurred under the auspices of Regional Economic Communities (RECs) and / or resulted in COSCAPs that even predate the AFI Plan, transitioning into RSOOs.

5.2. These safety oversight organizations have taken different forms and are at various stages of development and operationalization. The degree of success or the lack thereof in terms of improvement of State safety oversight systems has been a source of concern for the AFI Region over the years.

5.3. AFI RSOOs have been known to face major challenges related to insufficient qualified personnel and financial resources, and lack of adequate mandates and frameworks (and sometimes reluctance) to allow full execution of their mandates or the delegation of functions by States. This is compounded by phenomena of multiple memberships and duplication of functions between States and RSOOs, which do not allow States to derive the envisaged cost-effectiveness from their membership of such organizations. The sustainability and effectiveness of these organizations is thus severely threatened.

5.4. The general objective of the study is therefore to identify the necessary actions for ensuring effective and sustainable implementation and operation of RSOOs in the AFI Region and to consolidate these actions into a Strategic Plan and Roadmap for implementation. The Strategic Plan will include and determine the way forward on:

- Financial sustainability and feasibility of a joint/common funding mechanism
- Competence/capacity building requirements and sharing of human resources
- Delegation of tasks/mandate by States
- Operational effectiveness
- Harmonization of safety oversight regulatory material and documents
- The optimum number, size and configuration of RSOOs
- Coordination with other safety oversight programmes and projects in the AFI Region

5.5. To facilitate delegation of functions and enhance the effective utilization of the RSOOs by States, model documents in the form of MOUs and Service Level Agreements (SLAs) are also to be developed and proposed, together with the Strategic Plan and Roadmap, for adoption at continental level, through the AFI Plan and AFCAC organs.

6. STUDY METHODOLOGY

6.1. A survey involving all AFI States, RSOOs, and RECs was conducted between 1st July and 30th August 2021, as a first step, in order to collect information for analysis and assessment. For the purpose of this exercise, three separate questionnaires were developed and dispatched to AFI States, RSOOs and RECs, respectively. Similarly, to address the specific case of RAIOS, two other questionnaires were also separately developed and sent to States and BAGAIA; the only existing RAIO in the region. All these five (5) survey questionnaires are contained in Annex 3 of this report.

6.2. RSOOs were required to provide information on their membership and legal status; establishment and hosting arrangements; staffing; scope, level of involvement in State safety oversight activities, and impact; autonomy and independence; funding arrangements; delegation of functions by States; cooperation and collaboration with other RSOOs, States and organizations; challenges to sustainability and existing plans to resolve these; etc.

6.3. For States, the questionnaire covered organization of civil aviation safety oversight; RSOO membership including any duplications; autonomy and funding of civil aviation regulation; safety oversight activities and level of involvement and utilization of RSOOs; technical staff strengths; financial obligations to RSOOs; delegation of functions; size and effectiveness of RSOOs; collaboration and cooperation with other States and RSOOs; and challenges being confronted.

6.4. In the case of RECs, the survey questions include establishment and hosting of RSOOs; membership duplication and overlapping of functions; mandates, legal and statutory instruments; autonomy and independence of RSOOs; funding schemes including the community levy option; delegation of State safety oversight functions to RSOOs; integration and enlargement of RSOOs; challenges; and regional strategic plans and roadmaps. In the area of AIG, the issues of RAIO membership; legal and operational status; autonomy and independence of RAIOS; arrangements for independent accident investigation in States; delegation of functions; funding; scale of activities;

qualified staff; size and enlargement of the existing RAI0; cooperation and collaboration; participation in partner programmes; and challenges, are covered.

6.5. In addition to the survey, the study also relied on various reference materials and documents. These include the Ezulwini Ministerial Declaration on RSOOs in Africa; the RSOO Global Strategy and Action Plan for the improvement of RSOOs and the Establishment of a Global System for the Provision of Safety Oversight; and the AFI Plan programme document and Terms of Reference and Steering Committee meeting reports. The study took into account as well, relevant aspects of the in depth work contained in the Report of the ICAO Evaluation of RSOOs conducted in November 2017, and deliberations and activities of the RSOO-CP.

6.6. With regards to AIG and RAI0s, in addition to responses from BAGAIA to the present survey, the results of the survey conducted from November 2020 to July 2021 under the ECOWAS-ECCAS AIG study covering the 24 Western and Central African States have been utilized. The present study issued an AIG questionnaire to the ESAF States in order to complete the picture on AIG for the whole AFI region.

6.7. Important elements of the study are the carrying out of SWOT Analysis of RSOOs, individually, and a review of the status of safety oversight and effective implementation of the eight critical elements in the AFI States

6.8. The outcome of the SWOT analysis will form an integral part of the strategic plan and Roadmap. The study results will therefore be incorporated in such a way as to build on the existing strengths; overcome the identified weaknesses; effectively exploit all opportunities; and adequately confront possible threats to the existing and / or proposed organizations and arrangements.

6.9. It was originally envisaged that four Workshops will be conducted (2 each in the ESAF and WACAF regions) to review and finalize the deliverables. However due to the COVID-19 restrictions on mission travel and gatherings, the reviews are being conducted through virtual meetings online.

7. REVIEW OF STATE SAFETY OVERSIGHT EFFECTIVE IMPLEMENTATION IN THE AFI REGION

7.1. The fundamental and common objective of RSOOs in general is the strengthening of the overall safety oversight capabilities of their member States. In this regard, results of ICAO USOAP audits linked to GASP and regional benchmarks and targets were used in assessing safety performance and progress of States.

7.2. In the AFI Region, safety targets have been in place following their adoption by the Conference of African Ministers of Transport in July 2012 and endorsement by the Assembly of Heads of State of the African Union in January 2013. These targets include safety oversight Effective Implementation (EI); resolution of Significant Safety Concerns (SSCs); Certification of international aerodromes, etc.

7.3. Progress made by States on these key aviation safety performance indicators and targets may be difficult to quantitatively ascribe specifically and directly to the efforts of RSOOs given the multiplicity of actors, partners, and stakeholders involved, and the States' own efforts to improve their safety oversight capability. Thus, these parameters and results do not necessarily convey the capabilities and

capacities of the RSOOs but nonetheless give a good indication and very strongly reflect the impact of various safety initiatives and interventions, on aggregate, including the work and support of RSOOs.

7.4. At the adoption of the AFI safety targets in July 2012, the average regional EI was 41% and ten (10) States had overall EIs at or above the then global average and GASP target of 60%. Nearly a decade later, in July 2021, the average EI of all African States together reached 57.81%, with the number of States exceeding 60% increased 3-folds to 31, and 16 States surpassing the current EI world average of 69.19%. This has been accompanied by significant decrease in aircraft accidents and fatalities.

7.5. ANNEX 6 to this report presents ICAO USOAP-CMA audit results of AFI States in terms of overall EIs, by Audit Area and safety oversight Critical Element (CE). The Annex includes the regional State Averages as well as detailed charts presenting the same EI data along AFI RSOO State groupings.

7.6. On region wide basis, average AFI effective implementation falls short of the world average in all of the audit areas. The weakest areas with less than 60% average region wide EI being in AIG (44.93%), ANS (55.49%) and AGA (49.03%) and to a lesser extent OPS with 57.84%. Similarly, in terms of safety oversight critical elements, the world average is yet to be achieved in any of the CEs. Whereas the 60% target has been met for CEs1-3 and 5, the region falls short in CEs 4, 6, 7 and 8. The lowest region wide performance is in CEs 7-8 with average EIs of 42.24% and 33.24% respectively.

7.7. Viewed in terms of State groupings, only two out of the six (6) AFI RSOOs viz CASSOA and ACSAC/URSAC of UEMOA have average EIs which, at 67.48% and 65.11% respectively, surpass the 57.81% AFI average, and previous GASP and Regional safety targets of 60%. It is however worth pointing out that whilst one of the six CASSOA States (South Sudan) is yet to be audited, only one of the eight (8) URSAC States with an EI of about 12% is below the mark in these respects. None of the State groupings by RSOO has however attained the World average of 69.19%. In 2012 the EI performance of the same ACSAC/URSAC group of States was the exact opposite of what it is currently; only one State had attained the 60% EI target. On the other hand in the BAGASOO group, the situation has remained stagnant; in that four (4) of its seven (7) member States that had attained the 60% EI target in 2012 continue to do so at the exclusion of the remaining three (3).

7.8. Table 1 below gives a summary of the average effective implementation status and safety profiles of the group of States belonging to the different AFI RSOOs. Care must however be taken in equating it directly with the level of competence and capabilities of these organizations themselves. The average group EIs are currently in the following order: CASSOA 67.48%; ACSAC/URSAC (UEMOA) 65.11%; North Africa 62.35%; AAMAC 60.69%; iSASO 57.15%; BAGASOO 53.52%; and ASSA-AC 52.45%. An examination of the USOAP-CMA audit EI results by Area reveals common weaknesses in AIG and AGA for all groupings, with a relatively slight improvement in the ACSAC/URSAC States for AGA and AIG for the North African States. Similarly, in terms of safety oversight critical elements, CEs 6 to 8 stand out as common weak areas for all AFI RSOO State groupings, whilst in addition, four out of the six are deficient in CE5. It is striking that 50% of the RSOO State-groups have average EIs that are below the world average in all audit areas.

7.9. Through ICAO USOAP-CMA activities, 22 Significant Safety Concerns (SSCs) were identified in thirteen (13) States in the region. All but one of these have been resolved. Table1 below contains information on the distribution of these by State grouping. Although the ages of these SSCs, in terms of the time it took to get them successfully resolved, varied, most have not been resolved within the stipulated Abuja Target time frame of 12 months prior to December 2017 and 6 months thereafter.

Some were in fact addressed through mitigating measures of risk removal such as cancellation of certificates, authorizations etc. It is instructive to note that the only unresolved SSC presently exists in a non-RSOO State. Several States, including the latter, do not belong to any of the existing AFI RSOOs and have originally been referred to as the ‘Seven (7) Partner States’ (i.e. Djibouti, Egypt, Eritrea, Ethiopia, Libya, Somalia and Sudan). Four of these have since joined the MENA RSOO, and only three (3) viz: Djibouti, Eritrea, and Ethiopia, remain without an RSOO. Whilst out of the latter 3 one is above world average in terms of EI, two require significant improvement. Attempts made through the AFI Plan etc to create an RSOO for these States have so far not succeeded.

Table 1: Analysis of Safety Audit Results and Profiles of AFI RSOO-State Groups

STATE - GROUP	Average Group EI	Audit Area Compared to world averages		Critical Element Compared to world averages		SSCs	
		Above	Below	Above	Below	Resolved	Existing
CASSOA	67.48%	ORG PEL AIR AGA	LEG OPS AIG ANS	CE2 - 5	CE1, CE6-8	1	0
ACSAC/URSAC	65.11%	LEG ORG AIR AIG ANS	PEL OPS AGA	CE1-5	CE6-8	2	0
North Africa	62.35%	AIG	LEG ORG PEL OPS AIR ANS AGA	CE5	CE1-4, CE6-8	0	0
AAMAC	60.69%	LEG ORG	PEL OPS AIR AIG ANS AGA	CE1-2, CE4	CE3, CE5-8	4	0
iSASO	57.15%	LEG AIR	ORG PEL OPS AIG ANS AGA	-	CE1-8	7	0
BAGASOO	53.52%	-	LEG ORG PEL OPS AIR AIG ANS AGA	-	CE1-8	4	0
ASSA-AC	52.45%	-	LEG ORG PEL OPS AIR AIG ANS AGA	-	CE1-8	7	0
‘7-Partner States’	57.77%	-	LEG ORG PEL OPS AIR AIG ANS AGA	-	CE1-8	2	1

8. BRIEF OVERVIEW OF RSOOs IN THE AFI REGION

8.1. Lack of autonomy for Civil Aviation Authorities; inadequate qualified personnel; low level of aviation activity; and insufficient and unsustainable financing have precluded most AFI States from effectively fulfilling their safety oversight obligations on individual basis. Hence, the creation and pooling of resources and expertise under Regional Safety Oversight Organizations in the pursuit of harmonious effective implementation of ICAO SARPs. With the involvement and assistance of ICAO (specifically through the AFI Comprehensive Implementation Plan for Aviation Safety in Africa) and other partners over the past ten years, a number of such organizations were established in Africa.

8.2. Currently, 43 out of 54 African States (79.6%) belong to an RSOO; and in fact seventeen of these belong to more than one. Out of the six AFI RSOOs, two (ASSA-AC and BAGASOO) have fully transitioned from a COSCAP and two others (ACSAC and iSASO) are in the process of doing so, whilst the remaining two (AAMAC and CASSOA) were established directly as regional safety oversight bodies.

8.3. Some of the five North African States are also part of the RSOO for the Middle East and North Africa (MENA), created through an initiative launched by the Arab Civil Aviation Organization (ACAO) in 2015 with the support of ICAO. The Kingdom of Saudi Arabia is hosting the MENA RSOO and provided funding for the first two years of its establishment and operation under an ICAO-TCB technical assistance project arrangement. The MENA RSOO has been established on the basis of a Memorandum of Agreement (MOA) with a view to putting in place a more formal intergovernmental agreement or treaty, should the need arise. Fifteen States have signed the letter of intent / MOA for membership of the MENA RSOO including four North African States (Egypt, Libya, Mauritania, Morocco) as well as Somalia, and Sudan. The membership of the various AFI RSOOs is presented in ANNEX 5.

8.4. Important elements in the setting up of the majority of AFI RSOOs has been their association with or incorporation in to Regional Economic Communities or Monetary Unions such as UEMOA, ECCAS, EAC, and SADC, in the case of ACSAC, ASSA-AC, CASSOA and iSASO respectively, and the sharing of common official languages (with a few exceptions). This is however not the case for BAGASOO which was established independently as an international body. On the other hand, although AAMAC is not attached to a REC, it was established and operates within the purview of an ANSP, ASECNA.

8.5. In terms of functions, all of the AFI RSOOs are either providing advisory and coordinating services such as training, harmonization of safety regulations, development of procedures manuals etc. or in addition, providing operational assistance by conducting audits, inspections on industry entities in support of the certification and surveillance responsibilities of their States. The States then issue certificates, licenses and approvals on the basis and outcome of the assistance provided. Thirdly, no AFI RSOO has been mandated by its member States to issue certificates, licenses and approvals on their behalf.

8.6. The responsibility to investigate an aircraft accident, as specified in Article 26 of the Chicago Convention rests with the State of Occurrence. To meet this obligation, States need to put in place an appropriate organization for the investigation of aircraft accidents, which is independent of both the Regulator and Service Provider. However, many States do not have the resources necessary to investigate the full range of aircraft accidents and incidents. For such states, the establishment of a Regional Accident Investigation Organization (RAIO), or the creation of a regional pool of qualified investigators, is a recommended solution.

8.7. With the assistance of the ICAO AFI Plan, BAGAIA was created in 2009 and exists as the only standalone RAIO in Africa, although a few RSOOs (e.g. iSASO) have AIG assistance in their mandate. There is an ongoing initiative to create the EAC-RAIO in east Africa. As in the case of BAGASOO, BAGAIA has the same seven (7) BAG member States. However, in addition to its official members, the Agency has, upon demand, provided services and assistance in investigating accidents in other AFI States beyond the BAG (e.g. Sao Tome & Principe in 2017).

AAMAC

8.8. Initiated in 2001, the binding legal Treaty of AAMAC was signed by Ministers of member States in 2012. Comprising seventeen (17) AFI States, belonging to ASECNA and sharing a common official language (French), ratification of the Treaty has been completed, to date, by only ten (10) States.

8.9. Its sources of funding are identified as coming from Member State contributions/user fees/foreign funding/voluntary contributions/financial assistance/ Donations/and fees from publication, training or other services. The organization has however been funded thus far almost entirely by ASECNA from its resources as an ANSP. Although its operational structure was in place upon signing of a host agreement with a State member (Chad) in 2015, the actual hosting of the RSOO only took place in 2017.

8.10. The legal mandate of AAMAC covers services in OPS, AIR, PEL, AGA, ANS, SMS and any other task that may be assigned by its Council. All of its 17 member States also belong to other RSOOs in the region. To partly address such duplication with ACSAC/URSAC (COSCAP-UEMOA) and ASSA-AC (COCAP-CEMAC), a tripartite MOU was concluded in 2014 between the three RSOOs; confining AAMAC to ANS and excluding the other two from delivery services in the same area.

ACSAC/URSAC

8.11. In 2013, UEMOA established an RSOO by a Decision of the Conference of Heads of State and Governments, through the transformation of COSCAP-UEMOA + Mauritania into an entity with both Safety and Security oversight functions. This transition is however now taking place with the exclusion of Mauritania. Although there is still cooperation with this State, the latter has joined MENA, in addition to AAMAC. Being State parties to ASECNA, all eight (8) ACSAC member States are also members of AAMAC. Like its predecessor COSCAP, the RSOO has been anchored to the Regional Economic Community, UEMOA.

8.12. Although fully functional and effectively working in both the COSCAP framework and as ACSAC, the operationalization of the RSOO was slowed by delays in concluding hosting arrangements, the establishment of long term financing mechanism, and the future role of the COSCAP and its personnel. A 2-year plan that was adopted to help transform COSCAP-UEMOA into ACSAC was never fully implemented. Although in June 2018 a safety/security oversight levy of Two-hundred and Sixty (260) CFA Francs (XOF) per international passenger was agreed upon, pending implementation of which the UEMOA Commission under took to continue to support the RSOO.

8.13. Having discontinued the MSA with ICAO for the COSCAP and whilst awaiting operationalization of ACSAC, the UEMOA Commission created on 3 November 2020, the Unité Régionale de Supervision de la Sécurité et de la Sûreté de l'Aviation Civile (URSAC) within its Department responsible for Transport, to provide safety and security oversight to its member States. Its functions include assisting States fulfill their obligations under the Chicago Convention; develop regulations, guidance material etc.; provide safety oversight assistance; and certification and surveillance tasks as may be delegated by States.

8.14. Being anchored to a regional economic union with a strong mandate and direct applicability of Regulations, Decisions and Directives, has facilitated harmonization of regulations amongst ACSAC/URSAC States. The fact that all these States share a common regional Air Navigation Service Provider (ASECNA) with a corresponding RSOO AAMAC, has also been an enabler.

8.15. Although the adopted Community Regulations established ACSAC/URSAC as a specialized and autonomous institution of UEMOA, the issue of delegation of safety oversight functions to the RSOO has not been addressed. On the other hand, the duplication of functions with AAMAC has been

temporarily handled through a tripartite MOU signed in 2014 involving ASSA-AC, limiting AAMAC to purely ANS activities whilst assigning ACSAC and ASSA-AC all other safety oversight areas.

ASSA-AC

8.16. A specialized institution of the economic union of central Africa (UEAC, previously CEMAC), ASSA-AC was established by the UEAC Heads of State on 25 July 2009. It comprises six member States and is hosted in N'Djamena, Chad. It transitioned from COSCAP-CEMAC, which was launched in 2003 and included Sao Tome.

8.17. The ECCAS in collaboration with CEMAC launched an initiative to enlarge ASSA-AC to effectively cover all 11 central African States of the ECCAS/CEEAC region by including the non-CEMAC States of Angola, Burundi, DRC, Sao Tome and Rwanda. It is important to point out that Angola and DRC are also members of SADC and by extension potential members of another RSOO, iSASO. This initiative, which envisages vesting ASSA-AC with both safety and security responsibilities, has however stalled and hence ASSA-AC remains substantively a CEMAC/UEAC entity. The RSOO is funded entirely through a community import tax and subvention from the CEMAC Commission. Meanwhile, an alternative funding option from the passenger service charge is being explored.

8.18. The development of harmonized safety regulations in the areas of AGA, AIR, OPS and PEL has been embarked upon by the RSOO. Meanwhile, upon the request of States ASSA-AC provides assistance in preparations for USOAP Audits; development and implementation of post audit corrective action plans; aerodrome certification activities; inspector training, and drafting of documentation for aviation legislation, organization, training/qualification of personnel, guidance material etc.

BAGASOO

8.19. Established in 2010 from the transitioning of COSCAP-BAG, BAGASOO was created through an agreement signed by the Ministers of the seven (7) Banjul Accord Group (BAG) member States. This Agreement forms an integral part of the parent Agreement establishing BAG and is fully in force, following signature of the Member States.

8.20. Its main functions include assistance in the development of harmonized regulations; providing certification and surveillance support; assisting to develop and implement a training and regional safety programme; conducting audits and other quality assurance activities in member States; etc.

8.21. Being an independent international body, BAGASOO is hosted in Nigeria and depends entirely on contributions from States for its funding. The RSOO has devoted a lot of resources in developing various training and surveillance tools and materials that are in demand beyond its member States. The RSOO's Safety Information Management for Civil Aviation (SIMCA) programme used for recording and monitoring aviation activities of CAAs in the areas of AIR, OPS, AGA, MET, ATS, AIS/AIM, AVSEC etc., includes documentation for Ramp Inspections on Foreign Aircraft (FASAP); Tracking of Aviation Work Activities (ISATS), and Inspector Training (ITRAQS). BAGASOO is establishing a harmonization policy and development of generic documents for adaptation and adoption by States, as well as

introducing Quality Management Systems (QMS). In addition to a Cooperative Inspectorate Scheme, BAGASOO is introducing a Cooperative Training Scheme to build a regional pool of Instructors, an has also developed and disseminated guidance material to States for the development of the new Global Reporting Format for Runway Surface Condition (GRF).

BAGAIA

8.22. The seven BAG Member States established the Banjul Accord Group Accident Investigation Agency (BAGAIA) as an independent body in 2009, to conduct investigations into aircraft accidents and serious incidents upon delegation by and mutual arrangement and consent between a member State and BAGAIA.

8.23. The Agency currently operates under a management contract with ICAO/TCB. It is hosted in Cabo Verde and relies entirely on direct member State contributions for its funding. Its Commission comprises a Commissioner and one Investigator-in-charge from each Member State. In addition to the pool of investigators, the Commissioner is assisted by Technical, Administrative/Accounts, and Legal teams, although some members have proceeded to establish their own national AIBs.

8.24. The Agency has at its disposal a state-of-the-art AIG laboratory in one of the States (Nigeria). Its two Technical Committees are responsible for the harmonization of Regulations, and AIG Policy and Procedures respectively. The documentation being developed once adopted, will take effect in all seven member States. BAGAIA being the sole RAIO in the AFI Region, it is intended to share the material with other non-BAGAIA AFI States. The RAIO has collaborated with and conducted accident investigation in States outside its members, such as Sao Tome, in July 2017.

CASSOA

8.25. Established as an autonomous self-accounting institution of the EAC in April 2007 through the CASSOA protocol and the CASSOA Act, the RSOO combines safety and security functions in its mandate and, in the first instance, was aimed at harmonizing civil aviation policies, rules and regulations and coordinating cooperation amongst its Six (6) member States in these fields.

8.26. Hosted at inception in the EAC Headquarters in Arusha, CASSOA was relocated in Uganda from 2010. The organization is funded from Partner States' contributions and provides advisory services and assistance as the partner States may require. In its advisory functions, CASSOA facilitates the sharing of technical experts and facilities between Partner States, and assists States to comply with ICAO SARPs, national standards and regulations in force by evaluating the status of aviation safety and security in States. In addition, the RSOO provides information to the partner States and recommends necessary interventions or corrective measures for the resolution of constraints or deficiencies.

8.27. Not having emerged from a COSCAP, the original scope and mandate of the Agency were revisited in 2012 for restructuring into a full fledged RSOO, taking in to account the need for its involvement in developments relating to regulation of the EAC Unified Upper Air Space; creation of a regional Aviation Medical Centre; and to allow for formulation and promulgation of regulation by the CASSOA council of Ministers. In parallel, an initiative to establish the EAC-RAIA for conducting

independent investigation of aircraft accidents was launched in the same period subject to a feasibility study.

8.28. The RSOO's evolution and activities have been guided by 5-yr Strategic Plans, which focused on its mandate, restructuring, and staffing. Most recently, CASSOA developed a sustainable funding proposal, which is yet to be adopted. In July 2021, the RSOO conducted a self-assessment and is now preparing for GASO Assessment, and signed a cooperation agreement / MOU with SASO.

iSASO/SASO

8.29. The RSOO was created by international agreement under the SADC Aviation Safety Charter following a transitioning from COSCAP-SADC in 2016. To accommodate the transition, INTERIM SASO was established back in 2013 to fast track the operationalization of the SASO RSOO. So far nine (9) of the sixteen (16) SADC members are State parties to the SASO Charter. Thus, the entity is still in transition pending signature of the Charter by two (2) more States for full ratification. The RSOO is nonetheless active although with limitations.

8.30. The SADC Protocol on Transport, Communication and Meteorology aims at harmonization of civil aviation policies and procedures as well as safe and efficient use and development of civil aviation within the SADC Region through cooperative arrangements. SASO was therefore established for the main purpose of ensuring that civil aviation safety standards are harmonized and implemented consistently in the Member States through the development of effective oversight systems. Its objectives however combines assistance in safety oversight and accident investigation. The iSASO Secretariat was established in 2015 in the host State of eSwatini, and the RSOO is funded from State contributions.

8.31. In its advisory capacity, SASO provides information to the Member States and recommends necessary interventions or corrective measures for the resolution of safety challenges and deficiencies; in addition to ensuring that accident and incident investigations are conducted in compliance with ICAO SARPs.

8.32. As part of its operational assistance functions, SASO participates in initial certification exercises for the purpose of monitoring and ensuring the uniform application of common standards within the SADC Region. The mandate covers flight operations and airworthiness activities, and relate to processes for the issuance of Air Operator Certificates (AOCs), Approved Maintenance Organization (AMO) Certificates, Approved Training Organization (ATO) Certificates, Aircraft Registration or Airworthiness and special authorizations. It is also within the mandate of SASO to provide technical assistance to non-Member States, upon request and subject to an internal approval procedure.

9. INTERNATIONAL AND REGIONAL INITIATIVES AND PARTNER PROGRAMMES IN SUPPORT OF STATES AND AFI RSOOs

9.1. A number of collaborative efforts and initiatives and programmes for the enhancement of aviation safety oversight have complemented and directly supported the work of States and RSOOs in the AFI region. These initiatives and programmes include both global and regional efforts.

9.2. With assistance from ICAO, and specifically the AFI Plan, AFCAC launched the AFI Cooperative Inspectorate Scheme (**AFI CIS**) Project in 2008. Currently, the AFI-CIS has a pool of 70 Subject Matter Experts (SMEs) from Donor States offering technical assistance in the various audit areas to recipient States based on 38 MOUs concluded with AFCAC. The qualified regional experts available under the project are: 12 OPS, 6 PEL, 20 AIR, 11 AGA, and 21 ANS.

9.3. Under the AFI Plan framework, the ICAO Regional Offices for Eastern and Southern Africa and Western and Central Africa have been operating Regional Office Safety Teams (**ROST**) since 2009. The Teams provide support to States in their efforts to resolve deficiencies identified through ICAO Audits and Gap analysis conducted, and monitor the effectiveness and sustainability of assistance provided at national and regional level. Coordinated assistance is being delivered all over the AFI region through 39 State-specific ICAO Plans of Action. The ROSTs collaborate and work closely with both the AFI CIS and RSOOs; and sometimes conduct joint-missions.

9.4. The Global Aviation Safety Oversight System (**GASOS**) was established for the purpose of strengthening RSOOs/RAIOs and similar intergovernmental regional or sub-regional bodies that support States or groups of States in carrying out their safety and accident investigation functions and activities. Following approval by the 217th Session of the ICAO Council, the 40th Session of the Assembly adopted Resolution A40-6, which endorsed the implementation and further development of GASOS to strengthen, assess and support RSOOs, RAIOs and COSCAPs. Through GASOS assessment against a set of objective criteria, RSOOs can attain ICAO recognition of their qualifications and capability to provide specific safety functions or activities.

9.5. In its first phase, the programme is limited to RSOOs and RAIOs performing advisory services (Levels 1) and/or providing operational assistance (Level 2), with the focus on strengthening these organizations to better support their member States. Assessment for level-3 services is foreseen in subsequent phases of the programme. Currently, a number of AFI RSOOs are preparing themselves for GASOS assessment. Despite such recognition and the delegation that follows, States shall continue to maintain responsibility for safety oversight, accident investigation and safety management under the Chicago Convention and its Annexes.

9.6. In line with one of the strategic objectives of the Global Strategy and Action Plan for the Improvement of RSOOs and the Establishment of the GASOS adopted by the March 2017 RSOO Forum and endorsed by the Ezulwini Ministerial Declaration, an RSOO cooperative platform (**RSOO – CP**) was created by ICAO in December 2017. The platform is aimed at improving and strengthening RSOOs through open communication and dialogue; and cooperation, collaboration and coordination between RSOOs, States, ASIAP and industry.

9.7. By coordinating the collection of various types of information and data from RSOOs, the platform is facilitating development and implementation of technical assistance activities and projects. To help

achieve its overall objective the RSOO-CP has in place a 3-year Work Programme (2020-2022) which focuses on collection and sharing of information, guidance, assistance, and partnerships.

9.8. Along the same lines as the RSOO-CP and building on the successful experience and know-how from the latter, a RAIO Cooperative Platform (**RAIO-CP**) was established in July 2021 by ICAO. The principal objective being to assess, strengthen, and support existing RAIOs, and any new ones, in assisting their Member States to accomplish their accident and incident investigation functions and activities so that they be more effective and efficient in supporting their member States.

9.9. Through the Aviation Safety Implementation Assistance Partnership (**ASIAP**) framework and platform ICAO and its safety partners share information and coordinate efforts for the provision of assistance. ASIAP's work is based on prioritization of States and assistance needs, and includes States with Significant Safety Concerns. Canada, China, France, Japan, Malaysia, Republic of Korea, Singapore, United Kingdom, United States, ACI, Airbus, Boeing, CANSO, EASA, IATA and the World Bank are amongst its members. A number of AFI States such as Gabon and Tanzania have benefitted from SAFE projects under the ASIAP.

9.10. Separately or in collaboration, individual partners e.g. the AfDB, World Bank, EASA, FAA, French Cooperation, AIRBUS etc. have launched and are implementing various programmes to assist individual States and groups of States, including support for the establishment and strengthening of RSOOs and RAIOs. The launching of the International Partners for Aviation Development, Innovation and Sustainability (**iPADIS**) and its collaboration with AFCAC, to promote innovative and sustainable development of international civil aviation, will help strengthen efforts in the AFI region for recovery from the ongoing COVID-19 pandemic.

10. SURVEY REVIEW AND OUTCOME

a. Response rate

10.1. For the purpose of the survey, questionnaires were issued to (54) States, six (6) RSOOs, one RAIO, and six (6) RECs. Due to delayed responses, the initial deadline of 23 July was extended eventually to 30 August 2021. As presented in Annex 4, responses to the RSOO questionnaires were received from 75.9% of States; all RSOOs and RAIO; and 37.5% of RECs. For AIG, the combined responses to the ECOWAS-ECCAS 2020/2021 survey and the present survey represented 61.1% of States and the only existing RAIO. Annex 7 contains a summary of the survey outcome.

10.2. In the interest of securing sufficient responses and engagement of the stakeholders in a meaningful and credible exercise, the deadline for responses was extended and the original work plan revised to accommodate the extension.

10.3. The intention and scope of the study at the onset, was to cover the whole African region. However, none of the North African States (i.e. Algeria, Egypt, Libya, Tunisia and Morocco) responded to the survey. Consequently, most of the review and analyses that follows is limited to the AFI States of Sub-Saharan Africa.

10.4. In the light of the forgoing, it was considered acceptable to proceed on the basis of the information available and any deficiency partly mitigated by taking in to account the outcomes of similar surveys conducted during the Evaluation of RSOOs by ICAO in November 2017, and the ECOWAS-ECCAS AIG study of November 2020 – July 2021, as well as other sources such as the RSOO-CP.

b. Establishment and Operational Status

10.5. The partnering of States to form RSOOs rests on formal agreements or legal instruments that address the context and objectives of the partnership, define the modus operandi of the organization, set out its governing structures, and outline responsibilities and obligations of State parties. The adhesion or commitment of members is attested to or validated through signature and/or ratification of such instruments.

10.6. All AFI RSOOs have binding international agreements in place, although with different formats, routes and levels of approval. In the case of BAGASOO and BAGAIA, signature and approval of the Agreements is at the level of the Council of Ministers, without need for further ratification. For RSOOs such as ACSAC/URSAC, ASSA-AC, CASSOA and iSASO, that are attached to or associated with a Regional Economic Community, approval is at the level of the Council of Ministers of the REC followed by endorsement by the Heads of State. These agreements become directly enforceable on the basis of the Treaty governing membership of the States to the said RECs. The AAMAC Treaty, on the other hand, is signed by the Committee of Ministers and endorsed by the Heads of State of ASECNA member States, and require ratification by five (5) of its member States, in order to come into force.

10.7. It would be expected that the higher the approving authority the stronger the level of commitment of State parties to the agreement; such that agreements endorsed and signed by Heads of State will be the strongest in this respect. This does not however seem to make any difference in practice. State parties conclude such agreements with different intentions, objectives and expectations and the pathways to finding common denominators are often not fully exhausted. It is therefore not surprising that some of these instruments are deficient in clarity and detail on the precise objectives and expectations, which may hinder practical operation and implementation thereafter. It is however also understandable that the high-level nature of the documents may preclude a certain degree of precision, and explain the lack thereof.

10.8. Most of the RSOOs have expressed low or moderate commitment of States to the RSOO. Only in one case is the commitment of member States to the RSOO considered high. This reflects on the States' level of support for contribution to and utilization of the services of the organization. It is therefore important that there is a review of RSOO legal instruments to ascertain that they adequately serve as appropriate regional frameworks and that States implement the required accompanying national legal measures for commitment to their applicability. Such a review will also take into account any new formations, partnerships and amalgamations. It will be useful, at a subsidiary level, to have ANNEXES or additional MOUs to be concluded individually with States and according to their needs and expectations, which will clarify in detail, the precise nature of services, expectations and service level / quality control aspects of the agreement.

c. Review of sustainable funding options

10.9. AFI RSOOs do not operate on a commercial basis with fees and/or charges for services to States. Any payments received in connection with services in terms of for example assistance missions, are for cost-recovery purposes. They all invariably rely on external sources in the form of direct annual contributions from Member States, community organizations, and grants from partners. There are a few exceptions in which, for example, safety tools and software products developed by an RSOO such as BAGASOO is shared with non-member States at a cost.

10.10. Currently, four of the AFI RSOOs/RAIO (i.e. BAGASOO, BAGAIA, CASSOA, and iSASO) depend on direct annual State contributions, and two are attached to and receive funding from a REC i.e. ASSA-AC from CEMAC and URSAC from UEMOA. In the case of AAMAC, the RSOO receives the financing quota of States through its parent ANSP, ASECNA.

10.11. With annual budgets ranging from \$1.25 million US to \$4 million US in 2017, States as well as the organizations themselves have identified the lack of adequate and sustainable funding as one of the top challenges of AFI RSOOs. However, the financial situation of RSOOs that are anchored to or associated with a REC seems to be better, overall. On the other hand, where contributions are expected directly from States, these are neither prioritized nor readily available, and huge arrears are incurred as a result. In the case of one RSOO, all but one of the member States are presently in arrears. At the State level, the obligation is usually passed on to the CAA without clear identification of the precise source. Even where the source of the funding is stipulated, the mechanism is not in place for its proper and timely collection and vesting into the RSOO.

10.12. Attempts have been made by individual RSOOs to address the question of sustainable funding. So far, the cases of ACSAC/URSAC, where UEMOA agreed in 2018 on a regional levy of CFA260 per international passenger (which is yet to be implemented) and the use of overflight revenue by AAMAC through ASECNA, can be cited as significant progress. All remaining AFI RSOOs have a sustainable financing proposal awaiting adoption and implementation. It is important that such proposals contain financial frameworks and a business model that provides for sustainable funding. Discussions are ongoing and yet to be concluded or any proposal adopted.

10.13. For the other REC dependent RSOOs, ASSA-AC is funded 100% by CEMAC whilst CASSOA and iSASO are financed by the States through the RECs. In the case of BAGASOO and BAGAIA, which are funded directly by State (CAA) contributions, discussions on a percentage of the passenger service charge has been very protracted and inconclusive. CASSOA has also been seeking agreement amongst its members to introduce a passenger safety charge of US \$0.70 per passenger as the main source of revenue for the Agency. However, consensus has not yet been reached by the Partner States on the proposal.

10.14. Whereas the funding of RSOOs through contributions from their Member States is a general practice, there exist various other options, possibilities, and practices. These include fees for services provided by an RSOO i.e. licensing, certification, authorizations and approvals; airport and air navigation services charges; government funds; an air safety charge levied on passengers; and grants and loans from donor States and regional financial institutions. Debt financing is also an option. However, whereas foreign sources (from donor governments and certain financial institutions) can be considered as a last resort and not on long-term basis, Debt financing is unsustainable and hence unsuitable on long term

basis. The option of a Community Levy (i.e. Trade Tax etc.), especially for REC based RSOOs has been floated within the AFI region, but has faced opposition from States.

10.15. In order for any funding option to be viable and sustainable, it should be simple, equitable and where suitable, applicable on a regional basis. RSOO funding through direct State contributions has proven problematic in the region and should be avoided as a principal source if sustainable financing is to be attained. Alignment with ICAO's policies on charges concerning the principles of non-discrimination, cost-relatedness, transparency and consultation with users should be ensured. Duplication of charges for the same services should be avoided and charges should not be imposed in such a way as to discourage the use of the RSOO by States.

10.16. Exclusive dependence of an RSOO on charges and fees for its services requires sufficient volume of activity. Where the level of aviation activity is low such as in the AFI region or few States are involved, use of RSOO service fees if applied must be complimented by other sources, including funding from RECs, grants from donor States and regional financial institutions.

10.17. In terms of regional practices, there are variations in RSOO funding arrangements. EASA for example relies on revenues from fees for its certification and approval services; publications, training and other services it provides; contributions from non-EU States collaborating with the Agency; and voluntary contributions. In Latin America, whereas the ACSA RSOO for five (5) States is funded through air navigation charges collected on a regional basis, the SRVSOP RSOO for twelve other States is financed through State and industry contributions. On the other hand, CASSOS RSOO for twelve (12) Caribbean States relies entirely on State contributions. In the case of the Pacific Islands, PASO, which has been relying on user fees, foreign and voluntary sources, as well as international financial institutions, a passenger safety fee, is being introduced.

10.18. Thus, a number of possible scenarios and options, as enumerated above, are available for strengthening of the financial sustainability of AFI RSOOs. Consideration may be given to the adoption of one or, preferably, a combination of these sources; applied on regional or individual State basis. Application on a regional basis has the advantage of economies of scale, as opposed to over fragmentation that arises in State-by-State application of the schemes. The possibility of outsourcing the collection of the charges or fees to an agent or organization in a *Joint collection of charges scheme* has great merit and worth exploring. A brief analysis/evaluation of some of these funding options is presented in Table 2 below. The listed sources are principal ones that have to be supplemented by grants, foreign assistance and assistance from international financing institutions etc.

Table 2: Summary Evaluation of Sustainable Funding Options for AFI RSOOs

ITEM	FUNDING OPTION	PROS	CONS	RISKS
1	Air safety fee	<ul style="list-style-type: none"> ▪ In line with ICAO policies / principle on charges ▪ Lower per-capita contributions for States ▪ Sustainable funding ▪ Independent of State/CAA administrations ▪ Easier to justify ▪ More direct routing of payments to RSOOs 	<ul style="list-style-type: none"> ▪ Increase in already high travel cost ▪ Need for supplementary arrangements for RSOOs with both Safety & Security functions 	<ul style="list-style-type: none"> ▪ Slow implementation ▪ Resistance from Users and Travelers
2	Airport and Air navigation fee	<ul style="list-style-type: none"> ▪ In line with principle of utilizing aviation revenue for the sector ▪ Involves economies of scale if applied by FIR ▪ Lower per-capita contributions for States ▪ Sustainable funding ▪ Independent of State/CAA administrations ▪ More direct routing of payments to RSOOs 	<ul style="list-style-type: none"> ▪ Increase in high User charges and travel cost ▪ Need for supplementary arrangements for RSOOs with both Safety & Security functions ▪ Less easy to justify for broad safety functions 	<ul style="list-style-type: none"> ▪ Resistance from Users and ANSPs ▪ Slow implementation
3	RSOO service fees	<ul style="list-style-type: none"> ▪ In line with ICAO policies / principle on charges ▪ Direct payments to RSOO 	<ul style="list-style-type: none"> ▪ Insufficient activities and revenue ▪ Challenge of lack of delegation by States ▪ Low capacity of RSOOs to provide full scope of services ▪ Need for supplementary arrangements for RSOOs with both Safety & Security functions. 	<ul style="list-style-type: none"> ▪ RSOO funding challenges continue ▪ Weak and ineffective RSOOs ▪ Reduced assistance to States ▪ Lowering of safety standards ▪ May not be sustainable
4	Government Funding	<ul style="list-style-type: none"> ▪ Becomes a State obligation ▪ Use of public funds to avoid additional charges on aviation and stimulate growth ▪ Increased possibility of bilateral donor support. 	<ul style="list-style-type: none"> ▪ Funding insufficient and not readily available ▪ Continued dependence on States/CAAs ▪ Heavy bureaucracy ▪ Indirect routing of payments ▪ Competing national priorities. 	<ul style="list-style-type: none"> ▪ RSOO funding challenges continue ▪ Weak and ineffective RSOOs ▪ Responsibility passed on to CAAs ▪ Reduced assistance to States ▪ Lowering of safety standards.
5	Community Levy	<ul style="list-style-type: none"> ▪ Involves economies of scale ▪ Sustainable funding ▪ Independent of CAAs 	<ul style="list-style-type: none"> ▪ Less direct routing of payments ▪ Lengthy/bureaucracy of RECs and governments ▪ Cross sector subsidization difficult to justify ▪ Protracted negotiation with none-sector stakeholders 	<ul style="list-style-type: none"> ▪ Resistance from Trade / Tourism sectors ▪ Non-cooperation of RECs and States

d. Staffing

10.19. The promotion of RSOOs as a viable option for the improvement of effective safety oversight by States is largely premised on advantages to be gained from the pooling of human and financial resources. A team of well-qualified safety oversight inspectors lodged in or coordinated by the RSOO will assist States in carrying out their oversight functions in a more cost-effective manner. The burden for individual State CAAs to recruit, train and retain qualified technical personnel (who in some cases are underutilized) will thus be reduced. In the case of the AFI Region, these anticipated dividends are yet to be realized. Some national CAAs of States that belong to RSOOs continue to build and expand their structures and technical personnel for the full scope of safety oversight functions, at the expense of support for the RSOO, whilst a lot of other States are struggling with insufficient personnel.

10.20. The results of the survey indicate that almost all of the RSOOs/RAIO have insufficient qualified technical personnel in-house. However, CASSOA with four (4) qualified technical staff in the areas of PEL, OPS, AIR, AGA, ANS, is deemed to have adequate capacity for the advisory services it renders to its six (6) member States under level 1 delegation. AAMAC has three (3) inspectors in-house for its single ANS activity area, and in addition has recourse to and at its disposal, over twenty (20) inspectors designated by its seventeen (17) member States. Such capacity may be sufficient for AAMAC only in the context of the reduced scope of activities arising from the MOU with ASSA-AC and ACSAC-URSAC, but not for its full mandate across all audit areas.

10.21. ASSA-AC on the other hand, has five (5) full-time technical personnel in PEL, OPS, AIR and AGA which represents only have of the required capacity thus finding it necessary to call on inspectors from member States during assistance missions. BAGASOO has one (1) full-time inspector in each of the following areas: AIR, AGA, and ANS. To make up for capacity deficiencies in OPS and PEL, BAGASOO often utilizes the AFI CIS. Although BAGAIA has only one full-time investigator, which is considered insufficient, the RAIO has recourse to over thirty (30) qualified accident investigators from member States. Technical personnel requirements are sometimes further complicated by the need to satisfy the language diversity of member States, which may require an RSOO outsourcing an additional expert with the appropriate language proficiency.

10.22. It is not clear as to whether the RSOOs or States have conducted a proper needs assessment to determine the appropriate staff levels and capacity requirements for their safety oversight functions and activities. Based on responses to the survey, ANNEX 9 presents the scope and level of safety oversight activity in the region in terms of current licenses, certificates, approvals, and authorizations issued by individual States. The total licenses and certificates issued currently by the 41 respondent AFI States comprise 464 AOCs; 9,819 Airworthiness certificates; 19,375 Aircraft Registration Certificates; 898 AMOs; 433 ATOs; 52,364 Personnel Licenses; and 50 Aerodrome Certificates.

10.23. As a way forward, it would be useful, to start with, for RSOOs and individual States to conduct a Staff needs assessment; define minimum full time technical staff for a particular RSOO depending on the level of delegation and services conducted; and encourage the sharing of human resources from States in / outside the RSOO. An Inspectorate Scheme would appear ideal in this respect; a befitting role for an enhanced and strengthened AFI CIS which currently has 70 qualified experts, with a total of 53 others awaiting OJT in ANS (19), PEL (5), OPS (7), AGA (7) and AIR (15). That way, a minimum staff strength of one expert per area could be maintained full-time within the RSOOs and the rest of the capacity

requirements addressed through the established pool. This minimum in-house capacity may be adjusted to two experts, for contingency purposes.

10.24. In the absence of any recent evaluation, it will be important to conduct a thorough assessment of the AFI CIS; review its TOR; evaluate its impact so far and define modalities for its enhancement including building staff competencies, to ensure effectiveness and attainment of results.

e. Delegation of Safety Oversight Functions and Activities

10.25. State parties to the Chicago Convention on international civil aviation have a direct and individual obligation to implement provisions of the said convention and International Standards and Recommended Practices (SARPs) contained in its Annexes, and procedures adopted by ICAO, and hence bear responsibility for safety oversight and accident investigation. Under given circumstances, governed by specific arrangements, such functions may be delegated to another State, group of States, or organization such as an RSSOO.

10.26. Depending on the RSSOO's mandate, the nature, type and level of such delegation may vary; ranging from expert advisory and consultative services in safety oversight matters, to provision of technical assistance, and execution of safety oversight functions on behalf of and under the authority of the beneficiary State. In line with the *ICAO Safety Oversight Manual Part B – The Establishment and Management of a Regional Safety Oversight Organization, Doc 9734* and the GASOS, delegation of functions is defined according the following three levels:

Level 1: Advisory functions

Level 2: Operational assistance functions

Level 3: Delegated functions

10.27. Advisory functions include tasks such as advice on developing aviation safety legislation or regulations; and assistance in the identification and notification of differences to SARPs. It also includes advice on the development of manuals, checklists and other guidance material; coordination of a pool of inspectors or experts; and providing advice and expert services in safety management or safety investigation

10.28. Operational assistance functions on the other hand include, in addition to the Level 1 advisory functions, developing aviation safety legislation and/or regulations for adoption by States; delivery of safety inspector training; and conducting inspections or full technical investigations in support of certification and licensing activities of States. It also includes conducting surveillance activities and making recommendation on identified safety deficiencies for corrective actions; conducting parts of safety investigations (under Annex 13); and conducting State specific safety management activities.

10.29. In addition to the advisory and operational assistance functions carried out under Levels 1 & 2, the delegated functions conducted at Level 3 include the actual issuance, amendment or revocation of licenses, certificates, authorizations and approvals. They also include issuance or amendment of regulations; drafting aviation safety regulations and making them effective; and conducting the full range of incident and accident investigation activities

10.30. Reference to delegation of functions often draws attention to this last and final level of full empowerment of RSOOs. This may partly explain the hesitancy and reluctance on the part of State regulatory authorities (CAAs) to make the commitment to effectively engage and utilize the RSOOs.

10.31. Currently, all AFI RSOOs / RAIO are providing the Level 1 advisory services, and in addition, some are also performing Level 2 operational assistance functions. None however is empowered or mandated for the Level 3 functions of actual deliverance of certificates and licenses on behalf of States. Thus in most cases there is no formal delegation, and the intervention of AFI RSOOs in State safety activities is often based on simple requests for assistance issued to the RSOO by the CAA of a State. As a baseline, it is important that States have a national or regional legal framework that allows them to request for the services of or delegate functions to an RSOO or RAIO.

10.32. The international legal instruments establishing the AFI RSOOs to which States have assented, do delegate to an extent safety oversight functions to the RSOOs concerned. However, the provisions are sometimes broad and applicable across board to all the member States. States do not share the same needs for an RSOO; in fact, there are a few States with well established and strong effective safety oversight systems that have indicated that they have no need for the services of the RSOO to which they belong. It is therefore important, within the same membership of an RSOO, for each State to be able to delegate according to its needs and choices.

10.33. The various delegation levels call for different legal instruments. Whereas MOUs may suffice for delegation levels 1 & 2, a more robust and formal legal agreement, including all necessary ratification processes, is required for full delegation and empowerment under Level 3. Beyond the umbrella RSOO international agreements, there are a few good examples and practices in the region. AAMAC for example has in place a joint MOU signed by all seventeen (17) member States defining and delegating ANS functions for what would be effectively Levels 1 – 2. This agreement although a very good step, could be improved by more precisely specifying the functions in greater detail and making it a bilateral rather than multilateral one, in which case States can delegate according to their individual and specific needs. There are also examples of MOUs between BAGASOO and The Gambia, and BAGASOO and Sierra Leone, spelling out services to be provided by the RSOO. Again, these could be more precise and specific on the functions.

10.34. For RSOOs and RAIOs to be truly effective and have an impact on the desired improvement of state aviation safety oversight systems, it is important that they have the required capacity and States collaborate in accepting performance of operational assistance functions of these safety oversight bodies. There is empirical evidence and experience, which shows the great difference assistance to States from RSOOs, ROST and AFI CIS prior to audits makes on USOAP CMA results. The harmonization of safety legislation and regulations, etc., in which the RSOOs and RAIO are already involved is a necessary step and enabler that would facilitate effectiveness of the RSOOs and impact the safety oversight levels of States.

f. Autonomy & Independence

10.35. The need for civil aviation entities established by States to be autonomous and independent and provided with adequate and sustainable source of funding to enable them carry out their functions effectively applies to RSOOs as well. Specifically and in order for them to conduct their safety oversight functions and activities effectively, RSOOs require a degree of independence so that they can, in their own right, receive delegated functions and adequately provide for their own funding.

10.36. The legal instruments for the establishment of an RSOO should therefore grant such autonomy and in addition, define the sustainable means of funding. The RSOO agreement should also clearly stipulate the functions of the governing body, and ensure that there is enough room for the executive and technical functions of the RSOO to be independent.

10.37. Depending on the organization structure adopted, the RSOO may have as its governing body a Board, Council or similar body, which will be responsible for formulating policy, appointing top management, allocating budgetary resources, etc. This body should also be responsible for providing guidance and strategic orientation on regional and international issues, as well as setting the general principles that guide the work programme of the RSOO.

10.38. The situation vis-à-vis autonomy and independence amongst AFI RSOOs varies in practice, even though the legal instruments grant these attributes as required and the entities are considered autonomous and independent as far as their technical work is concerned. AAMAC for example has been established as an autonomous RSOO with its own administrative and financial processes; managing its budget and work programme. There is however insufficient oversight and little involvement of its governing Council in strategic orientation. ASSA-AC, CASSOA, iSASO, and URSAC all operate as specialized institutions of regional economic groupings although they are legally autonomous organizations. They exercise some independence in the management of their budgets and work programmes and are subjected to separate external financial audits. However, such RSOOs as in the case of URSAC are treated as technical departments, subjected to the internal processes of their RECs and struggle with lack of adequate autonomy to carry out their functions.

10.39. The key challenge to AFI RSOO's autonomy and independence relates to availability of adequate and sustainable funding in a timely manner. The financing of these organizations is being driven by the States, their governing bodies, and the regional economic organizations they are associated with. Although there is value in RSOOs continuing to leverage on States and parent RECs for mobilization of resources, an effective means of minimizing bureaucratic red-tape and strengthening commitment of States should be explored. A review of the legal agreements to ascertain adequate financial autonomy and independence and stronger State commitment may therefore be necessary.

g. Cooperation & Collaboration

10.40. Under Article 37 of the Convention on International Civil Aviation, contracting States undertake to collaborate in securing the highest practicable degree of uniformity in regulations, standards, procedures, and organization in relation to aircraft, personnel, airways and auxiliary services and all matters in which such uniformity will facilitate and improve air navigation. In this spirit, RSOOs are established as a viable means of improving safety oversight systems of States through joint collaborative efforts.

Cooperation within an RSOO

10.41. The primary level of such cooperation and collaboration is exercised amongst the States that constitute the RSOO. The group composition as is the case with all the AFI RSOOs, often reflects a mixed bag of States. On one hand, there are usually a few identifiable States with strong technical personnel capacity, sufficient financial resources, and relatively more effective safety oversight systems, whilst the

remainder of the States are less resourced and have low effective safety oversight implementation levels. The presence of these 'lead-States' as drivers of RSOO initiatives and programmes through mutual support, together with the individual commitment of all States to the partnership are key to successful collaboration and uniform progress.

10.42. There are cases in which, as part of the delegation of functions or request for services, MOUs are signed between an AFI RSOO and its member States e.g. AAMAC and its seventeen (17) member States and BAGASOO and The Gambia. It is important that all States have room and are encouraged to take a more active role in participating and supporting their RSOO in order to strengthen their own safety oversight effective implementation.

Cooperation between AFI RSOOs

10.43. At the next level, a number of AFI RSOOs have concluded MOUs which open doors for collaboration with other RSOOs in the region. In this regard, in addition to the tripartite agreement between AAMAC, ACSAC-URSAC, and ASSA-AC, agreements exist between AAMAC and BAGASOO; ASSA-AC and BAGASOO; ACSAC-URSAC and BAGASOO; and most recently between CASSOA and ISASO.

10.44. The MOU on cooperation with regards to Safety Oversight between AAMAC & BAGASOO signed in March-May 2020, is aimed at facilitating exchange of expertise, transfer of knowledge and industry best practices for effective civil aviation safety oversight in their member States. The specific areas of collaboration identified include maintaining and strengthening cooperation and communication in safety oversight; exchange of Inspectors through a CIS; staff training and sharing of regulations in OPS, PEL, AIR, AGA, and ANS.

10.45. Signed on 16 July 2021, the MOU between CASSOA and SASO involves cooperation and collaboration for harmonization of policies, laws, programmes, strategic objectives and activities in aviation safety; and initiatives to avoid unnecessary duplication of efforts and resources. As well as reciprocal acceptance of approvals and documentation issued by Member States; facilitate exchange of information and expertise through a pool of Inspectors; and harmonization of cooperation with potential stakeholders and partners.

Cooperation of AFI RSOOs with non-Member States

10.46. Certain AFI RSOOs have reached out and are collaborating with non-member States in the Region: ASSA-AC cooperates with individual States such as DRC, Sao Tome, Angola, and Burundi. It needs pointing out that the latter group of States are members of ECCAS but not formally members of ASSA-AC which is still limited to the six (6) CEMAC States, although steps are being taken for extension of ASSA-AC to cover the whole of central Africa which should be encouraged and welcomed. Similarly, CASSOA is cooperating in the area of safety oversight assistance with DRC, Malawi and Zimbabwe.

Cooperation with Partners and International Organizations

10.47. A wide range of international organizations, financing institutions and partner States are involved in different programmes, projects, initiatives and activities to support aviation development and specifically safety oversight enhancement, not only directly with individual States but also through regional organizations and bodies such as RECs and RSOOs.

10.48. These partners and initiatives include ICAO and its programmes such as GASOS, the RAIOP CP, RSOO CP, ASIAP, and AFI Plan; AFCAC and the AFI CIS; EASA with its SIASA project; the PASTA-CO of the

AfDB for Western and Central Africa; the FAA, IATA, Airbus etc. etc. All the AFI RSOOs are keenly collaborating with these partners in these and other programmes, although progress on implementation may be slow.

10.49. Through such collaboration, GASOS included one AFI RSOO (BAGASOO, May 2019) on pilot assessments conducted on three (3) RSOOs in the areas of general aspects (GEN); OPS; AIR; ANS; and AGA. The need for improvement of the legal frameworks; organizational structures, resources, and technical capacities; funding mechanisms; and management processes and systems was common to the assessed RSOOs. In the case of BAGASOO in particular, development and harmonization of regional aviation regulations and inspector handbooks; training of technical personnel for States and the RSOO; implementation of the established CIS; conclusion of agreements with members for level 2 delegation; and sustainable funding were the key recommendations from the assessment. Cooperation and collaboration at all levels need to be encouraged and strengthened.

h. Size, Number and Configuration of AFI RSOOs

10.50. The six AFI RSOOs and one RAIIO, together, cover forty-three (43) States with sizes ranging from six to seventeen (17) States per RSOO (Refer Annex 5). Thus, apart from the five (5) North African States of Algeria, Egypt, Libya, Morocco, and Tunisia, there are six (6) AFI States that do not formally belong to an RSOO.

10.51. A noteworthy characteristic of these organizations is the overlapping and duplication of membership, i.e. States belonging to more than one RSOO. Whereas, twenty-six States belong to just one organization, 17 have dual membership. In this respect, BAGASSO stands out as the only safety oversight organization in the region without any duplication. All AAMAC States belong to another organization. Thus, AAMAC shares SIX (6) States with ASSA-AC; (8) with ACSAC/URSAC; one with MENA, and (2) with iSASO. Whilst CASSOA and iSASO share one State.

10.52. The duplication in RSOO membership is partly explained by the fact that the majority of the RSOOs are associated with or a specialized institution of a regional economic structure and membership is linked to regional Treaties. The eight RECs recognized by the African Union viz: AMU, COMESA, CEN-SAD, ECCAS, EAC, ECOWAS, IGAD, and SADC also have significant overlaps in their membership and this reality influences the composition of RSOOs that are associated with them. For example all fifteen (15) ECOWAS States also belong to CEN-SAD; six (6) SADC States belong to COMESA; all AMU States with the exception of Algeria are members of CEN-SAD; DRC is a member of COMESA, ECCAS and SADC; Kenya is a member of COMESA, EAC and IGAD; etc.

10.53. Furthermore, a number of Economic and Monetary Unions (e.g. UEMOA and CEMAC) that exist within the AU recognized RECs have also set up RSOOs that transitioned from COSCAPs to give birth to ACSAC/URSAC (still in transition) and ASSA-AC. The ECCAS REC, to which all the members of the ASSA-AC RSOO belong, has taken steps to expand the RSOOs membership to include all ten (10) member States of the REC and the whole central African region. This process has stalled despite several ECCAS Ministerial meetings held and declarations issued on the subject between 2012 and 2018.

10.54. Association of certain RSOOs with regional economic communities has been to the advantage of the former given the mandate and decision-making powers of these bodies; their mission of regional cooperation and integration; the network of partnerships they have built; and their resource

mobilization capacity. It would therefore serve RSOOs well to continue to leverage on these strengths, in view of the challenges they face.

10.55. From a technical point of view, duplication may also arise from differences in the scope of activities and areas of involvement of RSOOs. States should have the flexibility to choose and combine providers of functions and services from different RSOOs according to their needs and capacity of the latter. However, when a State decides to join an RSOO, it should ascertain that the functions and activities concerned are not already being provided by another RSOO in the same domain or area, and where it is the case there should be clear non-conflicting delegation of functions by the State. It is important to point out the financial implications of multiple RSOO membership in terms of annual State contributions and the challenges faced by AFI States in this respect. Thus, unless outweighed by other advantages, the multiple membership of RSOO should be discouraged and minimized.

10.56. Although there is no hard and fast rule on the appropriate number and size of RSOOs, the need for a critical mass of aviation activity and economies of scale would tend to support the idea of larger and fewer entities for the region. Thus, rather than create additional RSOOs for States that do not belong to one, such as the '7-partner States' and Sao Tome, they may be encouraged to join, cooperate or access services of RSOOs/RAIOs of their choice that can provide advice and assistance in carrying out safety functions. Responses to the survey questionnaire on optimum sizes for RSOOs, generated mixed signals. Whilst some respondents indicated their RSOOs were optimal in size, the same respondents considered them small for financial sustainability.

10.57. In seeking to streamline and optimize the number of RSOOs in the AFI region the following are amongst possible options. For the purpose of the exercise, four (4) of the eight (8) RECs recognized by the AU that have RSOOs or are in the process of establishing one i.e. EAC, ECCAS, ECOWAS, and SADC are the ones considered in the relevant scenarios.

RSOO OPTION 1:

Increasing the number of RSOOs from six (6) to seven (7) by maintaining the existing six (6) RSOOs as constituted and establishing a new one for those States that do not belong to an RSOO.

RSOO OPTION 2:

*Maintaining the **status-quo of six (6) RSOOs** and encourage those States that do not belong to an RSOO to join one of the existing. This can be enhanced by bringing BAGASOO within the umbrella of the ECOWAS REC.*

RSOO OPTION 3:

*Full implementation of REC based RSOOs (i.e. one each for ECOWAS, ECCAS, SADC, and EAC) to **reduce the number from six (6) to five (5)**. This will require the integration of BAGASOO and ACSAC-URSAC under ECOWAS; enlargement of ASSA-AC to cover the ECCAS region; AAMAC to retain ANS continent wide; and for States that currently do not belong to an RSOO to join one of the existing.*

RSOO OPTION 4:

*Full implementation of REC based RSOOs to **reduce the number from six (6) to four (4)** (i.e. one each for ECOWAS, ECCAS, SADC, and EAC). This will require the integration of BAGASOO and ACSAC-URSAC under ECOWAS; enlargement of ASSA-AC to cover the ECCAS region; **AAMAC be diffused into all four**; and for States that currently do not belong to an RSOO to join one of the existing.*

10.58. In the case of AIG, there is presently only one RAIO in the whole AFI region, viz: BAGAIA, which has at its disposal excellent laboratory facilities in one of its member States. EAC has initiated the process of creating a RAIO, whilst the ECOWAS-ECCAS AIG study conducted from November 2020 to July 2021 is examining the establishment of a RAIO for the Western and Central African regions with emphasis on the possibility of extending BAGAIA to cover the two regions.

10.59. Although only seven (7) out of the forty-three (43) AFI States belong to the sole RAIO in existence, the majority of States have established an AIB structure which is independent of the regulatory authority (CAA) and reports to the Minister responsible for aviation. They have also concluded MOUs with other AFI States and various States outside the region for AIG support especially in the area of qualified Investigators, training, and laboratory facilities. Despite some of these efforts however, it is very striking that AIG is still the audit area in which the AFI region has the lowest average EI (i.e. 44.9%).

10.60. The following are possible options for the way forward:

AIG OPTION 1:

- Limit BAGAIA to BAG States, pursue creation of EAC-RAIO, and for States that do not belong to a RAIO to cooperate with individual States and RAIOs.

AIG OPTION 2:

- Expansion of BAGAIA to cover the ECOWAS-ECCAS regions, and pursue and implement the EAC- RAIO initiative to cover both EAC and SADC regions.

AIG OPTION 3:

- Expansion of BAGAIA as a continental RAIO.

10.61. A brief assessment of the above options and scenarios for both RSOOs and RAIOs is presented in Table 3 below and would be further considered in developing the AFI RSOO Strategic Plan. It is assumed that these scenarios and RSOO/RAIO configurations will be accompanied with the other funding and capacity building measures proposed for their strengthening and sustainability.

Table 3: Summary Assessment of proposed options for AFI RSOOs and RAIOS

ORGANIZATION	OPTION	PROS	CONS	RISKS
RSOOS	Option 1 (7 RSOOs): <i>Six (6) existing RSOOs plus new one for non-RSOO States</i>	<ul style="list-style-type: none"> • Less disruption to existing arrangements • Continuation of any established best practices • Both RECs and Monetary Unions maintain RSOOs without disruption 	<ul style="list-style-type: none"> • New additional RSOO of only 3 States not viable; • No improvement or solution to challenges of funding etc, • Absence of economies of scale • Limited activity / relevance of AAMAC 	<ul style="list-style-type: none"> • Establishment delays for new RSOO • Worsened challenges • Ineffectiveness and inefficiency of RSOOs
	Option 2 (6 RSOOs): <i>Six (6) REC based RSOOs and non-RSOO States to join existing ones</i>	<ul style="list-style-type: none"> • All RSOOs associate with and leverage on RECs • Opportunity for existing non-RSOO States to join already operational ones • Both RECs and Monetary Unions maintain RSOOs without disruption 	<ul style="list-style-type: none"> • No improved economies of scale • Limited activity and hence relevance of AAMAC • Legal challenge of incorporating BASOO into ECOWAS 	<ul style="list-style-type: none"> • ECOWAS not accepting to support BAGASOO • Ineffectiveness and inefficiency
	Option 3 (5 RSOOs): <i>Reduction to four (4) AU recognized RECs plus AAMAC</i>	<ul style="list-style-type: none"> • Improved economies of scale • Increased scale of activities per RSOO • Greater efficiency and less duplication • All RSOOs associate with and leverage on RECs • Opportunity for existing non-RSOO States to join already operational ones 	<ul style="list-style-type: none"> • Legal challenge of incorporating States that are not part of the REC regional treaties governing the RSOOs 	<ul style="list-style-type: none"> • Resistance to RSOO integration from Monetary Unions; • ECOWAS not accepting to support BAGASOO • Opposition to single continental RSOO for ANS
	Option 4 (4 RSOOs): <i>Reduction of six (6) RSOOs to four (4) (i.e. one each for ECOWAS, ECCAS, SADC, and EAC)</i>	<ul style="list-style-type: none"> • High economies of scale • Increased scale of activities per RSOO • Highest efficiency and less duplication • All RSOOs associate with and leverage on RECs • Opportunity for existing non-RSOO States to join already operational ones 	<ul style="list-style-type: none"> • Legal challenge of incorporating States that are not part of the REC regional treaties governing the RSOOs 	<ul style="list-style-type: none"> • Resistance to RSOO integration from Monetary Unions; • ECOWAS not accepting to support BAGASOO • Opposition to diffusing AAMAC ANS services into other RSOOs.
RAIO	Option 1 (2 RAIOS): <i>BAGAIA for BAG States; EAC-RAIO for EAC States; Remaining States to join one of the above</i>	<ul style="list-style-type: none"> • Less disruption to existing arrangements • Continuation of any established best practices 	<ul style="list-style-type: none"> • Lack of adequate resources for BAGAIA • Absence of economies of scale 	<ul style="list-style-type: none"> • Ineffectiveness and inefficiency • Lack of support from development partners
	Option 2 (2 RAIOS): <i>BAGAIA for ECOWAS/ ECCAS; EAC-RAIO for EAC/SADC</i>	<ul style="list-style-type: none"> • ECOWAS-ECCAS collaboration and support for BAGAIA • Support from development partners. • Increased efficiency and cost-effectiveness 	<ul style="list-style-type: none"> • Demand for increased RAIO capacity / qualified personnel • protracted negotiations and consultations for agreements 	<ul style="list-style-type: none"> • Reluctance of non ECOWAS, ECCAS and EAC, States and RECs • Slow implementation process
	Option 3 (1 RAIO): <i>One continental RAIO - BAGAIA</i>	<ul style="list-style-type: none"> • ECOWAS-ECCAS collaboration and support for BAGAIA • Support from development partners. • High efficiency and cost-effectiveness 	<ul style="list-style-type: none"> • Difficult negotiations and consultations for agreements • High capacity demand and need for more qualified personnel 	<ul style="list-style-type: none"> • Resistance from non-BAG States and new RAIO initiatives • Slow establishment/expansion process • Inadequate capacity of RAIO for scope of activities

i. Effectiveness and impact on safety oversight.

10.62. The central objective and *raison d'être* of an RSOO is improvement of aviation safety oversight of its member States, and for this purpose AFI RSOOs should, as a minimum, be able to provide expert advisory and consultative services, and deliver technical assistance in the area of safety oversight to their States. This will entail activities and functions that support implementation of common safety oversight procedures and documentation and facilitate licensing, certification, authorization, approval and surveillance of the aviation industry to the extent that the States are willing to delegate and the RSOO is able to provide.

10.63. A good measurement of the effectiveness and impact of an RSOO is, therefore, the extent of its contribution to improving the safety oversight effective implementation (EI) level of member States. Although there are other important factors such as interventions from other stakeholders and partners, level of commitment of States, the powers and mandate of the RSOO, and availability of financial and human resources, to take in to account.

10.64. Section 8 of this report provides a review of safety oversight effective implementation in the AFI region and presented the average effective implementation status and safety profiles of the group of States belonging to the different RSOOs as follows: ACSAC/URSAC (UEMOA), 65.11%; North Africa, 62.35%; AAMAC, 60.69%; ISASO, 57.15%; CASSOA, 67.48%; BAGASOO, 53.52%; and ASSA-AC 52.45%. Half of the AFI RSOO State-groups have average EIs that are below the world average in all audit areas, with common weaknesses in AIG and AGA for all groupings. In terms of safety oversight critical elements, CEs 6 to 8 stand out as common weak areas for all AFI RSOO State groupings, whilst in addition, five out of the six are deficient in CE5.

10.65. The survey revealed for all RSOO's, a striking lack of information on the scale of safety oversight and certification and licensing activities of their member States. The RSOOs, with the exception of URSAC, could not provide information on how many of the different categories of licenses and certificates (i.e. AOCs, PEL, AMOs, ATOs, Aerodromes, etc) their States have issued. RSOO operational assistance to States has also been limited to mostly AGA, through the AFI Plan Aerodrome Certification Project.

10.66. The development of strategic plans and inclusion of GASP and AFI safety regional targets in strategic objectives of RSOOs with clear goals, KPIs and annual targets should be encouraged.

j. The Covid-19 Pandemic and Its Impact

10.67. Regional developments and trends had been expected to yield significant growth in air transport in the coming decades; however, the outbreak of the COVID-19 pandemic had severe effects on almost all sectors, with the global economy contracting in 2020 by 3.5% from ... to 4.3%, according to the IMF and World Bank. Figures for 2020 compared to 2019 indicate drops of 60% in international passenger traffic; 65% in airport revenue; and 65.9% in airline revenue according to ICAO, ACI, and IATA respectively. At the regional level, the African Airlines Association (AFRAA) estimates the combined losses to African airlines at \$8.5 billion, whilst losses to African airports and air-navigation service providers are estimated at \$2.8 billion and \$448 million, respectively.

10.68. The impact of such economic downturn has affected not only Airlines, CAAs, Airport Operators airport service providers and Air Navigation Service Providers, but most definitely RSOOs as well, both

financially and operationally. State contributions for their functioning are being less readily available and limitations on their ability to conduct field assistance missions and even industry inspections curtailed. The AFI RSOOs surveyed have indicated levels of implementation of their annual work programme dropping to between 20 and 40% in 2020 from 70 to 95% in pre-COVID 2019.

10.69. Furthermore, the RSOOs have participated in the work of the ICAO Council Aviation Recovery Task Force (CART) and have been assisting and supporting States to reduce the risks related to the COVID - 19 pandemic; assessing operational impact and harmonizing response, while providing training and guidance on region-wide basis. In addition to issuing publications and Circulars, assistance visits are conducted at international airports to evaluate the implementation of CAPSCA Preparedness plans and provide intervention strategies.

10.70. Whilst an upturn is expected, global and regional prospects remain uncertain for 2021 and beyond. IATA forecasts air travel to lag economic recovery by up to two years. COVID-19 recovery, earlier predicted within 3 to 18 months is now anticipated to take between 2 and 6 years. It is therefore important that AFI RSOOs have in place appropriate Contingency / Business Continuity Plans for consistent recovery, resilience and sustainability.

11. RSOO SWOT ANALYSIS

11.1. Presented in Table 4 below is an analysis of the Strengths, Weaknesses, Opportunities and Threats (SWOT) of individual AFI RSOOs. How these attributes are treated and handled will impact the performance of the organizations. The strategic plan will ensure that the identified Strengths are enhanced and consolidated; the weaknesses overcome; opportunities exploited; and threats mitigated for effectiveness, and sustainability.

Table 4: Analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) of AFI RSOOs

RSOO / RAI0	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
AAMAC	<ul style="list-style-type: none"> ▪ Heads of State commitment ▪ International agreement ▪ Anchored to an ANSP ▪ Sustainable financing ▪ Large group of States (17) ▪ Specialization in ANS ▪ Well established and hosted 	<ul style="list-style-type: none"> ▪ Inadequate staff ▪ Not covering full mandate ▪ Lack of information on oversight/certification activities of States 	<ul style="list-style-type: none"> ▪ Collaboration with ACSAC & ASS-AC in non-ANS ▪ Colocation with ASSA-AC ▪ Participation in RSOO-CP, AFI-CIS ▪ Long term regional aviation growth ▪ SAATM / AfCFTA ▪ Supportive partner States & Organizations ▪ iPADIS 	<ul style="list-style-type: none"> ▪ Overlapping membership without distinction of services ▪ Absence of guidance mat in ANS certification ▪ Impact of COVID-19 and other pandemic (EBOLA) ▪ States exercise all functions
ASSA-AC	<ul style="list-style-type: none"> ▪ Heads of State commitment ▪ International agreement ▪ Anchored to a REC ▪ Well established and hosted 	<ul style="list-style-type: none"> ▪ Low levels of State EIs ▪ Inadequate staff ▪ Low State commitment ▪ Small membership (6) ▪ Lack of information on oversight/certification activities of States 	<ul style="list-style-type: none"> ▪ Collocated with AAMAC ▪ Collaboration with AAMAC in ANS ▪ Participation in RSOO-CP, AFI-CIS ▪ Long term regional aviation growth ▪ SAATM / AfCFTA ▪ Supportive partner States & Organizations ▪ Expansion to 10 ECCAS States ▪ iPADIS 	<ul style="list-style-type: none"> ▪ Overlapping membership without distinction of services ▪ States exercise all safety functions ▪ Impact of COVID-19 and other pandemic (EBOLA)
BAGASOO	<ul style="list-style-type: none"> ▪ Well established and hosted ▪ International agreement ▪ Technical commitment of DGs ▪ Levels 1-2 Delegation ▪ Strong capability in Inspector training tools/software system 	<ul style="list-style-type: none"> ▪ Low State commitment ▪ Inadequate financing ▪ Small membership (7) ▪ Weak regional governance ▪ Lack of information on oversight/certification activities of States 	<ul style="list-style-type: none"> ▪ Participation in RSOO-CP, AFI-CIS ▪ Long term regional aviation growth ▪ SAATM / AfCFTA ▪ Supportive partner States & Organizations ▪ iPADIS 	<ul style="list-style-type: none"> ▪ States fully exercise all safety functions ▪ Impact of COVID-19 and other pandemic (EBOLA) ▪ Inadequacy/delay in payment of State contributions

RSOO / RAI0	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
BAGAIA	<ul style="list-style-type: none"> ▪ Well established and hosted ▪ International agreement ▪ Technical commitment of DGs ▪ Large number of trained investigators in member States 	<ul style="list-style-type: none"> ▪ Low State commitment ▪ Inadequate staff ▪ Inadequate financing ▪ Small membership (7) ▪ Weak regional governance 	<ul style="list-style-type: none"> ▪ Highly equipped AIG laboratory ▪ Only one of its kind in AFI ▪ Long term regional aviation growth ▪ SAATM / AfCFTA ▪ Supportive partner States & Organizations ▪ iPADIS 	<ul style="list-style-type: none"> ▪ Impact of COVID-19 and other pandemic (EBOLA) ▪ Inadequacy/delay in payment of State contributions ▪ independent AIBs in States
CASSOA	<ul style="list-style-type: none"> ▪ Heads of State commitment ▪ International agreement ▪ Anchored to a REC (EAC) ▪ Well established and hosted ▪ Existing Safety/AVSEC model regulations 	<ul style="list-style-type: none"> ▪ Low remuneration levels ▪ Moderate commitment of States ▪ Inadequate human resources ▪ Small membership (6) 	<ul style="list-style-type: none"> ▪ Long term regional aviation growth ▪ SAATM / AfCFTA ▪ Supportive partner States & Organizations ▪ Collaboration with other RSOOs RSOO-CP, AFI-CIS ▪ Strong political will/ regional commitment ▪ iPADIS 	<ul style="list-style-type: none"> ▪ Impact of COVID-19 and other pandemic (EBOLA) ▪ Inadequacy/delay in payment of State contributions ▪ Duplication of membership ▪ States exercise all safety functions
URSAC / ACSAC	<ul style="list-style-type: none"> ▪ Heads of State commitment ▪ International agreement ▪ Anchored to a REC ▪ Sustainable financing agreed 	<ul style="list-style-type: none"> ▪ Lack of information on oversight /certification activities of States ▪ Small number of States (8) 	<ul style="list-style-type: none"> ▪ Collaboration with AAMAC in ANS ▪ Participation in RSOO-CP, AFI-CIS ▪ Long term regional aviation growth ▪ SAATM / AfCFTA Supportive partner States & Organizations ▪ iPADIS 	<ul style="list-style-type: none"> ▪ Prolonged hosting disagreement ▪ Long COSCAP transition ▪ Overlapping membership without distinction of services ▪ States exercise all safety functions ▪ Impact of COVID-19 and other pandemic (EBOLA)
iSASO (SADC)	<ul style="list-style-type: none"> ▪ Heads of State commitment ▪ International agreement ▪ Anchored to a REC ▪ Large number of States () 	<ul style="list-style-type: none"> ▪ Weak commitment of States ▪ Inadequate technical personnel ▪ Potential conflict of interest in inclusion of AIG functions 	<ul style="list-style-type: none"> ▪ Participation in RSOO-CP, AFI-CIS ▪ Long term regional aviation growth ▪ SAATM / AfCFTA ▪ Supportive partner States & Organizations ▪ iPADIS 	<ul style="list-style-type: none"> ▪ Slow adhesion of States ▪ Impact of COVID-19 and other pandemic (EBOLA) ▪ Overlapping membership without distinction of services ▪ States exercise all safety functions

12. CONCLUSIONS

- 12.1. The process of establishing Regional Safety Oversight Organizations in the AFI region, which started with sub-regional COSCAPs in 2003, has progressed over the years. Supported by ICAO and other international partners, most of these COSCAPs (except two) have successfully transitioned to full-fledged safety organizations giving rise to a total of six RSOOs and one RAIO in the region.
- 12.2. All of these organizations however, face challenges of insufficient funding, inadequate technical personnel, lack of commitment and delegation of functions from States, underutilization, and duplication of efforts and resources. This has affected their sustainability, effectiveness and efficiency.
- 12.3. Most of the AFI RSOOs are being financed directly through State contributions and the funds for this purpose are usually insufficient and not readily available. Adoption of one or a combination of sustainable means of funding such as an air safety charge, airport and air navigation fees etc. needs to be considered for implementation on regional or individual State basis, subject to a proper evaluation and assessment.
- 12.4. Improving safety oversight of member States being the key objective of an RSOO, the levels of safety oversight effective implementation (EI) of their member States is a good indication of the effectiveness of safety organizations. Although the AFI region has seen some good improvement in the average safety oversight effective implementation levels, these improvements still fall short in many areas and aspects compared to global averages. For greater progress, more effectiveness and impact, development of strategic plans and inclusion of GASP and AFI safety regional targets in strategic objectives of AFI RSOOs with clear goals, KPIs and annual targets should be encouraged.
- 12.5. Because of inadequate funding, AFI RSOOs have difficulty in recruiting, training and retaining qualified technical personnel in the required numbers. As a way forward, RSOOs and individual States should conduct Staff needs assessments; determine the minimum full time technical staff requirements (depending on the level of delegation and services provided); and encourage sharing of human resources from States in / outside the RSOO, with support from a strengthened AFI CIS.
- 12.6. Strong State commitment and willingness to delegate functions to the RSOOs are paramount. However currently, all AFI RSOOs / RAIO are providing the Level 1 advisory services, and in addition, some are also performing Level 2 operational assistance functions. None is empowered or mandated for the Level 3 functions of actual deliverance of certificates and licenses on behalf of States. All AFI RSOO are to be encouraged and assisted to provide advisory services and operational assistance functions, at the minimum.
- 12.7. The six AFI RSOOs and one RAIO, together, cover 43 States with sizes ranging from six to 17 States per RSOO. Twenty-six of these States belong to just one organization, whilst 17 have dual membership. States should have flexibility to choose and combine functions and services from different RSOOs according to their needs and capacity of the RSOOs. When a State decides to join an RSOO, there should be clear non-conflicting delegation of functions. However, unless outweighed by other advantages, the multiple membership of RSOOs should be discouraged and minimized. The need for critical mass of aviation activity and economies of scale would tend to support the idea of larger and fewer entities in the region for sustainability.

13. RECOMMENDATIONS

<p>1. ESTABLISHMENT</p>	<p>A. All RSOO legal instruments be reviewed to ascertain their adequacy as appropriate regional frameworks and that States implement accompanying national legal measures for commitment to their applicability.</p> <p>B. MOUs be concluded between RSOOs and individual member States tailored to their needs, that will clarify in detail, the precise nature of services, expectations, and quality control aspects involved.</p>
<p>2. MEMBERSHIP/SIZE/ CONFIGURATION</p>	<p>A. Encourage non-duplication of RSOO membership, where feasible, and ensure distinction of services where duplication is unavoidable or of some other advantage</p> <p>B. Conduct an in depth assessment and stakeholder consultations on the proposed options for streamlining the size and number of AFI RSOOs and RAIOS.</p>
<p>3. AUTONOMY / INDEPENDENCE</p>	<p>A. Review and appropriately revise RSOO legal agreements to ascertain adequate autonomy, independence and strong State commitment.</p> <p>B. RECs that have established RSOOs as specialized institutions be encouraged to grant such organizations greater technical, financial and administrative independence for efficiency and effectiveness</p>
<p>4. STAFFING & EFFICIENCY</p>	<p>A. Encourage and assist all RSOOs and individual States to conduct technical safety staff needs assessments and maintain an optimum staffing level.</p> <p>B. Encourage and assist States with strong safety oversight capabilities and spare resources to seek GASOS assessment and recognition for certain functions and so as to be called upon by other States and RSOOs/RAIOS for assistance in relevant areas.</p> <p>C. Encourage the sharing of technical personnel between RSOOs and between RSOOs and non-member States.</p> <p>D. AFI CIS be enhanced and strengthened for its effective operation as a region wide CIS.</p>
<p>5. SUSTAINABLE FUNDING</p>	<p>A. Encourage and assist partner States to develop and implement a sustainable RSOO funding mechanism based on assessment of the proposed options for application on individual RSOO or regional basis.</p> <p>B. Aviation charges and fees be reviewed on a region wide basis in line with ICAO policies and principles of non-discrimination, cost-relatedness, transparency and consultations with Users and Service Providers.</p> <p>C. Require all RSOOs to develop new Business Plans or review any existing ones.</p> <p>D. Establishment/utilization of a <i>Joint collection of charges scheme</i> for the sustainable funding of RSOOs.</p>

6. DELEGATION

- A. States and RSOOs review their national and regional legal framework to allow them to request the provision of functions or delegate functions.
- B. A region wide harmonization of regulations, procedures and documentation relating to safety oversight be conducted.
- C. RSOOs/RAIOs be encouraged to undergo a GASOS assessment for those functions that they perform on behalf of States, thereby increasing their visibility and credibility.
- D. All States conclude Agreements / MOUs for the delegation of Levels 1 & 2 functions to RSOOs they belong to, based on regional templates.

7. EFFECTIVENESS

- A. RSOOs be encouraged and assisted to develop Strategic Plans incorporating global and regional safety targets and benchmarks
- B. Urge RSOOs to have in place appropriate Contingency / Business Continuity Plans that are regularly updated for effectiveness, resilience and sustainability.
- C. Support of the RSOO CP and ICAO ROs to AFI RSOOs be continued and enhanced in all feasible areas.
- D. ICAO continues to improve guidance material and AFI RSOOs and RAIOs be encouraged to use available guidance to resolve deficiencies identified from assessments.

8. COLLABORATION / COOPERATION

- A. Encourage and assist AFI RSOOs and RAIOs to effectively participate in and benefit from ICAO initiatives such as the RSOO CP, RAIO CP, and GASOS.
- B. ICAO should work with RSOOs to identify specific assistance needs and coordinate with partners and stakeholders for possible collaboration on assistance needs.
- C. All AFI RSOOs conduct/complete the GASOS self-assessment to determine their overall baseline of activities and help identify gaps and necessary corrective actions and enable ICAO and partners to prioritize technical assistance.
- D. Encourage States to take a more active role by in RSOOs and actively support RSOOs in order to strengthen their own safety oversight effective implementation.
- E. Promote cooperation and coordination between RSOOs through bilateral contacts, exchange of experiences and mutual support through peer projects to be encouraged and supported by ICAO and partners.

- END -

14.

ANNEXES

ANNEX 1: TERMS OF REFERENCE

STUDY FOR THE DEVELOPMENT AND IMPLEMENTATION OF A STRATEGIC PLAN FOR SUPPORTING AND STRENGTHENING RSOOS IN THE AFI REGION

BENEFICIARIES: All AFI States and RSOOs (BAGASOO, BAGAIA, COSCAP UEMOA/ACSAC, ASSA- AC, AAMAC, CASSOA, ISASO, etc.)

A. BACKGROUND:

Various initiatives have either already given rise, or will give rise, to a number of RSOOs in the AFI Region. These initiatives, supported by ICAO through the AFI Plan, have occurred either under the auspices of RECs or resulted in the transitioning of COSCAPs into RSOOs.

In order that optimum benefit be derived from all these initiatives, it is important that they are carried out within a properly coordinated and integrated regional framework. This is even more the case considering that RSOOs coexist with other players in the Region, such as the national Civil Aviation Authorities, the AFI-CIS, etc. for limited financial and suitably qualified human resources and are incurring the risk of wastage through unnecessary overlap and duplication of functions.

In addition, RSOOs face major challenges related to insufficient manpower and financial resources and inadequate mandates that do not allow for the delegation of functions from States, related to exercising authority and being accepted and recognized as legitimate players.

The Ezulwini Ministerial Declaration on Regional Safety Oversight Organizations in Africa called for the conduct of a specific study for supporting and strengthening AFI RSOOs. This Study will take into account results of the global RSOO evaluation conducted by ICAO in 2017 as well as the Global System for the Provision of Safety Oversight that is being established.

B. GENERAL OBJECTIVE:

To identify the necessary actions for ensuring effective and sustainable implementation and operation of RSOOs in the AFI Region and to consolidate these actions into a Strategic Plan.

Concerning strengthening RSOOs, the study would consider the following criteria:

- Efficiency
- Effectiveness
- Sustainability
- Relevance

C. EXPECTED OUTCOMES :

The envisaged Strategic plan would encompass actions aimed at ensuring effective and sustainable implementation and operation of RSOOs as follows:

- i) For each RSOO, considered individually, assess and determine the way forward:
 - a. The financial sustainability
 - b. The Competence/capacity building requirements
 - c. Delegation of tasks/mandate by or on behalf of the member /partner States and participation in ICAO programmes and projects
 - d. Effectiveness of the RSOO with respect to the implementation of their respective work programmes and performance of tasks and functions in alignment with Global, Regional and national plans, objectives, priorities and programmes
 - e. Harmonization of safety oversight regulatory material and documents that support compliance with ICAO SARPs and effective implementation of oversight systems

At the Continental level, i.e. considering coordination between RSOOs or the involvement of several RSOOs in the same States, determine and/or facilitate:

- a. An optimum number and configuration of RSOOs in the AFI Region taking into consideration available financial and qualified manpower resources, sub-regional, regional economic communities and other alignments, size of membership and scope of functions provided and technical areas covered.
- b. The financial sustainability of AFI RSOOs.
- c. Effective sharing of scarce human resources through harmonized capacity building in a standardized training system.
- d. Coordinated implementation of work and training programmes and projects undertaken in the AFI Region, in the area of aviation safety and safety oversight by RSOOs, other regional organizations and programmes, international organizations and ICAO.
- e. feasibility of establishment of a joint/common funding mechanism

D. MAJOR DELIVERABLES:

1. The Study on the development of a Strategic Plan for AFI RSOOs will include:
 - a. A SWOT analysis of the AFI Region, to include a review of the status of safety oversight and effective implementation of the eight critical elements in the AFI States.
 - b. Review/survey of operationalization of existing RSOOs in the AFI Region.
 - c. Review of mechanisms/options for the sustainable funding of RSOOs, to include the possible establishment of common funding scheme, service user levies, passenger tariffs, etc.

- d. Overview of options for the appropriate staffing of RSOOs with technical staff and inspectors, including the development of schemes for the sharing of inspectors between RSOOs and other entities, such as the national authorities and the AFI-CIS, within the region and between the RSOOs themselves.
 - e. Analysis of current setup mechanisms aimed at streamlining the number and size of RSOOs in the AFI Region relative to the availability and distribution of resources, including a review of already existing RSOOs.
 - f. Review of issues related to the autonomy/independence of RSOOs within the AFI Region, the delegation of functions and duties to the RSOO by its member/partner States and, on behalf of member States, participation in ICAO programmes and projects.
2. A Strategic Plan for AFI RSOOs and a roadmap for its implementation.
 3. Model MOUs and service level agreement documents (as may be required) for the delegation of tasks and functions to an RSOO, accreditation of experts by its member /partner States.

E. TENTATIVE SCHEDULE OF EVENTS / IMPLEMENTATION STRATEGY (TWO EXPERTS INVOLVED: 1 PC AND 1 CONSULTANT):

- March 2017 (RSOO Conference) – Signing by AFI States Ministers, of a Ministerial Declaration agreeing to the development of a Strategic Plan for supporting and strengthening RSOOs in the region.
- 2020 - Conduct of the three (3) month-study and development of the Strategic Plan as per the following major activities
 - Consultation session with RSOO Cooperative Platform to be informed of the challenges of AFI RSOOs and the lessons learned and best practices of RSOOs in other regions
 - Development of a fact-finding and data collection questionnaires taking into account the results of the just completed global survey on RSOOs; to be completed by RSOOs, RSOOs Member States/Partners, RECs (5 w/d for PC + 3 w/d for consultant from home);
 - Completion of the questionnaires by RSOOs, RSOOs Member States/Partners and RECs;
 - Drafting of deliverables (as listed in para D.) based on an analysis the answers to the questionnaires (12 w/d for PC and 10 w/d by consultant from home)
 - Planning and organization of four workshops (2 in ESAF and 2 in WACAF) to review and finalize the deliverables
 - PC : 3 w/d from home + (5 w/d in ESAF (Nairobi and Kigali) + 5 w/d in WACAF (Dakar and Accra) + travel time ;
 - Consultant : (2 w/d in ESAF (Kigali) + 2 w/d in WACAF (Dakar) + travel time;
 - 1 ICAO WACAF RO Staff : DSA+ travel from Dakar to Accra for 2 w/d;
 - Same for 1 ICAO ESAF RO Staff : DSA + travel from Nairobi to Kigali for 2 w/d

- One month after the conduct of the study – Consideration and adoption of the Strategic Plan by AFI States (AFI Plan and AFCAC organs).(5 w/d by PC and 3 w/d by Consultant for wrap up from home)
- Three months after the study – Inception date for the implementation of the Strategic Plan for Supporting and Strengthening RSOOs in the AFI Region.

F. REFERENCES:

The following documentation will be provided to the team as reference material:

- Ezulwini Ministerial Declaration on RSOOs in Africa
- RSOO Global Strategy and Action Plan for the improvement of RSOOs and the Establishment of a Global System for the Provision of Safety Oversight
- Report on the ICAO evaluation of RSOOs, November 2017
- AFI Plan programme document and Terms of Reference and Steering Committee meeting reports

----- END -----

ANNEX 3: SURVEY QUESTINNAIRES

AFI REGIONAL SAFETY OVERSIGHT ORGANIZATION STUDY
SURVEY QUESTIONNAIRE FOR RSOOs
JULY 2021

1. ORGANIZATION:

Name:.....

Address:.....

Focal Point/Form completed by:

Name/Designation -; Tel:.....; Email:.....

List of Member States:

Grid of 18 numbered boxes for listing member states.

Type of Organization

- a) Is the organization a full-fledge RSOO, COSCAP or other?.....
b) If an RSOO, did it transition from a COSCAP?.....
c) What is the level of commitment of States to the RSOO? : High.....; Moderate.....; Low.....
d) How many of the organization’s member States belong to another RSOO?.....

2. OPERATIONAL STATUS

- a) Under what legal instrument or statute has the organization been established and from which it derives its mandate?
b) Has this legal instrument been fully ratified and assented to as may be required (by all member States) if not, what is the challenge?.....
c) Is there a ‘Host agreement’ in place and does this accord all necessary privileges and facilities for the effective and efficient functioning of the organization, in line with its mandate?.....
d) Are the obligations of the Host State being fulfilled?.....
e) Identify and list any challenges encountered in connection with establishing the RSOO.....
f) Does the organization have an annual technical work programme?.....
g) What percentage of the key activities in the annual work programme were implemented in:
2019 -; and 2020 -
h) Would the RSOO participate in any ICAO accreditation programme for recognition or validation of its standards and competence? If not, why?.....

Scale of Activities :

- a) Please indicate the number of certification documents issued and valid as at 1 July 2021, for the following listed safety oversight activities:

Oversight Activity/Doc.	Total N° issued by all States of the RSOO	N° issued with RSOO's involvement
Air operator certificates
Airworthiness Certificates
Aircraft Registration Certificates
Maintenance organization approvals
Training organization approvals
Personnel Licenses
Aerodrome Certificates

- b) How effective has the RSOO been in assisting States? Indicate the proportion of States that have met global and regional safety targets for: Effective Implementation of safety oversight (EIs):.....; aerodrome certification:.....; and reduction of fatal aircraft accidents.....
- c) Have member States harmonized or adopted common safety regulations?.....What are the challenges in this regard, if any?.....
- d) Has the RSOO implemented or participated in any Inspectorate Scheme?.....
- e) Is the RSOO: Underutilized.....; Optimally utilized.....; or Over utilized.....?

3. AUTONOMY & INDEPENDENCE

- i. Is the RSOO an independent and autonomous corporate entity?.....
- ii. Is the control from its oversight and governing bodies: Excessive.....; optimal.....; insufficient.....?
- iii. Is the involvement of the governing body focused on strategic orientation and policy guidelines?.....
- iv. Does the organization have its own independent financial and administrative units and processes?.....
- v. Is the organization able to exercise total independence in the management of its budget, programme of activities etc?.....
- vi. Does the organization go through independent external financial audits?.....

STAFFING

- i. Please provide the number of qualified full-time in house Inspectors currently in the organization:

AREA	N°	AREA	N°	AREA	N°
Airworthiness		Dangerous Goods		Air navigation Services	
Flight Operations		Personnel Licensing		Other (s)	
Ground Operations		Aerodrome & Ground Aids			

- ii. Is the above staff complement adequate for the RSOO to conduct the required safety oversight activities of member States? If not, please indicate any 'gaps' or shortfalls in the respective areas:

AREA	N°	AREA	N°	AREA	N°
Airworthiness		Dangerous Goods		Air navigation Services	
Flight Operations		Personnel Licensing		Other (s)	
Ground Operations		Aerodrome & Ground Aids			

- iii. Indicate any additional professional technical staff (inspectors) outsourced from or resident elsewhere and, if applicable, the arrangement under which such outsourcing is done.....

4. FUNDING

- a) What is/are the current source(s) of funding for the RSOO and in what proportions are they?.....
.....
- b) Is the funding readily available and adequate for the effective functioning of the organization?
- c) If the RSOO is funded through State contributions, how is the level of contribution determined?.....
.....
- d) Is there any difficulty in States meeting their financial obligations to the RSOO and if so how can this be overcome?.....
- e) Does the RSOO charge for services to member States and if so what proportion of its annual revenue does this represent and what are the charges based upon?.....
.....
- f) If the RSOO is presently under funded, what would be the most suitable and sustainable alternative financing option(s)?
- g) For the purposes of effectiveness and financial sustainability, is the size of the RSOO considered:
Too small.....; Optimal:.....; or Too large:.....

5. COOPERATION / COLLABORATION

Is the RSOO cooperating or collaborating with any of the following and if so which ones and in what form?

- Other RSOOs:.....
- Regional/International Safety Programmes:.....
 - Non-member States of the RSOO:.....
- Training Organizations.....
- International Organizations:.....

6. DELEGATION OF FUNCTIONS

- a) Is there a formal delegation of safety oversight functions to the RSOO by any member States? If so, what proportion of States have done so?.....
- b) If there is no delegation, on what basis are safety oversight activities carried out in States by the RSOO?.....
- c) What would be a suitable way of overcoming the reluctance of States to delegate functions to the RSOO?.....

7. PARTICIPATION IN PARTNER PROGRAMMES

List the key partners and organizations, and identify their programmes in which the RSOO is or would like to participate in:

8. CHALLENGES

- i. In order of significance, identify and list the three top challenges to the effectiveness and sustainability of the RSOO: 1).....; 2); 3).....
- ii. Indicate if the RSOO has a mid or long term strategy and roadmap for overcoming these challenges?.....
Give details.....

- END -

AFI REGIONAL SAFETY OVERSIGHT ORGANIZATION STUDY

SURVEY QUESTIONNAIRE FOR STATES

JULY 2021

1. STATE:.....

Name of entity responsible for civil aviation regulation:.....

Address:.....

Focal Point/Form completed by:

Name/Designation -; Tel:.....; Email:.....

RSOO MEMBERSHIP

a) Does the State belong to an RSOO, and if so which one(s)?.....

b) If the State belongs to more than one RSOO, is there a clear distinction in the services received from or assigned to the different RSOOs?.....

c) How effective has the RSOO been in assisting the State? :

Very Effective.....; Moderately effective..... Ineffective.....

d) Give examples of tangible results attained through such assistance in terms of:

▪ Improvement of Implementation of safety oversight (EIs).....;

▪ Aerodrome certification.....;

▪ Other areas.....etc.

e) To what extent does the State utilize RSOOs?: Underutilized.....; Optimally utilized.....; Over utilized.....

f) Does the State have any preference in terms of the size of the RSOO(s)?.....

g) For the purposes of effectiveness and financial sustainability, is the size of the RSOO considered:

Too small.....; optimal:.....; or Too large:.....

2. SAFETY OVERSIGHT ACTIVITIES

Scale of Activities: Please indicate the number of documents issued and valid as at 1 July 2021, for the following listed safety oversight activities:

<i>Oversight Activity/Doc.</i>	<i>Total N° issued by the State</i>	<i>N° issued with RSOO involvement</i>
Air operator certificates
Airworthiness Certificates
Aircraft Registration Certificates
Maintenance organization approvals
Training organization approvals
Personnel Licenses
Aerodrome Certificates

AUTONOMY & INDEPENDENCE

- i. Is the State entity responsible for regulation of civil aviation (CAA) autonomous?.....
- ii. What is/are the source (s) of funding for the CAA?.....
- iii. Does the CAA have adequate and sustainable funding for its effective functioning?.....

3. STAFFING

- i. Please provide the number of qualified full-time in house Inspectors currently in the State:

AREA	N°	AREA	N°	AREA	N°
Airworthiness		Dangerous Goods		Air Navigation Services	
Flight Operations		Personnel Licensing		Other(s)	
Ground operations		Aerodromes & Ground Aids			

- ii. Is the above staff complement adequate for the State to conduct the required effective safety oversight of its own aviation activities? If not, please indicate any 'gaps' or shortfalls in the respective areas:

AREA	N°	AREA	N°	AREA	N°
Airworthiness		Dangerous Goods		Air Navigation Services	
Flight Operations		Personnel Licensing		Other(s)	
Ground operations		Aerodromes & Ground Aids			

- iii. Indicate any additional professional technical staff (inspectors) outsourced from or resident elsewhere and, if applicable, the arrangement under which such outsourcing is done.....
- iv. Is the State in a position to provide qualified inspectors in the following areas to its RSOO(s) under an Inspectorate Scheme?

AREA	N°	AREA	N°	AREA	N°
Airworthiness		Dangerous Goods		Air Navigation Services	
Flight Operations		Personnel Licensing		Other(s)	
Ground operations		Aerodromes & Ground Aids			

4. FINANCIAL OBLIGATIONS TO RSOOs

- a) Has the State identified the source for funding of its participation in the RSOO(s)?.....If so, please indicate the source.....
- b) If the RSOO is funded through State contributions, how is the level of contribution determined?.....
- c) Is the State fulfilling its financial obligations to the RSOO (s) ?.....
- d) If the State is not meeting its financial obligations to the RSOO how can this be overcome?.....
- e) What would be the most suitable and sustainable alternative financing option(s) for the RSOO(s)?.....

5. COOPERATION / COLLABORATION

Would the State support:

- i. Cooperation and collaboration between:
 - RSOOs:.....
 - RSOOs and States outside the RSOO:.....
- ii. Integration and amalgamation of RSOOs in to larger entities?.....

6. DELEGATION OF FUNCTIONS

- a) Is there a formal delegation of safety oversight functions to an RSOO by the State?.....
- b) If there is no delegation:
 - What is/are the reason(s)?.....
 - What would be a suitable way of overcoming the difficulties in this regard?.....
- c) Does the State have any preferences in delegating certain functions rather than others? If so, please identify those that are preferred:.....
- d) Is the State satisfied with the competence and capability of the RSOO to effectively assume its safety oversight functions?..... Explain.....
- e) Would the State recommend its RSOO to participate in any ICAO assessment programme for recognition or validation of its standards and competence? If yes, would such recognition be a pre-condition for delegation of functions by the State?.....

7. CHALLENGES

- i. In order of significance, identify and list the three top challenges to effectiveness and sustainability of the RSOO (s):
1).....; 2).....; 3).....
- ii. What would the State recommend as a long term strategy and Roadmap for overcoming these challenges?.....

- END -

AFI REGIONAL SAFETY OVERSIGHT ORGANIZATION STUDY
SURVEY QUESTIONNAIRE FOR REGIONAL ECONOMIC COMMUNITIES (RECs)

JULY 2021

1. ORGANIZATION:

Name:.....

Address:.....

Focal Point/Form completed by:

Name/Designation -; Tel:.....; Email:.....

List of Member States:

1.....
2.....
3.....
4.....
5.....
6.....

7.....
8.....
9.....
10.....
11.....
12.....

13.....
14.....
15.....
16.....
17.....
18.....

h) Type of organization:.....

i) The organization's highest governing body is constituted by:

Heads of State:.....; State Ministers:.....; Other (specify):.....

2. ESTABLISHMENT OF REGIONAL SAFETY OVERSIGHT ORGANIZATION

a) Is there an RSOO operating within the organization's region?... If so, was it established by the organization?.....

b) If one doesn't exist would the organization prefer:

i. Working to create a new RSOO for its States:....., or ii. Encouraging States to join an existing RSOO?.....

c) If an RSOO already exists for its States would the organization support its integration/amalgamation with other RSOOs?..... If not, why?:.....

d) What is the level of commitment of States to the RSOO? : High.....; Moderate.....; Low.....

e) Under what legal instrument or statute has the RSOO been established and from which it derives its mandate?
.....

f) Has this legal instrument been fully ratified and assented to as may be required (by all member States); if not, what is the challenge?.....

g) Is the RSOO hosted by the organization or a member State?.....

h) Are all the conditions and terms for such hosting being fulfilled?.....

i) Identify and list any challenges encountered in connection with establishing the RSOO.....
.....

3. AUTONOMY & INDEPENDENCE

iv. Is the RSOO an independent and autonomous corporate entity?.....

v. Has the RSOO been accorded all necessary privileges and facilities for its effective and efficient functioning, in line with its mandate?.....

vi. Does the involvement of the organization and its governing body in matters concerning the RSOO go beyond broad strategic orientation and policy guidelines?.....

vii. Does the RSOO have its own independent financial and administrative units and processes?.....

viii. Is the RSOO able to independently manage its budget, programme of activities, etc?.....

ix. Does the organization approve / monitor effective implementation of the RSOO's work programme?.....

4. FUNDING

- f) Indicate the current source(s) of funding for the RSOO established by the organization and the proportions provided by the: 1) Organization.....%; 2) States.....%; 3) Other (specify).....%.
- g) If the sources do not include a community levy, would this be a feasible option for the organization?.....
- h) Is the funding readily available and adequate for the effective functioning of the RSOO?
- i) Is there any difficulty in the organization or States meeting their financial obligations to the RSOO and if so how can this be overcome?.....
- j) If the RSOO is underfunded, what would be the most suitable and sustainable alternative financing option(s)?
- k) For the purposes of effectiveness and financial sustainability, is the size of the RSOO considered:
1) Too small.....; 2) Optimal:.....; or 3) Too large:.....

5. DELEGATION OF FUNCTIONS

- f) Is there a formal delegation of safety oversight functions to the RSOO by member States? If so, what proportion of States have done so?.....
- g) If there is no delegation, on what basis are safety oversight activities carried out in States by the RSOO?.....
- h) Does the organization require States to delegate safety oversight functions to the RSOO and is it within the organization’s power and mandate to enforce such delegation?.....
- i) What would be a suitable mechanism and means to overcome the reluctance of States to delegate functions to the RSOO?.....
- j) Have member States harmonized or adopted common safety regulations?.....What are the challenges if any?.....

6. COOPERATION & PARTICIPATION IN PARTNER PROGRAMMES

- a) List the key partners that are supporting the organization in the field of aviation safety, and identify the specific needs in this respect:.....
- b) What additional support may be required from other potential partners/programmes? Identify the specific needs in this respect:.....

7. CHALLENGES

- i. In order of significance, identify and list the three top challenges to the effectiveness and sustainability of the RSOO(s) serving the organization’s States:
1).....; 2).....; 3).....
- ii. Indicate if the organization has a mid or long term strategy and roadmap for overcoming these challenges?.....Give details.....

- END -

AFI REGIONAL SAFETY OVERSIGHT ORGANIZATION STUDY
AIG SURVEY QUESTIONNAIRE FOR REGIONAL ACCIDENT INVESTIGATION ORGANIZATIONS (RAIOs)
JULY 2021

1. ORGANIZATION:

Name:.....

Address:.....

Focal Point/Form completed by:

Name/Designation -; Tel:.....; Email:.....

List of Member States:

1.....
2.....
3.....
4.....

5.....
6.....
7.....
8.....

Type of Organization

- j) Is the organization a full-fledge RAIO?.....
- k) What is the level of commitment of States to the RAIO? : High.....; Moderate.....; Low.....
- l) How many of the organization’s member States belong to another RAIO?.....
- m) How many of the organization’s member States have their own AIG bureau?.....

2. OPERATIONAL STATUS

- j) Under what legal instrument or statute has the organization been established and from which it derives its mandate?
.....
- k) Has this legal instrument been fully ratified and assented to as may be required (by all member States) if not, what is the challenge?.....
- l) Is there a ‘Host agreement’ in place and does this accord all necessary privileges and facilities for the effective and efficient functioning of the organization, in line with its mandate?.....
- m) Are the obligations of the Host State being fulfilled?.....
- n) Identify and list any challenges encountered in connection with establishing the RAIO.....
.....
- o) Is the organization adequately equipped for its AIG functions?.....
- p) Does the RAIO have AIG laboratory facilities or ready access to one?.....
- q) Would the RAIO participate in any ICAO accreditation programme for recognition or validation of its standards and competence? If not, why?.....

Scale of Activities :

- a) How effective has the RAIO been in assisting States? Indicate the proportion of States that have met global and regional safety targets in AIG:.....; and reduction of fatal aircraft accidents.....
- b) Have member States harmonized or adopted common AIG regulations?..... What are the challenges in this regard, if any?.....
- c) Is the RAIO: Underutilized.....; Optimally utilized.....; or Over utilized.....?
- d) How many aircraft accidents have occurred in member States in the past 5 years?..... How many were investigated with the involvement of the RAIO?.....
- e) Indicate any AIG activities conducted by the RAIO outside its member States:.....

3. AUTONOMY & INDEPENDENCE

- i. Is the RAIO an independent and autonomous corporate entity?.....
- ii. Is the control from its oversight and governing bodies: Excessive.....; optimal.....; insufficient.....?
- iii. Is the involvement of the governing body focused on strategic orientation and policy guidelines?.....
- iv. Does the organization have its own independent financial and administrative units and processes?.....
- v. Is the organization able to exercise total independence in the management of its budget, programme of activities etc?.....
- vi. Does the organization go through independent external financial audits?.....

4. STAFFING

- i. Please provide the number of qualified full-time in house Investigators currently in the organization:.....
- ii. Is the staff complement adequate for the RAIO to conduct the required activities for member States?..... If not, please indicate the 'gaps' or shortfalls:.....
- iii. Indicate any additional staff (investigators) outsourced from or resident elsewhere and, if applicable, the arrangement under which such outsourcing is done.....

5. FUNDING

- a) What is/are the current source(s) of funding for the RAIO and in what proportions are they?.....
- b) Is the funding readily available and adequate for the effective functioning of the organization?
- c) If the RAIO is funded through State contributions, how is the level of contribution determined?.....
- d) Is there any difficulty in States meeting their financial obligations to the RAIO and if so how can this be overcome?.....
- e) Does the RAIO charge for services to member States and if so what proportion of its annual revenue does this represent and what are the charges based upon?.....
- f) If the RAIO is presently under funded, what would be the most suitable and sustainable alternative financing option(s)?
- g) For the purposes of effectiveness and financial sustainability, is the size of the RAIO considered:
Too small.....; Optimal:.....; or too large:.....

6. COOPERATION / COLLABORATION

Is the organization cooperating or collaborating with any of the following and if so in what form?

- Other RAIOs:.....
- Regional/International Safety Programmes:.....
- Non-member States of the RAIO:.....
- Training Organizations.....
- International Organizations:.....

7. DELEGATION OF FUNCTIONS

- a) Is there a formal delegation of AIG functions to the RAIO by any member States? If so, what proportion of States have done so?.....
- b) If there is no delegation, on what basis are AIG activities carried out in States by the RAIO?.....
- c) What would be a suitable way of overcoming the reluctance of States to delegate functions to the RAIO?.....

8. PARTICIPATION IN PARTNER PROGRAMMES

List the key partners and organizations, and identify their programmes in which the RAIO is or would like to participate in:

.....

.....

9. CHALLENGES

- iii. In order of significance, identify and list the three top challenges to the effectiveness and sustainability of the RAIO:
1).....; 2); 3).....
- iv. Indicate if the RAIO has a mid or long term strategy and roadmap for overcoming these challenges?..... Give details.....

- END -

AFI REGIONAL SAFETY OVERSIGHT ORGANIZATION STUDY
AIG SURVEY QUESTIONNAIRE FOR STATES
JULY 2021

1. STATE:.....

Name of entity responsible for AIG:.....

Address:.....

Focal Point/Form completed by:

Name/Designation -; Tel:.....; Email:.....

2. RAI0 MEMBERSHIP

- a) Does the State belong to a Regional Accident Investigation Organization, and if so which one?.....
- b) To what extent does the State utilize the RAIO?: Underutilized.....; Optimally utilized.....; Over utilized.....
- c) If the State does not belong to an RAIO, would it consider joining an existing one?..... or creation of a new RAIO with other similar States?.....
- d) Does the State have any preference in terms of the size of the RAIO(s)?.....
- e) For the purposes of effectiveness and financial sustainability and if applicable, is the size of the RAIO the State belongs to considered: Too small.....; optimal:.....; or Too large:.....
- f) Does the State support expansion of existing RAIOs to include other AFI States?.....

3. AUTONOMY & INDEPENDENCE OF AIG

- i. Is the State entity responsible for AIG independent of civil aviation regulation (CAA)?.....
- ii. What is/are the source (s) of funding for AIG?.....
- iii. Does the entity responsible for AIG have adequate and sustainable funding for effective functioning?.....
- iv. Please provide the number of qualified AIG Investigators currently in the State:.....
- v. Is the above staff complement adequate for the State to conduct the required effective safety oversight of its own aviation activities? If not, please indicate the 'gap' or shortfall:.....
- vi. Indicate any additional professional technical staff (inspectors) outsourced from or resident elsewhere and, if applicable, the arrangement under which such outsourcing is done.....
.....
- vii. Is the State in a position to provide qualified Investigators to its RAIO or other States?.....

4. FINANCIAL OBLIGATIONS TO RAI0s

- a) Has the State identified the source for funding of its participation in the RAIO?.....If so, please indicate the source.....
- b) If the RAIO is funded through State contributions, how is the level of contribution determined?.....
.....
- c) Is the State fulfilling its financial obligations to the RAIO?.....
- d) If the State is not meeting its financial obligations to the RAIO how can this be overcome?.....
.....
- e) What would be the most suitable and sustainable alternative financing option(s) for the RAIO(s)?.....
.....

5. COOPERATION / COLLABORATION

Would the State support:

- i. Cooperation and collaboration between:
 - RAIOs:.....
 - RAIOs and States outside the RAIO:.....
- ii. Building on existing RAIOs to create a single large AIG entity for the AFI region?.....

6. DELEGATION OF FUNCTIONS

- a) Is there a formal delegation of AIG functions to an RAIO by the State?.....
- b) If there is no delegation:
 - What is/are the reason(s)?.....
 -
 - What would be a suitable way of overcoming the difficulties in this regard?.....
 -
- c) How many aircraft accidents occurred in the State in the past 5 years?..... How many were investigated with the involvement of the RAIO?.....
- d) Is the State satisfied with the competence and capability of the RAIO to effectively assume its AIG functions?..... Explain.....
- e) Would the State recommend RAIOs to participate in any ICAO assessment programme for recognition or validation of their standards and competence? If yes, would such recognition be a pre-condition for delegation of functions by the State?.....

7. CHALLENGES

- v. In order of significance, identify and list the three top challenges to the effectiveness and sustainability of independent accident investigation and the RAIO (s):
 - 1).....; 2).....; 3).....
- vi. What would the State recommend as a long term strategy and Roadmap for overcoming these challenges?.....
-
-

- END -

ANNEX 4: AFI RSOO STUDY - SURVEY QUESTIONNAIRE RESPONSE CHECKLIST, JULY – AUGUST 2021

	STATE	QUESTIONNAIRE	
		RSOO	RAIO
1	Algeria		
2	Angola	✓	✓
3	Benin	✓	✓ *
4	Botswana	✓	✓
5	Burkina Faso	✓	
6	Burundi	✓	✓
7	Cameroon	✓	✓ *
8	Cabo Verde	✓	
9	Central African Republic	✓	✓ *
10	Chad		
11	Comoros		
12	Congo, Democratic Republic of	✓	✓ *
13	Congo, Republic of	✓	✓ *
14	Cote D'Ivoire	✓	✓ *
15	Djibouti		
16	Egypt		
17	Equatorial Guinea	✓	✓ *
18	Eritrea		
19	eSwatini (Swaziland)	✓	
20	Ethiopia	✓	✓
21	Gabon	✓	✓ *
22	Gambia	✓	
23	Ghana	✓	✓ *
24	Guinea	✓	
25	Guinea-Bissau		
26	Kenya	✓	✓
27	Lesotho	✓	✓
28	Liberia	✓	
29	Libya		
30	Madagascar	✓	✓
31	Malawi		
32	Mali	✓	✓ *
33	Mauritania	✓	✓ *
34	Mauritius	✓	✓
35	Morocco		
36	Mozambique	✓	✓
37	Namibia	✓	✓
38	Niger	✓	
39	Nigeria	✓	✓ *
40	Rwanda	✓	✓
41	Sao Tome et Principe	✓	✓ *
42	Senegal	✓	✓ *
43	Seychelles	✓	✓ *
44	Sierra Leone	✓	✓ *
45	Somalia	✓	✓
46	South Africa	✓	
47	South Sudan		
48	Sudan		
49	Tanzania	✓	✓
50	Togo	✓	✓ *
51	Tunisia		
52	Uganda	✓	✓
53	Zambia	✓	✓
54	Zimbabwe	✓	✓
RESPONSE RATE (%):		75.9%	61.1%

	RSOO/RAIO	RSOO / RAIO QUESTIONNAIRE
1	AAMAC	✓
2	ASSA-AC	✓
3	BAGASOO	✓
4	BAGAIA	✓
5	CASSOA	✓
6	iSASO	✓
7	URSAC	✓
RESPONSE RATE (%):		100%

	REC	RSOO QUESTIONNAIRE
1	Arab Maghreb Union (AMU)	
2	Common Market for Eastern & Southern Africa (COMESA)	
3	East African Community (EAC)	✓
4	Economic Community of Central African States (ECCAS)	
5	Economic Community of West African States (ECOWAS)	
6	Economic & Monetary Community of Central Africa (CEMAC)	
7	Southern African Development Community (SADC)	✓
8	West African Economic & Monetary Union (UEMOA/WAEMU)	✓
RESPONSE RATE (%):		37.5%

*Responses to ECOWAS-ECCAS AIG Survey of Nov 2020 – July 2021

ANNEX 5: RSOO AND RAI0 MEMBERSHIP OF AFI STATES

	AAMAC	ASSA-AC	MENA	BAGASOO	BAGAIA	CASSOA	URSAC/ ACSAC	iSASO (SADC)	7-Partner States
1	Benin	Cameroon	Egypt	Cabo Verde	Cabo Verde	Burundi	Benin	**Angola	Eritrea
2	Burkina Faso	Central African Rep.	Libya	Gambia	Gambia	Kenya	Burkina Faso	**Botswana	Ethiopia
3	Cameroon	Chad	Morocco	Ghana	Ghana	Rwanda	Cote D'Ivoire	Comoros	Somalia
4	Central African Rep.	Congo, Republic of	Mauritania	Guinea	Guinea	South Sudan	Guinea-Bissau	DRC	Sudan
5	Chad	Equatorial Guinea	Somalia	Liberia	Liberia	Tanzania	Mali	**eSwatini	Djibouti
6	Comoros	Gabon	Sudan	Nigeria	Nigeria	Uganda	Niger	**Lesotho	Egypt
7	Congo, Republic of			Sierra Leone	Sierra Leone		Senegal	Madagascar	Libya
8	Cote D'Ivoire						Togo	**Malawi	
9	Equatorial Guinea							Mauritius	
10	Gabon							**Mozambique	
11	Guinea-Bissau							**Namibia	
12	Madagascar							Seychelles	
13	Mali							South Africa	
14	Mauritania							Tanzania	
15	Niger							**Zambia	
16	Senegal							**Zimbabwe	
17	Togo								

KEY / COLOUR CODE: OVERLAPPING RSOO MEMBERSHIPS:

AAMAC – ACSAC/URSAC

AAMAC – MENA

AAMAC - ASSA AC – CASSOA - iSASO

AAMAC – ASSA-AC

MENA – 7 Partner States

** Signatories to SASO Charter

ANNEX 6: EFFECTIVE IMPLEMENTATION OF SAFETY OVERSIGHT IN AFI REGION

Fig 1.1 Overall EIs by State (57.81% Regional Average)

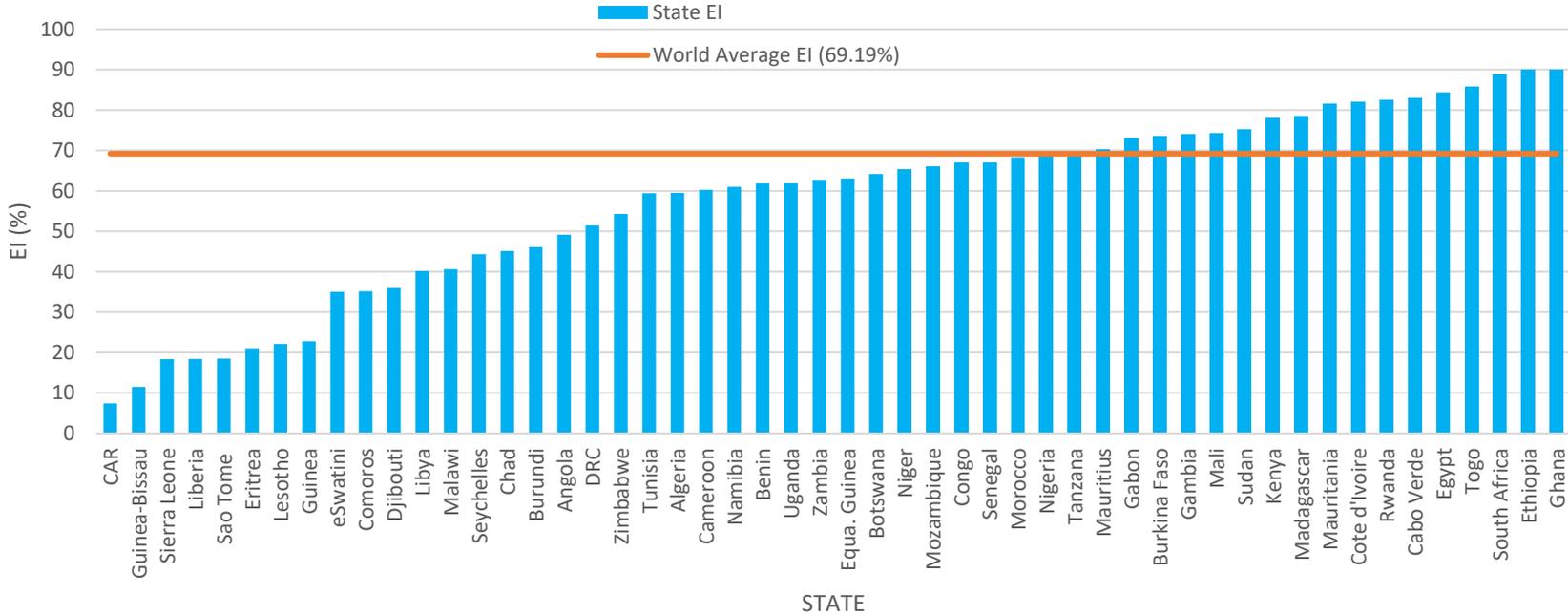


Fig. 1.2 AFI Region average EI vs World by Audit Area

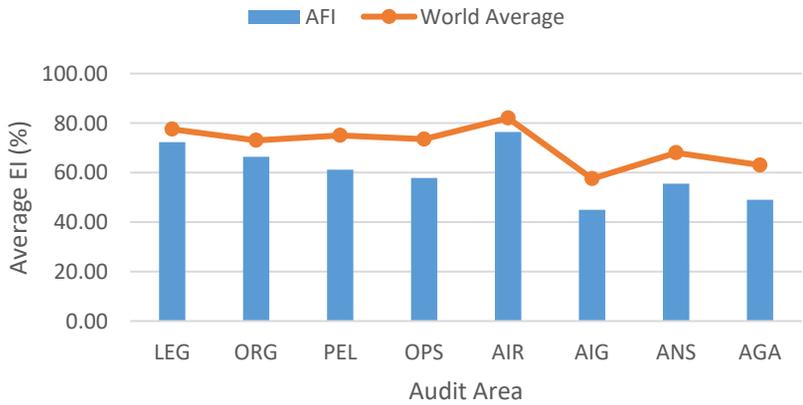
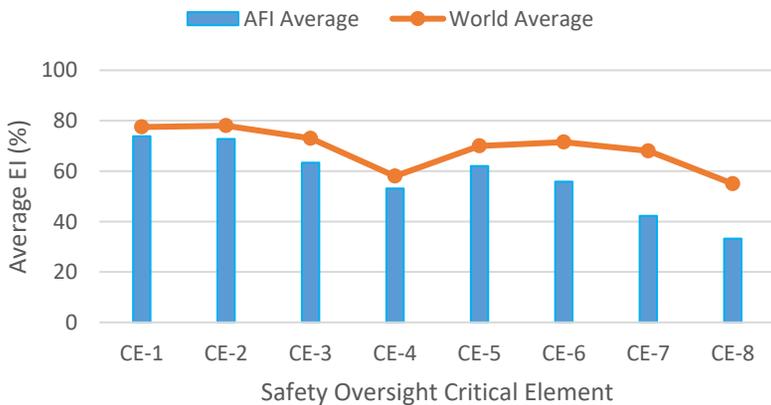


Fig. 1.3 AFI Region average EI vs World by Critical Element



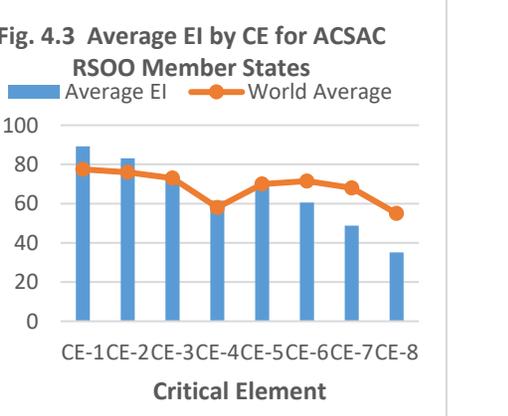
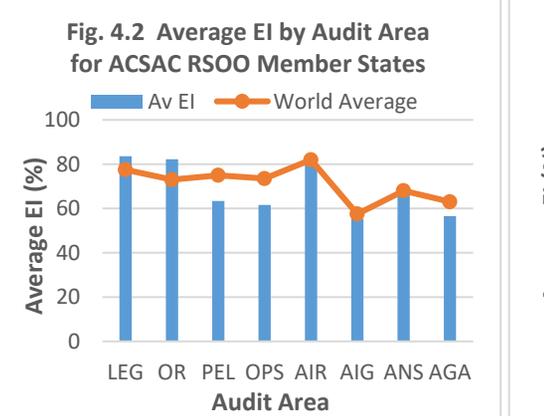
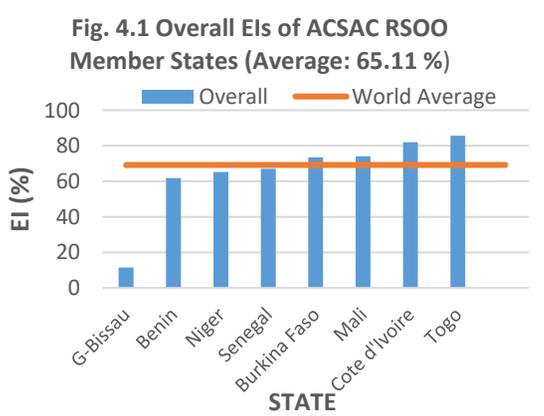
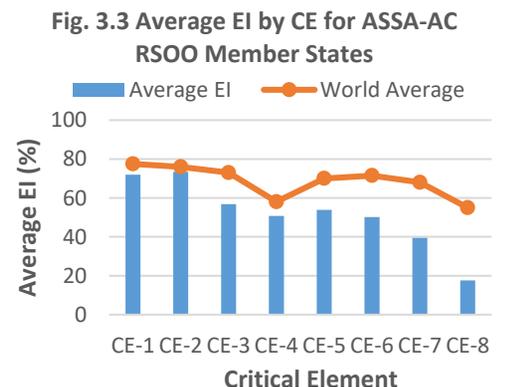
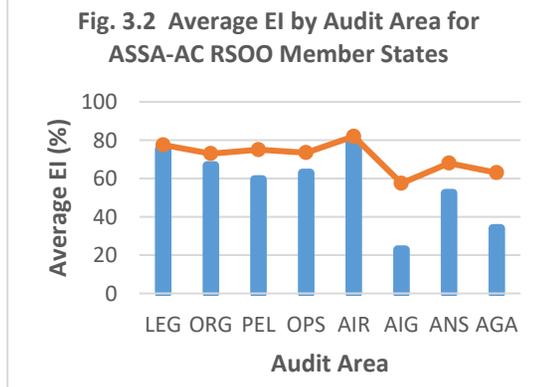
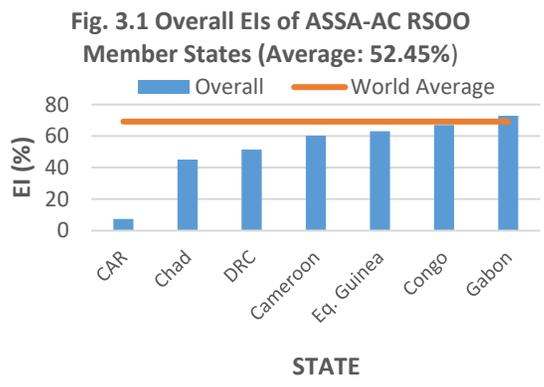
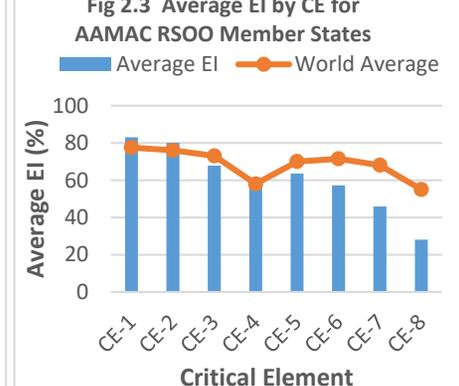
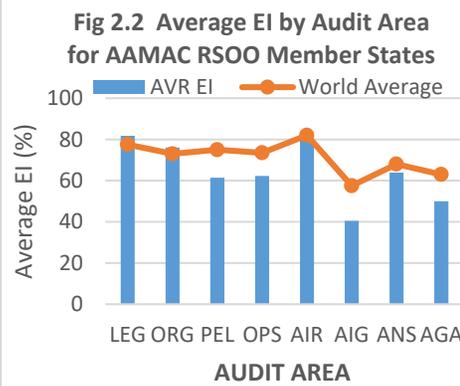
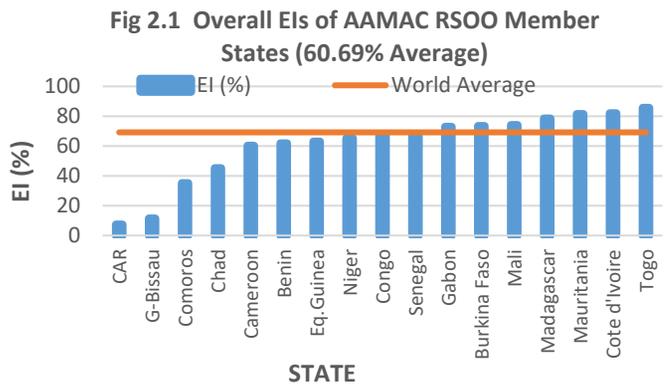


Fig. 5.1 Overall EIs of BAGASOO Member States (Average: 53.52 %)

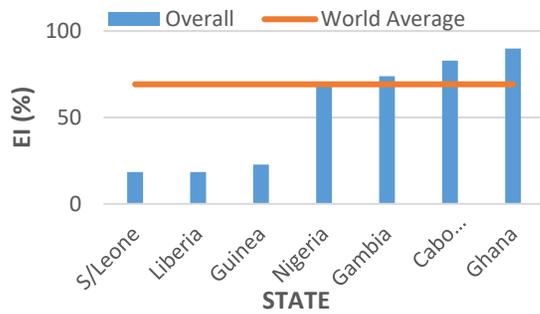


Fig. 5.2 Average EI by Audit Area for BAGASOO States

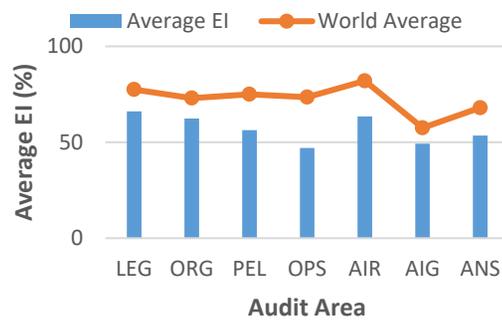


Fig 5.3 Average EI by CE for BAGASOO States

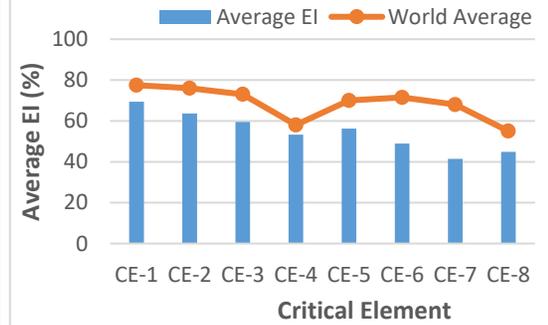


Fig. 6.1 Overall EIs of CASSOA States (Average: 67.48 %)

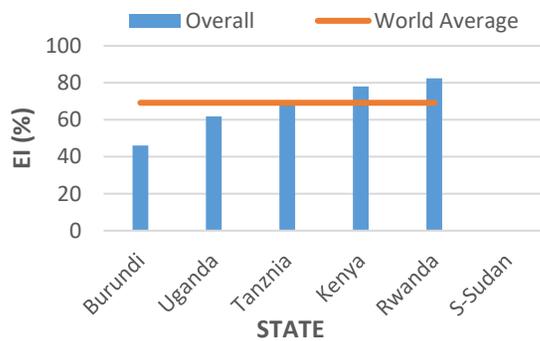


Fig. 6.2 Average EI by Audit Area for CASSOA States

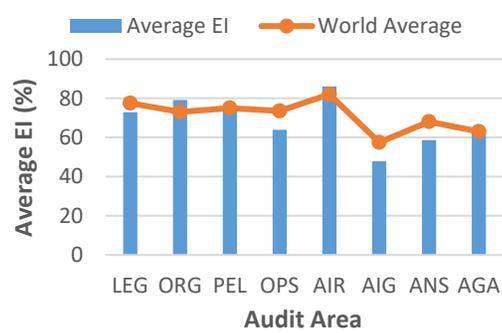


Fig. 6.3 Average EI by CE for CASSOA States

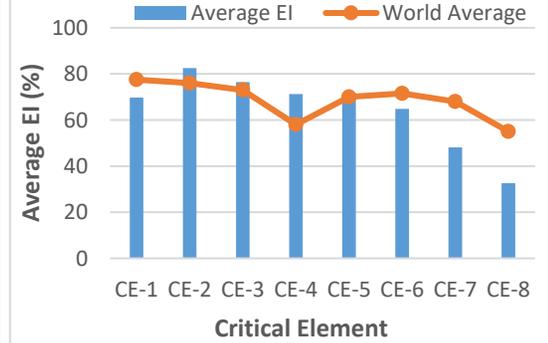


Fig. 7.1 Overall EIs of iSASO States (Average: 57.15%)

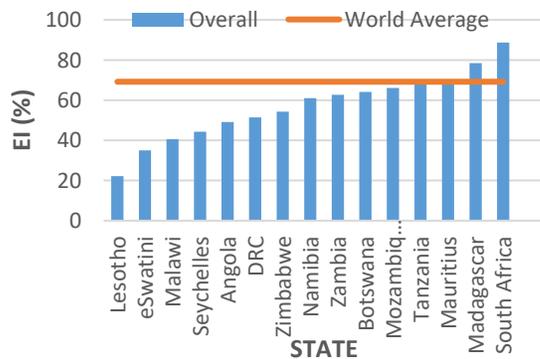


Fig. 7.2 Average EI by Audit Area for iSASO States

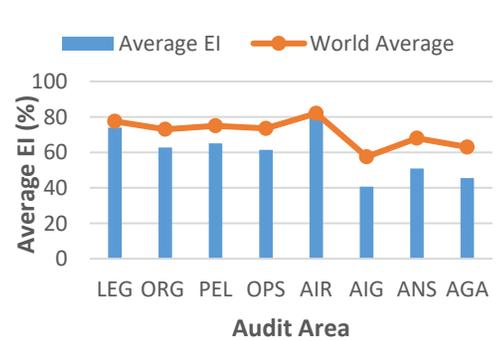
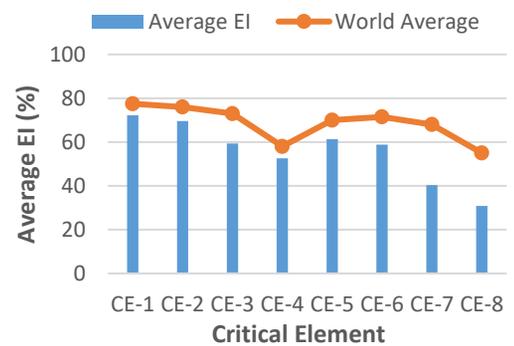


Fig. 7.3 Average EI by CE for iSASO States



**Fig. 8.1 Overall EIs, North African States
(Average: 62.35%)**

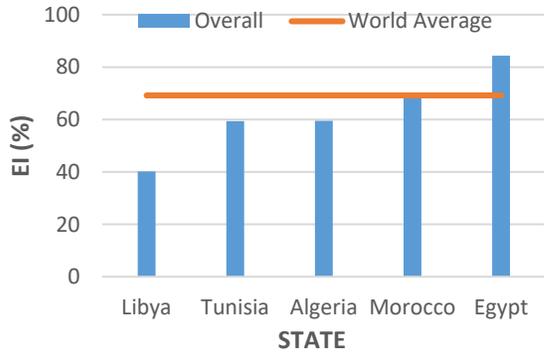


Fig. 8.2 Average EI by Audit Area for North African States

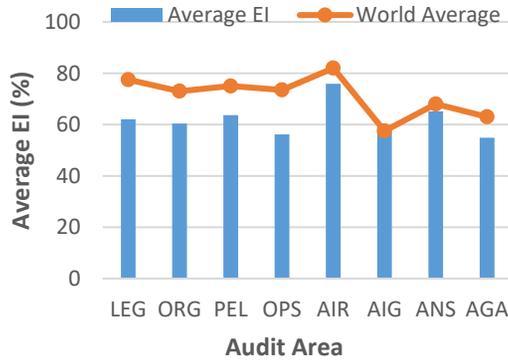
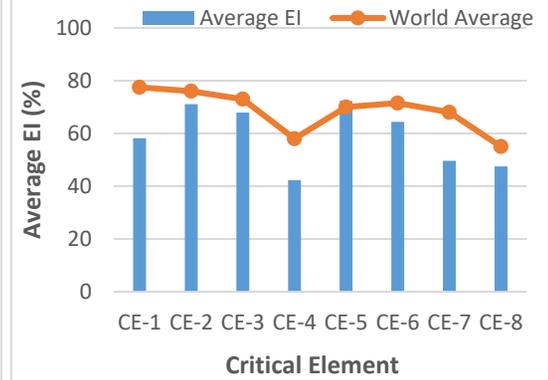


Fig. 8.3 Average EI by CE for North African States



**Fig. 9.1 Overall EIs, '7-Partner States'
(Average EI - 57.77%)**

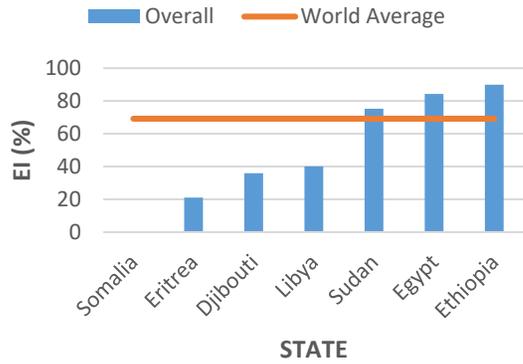


Fig 9.2 Average EI by Audit Area for '7-Partner States'

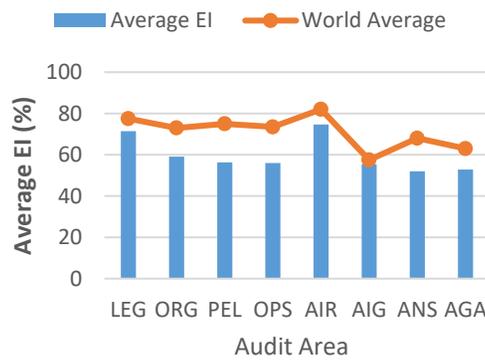
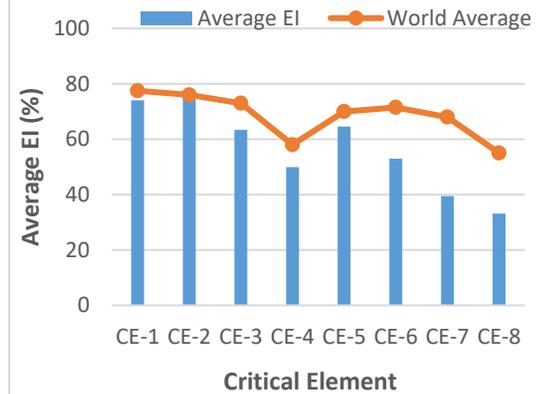


Fig. 9.3 Average EI by CE for '7-Partner States'



ANNEX 7: Signatories of AFI-Co-operative Inspectorate Scheme (AFI-CIS) MOUs

No.	State	Region	Signature Date
1	Algeria	Northern	
2	Angola	Southern	
3	Benin	Western	27/01/17
4	Botswana	Southern	11/04/11
5	Burkina Faso	Western	13/10/11
6	Burundi	Central	13/02/15
7	Cameroon	Central	30/06/11
8	Cape Verde	Western	
9	Central African Republic	Central	13/07/11
10	Chad	Central	07/04/11
11	Comoros	Eastern	22/03/11
12	Congo	Central	13/07/11
13	Cote d'Ivoire	Western	08/06/12
14	D.R. of the Congo	Central	15/06/11
15	Djibouti	Eastern	29/09/11
16	Egypt	Northern	
17	Equatorial Guinea	Central	12/4/14
18	Eritrea	Eastern	
19	eSwatini	Southern	08/08/11
20	Ethiopia	Eastern	14/03/11
21	Gabon	Central	11/04/11
22	Gambia	Western	15/12/10
23	Ghana	Western	10/10/11
24	Guinea	Western	21/06/12
25	Guinea-Bissau	Western	28/08/12
26	Kenya	Eastern	08/03/11
27	Lesotho	Southern	22/06/11
28	Liberia	Western	
29	Libya	Northern	
30	Madagascar	Eastern	05/05/11
31	Malawi	Southern	05/04/12
32	Mali	Western	24/01/11
33	Mauritania	Northern	21/03/11
34	Mauritius	Eastern	
35	Morocco	Northern	
36	Mozambique	Southern	
37	Namibia	Southern	
38	Niger	Western	11/02/11
39	Nigeria	Western	21/02/11
40	Rwanda	Eastern	22/06/11
41	Sao Tome and Principe	Central	23/05/14
42	Senegal	Western	10/05/11
43	Seychelles	Eastern	
44	Sierra Leone	Western	16/05/11
45	Somalia	Eastern	18/12/10
46	South Africa	Southern	
47	South Sudan	Eastern	

No.	State	Region	Signature Date
48	Sudan	Eastern	
49	Tanzania	Eastern	10/12/14
50	Togo	Western	03/07/15
51	Tunisia	Northern	
52	Uganda	Eastern	14/01/11
53	Zambia	Southern	15/06/11
54	Zimbabwe	Southern	07/04/11

	RSOO	Signature Date
1	BAGASOO	19/09/2012
2	CASSOA	
3	ASSA-AC	22/02/2019
4	SASO	
5	URSAC	
6	AAMAC	

ANNEX 8: SUMMARY OF AFI RSOO STUDY SURVEY RESPONSES

RSOOS/STATES / RECS	LEGAL STATUS	MEMBERSHIP	OPERATION / EFFECTIVENESS	AUTONOMY	STAFFING	FUNDING	DELEGATION
AAMAC	AAMAC Treaty of 20 Jan 2012; ratified by 10 States; very slow process in some States; Mandate for all safety oversight areas; Host agreement in sept 2015 - offices in 2017; 2014 MOU with ACSAC & ASSA-AC limits activity to ANS; Ministers as highest governing body.	17 ASECNA States; 15 overlaps (8 with ACSAC; 6 with ASSAC; one with iSASO); only 2 not belonging to any other. Proposed to enlarge RSOO for financial viability.	Moderate commitment of States; 70% of 2019 work programme achieved and 40% of 2020 due COOVID-19; open to being subjected to ICAO validation; not involved in any certification activities in States; common regulations but low involvement of States in process; underutilized; participating in AFI- CIS.	Autonomous but insufficient governing body oversight; independent financial and budgetary management. Cooperation with: BAGASOO, ACSAC,ASSA-AC, AFI- CIS, EASA etc.	Inadequate staff to conduct activities in States (3 ANS inspectors, 4 more needed); about 20 inspectors designated in States and managed by AAMAC.	67% from State contributions and 37% from service charges; split equally amongst States; not sufficient nor readily available; solution through ASECNA intervention. % of ANS charges a proposed option.	No delegation; MOU and roadmap with all member States; advisory capacity and assistance in development of docs & preparation for audits and CAPs)
ASSA-AC	Mandate derived from 2009 revised CEMAC Treaty by additional Act of Heads of State 2012; a specialized institution of UEMAC; Host agreement in sept 2015; MOU 2014 with ACSAC & AAMAC; Heads of State as highest governing body.	6 CEMAC States; excludes 4 ECCAS states; transitioned from COSCAP-CEMAC; all states belong to AAMAC; RSOO too small for sustainability; initiative to extend to all ECCAS States.	Weak commitment of States; open to ICAO validation upon development of docs. and recruitment of personnel; 40% of 2019 & 2020 work programs implemented; not involved in any certification in States; harmonization of regulations by 2022; underutilized;	Legal and managerial autonomy; Cooperation with: AAMAC, BAGASOO, EASA, ENAC, ICAO, IATA, AFCAC and other individual States (DRC, Sao Tome, Angola, Burundi etc.	Has only about half the required technical personnel; falls back on inspectors of States; services and regulations in AGA, AIR, OPS et PEL.	100% funding from CEMAC; contribution from States insufficient and not readily available; draft proposal for % of Passenger Service Charge as alternative	No delegation; Services rendered upon formal request by Sates; advisory capacity and assistance (development of docs for CES1-5; preparations for audits; CAPs and certification of aerodromes)
BAGASOO	BAG International legal instrument; BAGASOO agreement as annex; Host agreement in place; not tied to any REC; Ministers as highest governing body..	7 States with no overlapping membership; Same as BAGAI A; Moderate commitment of States	Moderate commitment of States; inadequate technical experts; 60-75% of 2019 work programme achieved and 40-60% of 2020 due COOVID-19; safety regulations partially harmonized; assistance effective in AGA certification	Legal/managerial autonomy; Independent external financial audits; Cooperation with: URSAC, AAMAC, ICAO, EU AFCAC, FAA, AfDB; and sharing training app with other States	Inadequate staff – 3 available in only 3 audit areas; short of OPS/PEL experts and the Technical Support and training Director. AFICIS utilized for French speaking inspectors in PEL, ANS, AGA on need basis.	Funded 100% by States; 60% divided equally and 40% based on intl. pax; insufficient and not readily available; States not contributing. Only Nigeria without arrears; % of Passenger Service Charge proposal.	Level 1 delegation on advisory capacity for all 7 States; assistance services rendered upon request by Sates (develop docs; prepare for audits; certification).

RSOOS/STATES / RECs	LEGAL STATUS	MEMBERSHIP	OPERATION / EFFECTIVENESS	AUTONOMY	STAFFING	FUNDING	DELEGATION
BAGAIA	BAG International legal instrument; BAGAIA agreement of 2009; Host agreement in place; not tied to any REC; Ministers as highest governing body..	7 States with no overlapping membership; Same as BAGASOO; low commitment of States; considered too small for sustainability;	Not adequately equipped for functions; has access to AIG lab in member State; not inclined to ICAO validation/accreditation; harmonized AIG regulations; one out of 3 accidents in last 5 years investigated by RAIO (2017) in 3 rd state;	Legal/managerial autonomy; ICAO-TCB MSA contract; participation in RAIO CP; Cooperation with: ICAO, EU-EASA, AFCAC, FAA, etc.	Only one full-time Investigator but recourse to a pool of 38 in member States	100% State contributions apportioned according to traffic volume; left to States to determine precise source; Problem of State contributions not being readily available;	Five out of 7 States have their own AIB as well; no formal delegation; focus on development of regulations, procedures, policy etc
CASSOA	EAC Treaty, CASSOA Act, EAC-CASSOA Protocol; a specialized EAC institution; Host agreement in place with Uganda; Ministers as highest governing body.	Six (6) States; one overlapping with iSASO & ASSA-AC; size considered optimal	Moderate commitment of States; 95% of 2019 work programme & 20% of 2020 achieved; part harmonization of regulations -delayed promulgation; not involved in certification activities; preparing for GASOS Assessment	Legal/managerial autonomy; Cooperation with iSASO, ACSA, BAGASOO, EASA, FAA, etc ICAO, AFCAC (under RSOO CP), and DRC, Zimbabwe, Malawi etc.	Human Resources Constraints; one inspector in each of the areas (PEL, OPS,AIR, AGA) adequate for level 1 delegation but not beyond; complimented by AFI CIS participation;	100% funding from State contributions; inadequate and not readily available; implementation of sustainable funding; requires political will; propose passenger levee.	States have delegated by acceding to EAC Treaty, however lack of clear levels of delegation; mainly level-1;
ACSAC/URSAC	International legal instrument (UEMOA Treaty and Decision of 3 Nov 2020.) hosted temporarily at UEMOA HQ. Transitioning from COSCAP-UEMOA to ACSAC and URSAC; Heads of State as highest governing body.	Eight States; All AAMAC members as well, size considered optimal,	Commitment of States rated high; Under-going GASOS self-assessment; 80% work programme implemented in 2019 and 57% in 2020 due to COOVID-19; assisting States with Aerodrome certification and ATOs; has data on States.	Within a Department of UEMOA, Not sufficiently independent or autonomous of REC for its functions. Cooperation with ICAO, EASA,FAA, AIRBUS, AfDB, DGAC France, Mauritania	Inadequate staff for RSOO functions; staff available only for AIR, Ground Ops PEL, AGA & AVSEC; complimented by AFI CIS participation;	100% funding from REC but not considered sufficient; funding from passenger charge adopted but awaiting application.	No formal delegation by States; Reliance on UEMOA Treaty; Combines safety and security functions;
iSASO (SADC)	Established through SADC Protocol and SASO charter; the latter is pending full ratification - still in transition; Host agreement in place with eSwatini; Ministers as highest governing body.	16 SADC States; 3 of which also belong to other RSOOs and RECs; transitioned from COSCAP-SADC; Weak commitment of States; RSOO size considered too small.	Slow harmonization partly due to delayed signature of charter; minimum to negligible implementation of work programmes in 2019 & 2020; mandate includes AIG; involved in advisory and operational assistance but not fully functional; underutilized	Legal/managerial autonomy; Cooperation with CASSOA, AFCAC, EASA, FAA, AIRBUS, etc.	Inadequate qualified personnel with 1 expert each in PEL, OPS, AIR; additional staff needs in AIG, Ground operations, and Dangerous goods	100% from State contributions; insufficient and not readily available; topmost challenge for the RSOO together with human resources and low State commitment	No formal delegation by States although activities involve levels 1-2;

ANNEX 9: STATE RESPONSES ON LEVEL OF SAFETY OVERSIGHT ACTIVITIES

	STATE	NUMBER OF LICENSES, CERTIFICATES, APPROVALS & AUTHORIZATIONS						SUB-TOTALS	
		AOC	AIRWORTHINESS	AIRCRAFT REGISTRATION	PEL	AGA	AMO		ATO
1	Algeria	-	-	-	-	-	-	-	-
2	Angola	9	61	187	2,322	0	0	5	2584
3	Benin	1	2	2	10	1	1	2	19
4	Botswana	0	0	0	0	0	0	0	0
5	Burkina Faso	3	8	8	87	1	5	1	113
6	Burundi	0	1	1	15	0	1	0	18
7	Cabo Verde	2	2	4	418	4	6	4	440
8	Cameroon	4	25	33		0	14	6	95
9	Central African Republic	5	7	10	16	0	4	0	42
10	Chad	-	-	-	-	-	-	-	-
11	Comoros	-	-	-	-	-	-	-	-
12	Congo	4	7	8	120	0	3	6	148
13	Cote d'Ivoire	6	41	54	577	1	13	2	694
14	D.R. of the Congo	10	97	102	242	0	2	1	454
15	Djibouti	-	-	-	-	-	-	-	-
16	Egypt	-	-	-	-	-	-	-	-
17	Equatorial Guinea	2	11	22	152	0	22	17	226
18	Eritrea	-	-	-	-	-	-	-	-
19	eSwatini	0	7	10	25	1	5	2	50
20	Ethiopia	7	177	181	11,900	4	6	4	12279
21	Gabon	2	7	7	72	1	10	2	101
22	Gambia	0	6	15	5	0	3	0	29
23	Ghana	7	18	26	600	1	13	3	668
24	Guinea	1	9	9	15	0	1	0	35
25	Guinea-Bissau	-	-	-	-	-	-	-	-
26	Kenya	78	821	1,600	453	2	125	16	3095
27	Lesotho	0	3	0	0	0	0	0	3
28	Liberia	0	0	0	44	0	0	2	46
29	Libya	-	-	-	-	-	-	-	-
30	Madagascar	10	93	129	167	4	17	6	-
31	Malawi	-	-	-	-	-	-	-	-
32	Mali	3	19	22	48	1	10	12	115

33	Mauritania	3	9	17	213	1	8	7	258
34	Mauritius	4	25	28	569	1	24	1	653
35	Morocco	-	-	-	-	-	-	-	-
36	Mozambique	15	83	83	563	2	19	8	773
37	Namibia	5	624	624	63	2	39	1	1356
38	Niger	1	7	7	98	1	1	1	116
39	Nigeria	25	431	502	1,058	2	133	24	2175
40	Rwanda	2	23	23	600	1	10	3	662
41	Sao Tome and Principe	1	0	0	20	0	0	0	21
42	Senegal	4	31	39	253	1	6	4	337
43	Seychelles	3	18	19	31	0	9	1	81
44	Sierra Leone	0	0	0	10	0	0	0	10
45	Somalia	0	2	2	0	0	2	0	6
46	South Africa	177	6,546	14,804	27,070	10	300	268	49281
47	South Sudan	-	-	-	-	-	-	-	-
48	Sudan	-	-	-	-	-	-	-	-
49	Tanzania	28	322	322	3,079	3	41	4	3799
50	Togo	1	1	8	205	1	2	6	224
51	Tunisia	-	-	-	-	-	-	-	-
52	Uganda	11	68	72	429	0	7	8	595
53	Zambia	14	121	330	615	3	29	2	1113
54	Zimbabwe	16	86	65	200	2	7	4	478
TOTAL		464	9819	19375	52364	50	898	433	82977