

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Tenth Meeting of the Regional Aviation Safety Group for the Africa-Indian Ocean (RASG-AFI/10)

7 November 2024

Agenda Item 4: Status of implementation of the GASP safety goals, targets and indicators including the priorities set for the RASG-AFI Region

4.1. Reports on the Activities of RASG-AFI and its Contributory Bodies

(Presented by Secretariat)

SUMMARY	
This working paper presents the implementation status of the activities of RASG-AFI Safety Support Teams (SSTs) and other initiatives, since the last Steering Committee meeting of the Africa-Indian Ocean Regional Aviation Safety Group. Action by the Meeting is provided at paragraph 3 of the Paper.	
References:	RASG-AFI Procedural Handbook IGAG G. I.B. I. G. DEG 210/4
	• ICAO Council Decision, C-DEC 210/4.
	ICAO Council approved ToRs of PIRGs and RASGs.
Strategic	This Working Paper relates to the ICAO Strategic Objectives:
Objectives	A- Aviation Safety and
	B- Air Navigation Capacity and Efficiency

1. INTRODUCTION

- 1.1 This working paper highlights, the status of implementation of activities of the Safety Support Teams (SSTs) and complementary initiatives and projects to address safety challenges and improve RASG-AFI safety performance. The paper also highlights the status of resolution of the Significant Safety Concerns (SSCs) in ANS related to the Instrument Flight Procedures and the calibration of NAVAIDS.
- 1.2 The SSTs' efforts are supplemented and complemented by assistance programmes established and implemented by other programmes and projects including, ICAO Regional Office Safety Teams (ROST), AFI Plan, AFCAC (AFI-CIS), RECs, RSOOs, States and Industry partners.
- 1.3 Although progress has been made in the implementation of the activities contained in the programme, it is important to note that some are continuous activities in nature and therefore their status of implementation remains on-going.

2. DISCUSSION

In the framework of the AFI Plan annual work programme, projects activities are implemented through assistance activities to States, which are complemented by activities jointly conducted by the Regional Offices, AFCAC through the AFI-CIS and the RSOOs, for the improvement of the States' safety oversight systems, as well as the resolution of Significant Safety Concerns (SSCs) when applicable. The SSTs develop, implement and monitor safety enhancement initiatives (SEIs) that have been identified by the region, for mitigation of contributing factors to the regional high-risk categories of occurrences (R-HRCs).

2.1 AFI Plan Programme

- 2.1.1 Based on the focus areas of the Comprehensive Regional Implementation Plan for Aviation Safety in Africa (AFI Plan) and in accordance with its annual work programme, several implementation support activities were conducted. The programme continues supporting the improvement of the level of EI of the critical elements of States' safety oversight systems; the resolution of SSCs; the certification of aerodromes, the establishment and strengthening of regional safety oversight and accident and incident investigation organizations (RSOOs/regional accident and incident investigation organizations (RAIOs)) and capacity building, through various training activities.
- 2.1.2 Furthermore, other projects are implemented such as the air navigation service providers (ANSPs) peer review, State safety programme (SSP), the fundamentals of safety oversight (FSO) and aeronautical information management (AIM), so as to further assist States in achieving a sustainable aviation safety oversight and safety management levels in the region. The specific implementation under each area of initiatives of the Plan is presented below.

2.2 Aerodrome certification project

- 2.2.1 By the end of September 2024, the rate of Aerodrome Certification had improved from 38% to 43 %. This was attributed to the actions undertaken by States to certify more international airports. One Aerodrome Certification workshop was conducted for ESAF States hosted by Angola from 13 to 27 May 2024 while an Aerodrome Certification Assistance mission took place in Kasane, Bostwana from 16 to 27 September 2024. The Kassane Airport Assistance mission was conducted under the AFI Plan Aerodrome Certification Assistance programme through the No Country Left Behind Initiative by peer support experts from Ethiopia and Zambia together with the aerodrome inspectors from Bostwana.
- 2.2.2 In the WACAF region, one aerodrome certification was conducted from 5 to 9 August 2024 to launch the assistance activities for the three following airports: Bangui/Central Africa, N'djamena/Chad and Malabo/Equatorial Guinea. Furthermore, assistance activities are ongoing for Conakry/Guinea, Pointe Noire/Congo, Kinshasa/DRC. 12 resource experts are currently supporting the monitoring of the certification activities in collaboration with the focal points from the targeted airports/States

2.3 State Safety Programme (SSP) implementation project

2.3.1 ICAO ESAF and WACAF Regional Offices conducted virtually the SSP Project Launching Meeting and Workshop from 16 to 17 January 2024 to introduce the revised

- AFI-Plan SSP project and generic documentation developed by the Group of Experts. These activities aimed to present the planned initiatives and encourage States to make progress in establishing effective State Safety Programs. Ninety-six participants from 21 States, RSOOs, RAIO and partners participated in the workshop
- 2.3.2 ICAO ESAF and WACAF Regional Offices under the AFI Plan SSP project and the regular program of the Regional Offices, have conducted several technical on-site assistance missions and capacity-building activities to support States.
- 2.3.3 Technical assistance on SSP was provided to Botswana, Burundi, Ethiopia, Gabon, Ghana Madagascar, Malawi, Mauritania, Seychelles and Togo. Three more States (Angola, Cabo Verde, Cote d'Ivoire) are planned to receive assistance before the end of the current year.
- 2.3.4 ESAF and WACAF States have also benefited from ICAO workshops relating to the development and implementation of National Aviation Safety Plans (NASPs) conducted in Nairobi, Kenya, from May 28 to 31, 2024 (47 participants from ESAF States, industry and ICAO ESAF Regional office) and in Banjul, Gambia (50 participants from CAAs, Ground Handling Agents and other stakeholders), from September 16 to 20, 2024. Also, Safety Programme (SSP) trainings have also been organized and conducted by ICAO in Nairobi, Kenya, from November 27 to December 4, 2023 (23 Participants from States and RSOO attended the training).
- 2.3.5 In coordination with EASA and the Civil Aviation Authority of Singapore, safety management implementation training was conducted in Dakar, Senegal, from 10–14 June 2024(24 participants attended the training), and the state safety program and NASP workshop were conducted virtually from 20–24 May 2024 (more than 100 participants attended the workshop).
- 2.3.6 Additionally, EASA in collaboration with WACAF Regional and RSOOs (AAMAC, ASSA-AC), conducted a State Safety Planning Workshop from June 24 to June 28, 2024, in Libreville, Gabon, with the participation of 18 States.

2.4 Fundamentals of Safety Oversight (FSO) project

- 2.4.1 The beneficiary States of the project are those with EI score below 50. These are Angola, Burundi, Central African Republic, Chad, Comoros, Djibouti, Eritrea, Eswatini, Guinea, Guinea-Bissau, Lesotho, Liberia, Malawi, Sao Tome and Principe, Seychelles, Sierra Leone, South Sudan and Somalia.
- 2.4.2 Remote and on-site assistance missions have been carried out in Guinea, Liberia and São Tomé and Principe. However, in the WACAF Region, only one beneficiary of the FSO project beneficiary has been scheduled for USOAP CMA assessment activities, namely Guinea, which has received a full audit from 9 to 21 October with an interim EI score of 40,94% pending the AIG area assessment to be conducted in December 2024.
- 2.4.3 In addition, on-site assistance activities have been conducted to South Sudan, Eswatini, and Seychelles. Furthermore, on-site activities for the remaining year have been planned for Somalia, Eritrea, Djibouti, and Angola.
- 2.4.4 Notable achievements during the period under review include the significant increase in EI for all the few ESAF States that were audited under USOAP: Angola (increase from 48.35% to 60.03%), Djibouti (from 34.13% to 50.74%).

- 2.4.5 Angola and Sierra Leone achieved FSO project objectives and are no longer considered beneficiary States. Nonetheless, Regional Offices will continue to assist in other ways.
- 2.4.6 Few FSO beneficially States, namely Eritrea and Lesotho, have been scheduled by ICAO to undergo USOAP audits in 2025. Eritrea has already formally accepted its audit. However, Lesotho has requested postponement of its audit to 2027 for the State to implement key initiatives. No WACAF FSO beneficiary State has been scheduled for 2025.

2.5 African Air Navigation Service Providers (ANSPs) Peer Review Programme

- 2.5.1 The ANSP peer review project aims to build up on the achievements obtained so far and to strengthen the peer review mechanism among and between ANSPs (akin to IOSA for airlines and APEX for airports) to improve the capabilities of the ANSPs and enhance the safety and quality of air navigation services in the Africa Region.
- 2.5.2 Within the established Cooperation Framework and in accordance with ANSP Roadmap for 2017-2018, ASECNA and CANSO have signed a Memorandum of Cooperation (MoC) for the improvement of air navigation services on the African Continent. This positive development enhanced the membership of the ANSP Peer Review Programme significantly.
- 2.5.3 ICAO has developed the Peer Reviews Questionnaire based on the USOAP Basic Building Blocks related Protocol Questions. CANSO & ANSPs reviewed and finalized the questionnaire including the Peer Review Manual. Refresher Training of Peer Reviewer and the relaunch of the Peer Review are scheduled for 4th quarter of 2024 and early 2025.

2.6 Aeronautical Information Management (AIM)Result Based Implementation Support (RBIS) for AFI States

- 2.6.1 In the framework of the AIM RBIS project Go-team activities, Guinea, Liberia, and Sierra Leone received in September 2023, assistance for the regulation and oversight of Quality management system (QMS) applied to Aeronautical information management (AIM). A second Go-team mission was conducted in November 2023 to assist the three States in regulating the implementation of Aeronautical information exchange model (AIXM), electronic Aeronautical information publication (eAIP) and Terrain and Obstacle Data (TOD).
- 2.6.2 From May 2024 to October 2024, the following States received assistance in the regulation, implementation and oversight of QMS, AIXM, eAIP and TOD: Islamic Republic of Mauritania, Democratic Republic of Congo, Cote d'Ivoire, Benin and Togo.

2.7 RSOO Strategy and Roadmap

- 2.7.1 The 2017 Ezulwini Ministerial Declaration on Regional Safety Oversight Organizations in Africa consented to the development of a Strategic Plan and a Roadmap for their strengthening. The study, conducted to identify the actions necessary for ensuring the effectiveness, efficiency, and sustainability of the RSOOs, proposed a Strategic Plan and a Roadmap for implementation.
- 2.7.2 The proposed Strategy and Roadmap were presented to States and partners during a validation workshop in November 2021, the outcomes and recommendations of which were presented to the 25th Session of the AFI Plan Steering Committee. This latter

considered that ICAO, in collaboration with the AUC, AFCAC, EASA and other key partners, organises a high-level forum as a follow-up to the Ezulwini Declaration of March 2017 to establish a continental common understanding and synergy for the implementation of the AFI RSOOs Strategic Plan.

- 2.7.3 The Second Forum on Regional Safety Oversight Organizations (RSOOs) for Global Aviation Safety, held in Nairobi, Kenya, from 10 to 13 October 2023, discussed the harmonisation of the establishment and operationalisation of AFI RSOOs and provided some insights and experiences on how to ensure the sustainability of the RSOOs/RAIOs.
- 2.7.4 The Forum agreed that the recommendations and tasks/activities that have been suggested during the discussions were already identified in the roadmap and needed to be further emphasized when revising the Strategic Plan and recommended that:
 - a) Regarding funding mechanisms and optimization of the number and size of RSOOs and RAIOs, ICAO AFI Plan in collaboration with stakeholders and partners, reviews and updates the AFI RSOOs/RAIOs Strategic Plan and Roadmap.
 - b) ICAO AFI Plan, in collaboration with stakeholders and partners, conducts an in-depth feasibility analysis, considering the benefits and disadvantages of the different options of the AFI RSOO/RAIO Strategic Plan with the objective of facilitating its final adoption by decision-makers.
 - c) ICAO, in collaboration with AFCAC and AUC, presents the revised, and validated Strategic Plan and Roadmap, together with the in-depth feasibility analysis for the consideration and approval by the relevant African Ministers, as a follow-up to the Ezulwini Ministerial Declaration of March 2017.
- 2.7.5 To this end, ICAO with the support of the European Union Aviation Safety Agency (EASA) under the EU-Africa Safety in Aviation (EU-ASA) project framework, have selected France Aviation Civile Services (FRACS) to conduct the feasibility follow-up study.
- 2.7.6 The study report that proposes an analysis and a strategic roadmap to make the RSOOs in the AFI region more reliable and efficient; and some strategies to strengthen the accident and serious incident investigation capacity in the AFI Region, will be presented during this meeting.

2.8 Capacity Building

- 2.8.1 In line with the key objectives outlined in the 2024 activity plan of the Comprehensive Regional Implementation Plan for Aviation Safety in Africa (AFI Plan), and in collaboration with the Global Aviation Training (GAT) Office and regional training centres, two key training programs were organised and aimed at strengthening the safety oversight capabilities of African States.
- 2.8.2 The first training program, Government Safety Inspectors Air Operator Certification (GSI OPS), was conducted from July 1 to 18, 2024, at the East African School of Aviation (EASA) in Nairobi, Kenya. This training, attended by 15 participants from 13 African States, aimed to build capacity in safety oversight in air operator certification.
- 2.8.3 The second program, focused on Government Safety Inspector (GSI) and Approved Maintenance Organization (AMO) certification, took place from September 2 to 20, 2024, at the Ecole Régionale de la Navigation Aérienne et du Management (ERNAM) in Dakar, Senegal. 12 participants from 9 African States completed this course, gaining critical expertise to support the region's aviation safety oversight.

- 2.8.4 These initiatives are part of the AFI Plan's ongoing efforts to develop qualified personnel and enhance the effective implementation of safety oversight across the continent.
- 2.8.5 The ICAO ESAF Regional Office, with the support of Airbus, organized a workshop on air operator certificate (AOC) and operations specifications (OPSPECs) from 20 to 24 November 2023 in Nairobi, Kenya. The workshop, which aimed at enhancing competencies in the processes relating to the granting of specific approvals, attracted 98 participants from regulators and industry.

2.9 Aviation Infrastructure Gap Analysis

- 2.9.1 In accordance with the ICAO Assembly Resolution A41-27 and related decision of the AFI Plan SC meeting, a coordinated strategy to conduct aviation infrastructure analysis and forecasted demand were initiated with the African Union Commission, African Civil Aviation Commission, Regional Economic Communities, and other relevant organization. Accordingly, coordinated strategy and plan were drawn up to gather information, analyse and provide informed technical recommendations. In line with the plan, ICAO played a key leading role in designing the questionnaire and developing a tool to gather information and conduct the gap analysis report, which was presented to the 2nd Working Group meeting held from 25 to 28 June 2024 at Addis Ababa, Ethiopia. The analysis was discussed and validated during this workshop.
- 2.9.2 The final report of the aviation infrastructure Gap analysis was adopted by the technical working group (TWG) in a virtual Meeting held on 21 August 2024. The report will be presented to member States of the African Union for consideration. This project is recognized as one of the key collaborative initiatives between ICAO, the African Union Commission (AUC), the African Civil Aviation Commission (AFCAC), the aviation Industry and member States.

2.10 ROST Assistance

- 2.10.1 As of October 2024, the WACAF Regional Office conducted remote and on-site assistance activities to Benin, Chad, Cote d'Ivoire, Guinea, Liberia and Senegal. Benin and Guinea received a USOAP CMA Audit in July and October 2024, which led to interim EI scores of 62,17% and 40,94% respectively, whilst Senegal and Cote d'Ivoire received an ICVM in April and October 2024, with an EI score of 84,89% for Senegal and an interim score of 93,89% for Cote d'Ivoire. The Democratic Republic of Congo and Liberia were assisted in the development and implementation of their corrective action plans to address the findings of the audits that were both conducted in 2022, as well as the resolution of the respective SSCs in ANS. Additional on-site activities for the remaining year have been planned for Cameroon and Congo.
- 2.10.2 As of October 2024, the ESAF Regional Office has conducted remote and on-site assistance activities to States under its accreditation. Remote assistance activities have mainly been conducted through regular and routine monitoring using ICAO portals, including the ICAO USOAP OLF, and by correspondence with State focal points, including State NCMCs. Onsite assistance activities have been conducted to Eswatini, Mauritius, Mozambique, Seychelles, South Sudan and Zambia.
- 2.1.1 Additional on-site activities for the remaining year have been planned for Angola, Djibouti, Eritrea, Somalia, Madagascar and Rwanda. Achievements during the period under review include the significant increase in EI for all the ESAF States that were audited under ICAO

USOAP: Botswana (increase from 80.1% to 85,65%), Namibia (from 57.39% to 72.62%) and Zambia (from 60.04% to a provisory 72.94%).

2.2 Safety Enhancement Initiatives SEIs to mitigate contributing factors to LOC-I accidents and incidents

- 2.2.1 The 2023 RASG-AFI Workshop on LOC-I and UPRT was held on 27-28 November 2023 at the Kenya Airways Training Centre, The Pride Centre, Nairobi, Kenya. The objective was to continue raising awareness on LOC-I and UPRT and mitigation measures in the AFI Region, to assist in the implementation of the RASG-AFI 5-year LOC-I Plan, to help enhance the safety enhancement initiatives (SEIs) for NASPs and AFI RASP as per the ICAO GASP and keep abreast of latest development in UPRT.
- 2.2.2 The agenda addressed 11 topics that included presentations and demonstration sessions on flight simulators. The main facilitators were Boeing, Airbus, Ultimate High Academy, FAA, International Development Technology, Kenya Airways and ICAO. The workshop attracted 80 participants from 12 States and from Civil Aviation Authorities, air operators, training organizations, and aircraft manufacturers.
- 2.2.3 As a way forward, given the recent adoption of the AFI RASP, timelines for the LOC-Plan and related SEIs are being updated and measures for monitoring progress made are being put in place, in coordination with Kenya, as the RASG-AFI LOC-I Champion. The 2024 Workshop on LOC-I and UPRT will be hosted by Ethiopia from 11 to 12 December 2024.
- 2.3 Safety Enhancement Initiatives (SEIs) to mitigate contributing factors to Controlled Flight into Terrain (CFIT) accidents and incidents.
- 2.3.1 The CFIT Workshop is one of the RASG-AFI annual events to promote awareness of risks associated with CFIT; and to review the status of implementation of the SEIs identified by the region to mitigate such risks. The RASG-AFI recognises and commends the Cameroon CAA for hosting the CFIT workshop this year at the Cameroon CAA Training School in Yaoundé, from 7 to 9 October 2024. The event attracted participants from Civil Aviation Authorities, Airlines, Air Navigation Services Providers, Aircraft Accident Investigation Agencies, Approved Training Organizations, Regional and International Organizations.
- 2.3.2 The workshop was supported by the ICAO ESAF and WACAF Regional Offices, IATA and AFPP; and covered the ICAO regulatory provisions on CFIT; CFIT Detailed Implementation Plan and Accident Analyses; and review of the status of implementation of the identified Safety Enhancement Initiatives (SEIs) to mitigate risks related to CFIT. Cameroon CAA shared its experience with the workshop participants on mitigation of CFIT risks during air operator certification processes.
- 2.3.3 CFIT-related Protocol Questions (PQs) from the ICAO USOAP CMA Online Framework have been used as a tool to assess the level of implementation of the 8 Safety Enhancement Initiatives (GPWS; SOPs, CDFA, FDA, CRM/TEM, ALAR, MSAW, PBN-AR) identified to mitigate risks associated with CFIT occurrences in the RASG-AFI Region. From the analyses, 15 out of the 46 audited RASG-AFI States have fully implemented all the identified CFIT-related SEIs (PQs), representing 32.6%, showing an improvement from 9 States (19.57%) by end of 2022
- 2.3.4 The workshop requests the RASG-AFI Operational Safety Issues Safety Support Team (OSI-SST) to continue to monitor the level of implementation of the SEIs identified by the region and provide reports to the RASG-AFI through the RASC on regular basis. States

that have attained related PQs satisfactory were requested to provide support to other States by sharing their documentation and experience with them and provide report to the SST on progress registered.

2.4 Assistance to States in resolving or mitigating Significant Safety Concerns (SSCs) in ANS

- 2.4.1 The WACAF Regional Office provided remote and onsite assistances to the States of DRC and Liberia, while ESAF provided remote assistance to Zimbabwe with on-site support of experts from SASO and AFCAC.
- 2.4.2 In the case of both the Democratic Republic of Congo and Liberia, the assistance enabled the States to develop a plan of action in view of the resolution of their SSCs.
- 2.4.3 The Regional WACAF Office, in coordination with AFPP, conducted a workshop on the prevention and resolution of Air Navigation Services related SSCs, from 19 to 23 August 2024 in Abidjan, Cote d'Ivoire. The workshop was attended by fifty-four (54) participants from States and Organization.
- 2.4.4 The aim of the workshop was to raise awareness of the States focal points on the main areas and root causes of SSCs, ICAO provisions related to obstacle management, instrument flight procedures implementation, NAVAID operations and maintenance as well as aeronautical information management and cartography. Participants were also kept abreast of best practices related to the prevention and resolution of SSCs through case studies. Some of the main outcomes of the workshop included the need for a high-level sensitization on SSCs and the establishment of a more collaborative approach to the prevention of SSCs.

2.5 RVSM

- 2.5.1 A virtual workshop was conducted by ARMA on 6th November 2023 for RVSM National Programme Managers, during which sensitization on LHD was provided. The issue of documentation language was raised during the workshop. Non-English-speaking Participants solicited that RVSM LHD Manual be translated in French for their effective usage. The Regional Office WACAF subsequently provided support in translating the manual in French.
- 2.5.2 In line with the Decision 26/26 of APIRG 26, in the last year a number of activities have been carried out to support better reporting, these include activities carried out by ARMA for the AFI Region. ARMA has developed a RVSM Guidance Material for the Africa Indian Ocean region that is based on European Doc. 034 which would be beneficial for regional adoption; the document that has been in development since July 2022 is a domesticated version of ICAO Doc 9937.
- 2.5.3 The guidance material aims to align the Africa-Indian Ocean RVSM requirements due to the low levels of compliance and understanding on the different roles each stakeholder plays when it comes to regional compliance on RVSM. The AFI States are called upon to review and provide their contributions to improve the document.
- 2.5.4 As far as Height Monitoring in RVSM Airspace is concerned, ARMA is working on a project to use ADS-B data to perform height monitoring in the AFI RVSM airspace by calculating the Altimetry System Error. The use of this method requires the aircraft to be ADS-B equipped and for the aircraft to fly in a region where ADS-B monitoring is performed.

- 2.5.5 The meeting is reminded of APIRG/22 Conclusion 22/40 which urged States and aircraft operators to ensure that all aircraft operating within the AFI RVSM airspace are equipped with ADS-B Transponder Extended Squitter 1090 by June 2023 and States and aircraft operators ensure that all aircraft operating within the AFI Region airspace are equipped with ADS-B Transponder Extended Squitter 1090 by January 2025.
- 2.5.6 The airspace users have expressed concern as to their ability to be ready with aircraft equipage by the mandated date. The Airspace users have requested for an extension of the effective date to enable complete upgrading of their equipment. The States have also requested more time noting that they needed to put in place a regulatory framework for ADS-B mandate.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a. note the content of this paper and the status of RASG-AFI related activities;
 - b. encourage States to enhance their effective participation in Projects and other safety initiatives;
 - c. encourage stakeholders to maintain and intensify assistance to States;
 - d. urge States to develop their National Aviation Safety Plans (NASPs); and
 - e. urge States to implement safety enhancement initiatives (SEIs) for the regional high-risk category of occurrences (R-HRCs) and report on progress made thereon.