

Seventh Meeting of the Africa-Indian Ocean Regional Aviation Safety Group (RASG-AFI/7) (Virtual – 5 November 2021)

Agenda item 3: Reports on RASG-AFI Activities

(Presented by the Secretariat)

SUMMARY

This working paper presents the status of implementation of the RASG-AFI activities, including programmes and projects supported by the AFI Plan and other assistance partners. The RASG-AFI activities are mainly implemented by its Contributory Bodies, currently being Fundamentals of Safety Oversight (FSO), Significant Safety Concerns (SSC), Emerging Safety Issues (ESI) and Aircraft Accident Investigation (AIG). The AFI Plan projects included Fundamentals of Safety Oversight (FSO), State Safety Programme (SSP) and Aerodrome Certification.

Action by the Meeting is at paragraph 3

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| Strategic | Aviation Safety |
| Objectives | · |

1 INTRODUCTION

- 1.1 This working paper highlights the status of implementation of select activities, initiatives and projects to improve RASG-AFI safety performance and outlines associated challenges and recommendations. The period under review is from December 2020 when the last RASG-AFI/6 meeting was held.
- 1.2 The RASG-AFI has established four Safety Support Teams (SSTs) as its Contributory Bodies to resolve safety challenges and support the process to develop, prioritize and implement safety enhancement initiatives. These SSTs are Fundamentals of Safety Oversight (FSO); Significant Safety Concerns (SSC); Emerging Safety Issues (ESI); and Aircraft Accident and Incident Investigation (AIG).
- 1.3 The SSTs' efforts are supplemented and complemented by assistance programmes established and implemented by other diverse stakeholders, including ICAO Regional Offices (ROST), AFI Plan, AFCAC (AFI-CIS), RECs, RSOOs, States and Industry partners.
- 1.4 Prior to the advent of the COVID-19 pandemic in March 2020, ICAO and assistance partners provided assistance mainly by conducting onsite missions to States. Subsequently, however, due to the pandemic related restrictions, assistance is largely through monitoring mechanisms and virtual activities.
- 1.5 Notable challenges that impede progress by the SST projects include:
 - a) Limited funding;

- b) Unwillingness, reluctance or refusal by some States to solicit or accept assistance;
- c) Lack of or limited sharing and exchange of safety data and information; and
- d) COVID-19 pandemic that has further aggravated the challenges.
- 1.6 Monitoring and measurement of States' safety performance and achievement since the advent of the COVID-19 pandemic in March 2020 has been negatively impacted upon because of the very limited USOAP audits or validation activities during the period. Consequently, USOAP EI scores have not changed for the last approximately two years.

2. DISCUSSION

- 2.1 SST Fundamentals of Safety Oversight (FSO) (Champion States: Senegal & Uganda) and AFI Plan FSO Project
- 2.1.1 The goal of this SST and project is to support select States with low levels of effective implementation (EI) of the critical elements (CEs) of a state safety oversight (SSO) system, as assessed under USOAP, to establish and implement an effective and sustainable SSO.
- 2.1.2 The emphasis and priority of the SST and project is to assist States develop and implement effective USOAP corrective action plans (CAP) with emphasis on "Establishment CEs", namely:
 - CE-1 Primary aviation legislation;
 - CE-2 Specific operating regulations;
 - CE-3 State system and functions;
 - CE-4 Qualified technical personnel; and
 - CE-5 Technical guidance, tools and provision of safety-critical information.
- 2.1.3 Currently, the average USOAP EI score for States in AFI Plan FSO Project 2020 is 30.1% as per details shown in Appendix A.
- 2.1.4 Evidently, consistent with the previous assessments, more efforts and resources are needed to assist States, especially those that have never been audited and those with EIs lower than 40%.
- 2.2 SST Significant Safety Concerns (SSC) (Champion States: Ghana & South Africa).
- 2.2.1 The goal of this SST is to support States with identified unresolved, potential or latent SSCs to implement corrective measures.
- 2.2.2 The emphasis and priority of the SST is to assist States develop and implement effective USOAP corrective action plans (CAP) with emphasis on protocol questions (PQs) linked to the identified SSCs. The process applies where it is evident that potential or latent SSCs may exist, most common with States with low EIs and high or complex aviation activities.
- 2.2.3 The only remaining SSC in the RASG-AFI region is the SSC in Eritrea in the area of aircraft operations, specifically pertaining to the certification of air operators. This SSC, which was identified more than ten years ago in 2010, is not only the longest outstanding SSCs worldwide but is also contrary to the Abuja safety targets, which provide, *inter alia*, that an SSC should be resolved within six months from its identification.

- 2.2.4 On a positive note, an SSC identified in Côte d'Ivoire in March 2020 in the area of air navigation services pertaining to the ground and flight validations of published instrument flight procedures was resolved within a period of less than four months from identification.
- 2.2.5 Currently, the outstanding SSCs worldwide are shown in Appendix B
- **2.3 SST Emerging Safety Issues (ESI) Project** (Champion State: Kenya).
- 2.3.1 The goal of this SST is to address operational risks.
- 2.3.2 The emphasis and priority of the SST is to support the implementation of safety enhancement initiatives to mitigate the risk of accidents or fatalities associated with high-risk categories of occurrences (HRCs) as outlined in the GASP. The HRCs selected are runway safety, loss of control in-flight (LOC-I), controlled flight into terrain, (CFIT) and Aeronautical Information management (AIM).
- 2.3.3 In this regard, the ICAO Regional Offices in coordination with Champion States and other assistance partners regularly conduct assistance activities, including symposia and workshops.
- 2.3.4 In the area of LOC-I, additional reporting forms with detailed items in line with GASP organizational challenges and operational safety risks have been sent to States and stakeholders. The initially established core group of experts is being consolidated and RASG-AFI LOC-I guidance material is updated. A good attendance level was reached for the last workshop held from 17 to 18 November 2020.

2.4 SST Aircraft Accident and Incident Investigation (AIG).

- 2.4.1 The goal of this project is to support States enhance capability to conduct investigations into circumstances of the accidents and incidents in compliance with Annex 13 *Aircraft Accident and Incident Investigation*.
- 2.4.2 The emphasis and priority of the project was initially to assist States develop and implement effective USOAP corrective action plans (CAP) with emphasis on "Establishment CEs", namely:
 - CE-1 Primary aviation legislation;
 - CE-2 Specific operating regulations;
 - CE-3 State system and functions;
 - CE-4 Qualified technical personnel; and
 - CE-5 Technical guidance, tools and provision of safety-critical information.
- 2.4.3 Currently, the average USOAP EI score for States in SST-AIG is 28.9% as per details shown in Appendix D
- 2.4.4 Evidently, consistent with the previous assessments, more efforts and resources are needed to assist States, including embarking on "Implementation CEs", namely CE-8 Resolution of safety issues.

2.5 AFI Plan State Safety Programme (SSP) project

2.5.1 The goal of this project is to support select States with high levels EIs, 60% or higher, as

assessed under USOAP, to establish and implement an effective SSP in compliance with Annex 19 — *Safety Management*.

- 2.5.2 The emphasis and priority of the project was initially to assist States develop and implement effective USOAP corrective action plans (CAP) with emphasis on "Implementation CEs", namely:
 - CE-6 Licensing, certification, authorization and approval obligations;
 - CE-7 Surveillance obligations; and
 - CE-8 Resolution of safety issues.
- 2.5.3 Subsequently, as processes and initiatives evolved, including USOAP and GASP, emphasis and priority extended to the SSP Foundation PQs.
- 2.5.4 Currently, the average USOAP EI score for States in AFI Plan SSP Project 2 is 72.24%, the level of accomplishment of SSP Gap Analysis, implementation plans definition and implementation is limited, while the level of implementation of SSP Foundation PQs is reasonable, as shown in Appendix C.
- 2.5.5 Evidently, consistent with the previous assessments, more efforts and resources are needed to assist States, especially those with EIs lower than 75%.

2.6 Aerodrome Certification

- 2.6.1 The goal of this project is to support States enhance capability to certify aerodromes in compliance with Annex 14 *Aerodromes*.
- 2.6.2 The emphasis and priority of the project was initially to support select States to certify at least one international aerodrome and build capacity to certify the rest.
- 2.6.3 Assistance provided under the project has resulted in certification of 14 international Airports in in thirteen States.
- 2.6.4 Currently, the percentage of certified aerodromes in the AFI region is 31.78% as of October 2021 while 50% of AFI States have developed aerodrome certification capability.

3 ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) Urge assistance partners to maintain and to the extent possible increase support and assistance in implementation of RASG-AFI SSTs, projects and activities, with special emphasis on the resolution of the SSC in Eritrea;
 - b) Urge States to develop, implement and review their USOAP CAPs on an ongoing basis and update the relevant modules of the USOAP CMA OLF accordingly.
 - c) Urge States to use the SSP GAP Analysis on iSTARS SPACE to conduct SSP gap analyses and review SSP Foundation PQs to define SSP implementation plans and implement effective SSPs taking into account goals and targets prescribed in the current edition of GASP.
 - d) Urge States to expedite and certify their international aerodromes.
 - e) Urge States in general and Eritrea in particular to solicit or accept assistance as appropriate to resolve the identified or potential SSC; and

- f) Urge States to promote and enhance the sharing and exchange of safety data and information, including responses to the USOAP-CMA online framework (OLF) modules, ICAO State Letters and AFCAC letters.
- g) Urge States and stakeholders to further report on organizational challenges and operational safety risks relating to LOC-I, to contribute to the core group of experts and to attend the next workshop to be held virtually from 10 to 11 November 2021.

APPENDIX A: AFI Plan FSO Project

Table 1. AFI Plan FSO Project 2020: Dashboard

| Indicator | Value |
|---|--------|
| State Safety Oversight - Group Average Average USOAP Overall EI(%) | 28.23% |
| State Safety Oversight - State Levels Percentage of States with USOAP Overall El above 60% | O% |
| Significant Safety Concerns (SSCs) | 1 |
| Accident Rate Number of accidents per mil. departures over preceding 5 years | 9.08 |
| OSA - Airlines Number of IOSA certified airlines in the region | 2 |
| OSA - State Levels Percentage of States with IOSA certified eirlines | 10.53% |
| EU Safety List Number of States with restrictions | .8 |
| FAA IASA Number of States rated as Category 2 | 0 |
| PBN Implementation - Runways Percentage of instrument runways with PBN approaches | 60.47% |
| PBN Implementation - State Levels Percentage of States having PBN approaches on all instrument runways | 63.16% |

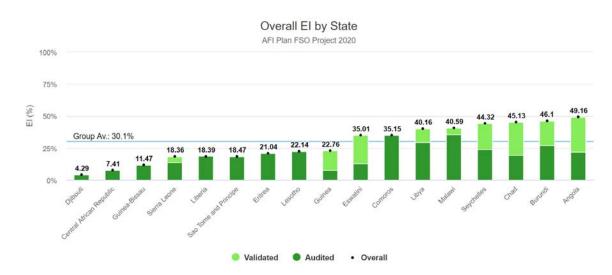


Figure 1. AFI Plan FSO Project: Overall EI by State

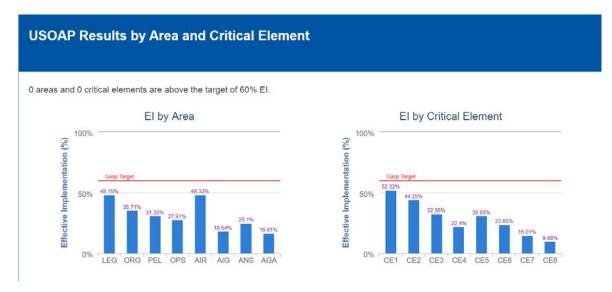


Figure 2. AFI Plan FSO Project: USOAP Results by Area and Critical Element

Table 2. Safety Support Team: Significant Safety Concern (SST; SSC)

| State Name | SSC Scope | Significant Safety Issue Date |
|----------------------------------|-----------|----------------------------------|
| Antigua and Barbuda | PEL | 24/04/2019 |
| Bhutan | ANS | 01/10/2018 |
| Eritrea | OPS | |
| Grenada | PEL | 24/04/2019 |
| Pakistan | PEL | 18/09/2020 |
| Saint Kitts and Nevis | PEL | 24/04/2019 |
| Saint Lucia | PEL | 24/04/2019 |
| Saint Vincent and the Grenadines | PEL | 24/04/2019 |

APPENDIX C: AFI Plan State Safety Programme (SSP) Project

Table 3. AFI Plan State Safety Programme (SSP) Project: Dashboard

| Indicator | Value |
|--|--------|
| State Safety Oversight - Group Average Average USOAP Overall E(%) | 72.22% |
| State Safety Oversight - State Levels Percentage of States with USOAP Overall El above 60% | 93.94% |
| Significant Safety Concerns (SSCs) | 0 |
| Accident Rate Number of accidents per mil. departures over preceding 5 years | 4.96 |
| OSA - Alrlines Vumber of IOSA certified airlines in the region | 37 |
| OSA - State Levels Percentage of States with IOSA certified airlines | 63.64% |
| EU Safoty List Vumber of States with restrictions | 6 |
| FAA IASA Number of States rated as Category 2 | 1 |
| PBN Implementation - Runways Percentage of instrument runways with PBN approaches | 76.52% |
| PBN Implementation - State Levels Percentage of States having PBN approaches on all instrument runways | 66.67% |

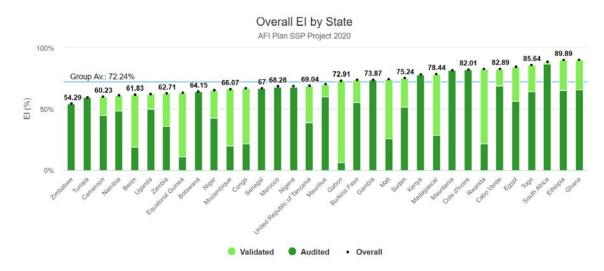


Figure 3. AFI Plan State Safety Programme (SSP) Project: Overall EI by State

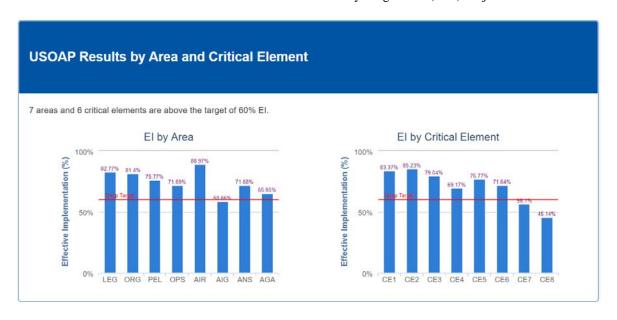


Figure 4. AFI Plan State Safety Programme (SSP) Project: USOAP Results by Area and Critical Element

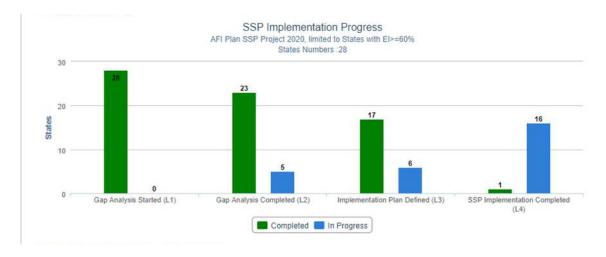
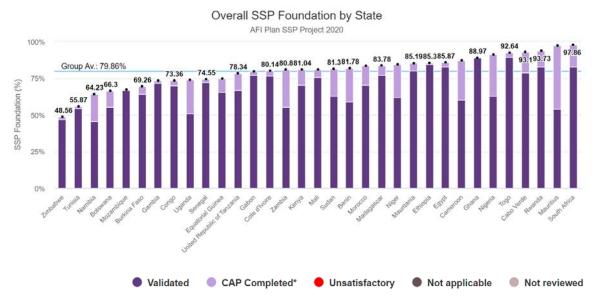


Figure 5. AFI Plan State Safety Programme (SSP) Project: SSP Implementation Progress

APPENDIX C: AFI Plan State Safety Programme (SSP) Project



*CAP completed are corrective action plans as reported by the State using the USOAP CMA Online Framework.

Figure 6. AFI Plan State Safety Programme (SSP) Project: Overall SSP Foundation by State

APPENDIX D: Safety Support Team; Aircraft Accident Investigation (SST: AIG) and AFI Plan AIG Project

Table 4. Safety Support Team; Aircraft Accident Investigation (SST: AIG) and AFI Plan AIG Project: Dashboard

| Indicator | Value |
|--|--------|
| State Safety Oversight - Group Average Average USOAP Overall E(1%) | 28.9% |
| State Safety Oversight - State Levels Percentage of States with USOAP Overall El above 60% | 0% |
| Significant Safety Concerns (SSCs) Number of SSCs | Í |
| Accident Rate Number of accidents per mil. departures over preceding 5 years | 16.04 |
| OSA - Airlines lumber of IOSA certified eirlines in the region | 2 |
| OSA - State Levels Percentage of States with IOSA certified airlines | 11.76% |
| EU Safety List Number of States with restrictions | 8 |
| FAA IASA Number of States rated as Category 2 | 0 |
| PBN Implementation - Runways Percentage of instrument runways with PBN approaches | 75.61% |
| PBN Implementation - State Levels Percentage of States having PBN approaches on all instrument runways | 64.71% |

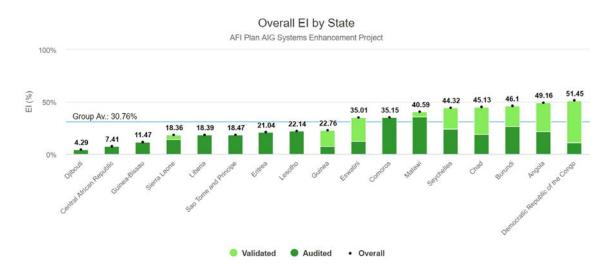


Figure 7. Safety Support Team; Aircraft Accident Investigation (SST: AIG) and AFI Plan AIG Project: Overall EI by State

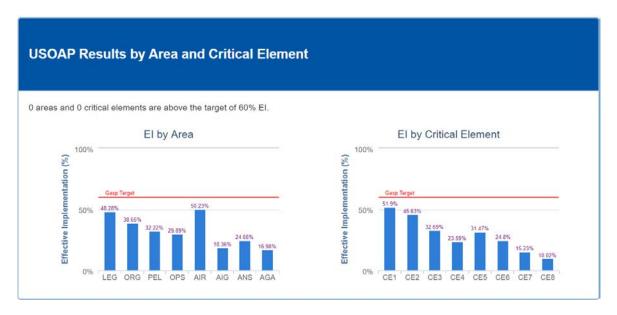


Figure 8. Safety Support Team; Aircraft Accident Investigation (SST: AIG) and AFI Plan AIG Project: USOAP Results by Area and Critical Element

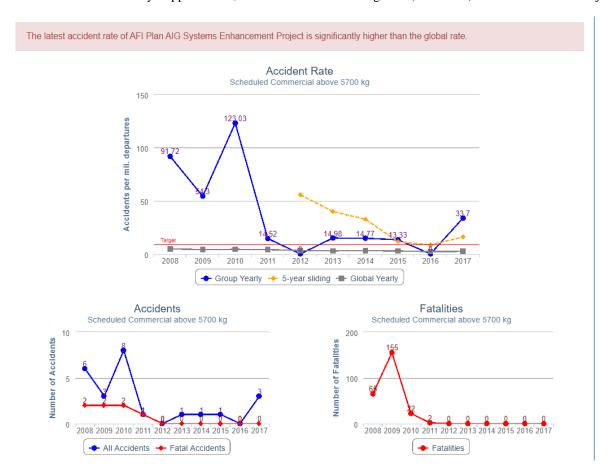


Figure 9. Safety Support Team; Aircraft Accident Investigation (SST: AIG) and AFI Plan AIG Project: Accident Rate