

### INTERNATIONAL CIVIL AVIATION ORGANIZATION

# FIFTH MEETING OF THE STEERING COMMITTEE OF THE REGIONAL AVIATION SAFETY GROUP FOR AFRICA-INDIAN OCEAN (RASC/5) – VIRTUAL.

#### 28 October 2020

# Agenda Item 4: – Review of the status of implementation of the revised Abuja Safety and Air Navigation Targets.

(Presented by AFCAC)

#### **SUMMARY**

This paper describes the status of implementation of the revised Abuja Safety Targets and ANS Performances Indicators by member States and other stakeholders at the end of 2019.

**Action required** by the meeting is at paragraph 4.

# **REFERENCE(S):**

- Abuja Declaration on Aviation safety in Africa
- Revised Abuja Safety Targets incorporating AFI ANS Performance Targets
- ICAO GASP and GANP

## **Related ICAO Strategic Objective:**

This working paper relates to the ICAO Strategic Objectives on **Safety** and **Air Navigation Capacity** and **Efficiency.** 

#### 1. Introduction

AFCAC was tasked to monitor implementation of the Abuja Safety Targets. In this regard, a monitoring mechanism was developed by AFCAC to achieve this purpose. Consistent with the mechanism, questionnaires were sent to member States in August and October 2019 to provide feedback which was meant to assist AFCAC determine status of implementation of the Abuja Safety Targets.

By February 2020, **only 25 AFCAC member States** had responded and consistent with decisions of the AFI Plan Steering Committee meeting held at the AFI Aviation Week from 16-20 July 2018, AFCAC was to supplement data from States with relevant information from appropriate IATA and ICAO databases i.e. ICAO iSTARS, USOAP CMA OLF etc (*refer to Attachment A*).

#### 2. Discussion

- a) The 2019 ASTs status of implementation report was compiled using information provided by 25 States and supplementary data from IATA and ICAO iSTARS resulting in the observations (*refer to Attachment A*).
- b) The average for 25 States that responded was **47%** implementation of ASTs and this figure is below the 2019 target of 60%;
  - African States average EI as of December 2019 was **55.69%** while 2018 EI status was **50.64%**. This positive movement was a marginal increase of 5%.
- c) Further analysis of the 2019 performance resulted in the following observations:
  - There were significant information gaps due to lack of automated information gathering tools available. A significant number of States did not provide the information requested through AST Questionnaires;
  - There was very limited progress in the implementation of air navigation related ASTs. For example:
    - AST # 14 on implementation of ASBU B0 Modules Target Not Met;
    - AST # 13 establishment of seamless Air Navigation Services in the AFI Region Target Not Met:
    - AST # 10 Implement the transition from AIS to AIM- Target Not Met;
    - AST # 11 States to implement PBN procedures for all instrument runways Target Not Met.
- d) In order to address the challenge of information gaps and the need for improved methods to collect safety data and monitor status of implementation of safety systems and targets, AFCAC has for the past two years advocated for the use of automated safety data collection tools to monitor safety systems and targets. With the prevalence of COVID-19 pandemic, use of automated and integrated safety oversight systems is indeed the way to go as they promote real time safety data collection and also provide contactless systems surveillance and feedback (*refer to AFCAC Mechanism for monitoring Safety Systems & Initiatives Chapter 5*);
  - In terms of implementation, there is need for more focused coordination and collaboration amongst key regional organizations to address implementation constraints and to assist member States achieve the agreed Safety and ANS Targets. This entails channeling resources and efforts towards areas of greater need such as the ANS targets.
- e) A number of Safety Performance Indicators are not sufficient to reflect the status of implementation of certain targets and therefore should be reviewed.

#### 3. Conclusion

- 3.1 The 2019 status of implementation of the Abuja Safety Targets was a reflection of:-
  - significant information gaps due to inadequacy of information gathering tools available; and

- lack of resources and limited regional interventions to assist member States achieve the targets.
- 3.2 In order to address these deficiencies, the following are recommended:-

### • AFCAC, ICAO and Regional entities

There is need for alignment of targets with GASP/GANP and clearly establish measurable objectives and associated targets, indicators and responsible persons/organizations to provide information. AFCAC needs to develop on-line mechanism and tools for effective reporting of progress, periodic meetings with established AST Focal Points and to provide technical assistance to States as required. There is need for effective coordination among key stakeholders, to ensure availability of resources. AFCAC and other Regional entities need to facilitate for appropriate continental master plans which are required to ensure comprehensive implementation of the ANS Targets.

#### • Member States

There is need to establish and implement automated safety data collection and information sharing tools consistent with AFCAC's Mechanism for Monitoring Implementation of Safety Systems & Initiatives.

Member States are encouraged to develop and implement all required national implementation plans related to various Safety and ANS targets.

#### 4 Action required

The RASG-AFI Steering Committee is invited to:-

- a) Note status and challenges related to implementation and reporting of progress;
- b) Promote use of automated data collection tools for monitoring Safety and ANS targets;
- c) Promote coordination among key stakeholders and increase interventions necessary to assist member States to implement, especially, the ANS targets.

# **Attachment A**

# **Combined performance for AFI States**

Revised Abuja Safety Target	Assessments	Status
<ol> <li>Progressively reduce the African accident rate from 8.6 to 2.5 per million departures by the end of 2022, with focus on:         <ul> <li>runway related accidents and serious incidents (Runway Excursion, RE).</li> </ul> </li> <li>controlled flight into terrain (CFIT) related accidents and serious incidents.</li> <li>Loss of Control In-flight (LOC-I) related accidents and serious incidents.</li> <li>Achieve and maintain zero fatalities in aircraft accidents.</li> </ol>	The accident rate increased from 5.16 in 2018 to 10.34 in 2019. Number of fatalities increased from 20 in 2018 to 184 in 2019 (Source: ICAO iSTARS)  runway related accidents and serious incidents (Runway Excursion, RE) rate increased from 1.2 in 2018 to 1.4 in 2019.  CFIT related Accidents & serious Incidents rate remained at 0 from 2015 to 2019.  LOC-I related accidents & serious incidents had a rate of 0.80 by end of 2018 but increased to 1.45 by 2019 i.e. 81% increase. (Source: IATA)	Target not met.  The accident rate in the RASG-AFI Region was 7.56 per million flights in 2017 and it reduced to 5.16 per million flights in 2018. The rate however increased to 10.34 in 2019;  Number of fatalities increased from 20 in 2018 to 184 in 2019.  There was an upward trend in the accident rates related to RS and LOC-I; and an increase in the number of fatalities.
<ul> <li>2. All States establish and strengthen autonomous Civil Aviation Authorities with independent regulatory oversight, sustainable sources of funding and resources to carry out effective safety oversight and regulation of the aviation industry by 2022.</li> <li>States that need support in areas with safety margins below zero, to use a regional safety oversight organization's or another State's ICAO-recognized functions by 2020.</li> <li>States effectively exercise the safety oversight functions with a positive safety margin in all areas by 2022.</li> <li>States to delegate certain safety oversight functions to RSOOs or other States, by the end of 2022 in areas with safety margins below zero, and as appropriate.</li> </ul>	There was no sufficient data to assess level of implementation. Available data showed that at least twenty-eight (28) States that attained 60% EI Target, amongst the RASG-AFI States, are effectively autonomous.	Comprehensive data on status of CAAs not available.
<ul><li>3. States resolve:</li><li>Existing SSCs by June 2018;</li></ul>	From 2012 to 2019:  21 SSCs found in 14 States; 20 resolved in 13 States.	Target not met 1 SSC remaining

Revised Abuja Safety Target	Assessments	Status
<ul> <li>Newly identified SSCs within 6 months from the date of its official publication by ICAO.</li> </ul>	<ul><li>1 SSC still exist in 1 State.</li><li>Exceeded 6 month deadline</li></ul>	
<ul> <li>4. States abide by the timelines and provide resources for implementation of ICAO/State Plans of Action</li> <li>All States to have accepted ICAO Plans of Action by 2019 and</li> <li>abide by the timelines and provide resources for their implementation.</li> </ul>	Thirty-seven (37) States have accepted ICAO Plans of Action and are at different stages of implementation (Source: AFI Plan)	Data collected was insufficient to determine level of implementation of the ICAO/ State Plans of Action.
<ul> <li>5. States progressively increase the Effective Implementation (EI) percentage under the ICAO USOAP such that States with:</li> <li>■ EI &lt; 60% attain 60% by 2020;</li> <li>■ 60% ≤ EI ≤ 70% attain 80% by 2022;</li> <li>■ 70% &lt; EI attain 95% by 2028.</li> </ul>	By December 2019, about 42 of the audited AFI States achieved an average EI status of 55.72%. This is 3.32% increase compared to 2018.	Target not met (EI < 60% attain 60% by 2020).  Number of AFI States with EI of 60% and greater has increased significantly from Fifteen (15) in 2014 to thirty-two (32) by December 2019.  The efforts of ICAO and AFCAC should be intensified to accelerate the implementation of the CAPs.
<ul> <li>6. For the purposes of SSP/SMS Implementation, all States:</li> <li>to have a Foundation SSP established, addressing all pre-requisites;</li> <li>to have an Effective SSP with appropriate maturity level established;</li> <li>to contribute information on safety risks, including SSP SPIs, to the RASG-AFI;</li> <li>with a positive safety margin, and an Effective SSP, to actively engage in RASG-AFI safety risk management activities (analysis of safety risks, design and implementation of risk mitigation actions).</li> <li>All Service Providers to use globally harmonized SPIs as part of their SMS.</li> </ul>	At least twenty (20) States initiated SSP implementation with Level 3 being the highest attained.  However, none of the member States attained Level 4 SSP implementation by December 2019;  None of the States contributed information on safety risks to RASG-AFI. (Source: ICAO iSTARS)	Target not met  Implementation of SSP/SMS remains a serious challenge, as no State has realized Level 4 SSP Status.
7. All International Aerodromes to be certified by 2022,	As of 31 December 2019, 54 International Aerodromes certified out of 195 (27.6%).  Since it's inception, APEX has provided Fourty-Seven (47)	Target not met.  From the responses to the questionnaire, aerodrome certification is still a serious challenge for AFI States.

Revised Abuja Safety Target	Assessments	Status
<ul> <li>At least one international aerodrome in every State to be certified by end of 2020;</li> <li>All airport operators to participate in the ICAO-recognized industry assessment programme for airports (APEX) by end of 2022;</li> <li>At least one international aerodrome in every State to establish a Runway Safety Team (RST) by end of 2020.</li> </ul>	assessments on the African continent (the highest percentage in the World).  (Source: ICAO)	However, almost all AFI States indicated that the process of certification of international aerodromes is in progress.
<ul> <li>8. Require all African airlines to obtain an IATA Operational Safety Audit (IOSA) certification:</li> <li>All States to establish an appropriate framework for recognition of IATA operational safety audit (IOSA) and IATA Standard Safety Assessment (ISSA) as effective safety mechanisms; All African airlines to obtain IOSA or ISSA certification, as appropriate, by the end of 2022.</li> </ul>	From a total of 20 airlines on the IOSA Registry in 2012 there were 34 airlines on the Registry by end of December 2019.  One new airline in ESAF (first ever in the Region) was also added to the ISSA Registry by December 2019. By end of 2019 only four (4) RASGAFI States: Mozambique, Rwanda, Togo and Zimbabwe had established some form of legal instrument that recognizes IOSA. One (1) additional State in ESAF close to finalizing.	Target to not met.  There is a need for distinction between the establishment of an appropriate framework by States for recognition of IATA operational safety audit (IOSA) and IATA Standard Safety Assessment (ISSA) as effective safety mechanisms, and IOSA registration.
<ul> <li>9. All States to establish an effective and operational SAR organization:</li> <li>Development of a National SAR Plan by end of 2018;</li> <li>Conclusion of SAR Agreements/ MoUs with all neighboring States by end of 2018;</li> <li>Organisation of multi-agency, multi-State and combined Regional SAR exercises to test SAR systems in place involving as many SAR units as practicable by end of 2019.</li> </ul>	<ul> <li>Based on data collected as part of AFI Plan project, 25 SAR agreements have been signed between States and 35 new Draft agreements have been developed to either supersede old agreements or formalised cooperation where this has been lacking.</li> <li>8 States have developed National SAR Plans and 2 States have draft National SAR Plans in place.         (Source: ICAO)</li> </ul>	Target not met.  States are progressively developing SAR Plans, though at a slow pace.
<ul> <li>10. All States to implement the transition from AIS to AIM:</li> <li>Development of a National Action Plan By end of 2018;</li> </ul>	<ul> <li>36% of States have fully completed Phase 1 Consolidation;</li> <li>44% have partially accomplished Phase 2 Going Digital.</li> </ul>	No comprehensive data available.

Revised Abuja Safety Target	Assessments	Status
Implementation of the National Action Plan in accordance with the ASBU Block 0 D-ATM by end of 2020.	(Source: ICAO)	<ul> <li>There is need to establish and promote sufficient data collection tools;</li> <li>Effective coordination among key stakeholders and appropriate regional master plans/ interventions are required to ensure effective implementation of this target.</li> </ul>
<ul> <li>11. All States to implement PBN procedures for all instrument runways.</li> <li>• 75% of Instrument Runways to have PBN procedures by end of 2020;</li> <li>• 100% of Instrument Runways to have PBN Procedures by end of 2025.</li> </ul>	Available information indicated that 33 out of 48 RASG-AFI States attained target of 100% PBN implementation, representing 68.75%.  (Source – ICAO iSTARS)	Target Not Met.  Although group average is high, a number of States have not initiated PBN procedures for their instrument runways. There is need for effective coordination among key stakeholders and appropriate regional interventions are required to ensure effective implementation of this target.
<ul> <li>12. All States to progressively reduce the rate of aircraft proximity (AIRPROX) occurrences in their managed airspaces by at least 50% annually from Dec. 2017 baseline, in order to attain and maintain a level of zero (0) Airprox by correspondingly reducing errors in the following contributive factors:</li> <li>Co-ordination between ATS Units (50%);</li> <li>Airspace Organization and ATC Procedures (50%);</li> <li>Mobile Communications (50%)</li> <li>Poor Crew Discipline on board aircraft (50%)</li> </ul>	No comprehensive data to establish level of implementation.	Target not met.  So far, no comprehensive data available.  There is need to establish and promote sufficient data collection tools.
13. Establishment of seamless Air Navigation Services in the AFI Region: a) All States to ensure provision of harmonized Air Navigation Services in terms of flight separation, interoperability of CNS/ATM systems to reduce airspace	Activities towards integration of the AFI Region towards seamless ANSPs is anticipated through RECs.	Target not met.  There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target.

Revised Abuja Safety Target	Assessments	Status
complexity and achieve seamless operations along major air traffic flows. b) Various initiatives formulated by the Regional Economic Communities (RECs) and ANSPs within the AFI Region to be harmonized.		
14. All States to implement ASBU B0  Modules:	IATA ASBU Tracker indicate that:	Target not met
<ul> <li>All States to develop National ASBU Plan by end of 2018.</li> </ul>	Total % RNAV GNSS APRCH as 63% for ESAF and 79% for WACAF;	Comprehensive information on current Status of ASBU implementation in AFI Region
	■ Total % RNAV SID as 40% for ESAF and 20% for WACAF;	<ul><li>was not available.</li><li>There is need to establish</li></ul>
	Total % RNAV STAR as 40% ESAF and WACAF 46%.	and promote sufficient data collection tools;
	(Source - ICAO/IATA)	• There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target.
15. All States to develop and implement a	25 States in AFI Region have	Target not met.
National Plan for the reduction of CO <sub>2</sub>	developed and submitted to ICAO,	Although there was an increase
emissions due to international civil	National Plans for the reduction of	from 18 States in 2018 to 25
aviation:	CO <sub>2</sub> emissions.	States in 2019, development of
• develop a National Plan for CO <sub>2</sub>	(Sauras ICAO)	National Plans needs to be fast
reduction by end of 2020;	(Source – ICAO)	tracked through appropriate regional initiatives.
• full implementation of the National Plan by 2022.		regional initiatives.
16. All States ensure that their ANSPs	Membership has continued to grow	Target not met.
effectively participate in the African	with current participation including:	More States need to be
ANSP Peer Review Programme by:	CANSO members (all 17 ASECNA	encouraged to join the ANSP
• Joining the programme and having in	States, South Africa, 3 Robert FIR	Peer Review Programme in
place, an annual Peer Review plan of	States, Uganda, Mozambique,	order to meet the 2022 target.
activities.	Zambia, Algeria etc).	
Develop and implement appropriate	(Source – ICAO)	
corrective action plans to satisfactorily address Peer Review		
recommendations.		
recommendations.		