



ICAO

## INTERNATIONAL CIVIL AVIATION ORGANIZATION

### Twenty Third Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group (APIRG/23) & Sixth Meeting of the Regional Aviation Safety Group for the AFI Region (RASG-AFI/6) – Joint sessions

(Virtual, 23 November and 2 December 2020)

#### Agenda Item 3 – APIRG and RASG-AFI Coordination - Status of Implementation of the AFI Safety and Air Navigation Targets

(Presented by AFCAC)

<b>SUMMARY</b>
<p>This paper describes the 2019 status of implementation of the revised Abuja Safety and Air Navigation (ANS) Targets by member States and operators as of December 2019</p> <p>The action by the Meeting is in <b>paragraph 3</b></p>
<p><b>REFERENCE(S):</b></p> <ul style="list-style-type: none"> <li>• Abuja Declaration on Aviation safety in Africa</li> <li>• Revised Abuja Safety Targets incorporating AFI ANS Performance Indicators</li> <li>• Mechanism for Monitoring Implementation of Safety Systems &amp; Initiatives</li> <li>• ICAO GASP and GANP</li> </ul>

## 1. INTRODUCTION

1.1. The Abuja Safety Targets consist of 16 continental Safety and ANS targets agreed amongst African member States to enhance aviation safety in Africa and AFCAC was tasked to monitor implementation of the subject 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 to provide feedback to assist AFCAC determine status of implementation of the Abuja Safety Targets.

1.2. By February 2020, **only 25 AFCAC member States** had responded whereby AFCAC supplemented this 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

2.1 The 2019 Aviation Safety targets (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 highlighted in Attachment A to this WP.

2.2 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 status as of December 2019 was 55.69% while 2018 EI status was 50.64%. This positive movement was a marginal increase of 5%.

2.3 Main challenges hindering the implementation include:

- 1) 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;
- 2) Limited progress in the implementation of air navigation related ASTs. For example:
  - a) **AST # 14** – on implementation of ASBU B0 Modules - Target Not Met - There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target;
  - b) **AST # 13** - establishment of seamless Air Navigation Services in the AFI Region – Limited progress to target - There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target;
  - c) **AST # 10** - Implement the transition from AIS to AIM- Limited progress to this target;
  - d) **AST # 11** – States to implement PBN procedures for all instrument runways –
  - e) Progress towards Target - Although group average is high, a number of States have either not initiated PBN procedures nor reported status of implementation
- 3) There is need for increased 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.
- 4) 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 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 inspections, surveillance and feedback systems.

3.2 In order to address the challenges alluded to above, the following are recommended:

**a) AFCAC, ICAO and Regional entities to:**

- align Abuja Safety Targets with GASP/GANP;
- establish measurable objectives and associated targets, indicators and responsible persons/organizations to provide information;
- develop on-line mechanism and tools for effective reporting of progress;
- convene periodic meetings with established AST Focal Points;
- provide technical assistance to States as required;
- coordinate among key stakeholders, to ensure availability and sharing of data on status of implementation.
- fast track the processes to establish relevant continental master plans which are required to ensure comprehensive implementation of the ANS Targets.

b) **Member States to:**

- establish and implement automated safety data collection and information sharing tools consistent with AFCAC's Mechanism for Monitoring Implementation of Safety Systems & Initiatives;
- develop and implement all required national implementation plans related to various Safety and ANS targets.

**4. ACTION BY THE MEETING**

4.1 The Meeting 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
<p>1. Progressively reduce the African accident rate from 8.6 to 2.5 per million departures by the end of 2022, with focus on:</p> <ul style="list-style-type: none"> <li>▪ runway related accidents and serious incidents (Runway Excursion, RE).</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> </ul>	<p>The accident rate increased from 5.16 in 2018 to 10.34 in 2019. Number of fatalities increased from <b>20</b> in 2018 to <b>184</b> in 2019 (Source: ICAO iSTARS)</p> <ul style="list-style-type: none"> <li>▪ runway related accidents and serious incidents (Runway Excursion, RE) rate increased from <b>1.2</b> in 2018 to <b>1.4</b> in 2019.</li> <li>▪ CFIT related Accidents &amp; serious Incidents rate remained at <b>0</b> from 2015 to 2019.</li> <li>▪ LOC-I related accidents &amp; serious incidents had a rate of <b>0.80</b> by end of 2018 but increased to <b>1.45</b> by 2019 i.e. <b>81% increase</b>. (Source: IATA)</li> </ul>	<p><b>Target not met.</b> <b>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;</b> <b>Number of fatalities increased from 20 in 2018 to 184 in 2019.</b> There was an upward trend in the accident rates related to RS and LOC-I; and an increase in the number of fatalities.</p>
<p>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.</p> <ul style="list-style-type: none"> <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> </ul> <p>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.</p>	<p>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.</p>	<p><b>Progress towards Target</b>  Comprehensive data on status of CAAs not available.</p>
<p>3. States resolve:</p> <ul style="list-style-type: none"> <li>▪ Existing SSCs by June 2018;</li> <li>▪ Newly identified SSCs within 6 months from the date of its official publication by ICAO.</li> </ul>	<p>From 2012 to 2019:</p> <ul style="list-style-type: none"> <li>▪ 21 SSCs found in 14 States;</li> <li>▪ 20 resolved in 13 States.</li> <li>▪ 1 SSC still exist in 1 State.</li> <li>▪ Exceeded 6 month deadline</li> </ul>	<p><b>Target not met</b> 1 SSC remaining</p>

Revised Abuja Safety Target	Assessments	Status
<p>4. States abide by the timelines and provide resources for implementation of ICAO/State Plans of Action</p> <ul style="list-style-type: none"> <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>	<p>Thirty-seven (37) States have accepted ICAO Plans of Action and are at different stages of implementation (Source: AFI Plan)</p>	<p><b>Target not met</b></p> <p>Data collected was insufficient to determine level of implementation of the ICAO/State Plans of Action.</p>
<p>5. States progressively increase the Effective Implementation (EI) percentage under the ICAO USOAP such that States with:</p> <ul style="list-style-type: none"> <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>	<p>By December 2019, about 42 of the audited AFI States achieved an average EI status of 55.72%. <b>This is 3.32% increase compared to 2018.</b></p>	<p><b>Target not met</b> (EI &lt; 60% attain 60% by 2020).</p> <p>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.</p>
<p>6. For the purposes of SSP/SMS Implementation, all States:</p> <ul style="list-style-type: none"> <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> </ul> <p>All Service Providers to use globally harmonized SPIs as part of their SMS.</p>	<p>At least twenty (20) States initiated SSP implementation with Level 3 being the highest attained.</p> <ul style="list-style-type: none"> <li>▪ However, none of the member States attained Level 4 SSP implementation by December 2019;</li> <li>▪ None of the States contributed information on safety risks to RASG-AFI. (Source: ICAO iSTARS)</li> </ul>	<p><b>Target not met</b></p> <p>Implementation of SSP/SMS remains a serious challenge, as no State has realized Level 4 SSP Status.</p>
<p>7. All International Aerodromes to be certified by 2022,</p> <ul style="list-style-type: none"> <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>	<p>As of 31 December 2019, 54 International Aerodromes certified out of 175 (27.6%).</p> <p>Since it's inception, APEX has provided <b>Forty-Seven (47)</b> assessments on the African continent (the highest percentage in the World).  (Source: ICAO)</p>	<p><b>Target not met.</b></p> <p>From the responses to the questionnaire, aerodrome certification is still a serious challenge for AFI States. However, almost all AFI States indicated that the process of certification of international aerodromes is in progress.</p>

Revised Abuja Safety Target	Assessments	Status
<p>8. Require all African airlines to obtain an IATA Operational Safety Audit (IOSA) certification:</p> <ul style="list-style-type: none"> <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>	<p>From a total of 20 airlines on the IOSA Registry in 2012 there were 34 airlines on the Registry by end of December 2019.</p> <p>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) RASG-AFI 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.</p> <p><i>(Source: IATA)</i></p>	<p><b>Progress towards Target.</b></p> <p>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.</p>
<p>9. All States to establish an effective and operational SAR organization:</p> <ul style="list-style-type: none"> <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>▪ Organization 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 style="list-style-type: none"> <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.</li> </ul> <p><i>(Source: ICAO)</i></p>	<p><b>Target not met.</b></p> <p>States are progressively developing SAR Plans, though at a slow pace.</p>
<p>10. All States to implement the transition from AIS to AIM:</p> <ul style="list-style-type: none"> <li>▪ Development of a National Action Plan By end of 2018;</li> <li>▪ Implementation of the National Action Plan in accordance with the ASBU Block 0 D-ATM by end of 2020.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 36% of States have fully completed Phase 1 Consolidation;</li> <li>▪ 44% have partially accomplished Phase 2 Going Digital.</li> </ul> <p><i>(Source: ICAO)</i></p>	<p><b>No comprehensive data available.</b></p> <ul style="list-style-type: none"> <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>
<p>11. All States to implement PBN procedures for all instrument runways.</p> <ul style="list-style-type: none"> <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>	<p>Available information indicated that 33 out of 48 RASG-AFI States attained target of 100% PBN implementation, representing 68.75%.</p> <p><i>(Source – ICAO iSTARS)</i></p>	<p><b>Progress towards Target.</b></p> <p>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</p>

Revised Abuja Safety Target	Assessments	Status
		ensure effective implementation of this target.
<p>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:</p> <ul style="list-style-type: none"> <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.	<p><b>Target not met.</b> So far, no comprehensive data available. There is need to establish and promote sufficient data collection tools.</p>
<p>13. Establishment of seamless Air Navigation Services in the AFI Region:</p> <p>a) All States to ensure provision of harmonized Air Navigation Services in terms of flight separation, interoperability of CNS/ATM systems to reduce airspace complexity and achieve seamless operations along major air traffic flows.</p> <p>b) Various initiatives formulated by the Regional Economic Communities (RECs) and ANSPs within the AFI Region to be harmonized.</p>	Activities towards integration of the AFI Region towards seamless ANSPs is anticipated through RECs.	<p><b>Limited progress to target</b></p> <p>There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target.</p>
<p>14. All States to implement ASBU B0 Modules:</p> <ul style="list-style-type: none"> <li>▪ All States to develop National ASBU Plan by end of 2018.</li> </ul>	<p>IATA ASBU Tracker indicate that:</p> <ul style="list-style-type: none"> <li>▪ Total % RNAV GNSS APRCH as 63% for ESAF and 79% for WACAF;</li> <li>▪ Total % RNAV SID as 40% for ESAF and 20% for WACAF;</li> <li>▪ Total % RNAV STAR as 40% ESAF and WACAF 46%.</li> </ul> <p style="text-align: center;"><i>(Source - ICAO/ IATA)</i></p>	<p><b>Target not met</b></p> <p>Comprehensive information on current Status of ASBU implementation in AFI Region was not available.</p> <ul style="list-style-type: none"> <li>▪ There is need to establish and promote sufficient data collection tools;</li> <li>▪ There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target.</li> </ul>
<p>15. All States to develop and implement a National Plan for the reduction of CO<sub>2</sub> emissions due to international civil aviation:</p>	25 States in AFI Region have developed and submitted to ICAO, National Plans for the reduction of CO <sub>2</sub> emissions.	<p><b>Progress towards target.</b></p> <p>Although there was an increase from 18 States in 2018 to 25 States in 2019, development of National Plans needs to be fast</p>

Revised Abuja Safety Target	Assessments	Status
<ul style="list-style-type: none"> <li>▪ develop a National Plan for CO2 reduction by end of 2020;</li> <li>▪ full implementation of the National Plan by 2022.</li> </ul>	<p><i>(Source – ICAO)</i></p>	<p>tracked through appropriate regional initiatives.</p>
<p>16. All States ensure that their ANSPs effectively participate in the African ANSP Peer Review Programme by:</p> <ul style="list-style-type: none"> <li>▪ Joining the programme and having in place, an annual Peer Review plan of activities.</li> <li>▪ Develop and implement appropriate corrective action plans to satisfactorily address Peer Review recommendations.</li> </ul>	<p>Membership has continued to grow with current participation including: CANSO members (all 17 ASECNA States, South Africa, 3 Robert FIR States, Uganda, Mozambique, Zambia, Algeria etc).</p> <p><i>(Source – ICAO)</i></p>	<p><b>Progress towards Target.</b> More States need to be encouraged to join the ANSP Peer Review Programme in order to meet the 2022 target.</p>