



## COMPREHENSIVE REGIONAL IMPLEMENTATION PLAN FOR AVIATION SAFETY IN AFRICA (AFI PLAN)

### TWENTY-SECOND AFI PLAN STEERING COMMITTEE MEETING *Kampala, Uganda, 15 May 2019*

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#### Agenda Item 4: Implementation of the revised Abuja Safety targets and ANS Performances Indicators

*(Presented by AFCAC)*

#### SUMMARY

This paper describes the 2018 status of implementation of the revised Abuja Safety targets and ANS Performances Indicators by States and Operators including the ANSPs for the ASBU modules.

#### REFERENCE(S):

Abuja Declaration on Aviation safety in Africa  
Revised Abuja Safety Targets incorporating AFI ANS Performance Indicators  
GASP  
Doc 10004, Global Aviation Safety Plan (GANP)

#### **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 April and August 2018 to provide feedback which was meant to assist AFCAC determine the status of compliance.

By December 2018, **only 20 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 ICAO databases.

## 2. Discussion

- a) The 2018 Abuja Safety Targets status of implementation report was compiled using information provided by 20 States and supplementary data from ICAO iSTARS resulting in the observations (*refer to attached graph*) below:
- b) The average for 20 States that responded was 46.5% implementation of ASTs and this is below the 2018 target of 60%;
  - The least score was AST # 10 “States to implement the transition from AIS to AIM” with 15% average level of implementation;
  - The highest average score was 100% for the 20 States due to 0 accidents recorded for the 2018 scheduled departures; and
  - States above 60% EI increased by 4% in year 2018 when compared to the 2017 performance.
- c) Further analysis of the 2018 performance resulted in the following observations:
  - There were significant information gaps due to inadequacy of information gathering tools available for example there was insufficient data to determine CFIT/ LOC-I/ Runway related accidents for 2018;
  - A considerable number of targets could not be assessed conclusively because there was insufficient data;
  - There was limited progress in the implementation of Air Navigation infrastructure related ASTs. For example:
    - AST # 14 – on implementation of ASBU B0 Modules;
    - AST # 13 - establishment of seamless Air Navigation Services in the AFI Region;
    - AST # 10 - Implement the transition from AIS to AIM;
    - AST # 11 – States to implement PBN procedures for all instrument runways.
  - **This was a result of lack of coordination, information sharing on status of implementation of the various state level and sub-regional initiatives and from interventions being observed from responsible entities.**

## 3. Conclusion

3.1 The results of the 2018 Abuja Safety Targets were a reflection of:-

- significant information gaps due to inadequacy of information gathering tools available; and
- lack of coordination and limited regional initiatives/ interventions by responsible entities to assist member States achieve set targets.

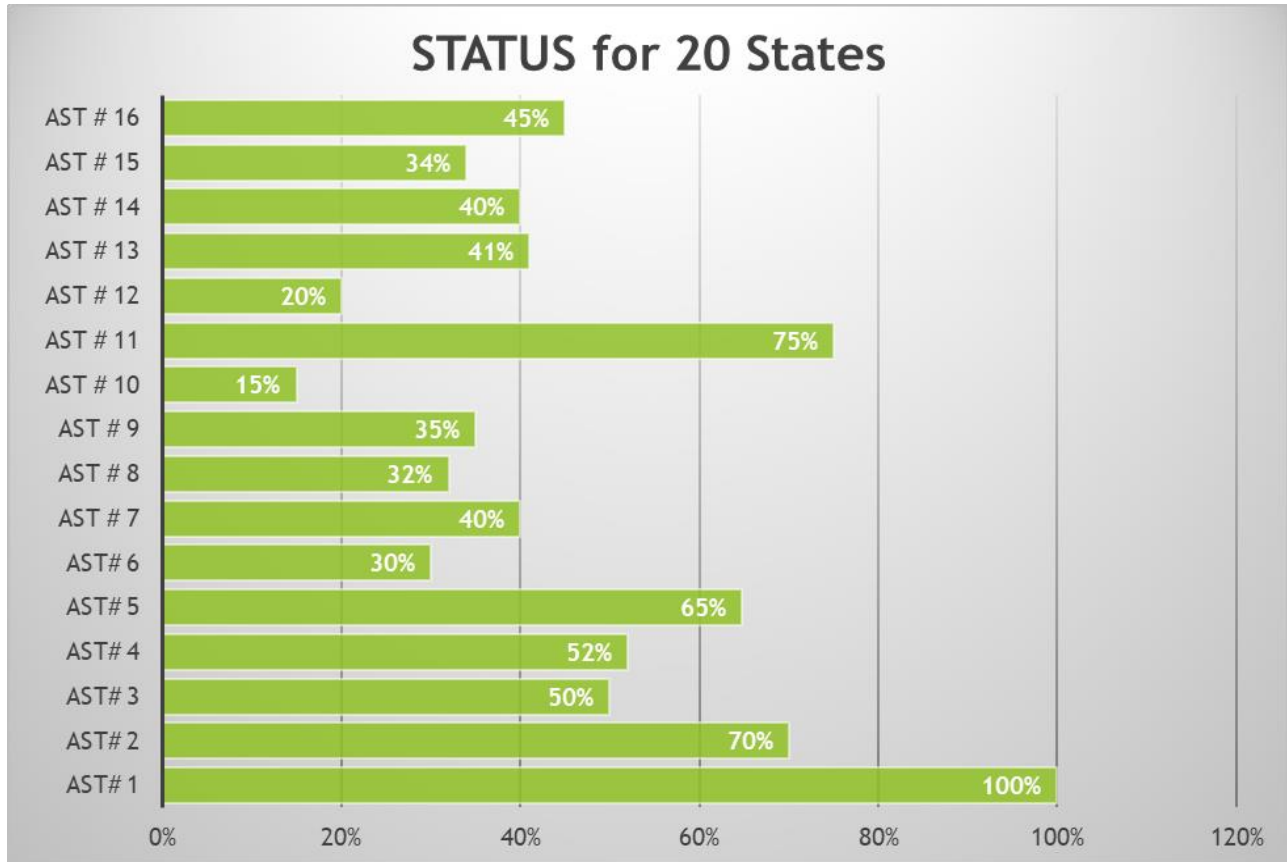
3.2 Therefore, there is need to establish and promote sufficient data collection tools consistent with AFCAC's Mechanism for Monitoring Implementation of Safety Systems & Initiatives. Effective coordination among key stakeholders and appropriate regional master plans/ interventions are required to ensure effective implementation of the Abuja Safety Targets.

#### **4. Action required**

The meeting is invited to:

- a) Note the information provided,
- b) Encourage the African States to provide the requested data to AFCAC for the monitoring and the reporting of the status of the implementation of the Abuja Safety Targets,
- c) Request ICAO to assist AFCAC in the development of the IT Tools for the collection and analysis of data received from African States,
- d) ICAO and Partners to share information captured from the various Regional and State specific implementation.

## Attachment A



**Table 1**

## Attachment B

### Combined performance for all 48 AFI States

#	Abuja Safety Targets	Assessments	Achievements
1	<p><b>Progressively reduce the African accident rate from 8.6 to 2.5 per million departures by the end of 2022.</b></p> <ul style="list-style-type: none"> <li>▪ <b>runway related accidents and serious incidents (Runway Excursion, RE).</b></li> <li>▪ <b>controlled flight into terrain (CFIT) related accidents and serious incidents.</b></li> <li>▪ <b>Loss of Control In-flight (LOC-I) related accidents and serious incidents.</b></li> </ul> <p><b>Achieve and maintain zero fatalities in aircraft accidents.</b></p>	<p><i>[Insufficient data collected in 2018]</i></p> <p>For a total of 969 900 departures within RASG-AFI States, there were 5 fatalities.</p> <p><i>(Source:- ICAO iSTARs)</i></p>	<p><b>Safety Target not met.</b></p> <p>There was a general increase in accidents compared to the same period in 2017.</p>
2	<p><b>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.</b></p>	<p><i>[Comprehensive data on status of CAAs not available]</i></p> <p>However, at least the twenty- seven (27) CAAs of States that have attained the 60% EI Target, amongst the fifty-two (52) audited African States, are effectively autonomous.</p> <p><i>(Source:-ICAO iSTARs)</i></p>	<p>Comprehensive data on status of CAAs not available.</p>

		<i>and questionnaires)</i>	
3	<p><b>States resolve:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Existing SSCs by June 2018;</li> <li><input type="checkbox"/> Newly identified SSCs within 6 months from the date of its official publication by ICAO.</li> </ul>	<p>2012 - 2018:</p> <ul style="list-style-type: none"> <li>▪ 20 SSCs found in 13 States;</li> <li>▪ 18 resolved in 12 States;</li> <li>▪ 1 SSCs still exist in 1 State;</li> </ul> <p>Most exceeded 12 month deadline.</p> <p><i>(Source: ICAO iSTARS)</i></p>	<p><b>Safety Target not met</b></p>
4	<p><b>States abide by the timelines and provide resources for implementation of ICAO/State Plans of Action</b></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>Fourty (40) States have accepted ICAO Plans of Action and are at different stages of implementation.</p> <p><i>(Source: AFI Plan)</i></p>	<p>Data collected was insufficient to determine level of implementation of the ICAO/ State Plans of Action.</p>
5	<p><b>States progressively increase the effective implementation (EI) percentage under the ICAO USOAP such that States with:</b></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>	<ul style="list-style-type: none"> <li>• 2012-: 14 States with EI above 60% (27% of States).</li> <li>• Oct 2017-: 27 States or 52% of the Audited states achieved EI above 60%.</li> <li>• December 2018-: About 56% of States average score was 52.4%. <b>This is 4% increase compared to 2017.</b></li> </ul>	<p><b>Safety Target not met</b></p> <p>Number of States with EI of 60% or greater has increased significantly from Fifteen (15) in 2014 to Twenty-four (24).</p> <p>The efforts of ICAO and AFCAC should be intensified to accelerate the implementation of the CAPs.</p>

<p>6</p>	<p><b>For the purposes of SSP/SMS Implementation, all States:</b></p> <ul style="list-style-type: none"> <li>• to have a <b>Foundation SSP established, addressing all pre-requisites by end 2022;</b></li> <li>• to have an <b>Effective SSP with appropriate maturity level established by end of 2025;</b></li> <li>• to <b>contribute information on safety risks, including SSP SPIs, to the RASG-AFI by end of 2022;</b></li> <li>• with a <b>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) by end of 2022;</b></li> </ul> <p><b>All Service Providers to use globally harmonized SPIs as part of their SMS.</b></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 forty eight (48) States attained level 4 SSP implementation for the period January – December 2018.</li> <li>• None of the States contributed information on safety risks to RASG-AFI;</li> </ul> <p><i>(Source: ICAO iSTARS)</i></p>	<p><b>Safety Target not met</b></p> <p>Implementation of SSP/ SMS remains a serious challenge, as no State has realized has realized level 4 SSP Status. Although ICAO’s recommendation is clear that ALL States above 60% EI should implement SSP/SMS, activities on the ground indicate that implementation is at its infancy.</p>
<p>7</p>	<p><b>All International Aerodromes to be certified by 2022:-</b></p> <ul style="list-style-type: none"> <li>• <b>At least one international aerodrome in every State to be certified by end of 2020;</b></li> <li>• <b>All airport operators to participate in the ICAO-recognized industry assessment programme for airports (APEX) by end of 2022;</b></li> </ul>	<p>As of 31 December 2018, 54 International Aerodromes certified out of 195 (27.6%).</p> <p><i>(Source: ICAO)</i></p>	<p><b>Safety 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>

	<b>At least one international aerodrome in every State to establish a Runway Safety Team (RST) by end of 2020.</b>		
<b>8</b>	<b>Implement State Safety Programs (SSP) and ensure that all Service Providers implement a Safety Management System (SMS) by end of 2015</b>	<p>Eleven (11) States have initiated implementation of SSP and the highest attained is level 2.</p> <p><i>(Source: ICAO)</i></p>	<p><b>Safety Target not met</b></p> <p>Comprehensive data on status of SSP/SMS implementation not available. The implementation of SSP remains a serious challenge, as no State indicated to have realized full implementation of SSP. However, the AFI States indicated that some of their operators have implemented SMS.</p>
<b>9</b>	<p><b>All States to establish an effective and operational SAR organization:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Development of a National SAR Plan by end of 2018;</b></li> <li>▪ <b>Conclusion of SAR Agreements/ MoUs with all neighboring States by end of 2018;</b></li> <li>▪ <b>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.</b></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:- AFI-Plan)</i></p>	<p><b>Safety Target not met.</b></p> <p>States are progressively developing SAR Plans though at a slow pace.</p>
<b>10</b>	<p><b>All States to implement the transition from AIS to AIM:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Development of a National Action Plan By end of 2018;</b></li> <li>▪ <b>Implementation of the</b></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><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/</li> </ul>



	<p><b>National Action Plan in accordance with the ASBU Block 0 D-ATM by end of 2020.</b></p>	<p><i>(Source : ICAO)</i></p>	<p>interventions are required to ensure effective implementation of this target.</p>
11	<p><b>All States to implement PBN procedures for all instrument runways.</b></p> <ul style="list-style-type: none"> <li>▪ <b>75% of Instrument Runways to have PBN procedures by end of 2020;</b></li> <li>▪ <b>100% of Instrument Runways to have PBN Procedures by end of 2025.</b></li> </ul>	<p>Available information indicate the overall average of over 75% in AFI Region which is below the Global target of 100%.</p> <p><i>(Source – ICAO iSTARS)</i></p>	<p><b>Target met.</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 master plans/ interventions are required to ensure effective implementation of this target.</p>
12	<p><b>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:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Co-ordination between ATS Units (50%);</b></li> <li>▪ <b>Airspace Organization and ATC Procedures (50%);</b></li> <li>▪ <b>Mobile Communications (50%);</b></li> <li>▪ <b>Poor Crew Discipline on board aircraft (50%)</b></li> </ul>	<p>No comprehensive data to establish level of implementation.</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> </ul>

<p>13</p>	<p><b>Establishment of seamless Air Navigation Services in the AFI Region by end of 2024:</b></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>	<p>Activities towards integration of the arrangements programs is anticipated in near future through RECs</p>	<p>There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target.</p>
<p>14</p>	<p><b>All States to implement ASBU B0 Modules:</b></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 59% for ESAF and 75% 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><i>(Source - ICAO/ IATA)</i></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</p>	<p><b>All States to develop and implement a National Plan for the reduction of CO2 emissions due to international civil aviation:</b></p> <ul style="list-style-type: none"> <li>▪ develop a National Plan for CO2 reduction by</li> </ul>	<p>25 States in AFI Region have developed and submitted to ICAO National Plans for the reduction of CO2 emissions.</p>	<p>Development of National Plans needs to be fast tracked through appropriate regional initiatives.</p>

	<p><b>end of 2020;</b></p> <ul style="list-style-type: none"> <li>▪ <b>full implementation of the National Plan by 2022.</b></li> </ul>	<p><i>(Source – ICAO)</i></p>	
16	<p><b>All States ensure that their ANSPs effectively participate in the African ANSP Peer Review Programme by year 2022:-</b></p> <ul style="list-style-type: none"> <li>▪ <b>Joining the programme and having in place, an annual Peer Review plan of activities.</b></li> <li>▪ <b>Develop and implement appropriate corrective action plans to satisfactorily address Peer Review recommendations.</b></li> </ul>	<p>Membership has continued to grow with current participation including:- CANSO members (all 18 ASECNA States, South Africa, 3 Robert FIR States, Uganda, Mozambique, Zambia, Algeria etc)</p> <p><i>(Source – ICAO)</i></p>	<p>More States need to be encouraged to join the ANSP Peer Review Programme in order to meet the 2022 target.</p>