

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

TWENTY-FOURTH AFI PLAN STEERING COMMITTEE MEETING VIRTUAL MEETING, 15 July 2021

Agenda Item 5 – Discussion and Partners interventions: Status of Implementation of the Abuja Safety and Air Navigation Targets and report on the AFI CIS activities.

(Presented by AFCAC)

SUMMARY

This paper describes the 2020 status of implementation of the revised Abuja Safety and ANS Targets by member States and operators. It includes a summary of the outcomes of the AFI CIS activities up to June 2021.

Action

The Meeting is invited to:-

- a) Note status of implementation of the Abuja Safety & ANS Targets (ASTs);
- b) Note outcomes of the AFI CIS activities up to June 2021.

REFERENCE(S):

- Abuja Declaration on Aviation safety in Africa;
- Revised Abuja Safety Targets incorporating AFI ANS Performance Indicators;
- Mechanism for Monitoring Implementation of Safety Systems & Initiatives;
- ICAO GASP and GANP;

1. Introduction

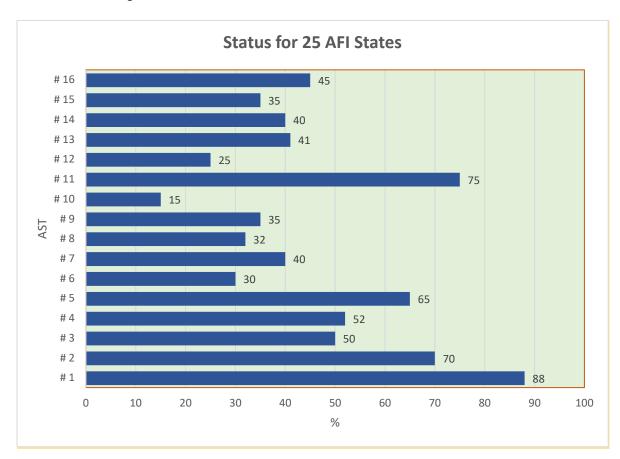
- 1.1. The Abuja Safety Targets consists of 16 continental Safety and ANS targets agreed amongst African member States to enhance aviation safety in Africa. AFCAC was tasked to monitor implementation of the Abuja Safety Targets. In this regard, a monitoring mechanism was developed by AFCAC to achieve 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.
- 1.2. By December 2020, **only 25 AFCAC member States** had responded and in-line with decisions of the AFI Plan Steering Committee meeting held at the AFI Aviation Week from 16-20 July 2018,

- AFCAC supplemented data from States with relevant information from appropriate IATA and ICAO databases i.e. ICAO iSTARS, USOAP CMA OLF etc (*refer to Attachment A*).
- 1.3. The report also includes outcomes of the AFI CIS activities conducted up to June 2021. The program is being supported by the AfDB and the EU ASA Project.

2. Discussion

Abuja Safety & ANS Targets (ASTs)

- 2.1 The 2020 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 2020 target of 60%;



2.3 Main challenges:

- 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;
- Limited progress in the implementation of air navigation related ASTs. For example:

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;

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;

AST # 10 - Implement the transition from AIS to AIM- Limited progress to target; AST # 11 - States to implement PBN procedures for all instrument runways - Progress towards Target - Although group average is high, a number of States have not initiated PBN procedures for their instrument runways.

- 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.
- A number of Safety Performance Indicators are not sufficient to reflect the status of implementation of certain targets and therefore should be reviewed.

AFI CIS Activities Report

- 2.4 AFCAC in collaboration with ICAO ESAF/ WACAF Regional Offices and EU-ASA Project hosted the 3rd AFI CIS Induction and Refresher workshop held virtually for eight consecutive days from 22 to 31 March 2021. A total of 70 AFI CIS inspectors from 21 African member States participated in the workshop. Out of the 70 participants, 58 were new AFI CIS Inspectors while 12 were experienced inspectors.
- 2.5 Beginning April 2021, AfDB is funding at least 11 AFI CIS technical assistance programmes to SAATM member States whose EI is below 60%. The assistance programmes under the Project Implementation Agreement (PIA) signed between ICAO and AFCAC will be implemented for the triennium from 2021 to 2023. As of the end of June, Zimbabwe and Guinea have gone through the first phase of the technical assistance programmes..

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 discussed, the following are recommended:-

a) AFCAC, ICAO and Regional entities to-

- o convene a group of experts meeting to revise and align the Abuja Safety & ANS Targets during 3rd quarter 2021;
- establish measurable objectives and associated targets, indicators and responsible persons/organizations to provide information for monitoring purposes;
- Concept Note and Specifications for the ASTs Performance Dashboard developed and to be validated by a group of experts meeting to be held 3rd quarter 2021;

- member States focal points appraised of the status of implementation of the Abuja Safety
 & ANS Targets at the last SADC Sub-sectoral
- o continue coordination and collaboration for AFI CIS technical assistance provided to Sierra Leone, Guinea and Zimbabwe;
- o coordinate among key stakeholders, to ensure availability of resources.
- o fast tract 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;
- o develop and implement all required national implementation plans related to the Abuja Safety and ANS targets.
- **3.3.** AFI CIS activities are being funded by AfDB and the EU ASA project. A total of 70 AFI CIS inspectors from 21 African member States participated in the induction and refresher workshop.

3.4 Action by the meeting

The Meeting is invited to:-

- a) Note status of implementation of the Abuja Safety & ANS Targets (ASTs);
- b) Note outcomes of the AFI CIS activities up to June 2021; and
- c) Recommend the alignment of various technical assistance programmes for the AFI States to avoid duplication efforts.

Attachment A

Combined Performance for AFI States

Revised Abuja Safety Target	Assessments	Status of Implementation
1. Progressively reduce the African accident rate from 8.6 to 2.5 per million departures by the end of 2022, with focus on: • runway related accidents and serious incidents (Runway Excursion, Runway Incursion). • controlled flight into terrain (CFIT) related accidents and serious incidents. • Loss of Control In-flight (LOC-I) related accidents and serious incidents. • Achieve and maintain zero fatalities in aircraft accidents.	The accident rate decreased from 10.34 in 2019 to 3.64 in 2020. (Source:- ICAO iSTARs) runway related accidents and serious incidents (Runway Excursion, Runway Incursion) continue to record a higher rate than the other High-risk categories of occurrences (HRCs). CFIT related Accidents and serious Incidents rate remained at Zero from 2015 to 2020. LOC-I related accidents and serious incidents had Zero rate in 2020. However, this may be due to the adverse reduction in traffic volume as impact of COVID-19. (Source: IATA) Number of fatalities decreased from 183 in 2019 to Zero in 2020 (Source: ICAO iSTARS)	Although there was an overall decrease in accident rate and fatalities in 2020 compared to the same period in 2019, this may be attributed to the drastic reduction in the volume of traffic due to the impact of COVID-19 pandemic. Notwithstanding, more efforts need to be put in place to continue to maintain a downward trend if the target for 2022 is to be achieved.
 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. States that need support in areas with safety margins below zero, to use a regional safety oversight organization's or 	At least the 28 States that have attained the 60 per cent EI Target, amongst the 46 audited RASG-AFI States, are effectively autonomous.	Comprehensive data on status of CAAs not available.

Revised Abuja Safety Target	Assessments	Status of Implementation
another State's ICAO- recognized functions by 2020. States effectively exercise the safety oversight functions with a positive safety margin in all areas by 2022. 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.		
3. States resolve:	Erom 2012 to 2020.	Target not met
 Existing SSCs by June 2018; Newly identified SSCs within 6 months from the date of its official publication by ICAO. 	 From 2012 to 2020: 22 SSCs found in 15 States; 21 resolved in 14 States. 1 SSC still exist in one State. Exceeded 12-month deadline 	
 4. States abide by the timelines and provide resources for implementation of ICAO/State Plans of Action All States to have accepted ICAO Plans of Action by 2019 and 	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.
 abide by the timelines and provide resources for their implementation. 		
5. States progressively increase the Effective Implementation (EI) percentage under the	By December 2020, only 59.62% of the AFI member States had reached the target of 60% EI and the group of States has an average EI of 57.18%.	Target not met (EI < 60% attain 60 per cent by 2020).

Revised Abuja Safety Target	Assessments	Status of Implementation
ICAO USOAP such that States with: ■ EI < 60% attain 60% by 2020; ■ 60% ≤ EI ≤ 70% attain 80% by 2022; 70% < EI attain 95% by 2028.	This is 1.49% increase compared to 2019.	Number of AFI States with EI of 60 per cent and greater has increased significantly from 15 in 2014 to 32 by December 2020. The efforts of ICAO and AFCAC should be intensified to accelerate the implementation of the CAPs.
 6. For the purposes of SSP/SMS Implementation, all States: to have a Foundation SSP established, addressing all pre-requisites; to have an Effective SSP with appropriate maturity level established; to contribute information on safety risks, including SSP SPIs, to the RASG-AFI; 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). All Service Providers to use globally harmonized SPIs as part of their SMS. 	By December 2020, at 24 RASG-AFI States initiated SSP implementation with One State (Rwanda) attaining Level 4. None of the States contributed information on safety risks to RASG-AFI. (Source: ICAO iSTARS)	Target not met Goal 3.1 of the 2020 – 2022 Edition of the GASP requires all States to implement the foundation of an SSP by 2022. Therefore, the ICAO Regional Offices (ESAF/WACAF) had incorporated SSP Implementation Assistance to States in their work programme, which includes review of the SSP Foundation Protocol Questions (PQs). The AFI Plan Project on SSP Implementation by States should be broadened to include all RASG-AFI States and not just States with 60% EI and greater.
7. All International Aerodromes to be certified by 2022,	As at 31 December 2020, 41 International Aerodromes were certified out of 129 within RASG-AFI States (31.78 per cent).	Target not met (At least one international aerodrome in every State to be certified by end of 2020).

Revised Abuja Safety Target	Assessments	Status of Implementation
 At least one international aerodrome in every State to be certified by end of 2020; All airport operators to participate in the ICAO-recognized industry assessment programme for airports (APEX) by end of 2022; 	 Source: ICAO) 24 out of 48 RASG-AFI States certified at least one international aerodrome. 47 airports out of 175 received an APEX review 	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.
• At least one international aerodrome in every State to establish a Runway Safety Team (RST) by end of 2020.	• 42 aerodrome out of 175	
8. Require all African airlines to obtain an IATA Operational Safety Audit (IOSA) certification: • 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.	From a total of 20 airlines on the IOSA Registry in 2012 there were 34 airlines on the Registry by end of December 2020. One new airline in ESAF (first ever in the Region) was also added to the ISSA Registry by December 2020. By end of 2020 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.	The Target to be further pursued. 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.
Air Navigation (ANS) Target	Status of Implementation	Recommendations

Revised Abuja Safety Target	Assessments	Status of Implementation
 9. All States to establish an effective and operational SAR organization: Development of a National SAR Plan by end of 2018; 	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.	Target not met. States are progressively developing SAR Plans, though at a slow pace.
 Conclusion of SAR Agreements/ MoUs with all neighboring States by end of 2018; 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. 	Eight (8) States have developed National SAR Plans and two (2) States have draft National SAR Plans in place. (Source: ICAO)	
 10. All States to implement the transition from AIS to AIM: Development of a National Action Plan By end of 2018; Implementation of the National Action Plan in accordance with the ASBU Block 0 D-ATM by end of 2020. 	 36 per cent of States have fully completed Phase 1 Consolidation; 44 per cent have partially accomplished Phase 2 Going Digital. 	No comprehensive data available. • There is need to establish and promote sufficient data collection tools; • Effective coordination among key stakeholders and appropriate regional master plans/ interventions are required to ensure effective implementation of this target.
Air Navigation (ANS) Target	Status of Implementation	Recommendations
11. All States to implement PBN procedures for all instrument runways.	Available information indicated that 33 out of 48 RASG-AFI States attained target of 100 per cent PBN implementation, representing 68.75 per cent.	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

Revised Abuja Safety Target	Assessments	Status of Implementation
 75% of Instrument Runways to have PBN procedures by end of 2020; 100% of Instrument Runways to have PBN Procedures by end of 2025. 	(Source – ICAO iSTARS)	appropriate regional interventions are required to ensure effective implementation of this target.
 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: Co-ordination between ATS Units (50%); Airspace Organization and ATC Procedures (50%); Mobile Communications (50%) Poor Crew Discipline on board aircraft (50%) 	No comprehensive data to establish level of implementation.	Target: 2023 So far, no comprehensive data available. There is need to establish and promote sufficient data collection tools.
Air Navigation (ANS) Target	Status of Implementation	Recommendations
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 complexity and achieve seamless operations along major air traffic flows. b) Various initiatives formulated by the Regional Economic Communities (RECs) and ANSPs	Activities towards integration of the AFI Region towards seamless ANSPs is anticipated through RECs.	Target: 2024 There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target.

Revised Abuja Safety Target	Assessments	Status of Implementation
within the AFI Region to be harmonized.		
14. All States to implement ASBU	IATA ASBU Tracker indicate that:	Target not met
 B0 Modules: All States to develop National ASBU Plan by end of 2018. 	 Total percentage of RNAV GNSS APRCH was 63 per cent for ESAF and 79 per cent for WACAF; Total percentage of RNAV SID was 40 per cent for ESAF and 20 per cent for WACAF; 	Comprehensive information on current Status of ASBU implementation in AFI Region was not available. • There is need to establish and promote sufficient data collection tools;
	Total percentage of RNAV STAR was 40 per cent ESAF and WACAF 46 per cent. (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	25 States in AFI Region have	States need to be encouraged to
implement a National Plan for	developed and submitted to ICAO,	develop or update their Action
the reduction of CO ₂ emissions due to international civil aviation:	National Plans for the reduction of CO ₂ emissions.	Plans using the guidance in the ICAO Doc 9988.
• develop a National Plan for CO ₂ reduction by end of 2020;	10 States are receiving assistance under Phase II of the ICAO assistance	
• full implementation of the National Plan by 2022.	project, funded by the European Union (EU), on Capacity Building for the Mitigation of CO ₂ Emissions from International Aviation.	
	(Source – ICAO)	
 16. All States ensure that their ANSPs effectively participate in the African ANSP Peer Review Programme by: Joining the programme and having in place, an annual Peer Review plan of activities. 	Membership has continued to grow with current participation including: CANSO members (all 17 ASECNA member States, South Africa, 3 Robert FIR States, Uganda, Mozambique, Zambia, Algeria etc). (Source – ICAO)	More States need to be encouraged to join the ANSP Peer Review Programme in order to meet the 2022 target.
Develop and implement appropriate corrective action plans to satisfactorily address Peer Review recommendations.	(Source Terro)	