



7th Edition of AFI Aviation Week

(16 – 20 May 2022)

25th AFI Plan Steering Committee Meeting

Agenda Item 3: DP/03 - Implementation status of the revised Abuja Safety Targets and Air Navigation Services Performance Indicators and AFI CIS Implementation Status report

(Presented by AFCAC Secretariat)

SUMMARY

This Discussion Paper highlights status of implementation of the revised Abuja Safety and ANS Targets (ASTs) up to December 2021. It also provides an update of the status of implementation of the AFI Cooperative Inspectorate Scheme (CIS).

Action Requested

The Meeting is invited to:-

- a) Note status of implementation of the revised Abuja Safety Targets and Air Navigation Services Performance Indicators;
- b) Urge AFCAC and ICAO to complete the exercise to align the ASTs with the ICAO GASP and GANP;
- c) Note the significant increase in the AFI CIS program capacity
- d) Encourage member States and RSOOs to fully participate in the AFI CIS activities

REFERENCE(S):

- Abuja Declaration on Aviation safety in Africa;
- Revised Abuja Safety Targets incorporating AFI ANS Performance Indicators;
- ICAO GASP and GANP;
- AFI CIS Policy and Procedures Manual.

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 level of

implementation of the Abuja Safety and ANS Targets on behalf of African member States. In this regard, a monitoring mechanism was developed by AFCAC to achieve this purpose. Consistent with the mechanism, questionnaires are regularly sent to member States to provide feedback meant to assist AFCAC to periodically determine the status of implementation of the Abuja Safety Targets.

1.2. Consistent with decisions of the AFI Plan Steering Committee meeting held at the AFI Aviation Week from 16-20 July 2018, AFCAC supplements data from States with relevant information from relevant IATA and ICAO databases i.e. ICAO iSTARS, USOAP CMA OLF etc.

1.3. The AFI-CIS is one of the key outreach programmes initiated by AFCAC with technical support from ICAO. The scheme was launched in year 2012 and it consists of a pool of qualified inspectors, selected from AFCAC member States, to provide technical assistance to States. The main objectives of the AFI CIS program are:

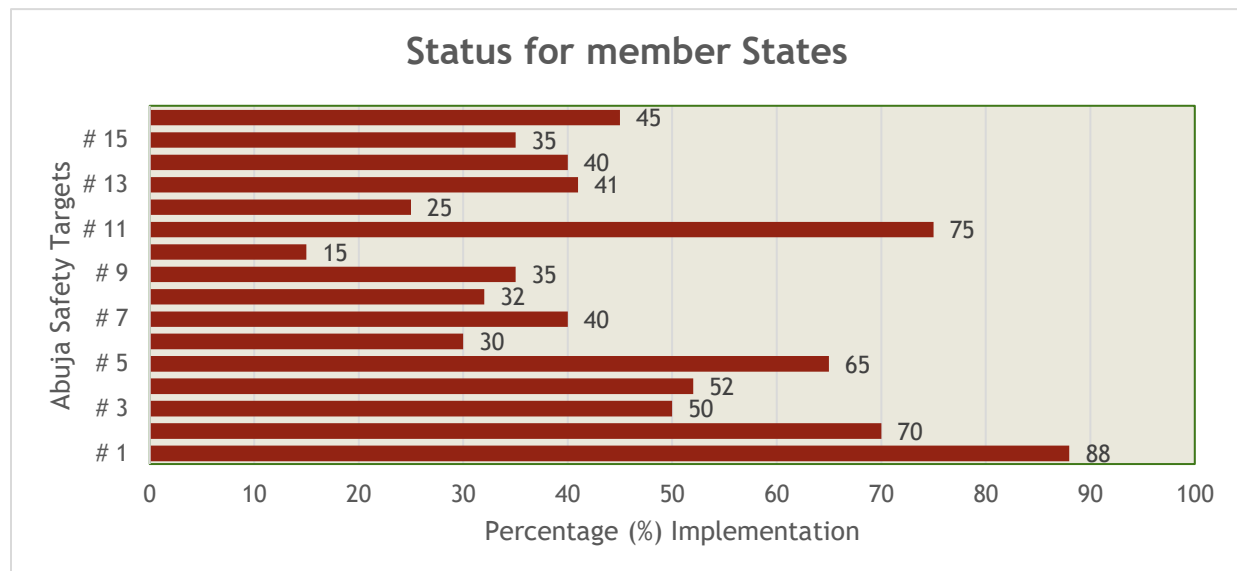
- to assist AFI States to resolve safety oversight deficiencies and in particular significant safety concerns (SSCs); and
- to improve effective implementation (EI) of the critical elements of AFI States’ safety oversight system;

2. Discussion

Abuja Safety and ANS Targets – Implementation status

2.1. Through cooperation and collaboration with international organisations and partners, resources were allocated to assist member States to implement the Abuja Safety and ANS targets. These included capacity building initiatives through various workshops and training sessions and deployment of specialist services to member States to assist them implement specific programs. The ICAO AFI Plan, funding from EU-ASA and AfDB and partnership with AFRAA, have contributed significantly towards member States compliance. These interventions resulted in increased level of implementation amongst various member States.

2.2. The ASTs status of implementation report was compiled using information provided by member States and supplementary data from IATA and ICAO iSTARS resulting in the observations as shown in Attachment B and the graph below:-



2.3. Further analysis of the 2020 - 2021 performance resulted in the following observations:

- There was very limited progress in the implementation of air navigation related ASTs. For example:
 AST # 14 – on implementation of ASBU B0 Modules – average 40% - Requirement for States to put in place National ASBU Plan by year 2018 not met;
 AST # 13 - Establishment of seamless Air Navigation Services in the AFI Region – Progress towards 2024 not satisfactory;
 AST # 10 - Implement the transition from AIS to AIM – About 15% member States submitted national action plans - 2018 Target not met;
 AST # 12 – Reduce the rate of aircraft proximity (AIRPROX) occurrences 25% of member States established AIRPROX monitoring mechanism – Progress towards 2023 Target not met.

3. AFI CIS Status of Implementation –

3.1 AFCAC collaborated with its international partners in order to provide financial support to sustain the AFI CIS program during the 2019 to 2021 triennium and the following organizations pledged financial support:-

- EU-Africa Safety in Aviation (EU-ASA) Project - The EU-ASA Project agreed to fund 10 AFI-CIS expert missions and 2 AFI CIS induction workshops for the 2019 – 2021.
- African Development Bank (AfDB) - In the framework of the AfDB Institutional Support to the AFCAC for the Implementation of the SAATM project, a provision for the assistance to SAATM member States CAAs, airlines and airports in order to improve their safety performance and their level of effective implementation of ICAO SARPs in safety. CAAs are being assisted through the AFI CIS technical assistance programs.

3.2 AFCAC in collaboration with ICAO ESAF/ WACAF Regional Offices and EU-ASA project hosted the 3rd AFI CIS Induction and Refresher workshop held from 22 to 31 March 2021. The EU-ASA Project funded the workshop while ICAO Regional Offices provided Resource Persons who conducted the workshop. 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. All the newly trained inspectors will go through the planned OJT which began in June 2021.

3.3 AFCAC conducted three AFI CIS technical assistance missions (*2 missions - Guinea Bissau and 1 mission - Zimbabwe*) in 2021 and deferred other planned missions to year 2022 due to COVID-19 disruptions. The mission to Guinea was funded by the EU-ASA project while the mission to Zimbabwe was held virtually.

4 Conclusion

- a) There is need for increased allocation of resources towards implementation of ANS related targets. In order to promote more efficient allocation of resources and to simplify monitoring of progress, there is need for alignment of targets with ICAO GASP/GANP and to clearly establish measurable objectives and associated targets.
- b) There is need for online tools for effective monitoring and reporting of progress. AFCAC and other Regional entities need to facilitate appropriate continental and regional master plans required to ensure comprehensive implementation of the ANS Targets.

ATTACHMENT A

Detailed Report on AST implementation for AFI States

1. AST Monitoring Mechanism

- A. 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 promoted and encouraged member States to use automated safety data collection and analysis tools to monitor safety oversight systems and targets consistent with the AFCAC Mechanism for Monitoring Safety Systems & Initiatives which AFCAC Plenary endorsed in December 2018. With the prevalence of COVID-19 pandemic, the use of automated and integrated safety oversight systems is the way forward as they promote real-time safety data collection and provide contactless surveillance systems and feedback.
- B. In terms of implementation, there is a need to identify suitable IT-based tools, related software, and subsequent deployment to member States as necessary.
There is also a need for coordination and collaboration amongst key regional organizations such as RSOOs and international partners to address implementation constraints, such as the requirement for resources to deploy the IT-based data collection tools and analysis for the benefit of member States. This entails channeling resources and efforts towards areas of greater need such as the ANS targets.
- C. A number of Safety Performance Indicators are not sufficient to reflect the implementation status of certain targets and therefore should be reviewed.
- D. Challenges -
- Limited information provided by the States and lack of effective mechanisms and tools for periodic reporting of progress;
 - Limited resources/ interventions by responsible entities to assist member States achieve the agreed Safety and ANS targets;
 - The safety and ANS targets are misaligned with the framework which establishes the ICAO GASP and GANP targets

2. Status -

Revised Abuja Safety Target	Assessments	Status of Implementation
<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">▪ runway related accidents and serious incidents (Runway Excursion, RE).	<p>The accident rate decreased from 10.34 in 2019 to 6.7 in 2021. <i>(Source:- ICAO iSTARs)</i></p> <ul style="list-style-type: none">▪ runway related accidents and serious incidents (Runway	<p>Although there was an overall decrease in accident rate and fatalities in 2021 compared to the same period in 2020, this may be attributed to the drastic reduction in the volume of traffic due to the impact of COVID-19 pandemic. Notwithstanding,</p>

Revised Abuja Safety Target	Assessments	Status of Implementation
<ul style="list-style-type: none"> ▪ 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. 	<p>Excursion, RE) continue to record a higher rate than the other HRCs.</p> <ul style="list-style-type: none"> ▪ CFIT related Accidents and serious Incidents rate remained at Zero from 2015 to 2021. ▪ LOC-I related accidents and serious incidents had Zero rate in 2021. However, this may be due to the adverse reduction in traffic volume as impact of COVID-19. <p><i>(Source: IATA)</i></p> <ul style="list-style-type: none"> ▪ Number of fatalities decreased from 20 in 2020 to Zero in 2021 <p><i>(Source: ICAO iSTARS)</i></p>	<p>more efforts need to be put in place to continue to maintain a downward trend if the target for 2022 is to be achieved.</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"> ▪ 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. ▪ States effectively exercise the safety oversight functions with a positive safety margin in all areas by 2022. <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>At least the 28 States that have attained the 60 per cent EI Target, amongst the 46 audited RASG-AFI States, are effectively autonomous.</p> <p><i>(Source: ICAO iSTARS)</i></p>	<p>AFCAC to encourage more States, through high level State visits, to establish autonomous CAAs with independent regulatory oversight and sustainable sources of funding.</p>

Revised Abuja Safety Target	Assessments	Status of Implementation
<p>3. States resolve:</p> <ul style="list-style-type: none"> ▪ Existing SSCs by June 2018; ▪ Newly identified SSCs within 6 months from the date of its official publication by ICAO. 	<p>From 2012 to 2020:</p> <ul style="list-style-type: none"> ▪ 22 SSCs found in 15 States; ▪ 21 resolved in 14 States. ▪ 1 SSC still exist in one State. ▪ Exceeded 12-month deadline 	<p>Target not met</p>
<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"> ▪ All States to have accepted ICAO Plans of Action by 2019 and ▪ abide by the timelines and provide resources for their implementation. 	<p>37 States have accepted ICAO Plans of Action and are at different stages of implementation (Source: AFI Plan)</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"> ▪ EI < 60% attain 60% by 2020; ▪ 60% ≤ EI ≤ 70% attain 80% by 2022; <p>70% < EI attain 95% by 2028.</p>	<p>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%. This is 1.49% increase compared to 2019.</p>	<p>Target not met (EI < 60% attain 60 per cent by 2020).</p> <p>Number of AFI States with EI of 60 per cent and greater has increased significantly from 15 in 2014 to 32 by December 2020.</p> <p>The efforts of ICAO and AFCAC should be intensified to accelerate the implementation of the CAPs.</p>

Revised Abuja Safety Target	Assessments	Status of Implementation
<p>6. For the purposes of SSP/SMS Implementation, all States:</p> <ul style="list-style-type: none"> ▪ 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). <p>All Service Providers to use globally harmonized SPIs as part of their SMS.</p>	<ul style="list-style-type: none"> ▪ 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. <p><i>(Source: ICAO iSTARS)</i></p>	<p>Target not met</p> <p>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.</p>
<p>7. All International Aerodromes to be certified by 2022,</p> <ul style="list-style-type: none"> • 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 	<p>As at 31 December 2020, 41 International Aerodromes were certified out of 129 within RASG-AFI States (31.78 per cent).</p> <p><i>(Source: ICAO)</i></p> <ul style="list-style-type: none"> • 24 out of 48 RASG-AFI States certified at least one international aerodrome. • 47 airports out of 175 received an APEX review 	<p>Target not met (At least one international aerodrome in every State to be certified by end of 2020).</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 of Implementation
<p>programme for airports (APEX) by end of 2022;</p> <ul style="list-style-type: none"> • At least one international aerodrome in every State to establish a Runway Safety Team (RST) by end of 2020. 	<ul style="list-style-type: none"> • 42 aerodrome out of 175 	
<p>8. Require all African airlines to obtain an IATA Operational Safety Audit (IOSA) certification:</p> <ul style="list-style-type: none"> ▪ 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. 	<p>From a total of 20 airlines on the IOSA Registry in 2012 there was an increase to 34 airlines on the Registry by end of December 2020.</p> <p>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.</p> <p><i>(Source: IATA)</i></p>	<p>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.</p>
<p>Air Navigation (ANS) Target</p>	<p>Status of Implementation</p>	<p>Recommendations</p>
<p>9. All States to establish an effective and operational SAR organization:</p> <ul style="list-style-type: none"> • Development of a National SAR Plan by end of 2018; • Conclusion of SAR Agreements/ MoUs with all neighboring States by end of 2018; 	<ul style="list-style-type: none"> • 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. • Eight (8) States have developed National SAR Plans and two (2) States have 	<p>Target not met.</p> <p>States are progressively developing SAR Plans, though at a slow pace.</p>

Revised Abuja Safety Target	Assessments	Status of Implementation
<ul style="list-style-type: none"> • 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. 	<p>draft National SAR Plans in place.</p> <p><i>(Source: ICAO)</i></p>	
<p>10. All States to implement the transition from AIS to AIM:</p> <ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 36 per cent of States have fully completed Phase 1 Consolidation; • 44 per cent have partially accomplished Phase 2 Going Digital. <p><i>(Source: ICAO)</i></p>	<p>No comprehensive data available.</p> <ul style="list-style-type: none"> • 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
<p>11. All States to implement PBN procedures for all instrument runways.</p> <ul style="list-style-type: none"> • 75% of Instrument Runways to have PBN procedures by end of 2020; • 100% of Instrument Runways to have PBN Procedures by end of 2025. 	<p>Available information indicated that 33 out of 48 RASG-AFI States attained target of 100 per cent PBN implementation, representing 68.75 per cent.</p> <p><i>(Source – ICAO iSTARS)</i></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 ensure effective implementation of this target.</p>
<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>	<p>No comprehensive data to establish level of implementation.</p>	<p>Target: 2023</p> <p>So far, no comprehensive data available.</p> <p>There is need to establish and promote sufficient data collection tools.</p>

Revised Abuja Safety Target	Assessments	Status of Implementation
<ul style="list-style-type: none"> • Co-ordination between ATS Units (50%); • Airspace Organization and ATC Procedures (50%); • Mobile Communications (50%) • Poor Crew Discipline on board aircraft (50%) 		
Air Navigation (ANS) Target	Status of Implementation	Recommendations
<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>	<p>Activities towards integration of the AFI Region towards seamless ANSPs is anticipated through RECs.</p> <p>ASECNA is playing a central role for its 18 member States to have seamless air navigation services.</p> <p>COMESA recruited experts to spearhead harmonization of Air Navigation Services etc.</p>	<p>Target: 2024</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"> • All States to develop National ASBU Plan by end of 2018. 	<p>IATA ASBU Tracker indicate that:</p> <ul style="list-style-type: none"> ▪ 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; ▪ Total percentage of RNAV STAR was 40 per cent ESAF and WACAF 46 per cent. 	<p>Target not met</p> <p>Comprehensive information on current Status of ASBU implementation in AFI Region was not available.</p> <ul style="list-style-type: none"> • There is need to establish and promote sufficient data collection tools; • There is need for appropriate regional master plans/ interventions to ensure effective implementation of this target.

Revised Abuja Safety Target	Assessments	Status of Implementation
	<i>(Source - ICAO/ IATA)</i>	
<p>15. All States to develop and implement a National Plan for the reduction of CO₂ emissions due to international civil aviation:</p> <ul style="list-style-type: none"> • develop a National Plan for CO₂ reduction by end of 2020; <p>E. full implementation of the National Plan by 2022.</p>	<p>25 States in AFI Region have developed and submitted to ICAO, National Plans for the reduction of CO₂ emissions.</p> <p>10 States are receiving assistance under Phase II of the ICAO assistance project, funded by the European Union (EU), on Capacity Building for the Mitigation of CO₂ Emissions from International Aviation.</p> <p style="text-align: center;"><i>(Source – ICAO)</i></p>	<p>States need to be encouraged to develop or update their Action Plans using the guidance in the ICAO Doc 9988.</p>
<p>16. All States ensure that their ANSPs effectively participate in the African ANSP Peer Review Programme by:</p> <p>F. Joining the programme and having in place, an annual Peer Review plan of activities.</p> <p>G. Develop and implement appropriate corrective action plans to satisfactorily address Peer Review recommendations.</p>	<p>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).</p> <p style="text-align: center;"><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>