



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

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

TWENTIETH AFI PLAN STEERING COMMITTEE MEETING

Montreal, Canada, 7 December 2017

Agenda Item 1.3 UPDATE ON THE REVISION OF ABUJA SAFETY TARGETS

(Presented by AFCAC)

SUMMARY

This paper presents the revised Abuja Safety Targets as proposed by the APIRG-RASG/AFI Coordination Task Force (ARC-TF) in accordance with the recommendations of the African Union Commission (AUC) Specialized Technical Committee (STC) meeting on Transport, Infrastructure, Energy and Tourism and Decision 4/9 of the Fourth Regional Aviation Safety Group for Africa-Indian Ocean (RASG-AFI/4).

The proposed revised Abuja Safety Targets include the AFI Air Navigation Services Performance Indicators (ANS PI) and Targets and take into consideration, the Safety Performance Indicators of the Aspirational Safety Goals of the new GASP.

Action: AFI Plan SC/20 Meeting is invited to:

- a) Note the information contained in this paper and its attachment;
- b) Review the new proposed targets including the revised AFI ANS Performance Indicators and Targets as well as the new time frames;
- c) Urge African States to implement the new Abuja Safety Targets;
- d) Support the current and new regional safety initiatives which are developed for the effective implementation of the Abuja Safety Targets; and
- e) Provide further guidance.

REFERENCE(S): Report of the AUC STC TTIET Meeting, APIRG/21 and RASG-AFI/4

Related ICAO Strategic Objective(s): Strategic Objectives A, B and C

1. INTRODUCTION

1.1 The Aviation Safety Targets for Africa, known as the “Abuja Safety Targets” were adopted by the African Ministers responsible for civil aviation at the Ministerial Conference on Aviation Safety in Africa which was held in Abuja, Nigeria from 16 – 20 July, 2012 through the Declaration on Aviation Safety in Africa.

1.2 The status of the implementation of the Abuja Safety Targets has been regularly presented to Stakeholders since the end of 2012, during various meetings. Many safety targets relating to the improvement of the effective implementation of ICAO Standards and Recommended Practices (SARPs) are yet to be met by many African States despite the fact that the deadlines have passed.

1.3 Furthermore, the rate of aircraft accidents in member States of the African Union is 6.79 per million departures over the 5 preceding years while the global accident rate is 3.2 per million departures over the 5 preceding years.

1.4 The revision of the Abuja Safety Targets considered as necessary for the enhancement of aviation safety in Africa, was approved by the AUC Specialized Technical Committee (STC) on Infrastructure, Transport, Tourism and Energy at its meeting which was held in Lomé, Togo, from 13 - 17 March, 2017.

2. DISCUSSION

2.1 AFCAC and ICAO have undertaken necessary coordination meetings with stakeholders to propose new Abuja Safety Targets, taking into consideration the new Global Aviation Safety Plan (GASP), the Global Air Navigation Plan (GANP) and regional safety initiatives.

2.2 The proposed revised Abuja Safety Targets were presented to the Fourth AFI Aviation Safety Symposium and the 19th AFI Plan Steering Committee organized by ICAO from 22 - 25 May 2017, in Botswana, Gaborone. The AFI Plan SC/19 meeting requested that the proposals be processed through APIRG and RASG-AFI for re-submission at its 20th meeting.

2.3 More recently, the proposed revised Abuja Safety Targets were reviewed by the 4th meeting of the Regional Aviation Safety Group for Africa-Indian Ocean (RASG-AFI/4), held in Nairobi, Kenya, in October, 2017 and formally endorsed with some observations captured in the following Decision 4/9:

“Decision 4/9: Review and endorsement of the revised Abuja Safety Targets incorporating ANS Targets & Performance Indicators and new timeframes

That,

The proposed revised AFI Safety/ANS Targets are reviewed with the following observations:

1. ***Abuja Safety Targets are endorsed subject to:***
 - a. ***Replacement of reference to ‘10% safety margin’ in targets 2 and 6 relating to autonomous CAAs and SSP Implementation respectively, with the term ‘positive safety margin’;***
 - b. ***The deadline for resolution of all three remaining SSCs being amended to end of June 2018; and***
 - c. ***Replacement of the term ‘sustainable’ with ‘Foundation’ SSP in Target 6.***
2. ***Recommendations on AN Targets:***
 - a. ***that target 12 on reduction of Airproxes be improved with the introduction of intermediary steps leading to the aspirational goal of attaining and maintaining zero Airprox,***
 - b. ***reformulation of targets 13 and 16 on establishment of seamless air navigation services and participation in the African ANS Peer Review programme respectively, to make them more precise and measurable; and***

- c. to reinforce the methodology for setting targets by determining baselines for all proposed items.*
- 3. That the Secretariat re-examines and amends, in collaboration with the RASC and APIRG Project Coordination Committee (APCC), the proposed revised AFI Safety/AN Targets taking into account the above observations and recommendations.”**

2.4 The proposed revised Abuja Safety Targets including the AFI ANS Performance Indicators and Targets presented in the attachment to this working paper were discussed and finalized during the two teleconferences conducted on 23 and 27 November, 2017 by the Steering Committee of RASG-AFI (RASC).

2.5 The framework for the revision of the Abuja Safety Targets includes the proposed amendments and the new safety targets baselines that are required for the monitoring of the implementation of the Abuja Safety Targets.

2.5 The new timeframes of the proposed revised Abuja Safety Targets are aligned with the Aspirational Safety Goals of the new Global Aviation Safety Plan (GASP) as recommended by the RASG-AFI/4.

3. CONCLUSION

3.1 The Meeting is invited to:

- a) Note the information contained in this paper and its attachment;
- b) Review the new proposed targets including the revised AFI ANS Performance Indicators and Targets as well as the new time frames;
- c) Urge African States to implement the new Abuja Safety Targets;
- d) Support the current and new regional safety initiatives which are developed for the effective implementation of the Abuja Safety Targets; and
- e) Provide further guidance and orientation as necessary.

- END -

Attachment to DP-03

FRAMEWORK FOR THE REVISION OF THE ABUJA SAFETY TARGETS AND INCORPORATION OF AFI AIR NAVIGATION SERVICES PERFORMANCE INDICATORS (ANS PIs).

(Reviewed by RASC Teleconf/9 on 27 November, 2017)

ABUJA SAFETY TARGET	Status of Implementation	Recommended Action (Revision of deadline/Target Re-Formulation/Sustain achievement)	References (GASP/GANP/NCLB/RANP/APIRG/RASG-AFI/AFI DGCA, etc)	Revised Deadline	Re-formulated Target
<p>1. Progressively reduce the African accident rate to be in line with the global average by the end of 2015.</p> <ul style="list-style-type: none"> ▪ Reduce runway related accidents and serious incidents by 50% by the end of 2015. ▪ Reduce controlled flight into terrain (CFIT) related accidents and serious incidents by 50% by the end of Dec 2015 ▪ Reduce Loss of Control In-flight (LOC-I) related accidents and serious incidents by 50% by the end of Dec 2015 	<p>Targets met:</p> <p>Runway Related Accidents & serious incidents had a rate of 6.8 accidents per million sectors in 2012 and 2.8 by end of 2015 i.e. 59% reduction. (Source: IATA)</p> <p>CFIT related Accidents & serious Incidents had a rate of 1.2 per million sectors in 2012 and went down to 0 in 2015 i.e. 100% reduction. (Source: IATA)</p> <p>LOC-I related accidents & serious incidents had a rate of 2.25 per million sectors in 2012 and went down to 0.80 by end of 2015 i.e. 64% reduction. (Source: IATA)</p>	<p>Sustain achievement and call for further reduction by 50% as applicable</p> <p>Include target on Fatal accidents to reflect NCLB aspirational goal.</p>	<p>GASP: Near-term Objective 2022</p> <p>NCLB: No fatal accidents in commercial scheduled flights by 2025</p>	By end of 2022	<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). ▪ 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.

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<p>2. 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 or delegate their functions to RSOOs or other African States by the end of Dec 2013</p>	<p>Comprehensive data on status of CAAs not available. 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>Maintain target as it is still relevant as an enabler for SARPs implementation and effective oversight.</p> <p>Autonomy and Delegation of functions to RSOOs as separate targets to avoid inference that autonomous CAAs are not to use RSOOs.</p>	<p>NCLB: No country without an autonomous and effective CAA by 2025</p>	<p>By end of 2022</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>3. As a matter of urgency, States resolve ALL identified Significant Safety Concerns created by a</p>	<p>Target not met</p> <p>2012 - 2017:</p>	<p>Sustain achievement.</p> <p>Explore all possible means</p>	<p>NCLB: No country with significant safety concerns</p>	<p>By end of June 2018</p>	<p>3. States resolve:</p> <ul style="list-style-type: none"> ▪ Existing SSCs by June 2018;

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<p>State in allowing the holder of an authorization or approval, to exercise the privileges attached to it without meeting the minimum requirements of the State and ICAO.</p> <ul style="list-style-type: none"> ▪ Existing by July 2013; ▪ Any newly identified within 12 months from identification. 	<ul style="list-style-type: none"> ▪ 20 SSCs found in 13 States; ▪ 18 resolved in 11 States. ▪ 2 SSCs still exist in 2 States. ▪ Most exceeded 12 month deadline 	<p>to resolve SSCs (i.e. RSOOs platform, AFI-CIS, Third party intervention, etc.).</p> <p>Although 12 month deadline was not met in most cases, lessons have been learnt to allow for tighter deadline (3 months) given the gravity of such occurrences.</p>			<ul style="list-style-type: none"> ▪ Newly identified SSCs within 6 months from the date of its official publication by ICAO.
<p>4. Abide by the timelines and provide resources for implementation of ICAO/State Plans of Action by July 2013.</p>	<p>Thirty-five (35) States have accepted ICAO Plans of Action and are at different stages of implementation (Source: AFI Plan)</p>	<p>Require that all States have tailored ICAO Plans of Action and implement them accordingly, in order to reflect the NCLB initiative.</p>		<p>By end of 2019</p> <p>By end of 2022</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>5. Progressively increase the Effective Implementation (EI) score of ICAO's USOAP results to no less than 60% (35% or 19 States of all African States by the end of 2013, 70% or 38 States of all African States by the end of 2015 and 100% or 54 of all African States by the end of 2017).</p>	<p>Target not met</p> <ul style="list-style-type: none"> ▪ 2012: 14 States with EI above 60% (27% of States) ▪ Oct 2017: 27 States or 52% of the Audited states achieved EI above 60% 	<p>Reformulation of target to cover States below as well as those above 60% EI</p> <ul style="list-style-type: none"> • 	<p>NCLB: No country below 40% EI in any operational or air navigation related field.</p> <p>DGCA/6: by end of 2017</p>	<p>By end of 2022</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>

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<p>6. Implement State Safety Programmes (SSP) and ensure that all Service Providers implement a Safety Management System (SMS) by the end of 2015.</p>	<p>Target not met</p> <ul style="list-style-type: none"> ▪ Eleven (11) States have initiated SSP implementation with level 2 being the highest attained. ▪ However, none of the forty eight (48) States has attained level 4 SSP implementation 	<p>For SSP implementation, all States above 60% EI to use the iSTARS Gap Analysis tool to perform the following:</p> <ul style="list-style-type: none"> • Gap Analysis; • Developing implementation plan; and • Benchmark progres. 	<p>GASP: Mid-term Objective by end of 2022.</p> <p>NCLB: No country without relevant data and tools to drive aviation development by end of 2025.</p> <p>DGCA/6: end of 2017</p>	<p>By end of 2022</p> <p>By end of 2025</p> <p>By end of 2022</p> <p>By end of 2022</p> <p>By end of 2020</p>	<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>
<p>7. Certify all International Aerodromes by the end of 2015.</p>	<p>Target not met</p> <p>As of Oct 2017,</p> <ul style="list-style-type: none"> • 37 International Aerodromes certified i.e. 	<p>Retain the target and reformulate it to capture the NCLB aspiration on State capacity for certification</p>	<p>NCLB: No country without aerodrome certification capabilities.</p> <p>DGCA/6: end of 2017</p>	<p>By end of 2022</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

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	<p>28.% of the total number of 133within AFI.</p> <ul style="list-style-type: none"> • 8 International aerodromes certified i.e 57 % of the total No. of 14 in MID (Egypt, Libya and Sudan) • 10 International Aerodromes Certified i.e. 31% out of 32 in EUR/ NAT (Morocco, Algeria , Tunisia) 				<p>certified by end of 2020;</p> <ul style="list-style-type: none"> • All airport operators to participate in the ICAO-recognized industry assessment programme for airports (APEX) by end of 2022; • At least one international aerodrome in every State to establish a Runway Safety Team (RST) by end of 2020.
<p>8. Require all African airlines to obtain an IATA Operational Safety Audit (IOSA) certification by the end of 2015.</p>	<p>From a total of 20 airlines on the IOSA Registry in 2012 there were 32 airlines on the Registry by end of December 2016. NB two (2) airlines went out of operation along the way</p> <p>However, no State had yet incorporated the IOSA requirement in the regulatory standards.</p> <p>(Source : IATA)</p>	<p>Target to be retained and improved by separating the regulatory Requirement for IOSA and the registry</p>		<p>By end of 2022</p>	<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.

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<p>9. <i>*States to establish effective and operational SAR organization (by:</i></p> <ul style="list-style-type: none"> • Developing SAR National Plan; and • Concluding SAR Agreements/MoUs). 	<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. • 8 States have developed National SAR Plans and 2 States have draft National SAR Plans in place. 		GANP:	By end of 2019	<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; • 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>10. States to implement the transition from AIS to AIM</p>	<ul style="list-style-type: none"> • 36% of States have fully completed Phase 1 Consolidation; • 44% have partially accomplished Phase 2 Going Digital 			By end of 2020	<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.

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11. All States to implement PBN procedures for all instrument runways.	Available information indicate the overall average of over 75% in AFI Region which is below the Global target of 100%	No instrument runway without a PBN approach	NCLB: Aspirational Goals	By end of 2025	11. All States to implement PBN procedures for all instrument runways. <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.
12. All States to reduce airproxes due to loss of separation	In order to achieve this target, prevalence of the top 5 contributory factors are to be reduced by 50 % year on year from 2017 to 2023; starting from a base line of 30 from December, 2017 (i.e. past 10 year average): <ul style="list-style-type: none"> • Contribution of Controller Proficiency (15.7); • Contribution of Co-ordination between ATS Units (8.5); • Contribution of Airspace Organization and ATC Procedures (7.5); • Contribution of Mobile Communications (7.5); • Contribution of Poor Crew Discipline on board aircraft (6.5). 			By end of 2023	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: <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%)

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13. All States to establish seamless Air Navigation Services	<ul style="list-style-type: none"> • Various initiatives ongoing in AFI Region under RECs and or ANSPs. • Activities towards integration of the arrangements programs is anticipated in near future through RECs 			By end of 2024	<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>
14. All States to implement ASBUs	<p>Accurate information on current Status of ASBU implementation in AFI Region is not available.</p> <p>IATA ASBU Tracker indicate that:</p> <ul style="list-style-type: none"> • Total % RNAV GNSS APPRCH as 59% for ESAF and 75% for WACAF; • Total % RNAV SID as 40% for ESAF and 20% for WACAF; • Total % RNAV STAR as 40% ESAF and WACAF 46% 		GANP:	By end of 2020	<p>14. All States to implement ASBU BO Modules:</p> <ul style="list-style-type: none"> • All States to develop National ASBU Plan by end of 2018.

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15. States to develop and implement a National Plan for the reduction of CO ₂ emissions due to international civil aviation	18 States in AFI Region have developed and submitted to ICAO National Plan for the reduction of CO₂ emissions due to international civil aviation			By end of 2022	15. All States to develop and implement a National Plan for the reduction of CO ₂ emissions due to international civil aviation: <ul style="list-style-type: none"> • develop a National Plan for CO₂ reduction by end of 2020; • full implementation of the National Plan by 2022.
16. **All State ANSPs participate in the African ANSP Peer Review Programme	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)			By end of 2019	16. All States ensure that their ANSPs effectively participate in the African ANSP Peer Review Programme by: <ul style="list-style-type: none"> • Joining the programme and having in place, an annual Peer Review plan of activities. • Develop and implement appropriate corrective action plans to satisfactorily address Peer Review recommendations.