



ASSEMBLY — 40TH SESSION

TECHNICAL COMMISSION

Agenda Item 29: Aviation Safety and Air Navigation Regional Implementation Coordination Mechanisms

SUSTAINABILITY OF THE AFRICAN FLIGHT PROCEDURE PROGRAMME (AFPP)

(Presented by the 54 Contracting States², Members of the African Civil Aviation Commission (AFCAC))

EXECUTIVE SUMMARY

Sustainable development of Civil Aviation remains a key focus of the global aviation sector hence the basis for ICAO's support for the establishment of regional flight procedure programmes to assist States to develop sustainable capability in the instrument flight procedure (IFP) domain so as to meet their commitments under Assembly Resolution A37-11 for Performance-based Navigation (PBN).

This paper outlines achievements by the African Flight Procedure Programme (AFPP) and highlights sustainability challenges in the flight procedure design capabilities and capacity building for PBN implementation in Africa as a concern with a potential to negate the gains made during Phase I of the programme implementation.

Action required: The Assembly is invited to:

- a) note the progress made through AFPP to address PBN implementation in Africa;
- b) request States and other industry players to support financially Phase II of AFPP;
- c) request ICAO to consider harmonization of the work of all FPPs; and
- d) adopt the proposed updated resolution in the appendix to this paper to supersede Assembly Resolution A39-14.

<i>Strategic Objectives:</i>	1) Safety 2) Air Navigation Capacity and Efficiency 3) Environmental Protection
<i>Financial implications:</i>	Under Participating States

¹ English and French versions provided by AFCAC.

² Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cabo Verde, Central African Republic, Chad, Comoros, Cote d'Ivoire, Democratic Republic of the Congo, Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe.

<i>References:</i>	Assembly Resolution A37-11: Performance-based navigation global goals Assembly Resolution A38-7: Comprehensive Regional Implementation Plan for Aviation Safety in Africa Assembly Resolution A39-14: Regional cooperation and assistance to resolve safety deficiencies, establishing priorities and setting measurable targets Doc 9613, <i>Performance-based Navigation (PBN) Manual</i> Doc 9750, <i>Global Air Navigation Plan</i>
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1. INTRODUCTION

1.1 The 37th Session of the ICAO Assembly in 2010 under its Resolution A37-11 reaffirmed the global commitment for performance-based navigation (PBN) implementation and called upon States to complete and submit to ICAO their PBN implementation plans as a matter of urgency.

1.2 The 38th Session of the ICAO Assembly in 2013, in its Resolution A38-7, further urged African States to support the implementation of the Flight Procedure Programme (FPP) Office for Africa through personnel secondments and/or financial support, as quickly as possible, in order to accelerate PBN implementation in the region.

1.3 The 39th Session of the ICAO Assembly in 2016, in its Resolution A39-14, additionally urged Member States to utilize the Flight Procedures Programme, where available, for PBN implementation. The implementation of PBN remains a global priority geared towards helping the global aviation community reduce traffic congestion, conserve fuel, protect the environment, reduce the impact of aircraft noise and maintain reliable, all-weather operations

2. AFPP PHASE 1 (2014-2017) ACHIVEMENTS

2.1 The Programme, structured in the form of States as Active Members providing annual contributions to support Programme activities, user States paying for specific technical assistance from AFPP, Programme host-ASECNA, programme donors (France and Airbus), ICAO providing management services and the decision-making steering committee chaired by Kenya, achieved remarkable progress during its initial phase of implementation (2 June 2014 to 31 May 2017).

- Fifty-eight percent (58%) enrolment translating to thirty-two (32) participating States.
- Number of States with developed PBN plans grew from under 40% to 79%.
- Level of implementation of RNP Approaches increased from 29% to 77%.
- Regional Capacity for experts in Procedure Design, approvals and data origination collectively grew by more than 100% through various trainings (Flight Procedure Design Courses-25 Experts, PANS-OPS OJT -5 Experts, PBN OPS Approval-90 Trainees, PBN Procedure Design Instructor Course-3 experts, workshops conducted by AFPP with 42 States participating).
- Thirty-five (35) Conventional and forty-seven (47) PBN flight procedures in five (5) States covering 16 airports developed and implemented through AFPP technical assistance.
- AFPP enhanced capacity in design by acquiring five (5) licences for Automated Procedure Design Software and associated tools.
- State contributions, including contribution by France ensured sustainability of AFPP and supporting staff for the Phase 1.
- Investment into AFPP permanent office building by the host organization – ASECNA to ensure conducive working environment.

- AFPP also participated in various regional initiatives that included: AIRBUS Showcasing of Global PBN Implementation Project in Sierra Leone, Guinea and Liberia, ICAO/EU CO2 emission reduction project through Continuous Descend Operations (CDO) / Continuous Climb Operations (CCO) implementation at Libreville and Ouagadougou airports and Project to improve Aviation Safety Oversight in DRC.

3. PROGRAMME CONTINUITY-PHASE II (2019-2021) AND SUSTAINABILITY CHALLENGES

3.1 In its 4th Meeting, the Steering Committee of AFPP approved the renewal of the Programme (Phase II) for another period of three years on assessing the need for further work on PBN implementation and the low level implementation of Continuous Descend Operations (CDO) and Continuous Climb Operations (CCO) in the region including gaps in WGS-1984 survey and lack of capacity in regulatory oversight for flight procedures.

3.2 To meet the programme objective and ensure sustainability, AFPP planned to make use of capacity achieved during Phase I of the programme through the secondment of experts to AFPP in order to meet the increased demand by States for the AFPP technical assistance. Sustainability of seconded experts to AFPP has however been hampered by lack of States' budgetary support to the seconded experts for accommodation and allowances outside their home environment. This problem is further compounded by the ICAO policy for the secondment that does not allow use of programme funds to meet maintenance cost for the experts seconded to AFPP.

3.3 Challenges faced by States to invest in appropriate technologies for flight procedure design is also a major threat to sustainability of design capabilities and capacity building for PBN implementation. As is the situation now, loss of procedure design competency for experts already trained in Phase I, lack of continuous update of already implemented flight procedures, lack of adequate capacity by AFPP to meet the increased demand for technical assistance, remain the biggest challenges with a potential to negate all gains made during Phase I of the AFPP.

4. CONCLUSION

4.1 The implementation of PBN remains a global priority geared towards helping the global aviation community reduce aviation congestion, conserve fuel, protect the environment, reduce the impact of aircraft noise and maintain reliable, all-weather operations. Several challenges still need to be addressed for Africa to comply fully with PBN, CCO and CDO implementation.

APPENDIX

DRAFT RESOLUTION FOR ADOPTION BY THE 40TH SESSION OF THE ASSEMBLY

Resolution A40-x: Regional cooperation and assistance to resolve safety deficiencies, establishing priorities and setting measurable targets

Whereas a primary objective of the Organization continues to be that of ensuring the safety of international civil aviation worldwide;

Whereas ensuring the safety of international civil aviation is also the responsibility of Member States both collectively and individually;

Whereas in accordance with Article 37 of the *Convention on International Civil Aviation* each Member State undertakes to collaborate in securing the highest practicable degree of uniformity in regulation, standards, procedures and organization in relation to aircraft, personnel, airports, airways and auxiliary services in all matters in which uniformity will facilitate and improve air navigation;

Whereas the improvement of the safety of international civil aviation on a worldwide basis requires the active collaboration of all stakeholders;

Whereas the Convention and its Annexes provide the legal and operational framework for Member States to build a civil aviation safety system based on mutual trust and recognition, requiring that all Member States implement the SARPs as far as practicable and adequately perform safety oversight;

Whereas the results of the audits and ICAO Coordinated Validation Missions (ICVMs) conducted under the Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP-CMA) indicate that several Member States have not yet been able to establish a satisfactory national safety oversight system and some Member States have been identified as having significant safety concerns (SSCs);

Whereas ICAO plays a leadership role in facilitating the implementation of SARPs and the rectification of safety-related deficiencies by coordinating support and harnessing resources among aviation safety partners;

Recognizing that the ICAO Plans of Action developed for individual Member States serve as platforms to provide, in coordination with other stakeholders, direct assistance and guidance to those States in resolving their SSCs as well as addressing low effective implementation (EI) of critical elements;

Whereas ICAO has a Policy on Regional Cooperation which is committed to render assistance, advice and any other form of support, to the extent possible, in the technical and policy aspects of international civil aviation to Member States in carrying out their responsibilities pertaining to the *Convention on International Civil Aviation* and ICAO Strategic Objectives, inter alia by promoting regional cooperation through close partnerships with regional organizations and regional civil aviation bodies;

Recognizing that not all Member States have the requisite human, technical and financial resources to adequately perform safety oversight;

Recognizing that the establishment of subregional and regional aviation safety and safety oversight bodies, including regional safety oversight organizations (RSOOs), has great potential to assist States in complying with their obligations under the Chicago Convention through economies of scale and harmonization on a larger scale resulting from the collaboration among Member States in establishing and operating a common safety oversight system;

Recalling that Member States are responsible for implementing ICAO Standards and may, in this respect, decide on a voluntary basis to delegate certain functions to RSOOs, and that, when applicable, the word “States” should be read to include RSOOs;

Acknowledging the recognition given in Annex 19 to RSOOs and their role in discharging delegated State safety management functions on behalf of States;

Recognizing that groups of Member States may decide to establish regional aviation systems, the legal basis of which may be an international Treaty and would encompass common rules and oversight applicable in the participating States;

Recognizing that the assistance available to Member States experiencing difficulties in correcting deficiencies identified through the safety oversight audits, particularly with priority given to those States with SSCs, would be greatly enhanced by coordination amongst all Member States, ICAO and other concerned parties in civil aviation operations; and

Recognizing that established regional aviation safety groups (RASGs) have the objective of establishing objectives, priorities and indicators and the setting of measurable targets to address safety-related deficiencies in each region while ensuring consistency of action and coordination of efforts;

The Assembly:

1. *Directs* the Council, in partnership with all aviation safety partners, to implement a comprehensive assistance programme that will help Member States to correct deficiencies identified through USOAP-CMA, with priority given to the resolution of SSCs;
2. *Directs* the Council to promote the concepts of regional cooperation, including the strengthening of RSOOs and RASGs, as well as the establishment of objectives, priorities and indicators and the setting of measurable targets to address SSCs and safety-related deficiencies;
3. *Directs* the Council to take the appropriate actions to ensure that the specificities of a regional aviation system established by a group of Member States are recognized and integrated in the ICAO framework;
4. *Directs* the Council to continue to partner with Member States, industry and other aviation safety partners for coordinating and facilitating the provision of financial and technical assistance to States and subregional and regional safety and safety oversight bodies, including RSOOs and RASGs, in order to enhance safety and strengthen safety oversight capabilities;

5. *Directs* the Council to continue the analysis of relevant safety-critical information for determining effective means of providing assistance to States and subregional and regional safety and safety oversight bodies, including RSOOs and RASGs;
6. *Directs* the Secretary General to continue to foster coordination and cooperation between ICAO, RASGs, RSOOs and other organizations with aviation safety-related activities in order to reduce the burden on States caused by repetitive audits or inspections and to decrease the duplication of monitoring activities;
7. *Urges* Member States to give the highest priority to the resolution of SSCs in order to ensure that there are no immediate safety risks to international civil aviation and that the minimum requirements established by the Standards set forth in the ICAO Annexes are met;
8. *Urges* Member States to utilize the Flight Procedures Programme, where available, for PBN implementation and additionally provide assistance (financial or otherwise) to ensure continuity and sustainability;
9. *Urges* Member States to develop and further strengthen regional and subregional cooperation in order to promote the highest degree of aviation safety;
10. *Calls* upon all Member States and relevant aviation safety partners, wherever possible, to assist requesting States with financial and technical resources to ensure the immediate resolution of identified SSCs and the longer-term sustainability of the State safety oversight system;
11. *Encourages* Member States to establish partnerships with other States, industry, financial institutions and other aviation safety partners to strengthen safety oversight capabilities, in order to better discharge State responsibilities and foster a safer international civil aviation system;
12. *Encourages* Member States to foster the creation of regional or subregional partnerships to collaborate in the development of solutions to common problems to build State safety oversight capability, and to participate in, or provide tangible support for, the strengthening and furtherance of subregional and regional aviation safety and safety oversight bodies, including RSOOs;
13. *Requests* the Secretary General to play a leading role in coordinating efforts to assist States to resolve SSCs through the development of ICAO Plans of Action and/or specific project proposals and to assist States to obtain the necessary financial resources to fund such assistance projects;
14. *Requests* the Council to report to the next ordinary session of the Assembly on the overall implementation of the comprehensive assistance programme; and
15. *Declares* that this resolution supersedes Resolution ~~A38-5~~ A39-14.