



**Fifth Meeting of the APIRG Airspace and Aerodrome Operations Sub-group
(AAO/SG5),**

Virtual, 23 to 26 August 2022

Agenda Item 3.1 Achievements in Airspace and Aerodrome Operations

IMPLEMENTATION OF THE AFI FREE ROUTE AIRSPACE (AFI FRA)

(Presented by the AFI FRA PMT)

SUMMARY	
This paper presents the progress made towards implementation of AFI Free Routing Airspace (AFI FRA) as per the APIRG 22 Conclusion 22/36 and ATM master plan in line with B1-FRTO ASBU module.	
Action by the Meeting is contained in section 3 of this paper.	
REFERENCE(S)	<ul style="list-style-type: none"> • Doc 9750, Global Air Navigation Plan • Doc 7474, Air Navigation Plan — Africa-Indian Ocean Region • APIRG 22 Conclusion 22/37
Strategic Objectives	A – Safety, B – Air Navigation Capacity and Efficiency, and E – Environmental Protection.

1 INTRODUCTION

- 1.1 The Global Air Navigation Plan, under ASBU Block 1 envisions improved operations through optimized ATS routing. Introduction of free routing in defined airspace, where the flight plan is not defined as segments of a published route network or track system to facilitate adherence to the user-preferred profile.
- 1.2 The APIRG /22 Conclusion 22/36 Free Routing Airspace (FRA) encourages States with the potential to implement free routing, to incorporate the FRA concept into their national airspace concept and ATM master plan in line with B1-FRTO ASBU module.

2. DISCUSSION

Rationale for Free Routing Airspace (FRA)

- 2.1 The goal of creating FRA is to allow flight plans to be filed with a significant part of the intended route specified by the user-preferred profile. Maximum freedom will be granted within the limits posed by the other traffic flows. The overall benefits are reduced flight time, fuel consumption and CO2 emissions.
- 2.2 FRA allows States / ANSPs to overcome the efficiency, capacity and environmental issues facing aviation and its full efficiency benefits will only be achieved if it is deployed over large areas and appropriated measures are taken to reduce its safety risks.
- 2.3 ICAO GANP advocates for application of FRA at Region or sub-region level. The geographical extent of the airspace of application should be large enough; significant benefits arise when the dynamic routes can apply across flight information region (FIR) boundaries rather than imposing traffic to cross boundaries at fixed predefined points

Progress made by the FRA PMT

- 2.4 The APIRG/22 Conclusion 22/36 led to the creation of the AFI FRA PMT whose main task is to guide states and the region in the implementation of FRA. The terms of reference of this team and the road map is provided as Appendix A to this WP.
- 2.5 The PMT completed:
 - 2.5.1 The translation of the FRA concept of operations (CONOPS) 1st edition to French language
 - 2.5.2 The development of the FRA CONOPS 2nd edition, which mainly addresses the standardization of FRA airspace publication (presented as Appendix B to the WP).
 - 2.5.3 Conducted the gap analysis. The gap analysis revealed the level of preparedness of the AFI States in implementing FRA. The results of the gap analysis and the CONOPS were shared with states during the first AFI FRA workshop held on 6-7 July 2022.
- 2.6 The gap analysis revealed that some States are considered to be fully ready for FRA implementation, some have already implemented FRA within their FIR while others are considered almost ready with a few considered not ready.

Way forward to advance FRA implementation within AFI

- 2.7 To ensure harmony in the implementation of the improvements required to realize FRA and eventual realization of the regional application of FRA, the meeting resolved to organize cluster meetings to deliberate further on requirements as well as develop State level action plans.

- 2.8 The three clusters are, Western & Central Africa, Southern Africa and the Eastern Africa. These are expected to hold virtual meetings to review the gaps identified, develop and consider safety assessments at regional level and agree on the action plans.

- 2.9 The cluster meetings are expected to culminate in a face-to-face meeting to be held from 24-28 October of 2022, in Mauritius, to review the level of preparedness at regional level and agree on the implementation date as guided by the road map contained in Appendix A to this WP.

3 ACTION BY THE MEETING

- 3.1 The meeting is invited to;
 - a) Take note of the progress made by the PMT.
 - b) Endorse the convening of the face-to-face meeting of the FRA PMT.
 - c) Endorse the AFI FRA CONOPS 2nd edition, which introduces the standardized FRA publication template.
 - d) Urge States that may not have actively participated in the FRA implementation to do so by providing required information and avail focal points towards FRA implementation.
 - e) Urge States to implement actions necessary for the harmonization and realization of FRA.

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