

INTERNATIONAL CIVIL AVIATION ORGANIZATION
**Fourth Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group
(AAO SG/4), Virtual Meeting, 16 to 18 August 2021**
Agenda Item 3 Planning and Implementation
Agenda Item 3.1: Airspace (Safety, Capacity and Efficiency) projects.
**ATS ROUTE NETWORK & FREE ROUTE AIRSPACE (FRA) IN AFI –TOWARDS THE
IMPLEMENTATION OF FRA**

(Presented by AFI FRA Implementation Project Team)

SUMMARY
This working paper (WP) provides an overview of the progress made in the implementation of Free Route Airspace (FRA) in AFI, together with some challenges that require a collaborative response.
REFERENCE(S): ICAO Global Air Traffic Management Operational Concept (Doc 9854) ICAO Global Air Navigation Plan (Doc 9750), APIRG 21 and 22 reports
APPENDICES FRA CONOPS 1 st Edition; AFI FRA Gap Analysis Check list; and AFI FRA Implementation Road Map.
Related ICAO Strategic Objective(s): A -Safety, B -Air Navigation Capacity and Efficiency, D -Economic Development of Air Transport and E - Environmental Protection

1. INTRODUCTION

- 1.1. Since 2019, AFI States/ANSPs, ICAO, IATA have worked together, under a Collaborative Decision Making (CDM) approach, to expedite the publication of the ATS routes agreed upon at the ICAO Route Laboratory workshop held in Accra in December 2019.
- 1.2. These initiatives have contributed to the reduction of airlines operating costs, and the environmental impact of aviation CO2 emissions, through allowing airlines to fly as close as possible to their preferred trajectories.
- 1.3. APIRG 22 Conclusion 22/36 urges States to consider incorporating Free Routing Airspace (FRA) in their national airspace concept and ATM Master Plan in line with ASBU B1-FRTO module and to include it into AAO SG work program. Despite the fact that the conclusion is focused on the East African States including, Seychelles, Mauritius, Kenya, Ethiopia, Tanzania and Uganda; it is not limited to those States listed therein. In fact, in the APIRG 21 report noted the progress made in implementation of B0-FRTO and urged the States that are ready to progress to B1-FRTO in order to improve efficiency in the upper airspace.
- 1.4 The demanding economic pressures currently experienced by Airlines and ANSPs indicate that fuel and flight efficiency has become more critical than never before. As consequence of these developments, ICAO sent on 15th April 2020 the State Letter Ref: ES AN 1/6 – 0239 calling for AFI states to nominate experts to form the AFI region FRA Project Management Team (AFI FRA PMT)

in order to progress the implementation of APIRG 22 conclusion 22/36 on Free Routing Airspace.

2. DISCUSSION

2.1 Since 2019, many AFI States have published flight plannable Directs (DCTs) as first step toward Free Route Airspace (FRA) implementation. As part of the implementation plan the stakeholders have worked together to introduce a set of operational improvements, notably the publication of Flight Plannable Direct routes (DCTs) as a first step towards To date the nineteen (**19**) AFI States have published new ATS routes, and twenty seven (**27**) AFI States published flight plannable direct (DCTs).

2.2 Those operational improvements have built ANSPs' confidence to work within a free route airspace and gradually move from fixed route network.

2.3 The AFI FRA Project Management Team (FRA PMT) was established at the FRA virtual workshop held on 9 September 2020, to provide a platform for a safe and harmonized implementation for FRA across AFI States.

2.4 To date, AFI FRA PMT has developed the first edition of the FRA Concept of operations (CONOPS) – **Appendix A**, the implementation Road map - **Appendix B** and a gap analysis checklist- **Appendix C** to assess AFI States/ANSPs capacity to implement FRA based on their ATM infrastructure and capabilities.

2.5 The FRA Gap analysis checklist was circulated to the AFI States through an ICAO state letter **Ref: ES AN 1/6 – 0100 dated 8 April 2021**, requiring states to give feedback by **31 May 2021**; so far only **24%** of AFI States completed and sent the survey to ICAO.

3. ACTION BY THE MEETING

The meeting is invited to:

- a) Review and endorse the AFI FRA Implementation Road Map
- b) Urge the AFI States that have not done so to coordinate and publish as soon as possible the pending ATS routes agreed upon in 2019 Accra workshop.
- c) Urge the AFI states that have not done so to complete the FRA Gap Analysis as soon as possible and send to the appropriate ICAO RO.
- d) Encourage States that have not implemented DCTs, to expedite the implementation based on their capabilities, in coordination with ICAO AFI FRA PMT.
- e) Urge States that have already implemented DCTs, to review the validity period of the publications in order to ensure continued availability.
- f) Urge States that have already implemented DCTs and conducting Cross border DCTs trails, to formalize cross-border DCTs through amendments of Letters of Agreements (LOAs) and Flight plannable directs publications, in coordination with the ICAO AFI FRA PMT.
- g) Urge States that have already implemented DCTs, to consider the transition to FRA in coordination with the ICAO AFI FRA PMT.

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