

INTERNATIONAL CIVIL AVIATION ORGANIZATION**Third Meeting of the APIRG Airspace and Aerodrome Operations Sub-Group
(AAO/SG3), Virtual Meeting, 3 to 5 August 2020****Agenda Item 3: Planning and implementation****IMPLEMENTATION OF FRA CONCEPT**

(Presented by ASECNA)

SUMMARY

As part of the implementation of the FRA concept which gives users the ability to plan a route between a defined entry point and a defined exit point, with the ability to go through intermediate waypoints (published or unpublished), without reference to the network of fixed ATS routes, subject to the availability of airspace, ASECNA in its deployment plan adopted the progressive approach for the implementation of the various phases of the ASECNA FRA.

The first phase, which consists in deploying direct DCT routes in all ACCs under the responsibility of ASECNA from flight level 290, was implemented in coordination with IATA.

For this purpose, a data collection campaign is underway and the analysis of the results obtained will allow the FRA ASECNA team to better approach the implementation phase in all ACCs of an FIR / UIR and the last phase, its extension to all ASECNA FIR / UIR.

REFERENCE(S): Global ATM Operational Concept (Doc 9854) - Global Air Navigation Plan (Doc 9750)

Related ICAO Strategic Objective(s): Security; Air navigation capacity and efficiency, Environment

1. INTRODUCTION

1.1 Free Route Airspace (FRA), gives users the freedom to plan a route between a defined entry point and a defined exit point, with the option of passing through intermediate waypoints (published or unpublished), without reference to the fixed ATS route network, subject to airspace availability.

1.2 ASECNA, as part of its air traffic management strategy, contained in its 2018-2023 Strategic Orientation Plan, has provided for the implementation of the Free Route Airspace concept in its airspace, a working group has therefore been set up for this purpose. The progressive approach has been adopted, the first step is the implementation of direct DCT

routes (end of 2020), the second phase will consist of implementing FRA in the ACCs of an FIR / UIR (2021-2022), the third phase is to extend it to all ACCs of all ASECNA FIR / UIRs (from 2023) and the final objective is the full implementation of the FRA in the whole airspace managed by ASECNA.

1.3 Related to the covid-19 pandemic and the recovery of the civil aviation sector, in coordination with IATA, ASECNA has provided support to airlines by publishing, since April 30, 2020, a circular of aeronautical information which offers air users the possibility of planning flights on direct routes in the ACCs of all FIR / UIR managed by ASECNA above flight level 290. The expected benefits are the reduction of flight time and fuel economy.

1.4 The entry, intermediate and exit points in the ASECNA FIRs must be chosen among the existing significant points published in the AIP ASECNA. The planning of DCT flights will be in line with the existing route networks of adjacent FIRs.

1.5 As the implementation of operations on direct routes is a prelude to the deployment of the FRA concept, for this purpose, a data collection campaign relating to the implementation of these operations is organized in all ACCs of the FIR / UIR ASECNA since May 2020 and it will last until October 2020. At the end of this collection campaign, the data analysis will identify the directions and the preferential levels requested, the airlines involved, the following reserved for the various requests for direct routes and especially the security events related to these operations.

1.6 The working group set up for the implementation of the FRA ASECNA will rely on the results obtained during this first phase to lead the second phase, that of the deployment of the FRA in the ACCs of an FIR / UIR as well as the other phases foreseen in the FRA ASECNA implementation plan.

2. DISCUSSION

2.1 The progressive approach being retained as the FRA implementation scenario, the latter will be carried out initially in a time slot chosen at night or day, in a range of flight levels and will initially be based on the review of the network of fixed ATS routes and in the phase of full deployment, in coordination with other stakeholders, on studies will decide on the advisability of maintaining or not the network of fixed ATS routes and the need for the creation contingency routes.

2.2 To continue to ensure the same level of safety and take full advantage of the benefits expected in the FRA, the deployment of this concept will require the improvement of procedures for operations, the revision of the airspace and road structures as well as that the modernization of communication systems (AIDC, CPDLC, VHF, HF), surveillance (ADS-B, radar, ADS-C) and air traffic management (procedures, required separation standards, conflict detection tools) and reliable flight plan processing to be compatible with existing operations, interoperable with the systems of adjacent ACCs. The effectiveness of the concept lies in its implementation over a large volume of airspace. Adjacent ACCs should facilitate implementation by in turn authorizing direct routes into the airspace under their responsibility or contribute to efficient and coordinated implementation at the regional level.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note of this FRA concept implementation initiative in the AFI region contained in this working paper
- b) Encourage concerned adjacent states to implement the FRA concept
