



Twenty Second Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group (APIRG/22)
(Accra, Ghana, 29 July – 02 August 2019)

Agenda Item 4.5: Regional and Interregional Activities

PROGRESS OF THE EAST AFRICAN COMMUNITY (EAC) UPPER AIRSPACE SEAMLESS OPERATIONS

(Presented by KENYA)

SUMMARY
<p>This paper presents an update of the ongoing initiative within East African Community (EAC) in as far as management of the upper airspace over the Partner States is Concerned.</p> <p>Implementation of seamless operations in upper airspace is a result of a successful study that addressed matters related to the establishment of an upper airspace system as outlined in the EAC treaty so as to ensure high level of safety and advantages in capacity, efficiency and performance in the EAC Region Action by the meeting is outlined in paragraph 3</p>
<p>REFERENCE(S):</p> <ol style="list-style-type: none"> 1. The Project Team. EAC UFIR Follow-On Study 2. EAC upper airspace seamless operations implementation plan 3. EAC harmonized regulations 4. ICAO ASBU implementation strategy 5. APIRG/19/20/21 Reports
<p>Related ICAO Strategic Objective(s):</p> <ol style="list-style-type: none"> 1. Enhance global civil aviation safety 2. Increase the capacity and improve the efficiency of the global civil aviation system 3. Minimize the adverse environmental effects of civil aviation activities

1. INTRODUCTION

- 1.1 The broad goal of the EAC is to enhance cooperation for the mutual benefit of Partner States;
- a) The Treaty was signed on 30th November 1999 and entered into force on 7th July 2000. 3 original Partner States, Kenya, Uganda Tanzania). Burundi, Rwanda acceded to EAC Treaty in June 2007 and became full members from July 2007. Republic of South Sudan was officially admitted in 2016.
 - b) The Treaty outlines a comprehensive system of cooperation among the Partner States in:
 - Trade
 - Investment,
 - Industrial development,
 - **Infrastructure and services** among others

EAC Treaty Chapter 15; Cooperation in Infrastructure and Services Article 92 (Civil Aviation and Civil Air Transport) requires the establishment of a **Unified Upper Area Control System**.

- a) A roadmap toward the establishment of an EAC Upper Flight Information Region (UFIR) controlled by one Upper Area Control Center (UACC) was developed. USTDA funded a Feasibility Study for the EAC UFIR Project which included participation of FAA. The Feasibility Study was conducted by DORS Incorporated with final report presented in March 2009.
- b) Expansion of EAC to include Burundi and Rwanda, the need to assess sustainability of the lower airspace while keeping pace with technological advancement, necessitated EAC to undertake a Follow-On Study that was concluded and adopted for implementation in January 2016.
- c) The Follow-On study recommended seamless operations within EAC with Partner States maintaining own FIR structure. Seamlessness will be achieved through utilization of existing and planned infrastructure and ATM systems in an interoperable manner without the need to establish a single large-scale unified Upper Area Control Center systems.

2. DISCUSSION

2.1 The USTDA Feasibility Study included creation of a single block of upper airspace (airspace above FL 245) over Tanzania, Kenya and Uganda operating from a single area control center and recommended 3 sectors

2.2 The study was not conclusive enough in areas related to;

- Legal
- CNS
- ATM
- AIS/AIM
- HR
- Finance
- No consideration of sustainability of the lower airspace (below FL 245)
- Effects of new technology that enable seamless ATM operations.

2.3 From the Follow – On Study, actual traffic volume movement statistics for fourteen (14) consecutive days indicated that the Upper airspace (Above FL 245) for Kenya, Tanzania and Uganda had more traffic than the Lower airspace (Below FL 245). In the case of Burundi and Rwanda, the Lower airspace had more traffic compared to the Upper airspace.

2.4 Based on data collected, air traffic movement projections and taking into account the investments within Partner States to enable movement from ICAO ASBU Block 0 to Block 1, the project team redesigned the airspace that entails seamless operations. It envisages sharing of CNS/ATM systems within Partner States at the various control centers in a cooperative and intraoperative manner.

2.5 Implementation plan

- To enable interoperability and seamlessness for the Air Navigation Services
- Enhancement of collaborative activities in the provision of Air Navigation Services
- Implementation/Development of National Aeronautical Information Databases
- Development and operationalization of the Centralized Regional Aeronautical Information Database
- Enhancement of Safety and Security

- Enhancement of Training, Research and Development
- Implementation of harmonized Safety Oversight
- To provide effective maintenance of CNS/ATM/AIM facilities
- To ensure provision of reliable Power supply and protection systems.
- To establish regional and national requisite policy, legal and regulatory framework for seamless operations
- Establish a regional coordination framework
- To manage the project identified risks
- Establishment of seamless EAC Upper Airspace management system
- Establishment of annual monitoring and evaluation of the performance of seamless operations

2.6 To enable progress in implementation, the following have been achieved
 Domestication of harmonized regulations including review to support seamless operations

- Harmonization of MANSOPS
- Development of LoP template for ACCs
- Development of National AIM database
- Development of an MoU for operationalization of seamless airspace
- Development of a 5-year implementation plan
- Interstate use of SAR resources framework

2.7 Further implementation progress is expected during system integration, key among the plan is the use of common SSR codes within the seamless upper airspace.

2.8 EAC SEAMLESS UPPER AIRSPACE



3 ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Take note of the development and progress made in East Africa in as far as seamless operations airspace management is concerned.

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