INTERNATIONAL CIVIL AVIATION ORGANIZATION

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

(Virtual, 23 - 26 August 2022)

Agenda Item 3.1: Status of implementation of applicable ASBU elements

WP3.1A1 Identification of ASBU elements applicable to AFI Region

(Presented by the Secretariat)

SUMMARY
This working paper outlines the assessment conducted by the secretariat for the identification of Aviation System Block Upgrade (ASBU) Elements applicable to AFI Region. It recalls the background of the AFI Regional air navigation system implementation plan and gives the approach adopted in identifying the applicable elements. Action by the meeting **in paragraph 3**
REFRENCE(S): ▪ Report of the 19th meeting of APIRG ▪ Report of the 24th meeting of APIRG ▪ Global air navigation plan (GANP)
ICAO Strategic Objectives: **A** – *Safety*, **B** – *Air Navigation Capacity and Efficiency*, ***D*** – *Economic Development of Air Transport*

1. INTRODUCTION

1.1 The nineteenth meeting of APIRG held from 28 to 31 October 2013 in Dakar, Senegal, took note of the ICAO twelfth Air navigation conference (AN-Conf/12) ***Recommendation 6/1*** calling States and PIRGs for the alignment of regional air navigation plans with the 4th edition of the GANP, with focus on implementing aviation system block upgrade (ASBU) Block 0 Modules according to their operational needs.

1.2 As a follow up to the said recommendation, the meeting, through its ***Conclusion 19/06***, adopted the AFI Regional air navigation system implementation plan aligned with the ASBU framework. This plan was based on categorization of modules with the objective of ranking each module in terms of implementation priority.

1.3 The 6th edition of the GANP, released in 2019, introduced the following significant changes:

a. Performance-based approach,
b. Four-tier layer approach which encompasses the global managerial level, the global technical level, the regional level, and the national plan layer,
c. Addition of the Basic Building Blocks (BBB) frameworks as backbone requirements of an air navigation system,
d. Update of ASBU framework.

1.4 The twenty-fourth meeting of APIRG held virtually from 1 to 8 November 2021, taking note of the important changes introduced through the 6th edition of the GANP, identified the need for the AFI Region to realign the regional air navigation plan to the GANP. In this regard, the meeting tasked the secretariat, in coordination of the AAO and IIM subgroups projects teams, to identify the ASBU elements applicable to AFI region.

1.5 A survey was also conducted through a State letter to State to indicate Status on implementation of ASBU elements initially identified in 2013 but very little response was received from States.

2. DISCUSSIONS

2.1 The AFI Regional air navigation system implementation plan had been aligned with the 4th edition of the GANP. Based on operational requirements and considering the benefits associated, a number of Block 0 modules were chosen for implementation in the AFI region, with the categories as follows:

a. **Essential (E):** These are the ASBU modules that provide substantial contribution towards global interoperability, safety, or regularity. The five (5) Modules for all States of AFI region are FICE, DATM; ACAS, FRTO and APTA.

b. **Desirable (D)**: These are the ASBU modules that, because of their strong business and/or safety case, are recommended for implementation almost everywhere. The eight (8) Modules for all States of AFI region are ACDM, NOPS, ASUR, SNET, AMET, TBO, CDO, and CCO.

c. **Specific (S)**: These are the ASBU modules that are recommended for implementation to address a particular operational environment in specific countries of AFI region (for example South Africa). The (3) Modules are OPFL, ASEP and WAKE.

d. **Optional (O)**: These are the ASBU modules that address operational requirements in specific countries of AFI region and provide additional benefits that may not be common everywhere. The two (2) Modules are SURF and RSEQ.

2.2 The modules were then allocated priority for implementation within the AFI Region as follows:

Priority	**Modules**
Priority 1: Immediate implementation, covers most of the AFI States	B0-65 APTA, B0-80 ACDM, B0-25 FICE, B0-30 DATM, B0-105 AMET, B0-10 FRTO, B0-101 ACAS, B0-05 CDO, B0-20 CCO
Priority 2: Recommended implementation, applies to only specific States of AFI region	B0-15 RSEQ, B0-70 WAKE, B0-75 SURF, B0-35 NOPS, B0-84 ASUR, B0-85 ASEP, B0-86 OPFL, B0-102 SNET, B0-40 TBO

2.3 The ASBU framework has been updated in the 6th edition of the GANP with better clarification of its concepts. Thus, the ASBU Element have become the core concept. It is a specific change in operations designed to improve the performance in air navigation under specified operational conditions.

2.4 While the first version of the AFI Regional air navigation system implementation plan was Module-oriented, the focus is now made on the applicability of the ASBU elements in the AFI region. The assessment of this applicability was conducted by the secretariat, considering the performance-based approach. Moreover, it should be noted that some ASBU Elements are made mandatory pursuant to the ICAO Standards and recommended practices (SARPs).

2.5 The identification of applicable ASBU Elements was conducted in the areas of AOP, ATM and SAR as per the Appendices 1 and 2 to this working paper.

3. ACTIONS BY THE MEETING

3.1 The meeting is invited to:

a) note the information provided in this working paper, and
b) review the identified/proposed ASBU elements identified,
c) Develop a draft decision for consideration by APIRG.

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