BU

*International Civil Aviation Organization*

**ASBU implementation in Africa**

(Presented by CANSO Africa boni dibate)

SUMMARY

The Aviation System Block Upgrades (ASBU) concept advances the ICAO Global Air Navigation Plan (GANP) (Doc 9750) with the goal of implementing regional aviation performance improvements. The concept focuses on four performance improvement areas: airport operations; global interoperable systems and data; optimum capacity and flexible flights; and efficient flight paths. The ASBUs outline air and ground equipment and timelines for standards and procedures implementation, and help to improve the efficiency, effectiveness and safety of air transport.

The implementation of ASBUs, along with initiatives like air traffic flow management (ATFM), collaborative decision-making (CDM) performance based navigation (PBN), safety management systems (SMS) and runway safety, are key priorities for ANSPs in Africa. In line with ICAO recommendations, CANSO is therefore committed to advancing ASBU implementation by addressing regional challenges and finding workable solutions.

An important aspect of this is working in collaboration with IATA, ICAO, ACI, AFRAA, AFCAC, regional associations and other relevant stakeholders.

1.    **INTRODUCTION**

1.1    CANSO members in Africa have identified ASBUs and PBN as part of their priorities

1.2    CANSO has been working with ICAO on an ASBU implementation initiative since 2014, when an initial framework for implementation was laid out. While there has been progress since, implementation has been a challenge for ANSPs and is a key concern in the context of rising air traffic both domestically and internationally.

1.3    In 2014 and 2015 CANSO in partnership with ICAO organised workshops on ASBUs implementation in Mozambique and Nairobi Kenya. In both these workshops the Remote Air Traffic Control Tower concept (UAV), Air Traffic Flow Management (ATFM), Aerodrome Collaborative Decision Making (A-CDM), Training on Air Navigation Services Technologies and finally on Flight Calibration were discussed.

1.4    To continue on its work of ASBU implementation , CANSO organised an ASBU Status of  implementation workshop in collaboration with ICAO on 24-25 April 2019 in Entebbe, Uganda. The workshop was attended by 109 participants from nine ANSPs

and eight organisations. The workshop explored the status of ASBU implementation and the challenges of its implementation. It also provided ANSPs with an improved understanding of the ASBU framework components, assisted participating States in completing the Air Navigation Reporting Forms (ANRF), and helped CAAs and ANSPs to determine the way forward for implementing and prioritizing ASBUs in National Plans.

1.5     To further support the ICAO ASBU initiative, CANSO has developed an ASBU 101 introduction booklet to help facilitate strategic planning initiatives in ATM. This booklet provides an overview of the processes that will guide decision makers' selection and implementation of the ASBUs.

This booklet provides an understanding of global aviation system harmonisation's vision, goals and challenges it also clarifies the ASBUs objectives, capability threads and minimum path to achieve global interoperability. This will ensure global interoperability and to meeting individual ANSP's regional requirements

## 2.     DISCUSSION AT THE UGANDA WORKSHOP

The workshop again was organized in line with the ICAO ASBU framework with the aim of continuing with the reviewing of the status of implementation of the ASBU Block 0 Modules  for AFI CANSO members and States. The specific objectives were to;

- report back on the status of ASBU Block 0 implementation by the participants;
- assess the challenges of Block 0 implementation of the participating States;
- further establish clear understanding of the components of the ASBU framework;
- assist participating States in completing the Air Navigation Reporting Forms;
- assist CAAs and ANSPs in determining the way forward in implementation and prioritization of the ASBUs in their National Plans.
- Missing flight plans was identified as a major safety concern in the region, the workshop recommended that;
  - AFI states should put in place measures to address the issue of missing flight plans;

- All data related to missing flight plans should be collected and shared with ICAO;
- ICAO considers allocating more resources in helping states resolve the issues relating to missing flight plans;
- States should audit the collective addresses within their AIM department to ensure use of correct addresses;
- Following the workshop, it was resolved that each ANSP would create specific ASBU focal points, ensure a multidisciplinary team, and help create organisational and national masterplans for ASBU implementation, meeting the specific needs of each ANSP and State.
- The participants also agreed to call upon States to help implement A-CDM, CDM and ATFM, as encouraged by the "CANSO ATFM Mombasa Roadmap". The interoperability of ATM systems is vital to the safe implementation of the ASBU modules, and States are urged to work closely with the manufactures to ensure the harmonisation of the ATM systems in the region.
- In addition, the workshop called for States to focus on developing a concept of operations for UTM, as UAS operations continue to increase.

## 3. RECOMMENDATIONS BY THE WORKSHOP

**3.1.1.** States should make it a requirement for suppliers to integrate new CNS/ATM systems with existing systems and

**3.1.2.** States should work closely with other States and manufacturers to ensure integration of new CNS/ATM systems with existing systems in the region;

**3.1.3.** States are called upon to implement ACDM, CDM and ATFM as required by the Mombasa ATFM Roadmap, 2018.

**3.1.4.** States need to designate ASBU Focal Point ( Champion) who will be responsible for coordinating ASBU implementation in the State and should have an appropriate level of knowledge and authority to command audience at all levels for the required information.

**3.1.5.** States should designate champions for RPAS to prepare a UAS Traffic Management (UTM) concept of operation for the State.

**3.1.6.** States should develop relevant documentation that includes the ATM roadmap, National Airspace Master Plan and enabling technologies roadmap.

**3.1.7.** Using the knowledge obtained in this workshop, states should review their ASBU implementation priorities and update their plans accordingly.

**3.1.8.** During the prioritization of the ASBU elements to implement, States should also focus on other ASBU modules like SWIM (AIDC) that support safety in the distribution of flight plans in the region.

**3.1.9.** States should fill in and periodically update their ANR Forms and submit to ICAO as required.

**3.1.10.** CANSO should present the recommendations of this workshop at the 6th AFI Aviation Week Meeting to be held in Kampala, Uganda 13th to 17th May 2019 and any other high profile ICAO forums thereafter.

**4. ACTION BY THE MEETING**

The meeting is invited to:

To Adopt the recommendations of the workshop.