ICAO

Twenty-Second Meeting of the AFI Planning and Implementation Regional Group (APIRG/22)
(Accra, Ghana, 29 July – 2 August 2019)

Agenda Item 4.- Other Air Navigation Issues

4.4 Initiatives by States & Industry and other air navigation issues

UPDATES ON PROGRESS MADE BY GHANA ON AIDC IMPLEMENTATION

(Presented by GHANA.)

SUMMARY	
This working paper present updates to the meeting on the progress made by Ghana towards the implementation of Air Traffic Service (ATS) Inter-facility Data Communication (AIDC). Action by the Meeting: see Paragraph 3. **References: APIRG 21 Report**	
Strategic Objectives	A: *Safety*; B: *Air Navigation Capacity and Efficiency* **Related ASBU Bloc 0 Modules, Performance Improvement Areas and Applications:** B0-FICE/PIA2-*AIDC*

1 INTRODUCTION

1.1 AIDC has been identified in the Aviation System Blocks Upgrades (ASBU) modules as one of the candidate applications for the block zero elements/technologies. AIDC seeks to inter-connect Air Traffic Service (ATS) Units in the Air Navigation industry. One advantage of AIDC is that, it provides automated coordination, which significantly reduces the workload on Air Traffic Controllers while impacting positively on safety.

1.2 AIDC implementation provides benefits in terms of safety and efficiency in the following ways;

- significantly reduces, the need for oral coordination between ATS units;
- reduces controller workload;
- reduces repetition/read back errors during coordination;
- enables expedited clearance delivery
- provides automatic validation of flight plans

1.3 The APIRG 21 Conclusion 21/26 "**The IIM/SG coordinate the implementation by AFI States of new AIDC capable systems aimed at ensuring the full compliance of their protocols in order to facilitate interoperability and interconnection"; and "ASECNA and GCAA are encouraged to complete the implementation of AIDC between Accra and Abidjan ACCs and share their experience for consideration by the relevant APIRG Project".**

1.4 The above conclusion encouraged the implementation of AIDC in AFI states and specifically encouraged Accra and Abidjan who had encountered initial challenges with AIDC interconnection, to resolve these challenges so that the experience gained by the two centers can be shared with others.

2. DISCUSSION

2.1 In May 2016 a Sub-regional initiative on implementation of AIDC began with the assistance of the ICAO WACAF Regional Office and participation from the Economic Community of West African States (ECOWAS). This meeting was held in Lomé.

2.2 This resulted in ASECNA (Benin, Burkina Faso, Chad & Côte d'Ivoire, Togo), GCAA (Ghana), NAMA (Nigeria) and the Roberts FIR (Guinea, Liberia & Sierra Leone) deciding to implement AIDC between identified ATSUs. This decision considered the following ATS Units Accra, Abidjan, Dakar, Kano, N'Djamena, Niamey and Roberts FIRs.

2.3 Since that meeting in Togo and considering the conclusions of successive APIRG and other regional meetings, Ghana has been coordinating with neighbouring ATSU, mainly ASECNA to ensure the implementation of AIDC among neighboring states. Accra has so far had successful AIDC interconnection with Abidjan, Niamey and Togo.

Challenges/Constraints

2.4 The initial challenge Ghana had was that our Air Traffic Management (ATM) system was not AIDC capable during the initial stages of the AIDC implementation. However, in July 2017, Ghana installed a new ATM system with AIDC capabilities. Following this, cross functional teams of CNS and ATM experts from Accra and Abidjan closely collaborated by mail, teleconferences as well as technical visits to their neighboring centers to ensure that AIDC interconnection was achieved Technically and Operationally.

2.5 One other challenge we encountered was the lack of training and awareness on AIDC. Being a new concept, there is the need to train and create adequate awareness to both the technical and operational teams to ensure smooth operations.
The table labeled: **APPENDIX** provides the roadmap of activities used by Ghana and ASECNA to achieve complete AIDC capability.

3. ACTION REQUIRED:

The meeting is invited to:

a) Take note of the information provided in the paper.;
b) Update information on status of AIDC implementation;
c) Encourage the ICAO regional offices to provide regular training, workshops and seminars as a means of increasing awareness on AIDC.
d) Encourage experience sharing, especially among member states who have already implemented AIDC.

APPENDIX

SN	**Activity**	**Current progress**	**Expected outcomes**	**Remarks**
1.	Identification of ATS Units for AIDC exchanges with Ghana.	Abidjan, Niamey, Lomé/Cotonou, Ouagadougou and Luanda identified as candidates for AIDC exchanges with Ghana	All ATS units for the AIDC exchange identified.	Completed
2.	Agreement on set of AIDC Messages for exchange	Ghana agreed on the proposed set of messages by ASECNA	Reach consensus on the set of AIDC messages to be exchanged.	Completed.
3.	All ATM infrastructure in place	Ghana installed a new ATM system in July 2017 with AIDC capabilities	All the ATS Units identified, must have ATM systems which are AIDC Capable. Testing of the system, expected on July 15, 2017	Completed for all centers except Luanda
4.	Commencement of Trials	Ghana commenced trials with identified centers.	Trials of AIDC with ASECNA expected to begin on July 15, 2017	Interconnectivity of Centres established and Trials commenced with Abidjan.
5	Final implementation	Preparation and Signing of LOAs with Abidjan	All letters of Agreements (LOAs) in place and signed by January 31, 2018. By this date, all difficulties arising from the trials would have been resolved to ensure full AIDC operations-	LOA between Accra and Abidjan finally signed March 2019. This was after a successful resolution of all initial operational issues encountered.