INTERNATIONAL CIVIL AVIATION ORGANIZATION

Fifth Meeting of the APIRG Infrastructure and Information Management Sub-Group (IIM/SG5)

(Virtual, 26 - 29 July 2022)

Agenda Item 3.1: *Status of implementation of applicable ASBU elements*

WP3.1C3 Summary of CNS Project Teams achievements

IIM SG COM 3 project "Implementation of Air/Ground communication aimed at ensuring Air traffic control Progress Report"

(Presented by South Africa)

SUMMARY
This working paper outlines the status of the project, indicate the challenges encountered by the team, possible recommendations and the documentation developed by the team.
Action by the meeting in paragraph 5

REFERENCE(S):
▪ Global Air Navigation Plan (GANP) ▪ ICAO Annex 10 Volumes II & III Aeronautical Telecommunication ▪ Annex 11 Air Traffic Service ▪ Doc 4444 Procedures for Air Navigation Service ▪ Doc 9694 Manuel on Air Traffic Services Data Link Applications ▪ Doc 10037 Global Operational Data Link Document (GOLD) ▪ APIRG IIM SG/1, SG/2 and SG/3 Report
This working document relates to ICAO Strategic Objectives: A – Safety and B – Air Navigation Capacity and Efficiency.
KPIS and concerned ASBU B0 Modules: All applicable to CNS and Spectrum.

1. INTRODUCTION

During the APIRG Sub-Group on Infrastructure and Information Management (IIM / SG / 1) held in Nairobi, Kenya from 27 to 30 June 2017, the IIMSG Communication Project 3 was recommended as Communication project to assist with the implementation of Air/Ground communication aimed at ensuring Air Traffic Control within AFI region through:

a)   High Frequency/Very High Frequency (HF/VHF) voice Communication;

b)   High Frequency/Very High Frequency Data link communication (HF/VHF DL); and

c)   Controller/Pilot Data Link Communication (CPDLC**).**

1.2   The implementation is in accordance with the operational requirements of ICAO Annex 10 Volumes II & III Aeronautical Telecommunication, Annex 11 Air Traffic Service and the relevant supporting guidance documents

(Doc 4444 Procedures for Air Navigation Service (PANS--ATM) Doc 9694 Manuel on Air Traffic Services Data Link Applications, Doc 10037 Global Operational Data Link Document (GOLD).

1.3 All tasks are carried out by COM/ IT experts nominated by AFI States participating in the project, led by the Project-Team Coordinator and under the supervision of the Project Facilitators (ROs/CNS, Dakar and Nairobi) through the IIM SG working methodology.

1.4 The states were invited by ICAO via a letter reference ES AN 13/0-584 dated 14 August 2017, to appoint and notify the participation of its qualified experts in any of the 14 regional IIM project teams identified.

2. DISCUSSIONS

2.1 The IIMSG Communication Project 3 team, has been submitting the project deliverables to the IIM SG Chairman, Vice chairman and Secretariat as a final document for submission to, and if necessary, approval by the APIRG Projects Coordination Committee (APCC).

2.2 A project progress report is submitted to the IIM SG Chairman, Vice chairman and Secretariat indicating the project status, challenges, and possible recommendations.

2.3 The IIM Sub-Group teams were allocated tasks and expected deliverables as indicated in Annexure A.

2.3.1 The team has managed to complete all project planning documentations;

2.3.2 Developed the Questionnaire analysis template and analysed responses recieved;

2.3.3 Commenced with the development of AFI HDL/VDL Manual/Guideline and completed the HDL section, herewith attached as Annexure B;

2.3.4 Commenced with the development of AFI Communication Strategy; and

2.3.5 Developing the project costing template.

2.4 The last IIMSG Communication Project 3 progress meeting was on 08 July 2022 via MS Teams. The project meeting minutes and matters arising have been compiled.

2.5 The project team members have also been communicating via a WhatsApp group if required.

2.6 IIM COM 3 MS Team folder was created for project documentation ease of access.

3 IMPLICATIONS

3.1 **Project Team Experts Verification**

3.1.1 The project teams are the foundation on the implementation of the APIRG plans and ensuring that Africa is not left behind. Its success is largely dependent on the project team members active participation, commitment and experts in the work of the project team.

3.1.2 Due to various organization or State structural changes; some of the identified experts are no longer available to assist with project deliverables. It is requested that ASECNA, Guinea-Conakry, IATA, Madagascar, Nigeria, Seychelles, Togo and Uganda confirm their participation COM3 as project team members.

3.2 **Project questionnaire survey**

3.2.1 The key challenge faced by the project is related to the project questionnaire survey and State responses. This will allow the team to track and report the AFI Air/Ground communication, between Pilots and ATCOs, Implementation status that will ensure all Airspaces and Air Traffic Control Centers involved in the provision of air avigation service for international civil aviation have required coverage.

3.2.2 We are pleased to report that the following states have submitted completed Questionnaire:

Seychelles, Ghana, South Africa, Kenya, Botswana, Burkina Faso, Ivory Coast and Togo.

3.2.3 The received questionnaires have been analysed; and following general recommendations are noted:

a. States need to invest in HF system which is IP compatible, ready for SELCAL migration and has DL capabilities;

b. Migrate systems including communication links, be IP ready; and

c. Consider deploying the renewable energy to address the power outage issues due to lack of backup power.

3.3 The project deliverables dependencies are listed below with comments. The deliverables status is attached as Annexure A:

NO	DESCRIPTION (DELIVERABLE)	DEPENDENCY
1	Monthly Implementation Status report of HF &VHF stations (Voice & data Link)	Projects questionnaires sent to States / Organizations and their response.
2	Monthly Implementation/Operation status of CPDLC Circuits	Projects questionnaires sent to States / Organizations and their response.
3	Monthly Implementation/sharing and operation of Remote VHF and HF systems	Projects questionnaires sent to States / Organizations and their response.
4	Develop HF DL and VHF DL States Requirement Manual / Guidance	Team Participation and Inputs, in the development of HF DL and VFD FL states requirement manual / guidance.
5	Develop AFI Communication Strategy	Team Participation and Inputs, in the development of AFI Communication Strategy
6	Develop project costing template	Team Participation and Inputs, in the development of project costing template

4 The Way forward

4.2 Finalise the AFI VDL Manual section;

4.3 Questionnaire analysis completed for all states that responded;

4.4 AFI Communication Strategy completed as per revised plan;

4.5 Align with new GANP Edition; and

4.6 Finalise COM3 Project Costing Report.

5 ACTIONS BY THE MEETING

5.1 The meeting is invited to:

a) Take note of the progress made so far regarding the IIMSG Communication Project 3 deliverables and challenges.

b) Encourage State participation in the AFI region projects; and

c) Approve the AFI HDL Manual section.

5.2 **Draft Conclusion /Decision 5/xx : Effective and efficient participation/coordination of Administrations in the IIM Projects activities**

That, States verify the participation of its qualified experts in COM 3 to assist with the development of AFI HDL/VDL Manual/Guideline and AFI Communication Strategy by 31 October 2022.

----- END -----