



INTERNATIONAL CIVIL AVIATION ORGANIZATION

Twenty First Meeting of the Africa-Indian Ocean Planning and Implementation Regional Group (APIRG/21) (Nairobi, Kenya, 9 – 11 October 2017)

Agenda Item 9: Any other business

PBCS IMPLEMENTATION AND OPERATIONALIZATION OF THE AFI REGIONAL DATA LINK/CENTRAL MONITORING REPORTING AGENCY (DL/CMRA)

(Presented by IATA)

SUMMARY

This paper reviews regional concerns identified by IATA with respect to the implementation of PBCS concept and the operationalization of the AFI Regional Data Link Central Monitoring and Reporting Agency. IATA recommends the implementation of prerequisite actions by States/ANSPs and the development of regional action plan based on the gap analysis on PBCS related regulation and the need, if any, on States legislation, in close coordination with airspace users.

Action by the meeting is at **paragraph 3**.

REFERENCE(S):

- ICAO Annex 10 Volumes II & III Aeronautical Telecommunication
- Annex 11 Air Traffic Service
- 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) and
- Doc 9869 Performance Based Communication and Surveillance Manual (PBCS)

Related ICAO Strategic Objective(s): **A – Safety, B – Air Navigation Capacity and Efficiency**

1. INTRODUCTION

1.1 APIRG Conclusion 20/24 established a Project Team (comprised of Cabo Verde as Team Leader, Ghana, ASECNA, South Africa, AFRAA and IATA) for the implementation of a Data Link Central Monitoring and Reporting Agency (DL/CMRA).

1.2 AFI DL/CMRA project Team finalized the draft Terms of Reference and sent to ICAO Secretariat for circulation to Administrations/Organization for final comment before submission to the APCC and the outcome should subsequently be submitted to APIRG/21.

1.3 In March 2016, ICAO adopted Amendment 7 (Amendments 7-A and 7-B), to the fifteenth edition of the Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM), for applicability on November 2016.

1.4 PBCS currently applies to CPDLC, ADS-C, HF and Satellite Voice. ICAO PANS-ATM requires PBCS with CPDLC RCP and ADS-C RSP to support some oceanic separation standards.

1.5 For Safety Oversight applicable to Users, State should ensure that airlines satisfy eligibility requirements for PBCS operations that have been established. Airlines require State operational approvals before conducting PBCS operations.

1.6 March 29, 2018 has been set as the target date when the application of the PBCS concept is to be implemented in the North Atlantic Region (NAT) and Asia Pacific (APAC).

2. DISCUSSION

2.1 During the last SAT meeting held in Paris from 5-9 June, AFI States involved in the EUR/SAM Corridor Task Force agreed on 5 minutes reduced longitudinal separation in accordance to the 16th edition of PANS-ATM Doc 4444 with regards to PBCS requirements in the provision of Air Traffic Services. A new airspace concept on time based separation was adopted to replace previous EUR/SAM airspace concept.

2.2 NAT SPG53 discussed the NAT PBCS forthcoming mandate on users operating in the NAT region by 29 March 2018 with regards to the readiness for PBCS implementation, in particular concerning the availability of necessary State regulations for PBCS Ops approval and the lack of appropriate Statements of Compliance (SoC) from manufacturers for certain aircraft types.

2.3 Considering the forthcoming NAT PBCS mandate and OPS approval issue for African Carriers that operate in Europe and America, AFI States are encouraged to start developing the process of PBCS Ops approval for their respective registered aircrafts that operate in NAT Region. This should be done in the same context of the planned PBCS implementation in the NAT Region.

2.4 With regards to PBCS implementation in the AFI Region, the meeting is invited to study the possibility of delaying PBCS application in the AFI Region in order to facilitate the establishment of requisite foundations before moving towards the implementation. First, AFI States/ANSPs should develop airspace concept for their specific airspace to see if PBCS can be helpful. If yes, develop a work plan and try to establish suitable timeline before committing to any implementation date for PBCS. They are particular, issues that require resolution prior any implementation of PBCS:

- a) State readiness to issue operational approval for PBCS;
- b) Revision of Regional Supplementary Procedures (Doc 7030);
- c) Promulgation of ANSP PBCS Operational Concept, including the use of PBCS-based separations;
- d) ANSPs' systems readiness to ingest, process, transfer and use PBCS flight plan codes;
- e) Readiness of State Regulators to conduct PBCS safety oversight of ANSPs; and
- f) Establishment of local PBCS Monitoring programmes and the operationalization of the Regional AFI DL/CMRA programme.

2.5 AFI States are encouraged to commence gap analysis for PBCS readiness and implementation and develop their individual action plan to address the gaps in accordance with the most recent

version of ICAO PBCS Manual. The gap analysis should include the following implementation issues:

- a) State PBCS regulatory framework;
- b) Operator OPS approval;
- c) ATC Flight Plan Systems to support RCP/RSP codes filling;
- d) Training for flight crews and other appropriate personnel (flight operations officers/ dispatchers); and
- e) Implementation of local and regional monitoring programs, and other items to be identified.

2.6 Moreover, to achieve a high level of operational performance across the region, AFI States are urged to find measures of establishing local means of collecting and sharing data in a standardized format defined/agreed in the Terms of Reference of the Regional monitoring programme (AFI DL CMRA). The tasks for the AFI DL CMRA may include but not limited to:

- a) ensure centralized support to accommodate specific, local, regional and global needs;
- b) validation of submitted data before importing it into a secure centralized database;
- c) maintain data, such as related to the ANSP, CSP, aircraft type and aircraft operator;
- d) manage resources and contracts, costs recovery and secure access to the services and information;
- e) support participating ANSPs in the analysis and reporting of the operational data at the regional level;
- f) coordinate, with other regional monitoring programs, such as those established for monitoring RVSM (e.g. ARMA & SATMA);
- g) provide means to receive , track, manage problem reports (e.g. web-based service);
- h) provide a diagnosis of the problem and recommend resolutions; and
- i) notify appropriate parties when the operational performance does not meet the RCP/RSP specification.

2.7 In light of the information presented above, IATA supports the following recommendations:

- a) AFI States, to start developing internal capability to issue PBCS ops approval to airlines. Therefore, States need to conduct gap analysis on PBCS related regulation and the need, if any, on States legislation;
- b) ICAO to establish training roadmap and activities for state regulators and that airlines may participate;
- c) AFI States and ANSPs to find measures for the establishment of local Data Link monitoring programme that will perform analysis and taking necessary corrective action;

- d) APIRG to approve the Terms of Reference for the AFI Data Link Central Monitoring and Reporting Agency developed by the AFI DL CMRA Project Team as described in **Appendix A** to this working paper and address measures of operationalization of the Regional Data Link Monitoring Programme
- e) AFI States/ANSPs to develop the airspace concept for their specific airspace to see if PBCS can be helpful. If yes, they should develop a work plan and try to establish suitable timeline before committing to any implementation date for PBCS.
- f) AFI States to conduct a gap analysis for PBCS implementation readiness and develop their National Action Plan. This includes an APIRG Conclusion for a supporting State Letter advising AFI States to conduct such activities;
- g) ICAO Regional Offices to support States/ANSPs on PBCS activities and monitor the progress made with respect to actions highlighted from item 2.7.1 to item 2.7.4.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information provided; and
- b) consider and adopt the IATA recommendations mentioned in paragraph 2.7 of this working paper as a pragmatic approach for the future implementation of PBCS based separation minima for the AFI Region.

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