



INTERNATIONAL CIVIL AVIATION ORGANIZATION

WESTERN AND CENTRAL AFRICAN OFFICE

**Sixth Meeting of the APIRG Communications, Navigation
and Surveillance Sub-group (CNS/SG/6)**

Dakar, Senegal, 18–22 May 2015

Agenda Item 4: Review of the status of implementation of CNS/SG Work Programme and related Task forces/Working Groups as assigned by APIRG

Implementation of a Data link Central Monitoring and Reporting Agency (DL/CMRA)

(Presented by IATA)

SUMMARY
This paper highlights the main requirements needed to establish DL/CMRA in the AFI region and proposes different options for the setting up.
REFERENCE(S): GOLD
Related ICAO Strategic Objective(s): A & B

1. INTRODUCTION

- 1.1 Automatic Dependent Surveillance – Contract (ADS-C) and Controller-Pilot Data Link Communications (CPDLC) operations have increased widely over the past years in AFI region to overcome air-ground communication and surveillance challenges in oceanic and remote areas. Thirteen (13) ANSPs have implemented ADS-C/CPDLC systems in the region and nine (9) are in advanced stage to carry out this system.
- 1.2 However those data link services were implemented without proper coordination of systems performance monitoring and reporting of anomalies/deficiencies. Many events have been reported where causes of technical dysfunctions could not be identified either by ANSPs or operators.
- 1.3 It is expected that data link operations continue to increase with implementation of AIDC and ATN-based ATS applications.
- 1.4 It is responsibility of States as part of implementing data link services to monitor operations performance and analyze problem reports. However set up several entities to perform those functions are costly and doesn't allow gleaning global picture of the issues.

- 1.5 This lead APIRG Group to formulate Conclusion 19/30 requesting stakeholders to explore available options to establish Data Link Central Monitoring and Reporting Agency (DL/CMRA) for the AFI region in the view to ensure effective operations, monitoring and reporting of ATS data link applications.

2. DISCUSSION

2.1 Main functions of DL/CMRA would be to :

- Develop and administer problem report processes;
- Maintain a database of problem reports;
- Process end-to-end system performance reports;
- Coordinate and test the implementation of new procedures resulting from ATS data link systems and
- Identify trends.

2.2 To perform these functions, DL/CMRA must have dedicated staffing and considerable technical resources and skills including but not limited to:

- Ability to simulate an ATS ground station operational capability;
- Access to airborne equipment;
- Software than can decode Communication Service Providers (CSP) data.

Engagement of all stakeholders (Operators, ANSPs and CSPs) is also needed.

2.3 In the light of the above, setting DL/CMRA could be very costly both in terms of set up and ongoing operating costs.

2.4 Varying models have been used in many regions:

- In APAC region Singapore is providing Central Reporting Agencies (CRA) services for the South East Asia area – Federal Aviation Authority (FAA) is performing same for the Pacific.
In that case States who have “volunteered” fund the services through their normal revenue stream;
- In India, Indian Ocean and Bay of Bengal IATA has been tasked to establish and maintain CRA services.

In the above mentioned situations third party has been contracted to provide expertise and laboratory facilities and assist States/ANSPs in resolving the problems they may have through bench testing facilities.

2.5 Whatever model used costs the provision of central reporting agency services need to be funded. Possible funding options would be:

- State/ANSP who has “volunteered” to fund services through their normal revenue stream (**Option 1**);
- Through ATC charges as part of an ANSP cost base (**Option 2**);
- Through specific charges to be levied and allocated directly to the monitoring agency

(Option 3). This option will help in simplifying funds collection process and ensure funds will be used only for central reporting agency purposes.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Take note of information provided;
- b) Discuss the need for the DL/CMRA in coordination with users to contract with third party who has proven capability to perform CRA technical tasks
- c) Discuss options proposed in paragraph 2.5 of this paper and
- d) Ensure all stakeholders (Operators, ANSPs and CSPs) are engaged in the process and ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082/9) are followed by all relevant stakeholders.

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