



**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

**ENHANCING SAFETY AND ESTABLISHING REGIONAL STANDARDS;
ESTABLISHMENT OF SUB-GROUP FOR DATA LINK MONITORING
IMPLEMENTATION**

(Presented by the United States)

SUMMARY

The AFI region has made measurable progress in establishing Data Link systems and is moving forward with Data Link monitoring activities. The success of this advancement is dependent on the establishment of regional standards and on-going regional training. To accomplish that, the Federal Aviation Administration (FAA) believes African-Indian Ocean (AFI) should establish a sub-group and initiate a train-the-trainer program.

References:

Communications, Navigation and Surveillance Sub-group (CNS/SG/6)
North Atlantic Systems Planning Group (NAT SPG), version 2.2.0 – June 2017
Performance-based Communication and Surveillance (PBCS) Manual (Doc 9869)

1. INTRODUCTION

1.1 Global harmonization and interoperability is paramount for advancing performance-based navigation to further socio-economic transformation. Working papers have been presented communicating the need to establish an implementation plan for Performance-based communications and surveillance and compliance with requirements outlined in the Global Operational Data Link (GOLD) Manual and the PBCS Manual for validation purposes. There have also been documented struggles in forging a clear pathway to implement the much desired Data Link Central Monitoring and Reporting Agency (DL/CMRA) for the AFI region. The purpose of this paper is to encourage the APIRG to establish a sub-group and train-the-trainer program by highlighting items identified during the CNS/SG/6 held 18-22 May 2015.

2. DISCUSSION

2.1 The FAA sees an opportunity to advance Data Link activities and implementation if the AFI Planning and Information Regional Group (APIRG) establishes an implementation group that meets regularly to ensure progress is made between the APIRG meetings. The FAA has seen a similar governance be successful with the North Atlantic Systems Planning Group (NAT SPG) and documented progress in advancing initiatives toward Global Harmonization. The AFI implementation group could establish standards for the APIRG to review and monitor. This would support continued advancement of the AFI goals to include the establishment and maintenance of the desired AFI DL/CRMA.

2.2 During fiscal years 2015, 2016, and 2017, the FAA partnered with ICAO to deliver foundational workshops focused on GOLD and PBCS requirements. The most recent workshop focused on introducing detailed Data Link Monitoring Activities to ensure Communication, Navigation and Surveillance and Air Traffic Management (CNS/ATM) system integrity. Over the past 3 years, 130 individuals from 25 States have attended these workshops.

2.3 During fiscal years 2016 and 2017 the FAA, working with ICAO, delivered the Air Traffic System (ATS) Analysis Workshops, which focused on encouraging a Just Culture in reporting system errors. The FAA delivered this workshop to 82 individuals from 19 States over the last 2 years.

2.4 With the educational foundation laid and nurtured during the past 3 years, it is now the opportune time to establish regional training programs and/or courses to teach the application of regional standards in order to enhance and sustain continued progress in data collection and monitoring activities. The FAA is willing to partner with training points of contact in the AFI region to assist with establishing a train-the-trainer program.

2.5 In addition to the train-the-trainer program, the FAA concurs there is still a need to establish regional standards and outline requirements for continued progress and success in executing Data Link monitoring activities. These activities include data collection, analysis, reporting, and mitigation. Data collection and analysis is necessary to determine the accuracy and reliability of the Data Link systems. It is important to create a solid foundation and standardized method for collecting data and reporting data anomalies to support the establishment and maintenance of the much desired DL/CMRA. The CNS/SG/6 highlighted the requirements necessary to establish DL/CMRA in the AFI region and proposed different options to consider in setting up the DL/CMRA (Ref: GOLD Manual) and Related ICAO Strategic Objective: A & B. Listed below are some of the concerns highlighted in the CNS/SG/6 report:

2.5.1 Data Link services were implemented without properly coordinating systems performance monitoring and anomaly/deficiency reporting. According to this report many events have been reported where causes of technical dysfunctions could not be identified either by air navigation service providers or operators.

2.5.2 It is the responsibility of the States, as part of implementing Data Link services, to monitor operations performance and analyze problem reports. The report also identified the high cost of setting up several entities to perform these functions.

2.6 In November 2013, the APIRG formulated conclusion 19/30 requesting stakeholders explore available options to establish a DL/CMRA for the AFI region to ensure effective operations, monitoring and reporting of ATS data link applications.

3. CONCLUSION

3.1 Continued progress and sustainment within the region is dependent on two specific actions (1) establishing a sub-group and (2) initiating a train-the-trainer program to implement Data Link in the AFI region.

3.2 A solid foundation in Operational Data Link has already been provided by the FAA in partnership with ICAO and it is essential AFI regional representatives shift to implementation and sustainment by establishing a sub-group and a train-the-trainer program.

3.3 Establishment of regional standards to include a sub-group will contribute to the advancement and sustainment of Data Link monitoring activity requirements outlined in the PBCS Manual (Doc 9869). This sub-group would provide a pathway in establishing a DL/CMRA for the AFI region.

3.4 To ensure preparedness throughout the aviation community, and prevent operational disruptions, the United States is willing to collaborate with the APIRG members to assist in guiding the group in structuring a sub-group and outlining a plan forward. The sub-group should mirror what is established within the North Atlantic and documented in the North Atlantic Systems Planning Group (NAT SPG version 2.2.0 – June 2017).

3.5 With regional input from an AFI working group and establishment of data collection and scrutiny standards, AFI could develop and deliver at a regional level, the necessary specialized training outlining Data Link activities and requirements to meet ANSP, State, and Operator needs. The United States is willing to work with the teaching staff, including an instructional designer, to provide guidance in outlining a train-the-trainer curriculum.

4. ACTION BY THE CONFERENCE

4.1 The Conference is invited to note the information contained in this Paper.

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