



ICAO

**INTERNATIONAL CIVIL AVIATION ORGANIZATION  
AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG) PROJECT  
COORDINATION COMMITTEE FIRST MEETING (APCC/1)**

**PROJECT: AFI DL/CMRA PROJECT**

**Coordinator: Cape Verde**

**DOMAIN: IIM**

(Infrastructure & Information Management)

AFI REGION	PROJECT DESCRIPTION	REFERENCE IMSG / Area of Routing # All	
		Start	End
<b>Sub-domain</b>	<b>Title of the Project</b>		
<i>Communication, Navigation and Surveillance (CNS)</i>  (ICAO Facilitator: WACAF/ESAF ROs/CNS)	<b>REGIONAL MONITORING AGENCY :</b> Implementation of Data Link Regional Monitoring Agency <b>Project-Team Coordinator:</b> <i>Cape Verde</i> <b>Project Team Experts (4):</b> <i>ATNS, Ghana, ASECNA, Seychelles, AFRAA and IATA,</i>	Month/ Year	Month/ Year
<b>Objectives</b>	<p>APIRG 20 held in Yamoussoukro, Cote d'Ivoire agreed to create the AFI Data Link Central Monitoring and Reporting Agency (AFI DL/CMRA) The project Team were tasked to identify and propose the main functions of the regional DL/CMRA, appropriate organizational framework and suitable cost effective funding mechanism</p> <p>The proposed role of AFI DL/CMRAs should be in the framework of the performance-based communication and surveillance (PBCS) monitoring program as prescribed by ICAO Standards and Recommended Practices (SARPs) with regards to the operational requirements of ICAO Annex 10 Volumes II &amp; 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 <b>10037</b> Global Operational Data Link Document (<b>GOLD</b>) and Doc 9869 Performance Based Communication and Surveillance Manual (<b>PBCS</b>))</p>		
<b>Scope</b>	<p>DL/CMRA Project Team should develop the Terms of Reference defining the main functions of the AFI DL/CMRA including information technology, supporting tools and security policies;</p> <p>DL/CMRA Project Team should study and identify regional funding mechanisms for the implementation of the DL/CMRA;</p> <p>The ICAO Regional Director, WACAF and ESAF, circulate by e-mail correspondence the outcome of the DL/CMRA Project Team for next APIRG/21 for approval.</p>		

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<b>Metrics</b>	<ul style="list-style-type: none"> <li>a- States' regulations and policy requirements for OPS approval and safety oversight applicable to ANSPs</li> <li>b- ANSPs systems readiness to handle P-codes</li> <li>c- CPDLC/ADS-C and SATCOM services implemented in the region</li> <li>d- AIDC links effectively implemented</li> <li>e- Local data link monitoring programs set up by ANSPs</li> </ul>		
<b>Outcome</b>	<p>Complete development of the Terms of Reference for the establishment of the AFI DL/CMRA.</p> <p>Proposal to APIRG 21 appropriate organizational framework and suitable cost effective funding mechanism for the establishment of the AFI DL/CMRA</p>		
<b>Strategy</b>	<p>ICAO WACAF/ESAF to identify and organize training and workshop for technical personnel on Data Link Monitoring performance assessment.</p> <p>ICAO to support AFI States on development of the regulations and policy requirements on Operational approval for data link operations in line with PBCS</p> <p>The project team to assist ANSPs establishing local Data Link monitoring programs that will support the regional DL/CMRA</p>		
<b>Rationale/Justification</b>	<p>The Air Navigation Commission acting under delegated authority, adopted/approved Amendment 7 (i.e. Amendments 7-A and 7-B), on March 2016 to the fifteenth edition of the Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM), for applicability on November 2016 concerning:</p> <ul style="list-style-type: none"> <li>a. Performance-based longitudinal and lateral separation minima and automatic dependent surveillance — contract (ADS-C) climb and descend procedure (CDP);</li> <li>b. Separation departing aircraft from arriving aircraft that are following an area navigation (RNAV) or required navigation performance (RNP) route</li> <li>c. Data link initiation capability (DLIC), ADS-C, performance-based communication and surveillance (PBCS) and satellite voice communications (SATVOICE)</li> </ul> <p>For safety oversight applicable to ANSP, States should ensure that ANSPs established a validation process that confirms regulatory and system readiness that would the meet capability and performance requirements to support PBCS operations.</p> <p>For Operational approval with regards to users, States of registry have to develop regulations and policy requirements for data link operations applicable to airlines.</p>		

<p align="center"><b>Related Projects</b></p>	<p>All APIRG projects specifically related to:</p> <ul style="list-style-type: none"> <li>✓ PIA1-Improve Traffic flow through Runway Sequencing (AMAN/DMAN)-<b>B0RSEQ</b></li> <li>✓ PIA1-Increased Runway Throughput through optimized Wake Turbulence Separation - <b>B0-WAKE</b></li> <li>✓ PIA1- Improved Airport Operations through Airport – <b>B0-ACDM</b></li> <li>✓ PIA2- Service Improvement through Digital Aeronautical Information Management- <b>B0-DIAM</b></li> <li>✓ PIA3-Air Traffic Situational Awareness(ATSA)- <b>B0- ASEP</b></li> <li>PIA3-Improved Operations through Enhanced En-Route Trajectories- <b>BO-FRTO</b></li> <li>✓ PIA3-Improved flow performance through planning based on Networkwide view- <b>B0-NOPS</b>.</li> <li>✓ PIA3- Improved access to optimum Flight levels through Climb/Descent Procedures using ADS-B- <b>B0-OPF</b></li> <li>✓ PIA4- Improved Safety and Efficiency through the initial application of Data Link En-Route- <b>B0-TBO</b>.</li> <li>✓ PIA4-Improved flexibility and Efficiency in Decent provides (CDO) - <b>B0CDO</b>.</li> <li>✓ PIA4-Improved Flexibility and Efficiency Departure profiles-Continuous Climb Operations (CCO)-<b>B0-CCO</b></li> </ul>						
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Sub-domain	Title of the Project					Start	End
Project Deliverables	Relationship with the Regional Performance-Objectives (RPOs/PFFs) and ASBU Modules	KPI	Responsible	Status of Implementation <sup>1</sup>	Date of Delivery	Comments	
Terms of Reference of the AFI DL CMRA	<b>AFI B0-ASEP</b> <b>AFI B0-FRTO</b> <b>AFI B0-CDO</b> <b>AFI B0-CCO</b> <b>PFF-CNS</b>		<ul style="list-style-type: none"> <li>✓ AFI COM Project Coordinators</li> <li>✓ AFI COM Project Team Leader</li> </ul>		December 2019		
Regional workshops on Data link monitoring performance assessment in line with PBCS			✓				

Implementation/Operation of CPDLC Circuits	<b>AFI B0-ASEP</b> <b>AFI B0-FRTO</b> <b>AFI B0-CDO</b> <b>AFI B0-CCO.</b> <b>PFF-CNS</b>		✓ AFI COM Project Coordinators  ✓ AFI COM Project Team Leader		December 2019	
Upgrade of ATM Systems (AMHS, FDPS, etc.) to process flight plan P-codes			✓			
Acquisition/Development of Tools to be used			✓			
Establishment of local Data link Monitoring Programmes			✓			
Teleconferences, Workshops/Seminars, meetings (French and English) on Data Link monitoring performance assesment	<b>AFI B0-ASEP</b> <b>AFI B0-FRTO</b> <b>AFI B0-CDO</b> <b>AFI B0-CCO</b> <b>PFF-CNS</b>		✓ AFI COM Project Coordinators  ✓ AFI COM Project Team Leader		TBD	

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<b>Resources needed</b>	<ul style="list-style-type: none"> <li>✓ Adequate human resources to be appointed by States</li> <li>✓ Funds to conduct meetings, Workshops, Seminars Missions and to translate reports, regional guides and manuals. Likewise, participants must be given facilities to participate in teleconferences and coordination meetings.</li> <li>✓ Funds for meetings with project Team Members in order to address regional monitoring performance assesment on CPDLC, ADS-C and SATCOM services provisions</li> <li>✓ Funds for the acquisition of the software tools to be used by the AFI DL/CMRA</li> </ul>		



- Grey*      *Task not started yet*
- Green*    *Activity being implemented as scheduled*
- Yellow*   *Activity started with some delay, but will be implemented on time*
- Red*      *Activity not implemented on time; mitigation measures are required*