

**Terms of Reference for SC-214/WG 78**  
(Revision 2)

**Standards for Air Traffic Data Communication Services**

To advance Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) concepts and support data communication developments for the Next Generation Air Transportation System and the Single European Sky ATM Research initiatives, Special Committee (SC) 214/Working Group (WG) 78 shall develop guidance material to define the safety, performance and interoperability requirements for Air Traffic Services (ATS) supported by data communications.

The special committee/working group shall work jointly and establish close working relationships with the International Civil Aviation Organization (ICAO) panels, regional coordinating groups and other standards organizations as appropriate.

**1. COMMITTEE PRODUCT(S)**

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|--|----------------------|
| <i>Safety and Performance Standard for Advanced<br/>ATS Data Communication .....</i>           | <i>December 2011</i> |
| <i>Interoperability Standard for Data Communication<br/>Via ATN.....</i>                       | <i>December 2011</i> |
| <i>Interoperability Standard for Data Communication<br/>Via ARINC 623 .....</i>                | <i>December 2011</i> |
| <i>Interoperability Standard for Data Communication<br/>Via a Mix of ATN and FANS-1/A.....</i> | <i>December 2011</i> |

*The planned data link services to be addressed in the above documentation are described in Appendix 1.*

## 2. TERMS OF REFERENCE

In performing its duties, RTCA SC-214 and EUROCAE WG 78 shall:

- A. Produce identical documents defining portable communication services independent, to the maximum extent practical, of the underlying network technology.
- B. Identify the data communication services and characterize the operational environment expressed by the following:
  - 1) Single European Sky ATM Research (SESAR) program,
  - 2) Next Generation Air Transportation System (NextGen),
  - 3) International Civil Aviation Organization OPLINK Panel,
  - 4) EUROCONTROL data link activities, and
  - 5) FAA/EUROCONTROL Future Communications Study, Communications Operating Concept and Requirements (COCR).
- C. Develop standards to support the use of data communications in the following two contexts where they are required:
  - 1) To support certain ATS functions, but not required for entry into the designated airspace, and
  - 2) For entry into the designated airspace.

ATS authorities continue to require an independent voice communication service, and its role will need to be characterized to the extent that it is considered in establishing the safety and performance requirements for the ATS communication services.

- D. Develop the new standards identified in Section 1 in the context of the environments identified in Section 2, paragraph C following the framework defined in DO-264/ED-78A. Specifically, the development shall be performed on the data communication services listed in Appendix 1.
- E. Allocate requirements to aircraft systems, ATS ground systems, and communication services.

*Note —Airworthiness and operational authorities intend to use these documents to develop advisory circulars to qualify aircraft and operations that use air traffic data communication services. The ATS authorities intend to use these documents to establish safety and performance requirements and interoperability requirements to qualify related ground-based ATS systems and operations.*

- F. The group shall ensure that the services support the operational improvements described in SESAR (D3 and D4) and the NextGen Integrated Work Plan.



## Appendix 1

### List of Services for Standards Development

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| Data Link Initiation Capability (DLIC)   |
| ATC Clearance Service (ACL)  |
| ATC Communication Management Service (ACM)   |
| ATC Microphone Check Service (AMC)   |
| Departure Clearance Service (DCL)  |
| Data Link Taxi (D-TAXI)  |
| Data Link Operational Terminal Information Service (D-OTIS)<br><b>Including:</b><br>VOLMET<br>Notices to Airmen (NOTAMS) |
| Data Link Automatic Terminal Information Service (D-ATIS)  |
| CPDLC for Airborne Situational Awareness In-Trail Procedures<br>(ATSA-ITP)   |
| 4D Trajectory for Data Link (4DTRAD)   |
| Flight Path Intent Service (FLIPINT)   |
| Data Link Flight Update Service (D-FLUP)   |