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**Future Air Navigation System 1/A –  
Aeronautical Telecommunication Network  
Interoperability Standard  
(FANS 1/A – ATN B1 Interop Standard)**

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## FOREWORD

This guidance document was jointly prepared by Special Committee 189 (SC-189) and the European Organization for Civil Aviation Equipment (EUROCAE) Working Group 53 (WG-53) and approved by the RTCA Program Management Committee (PMC) on June 26, 2007.

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## 1 INTRODUCTION

This standard was developed to enable air traffic service providers (ATSPs) to interoperate with data link equipped aircraft, regardless of which technology is installed on the aircraft. The standard is intended to support the goal of converging oceanic and continental data link applications.

### 1.1 Purpose

This document provides the interoperability requirements for an aeronautical telecommunication network baseline 1 (ATN B1) ground system that provides air traffic data link services to future air navigation system 1/A (FANS 1/A) aircraft in continental airspace.

*Note:* Based on DO-264/ED-78A, INTEROP and SPR standards provide recommendations intended for government organizations, conference of governments, or agencies having statutory jurisdiction over the use and provision of air traffic services supported by data communications. These recommendations are for use by such government organizations to enunciate official policy, related to such matters, in aeronautical information publications (AIPs), notices to airmen (NOTAMs), airplane flight manuals (AFMs), and operator specifications.

### 1.2 Scope

This standard provides interoperability requirements for the ATN B1 ground system to provide FANS 1/A aircraft data link services, as defined by the Continental SPR Standard, taking into consideration ICAO material listed in [paragraph 1.5](#). The following continental data link services are considered for the FANS 1/A aircraft:

- Data Link Initiation Capability (DLIC)
- ATC Communications Management (ACM)
- ATC Clearance (ACL)
- ATC Microphone Check (AMC)

This standard also considers the FANS 1/A aircraft emergency data communication capability.

*Note 1:* This standard considers message elements of the CPDLC application that are included in the “version 1” message set as defined by the ATN B1 INTEROP Standard to support the ACM, ACL, and AMC data link services and the FANS 1/A aircraft emergency data communication capability. See [paragraph 4.2.8](#) for the uplink CPDLC message elements and [paragraph 4.2.9](#) for the downlink CPDLC message elements considered within the scope of this document.

*Note 2:* This standard only considers message element parameters and data types of the CPDLC application that are included in the ATN B1 INTEROP Standard for the message elements in the “version 1” message set. See [paragraph 4.2.12](#) for message element parameters and data types considered within the scope of this document.