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Interoperability Requirements Standard for Baseline 2 ATS Data Communications, ATN Baseline 1 Accommodation (ATN Baseline 1 - Baseline 2 Interop Standard)

Initial Release

Based on a coordination plan agreed to by the Federal Aviation Administration (FAA) and Single European Sky Air Traffic Management Research Program (SESAR) dated August 7, 2013, this is an initial release of this standard. The final release will include the additional capabilities of Dynamic RNP, Advanced Flight Interval Management, and ATC winds. The FAA does not plan to invoke this initial release of the document. The FAA plans to invoke the final release of the document as enabling criteria for airworthiness approval and operational authorizations.

The technical content of this document is strictly identical to EUROCAE ED-231.

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FOREWORD

This report was prepared by RTCA Special Committee 214 (SC-214) and approved by the RTCA Program Management Committee (PMC) on March 18, 2014.

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- coalescing aviation system user and provider technical requirements in a manner that helps government and industry meet their mutual objectives and responsibilities;
- analyzing and recommending solutions to the system technical issues that aviation faces as it continues to pursue increased safety, system capacity and efficiency;
- developing consensus on the application of pertinent technology to fulfill user and provider requirements, including development of minimum operational performance standards for electronic systems and equipment that support aviation; and
- assisting in developing the appropriate technical material upon which positions for the International Civil Aviation Organization and the International Telecommunication Union and other appropriate international organizations can be based.

The organization's recommendations are often used as the basis for government and private sector decisions as well as the foundation for many Federal Aviation Administration Technical Standard Orders and several advisory circulars.

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1 INTRODUCTION

This standard was developed to enable air traffic service providers (ATSPs) to interoperate with data link equipped aircraft when one of the systems is still compliant with the Baseline 1 Standard.

1.1 Purpose

By design, a Baseline 2 (B2) system is not able to communicate with a Baseline 1 (B1) system.

This document provides the additional interoperability requirements to allow backward compatibility as depicted in Figure 1-1 between:

- B2 ground systems and B1 aircraft systems; or
- B2 aircraft systems and B1 ground systems.

Note:

1. The Baseline 1 ground systems compliant with the Data Link Implementing Rule are identified in this document as “B1” systems.
2. The definition of the air (A’x’) and ground (G’x’) configurations identified in the figures below is provided in the ATS INTEROP document [7].

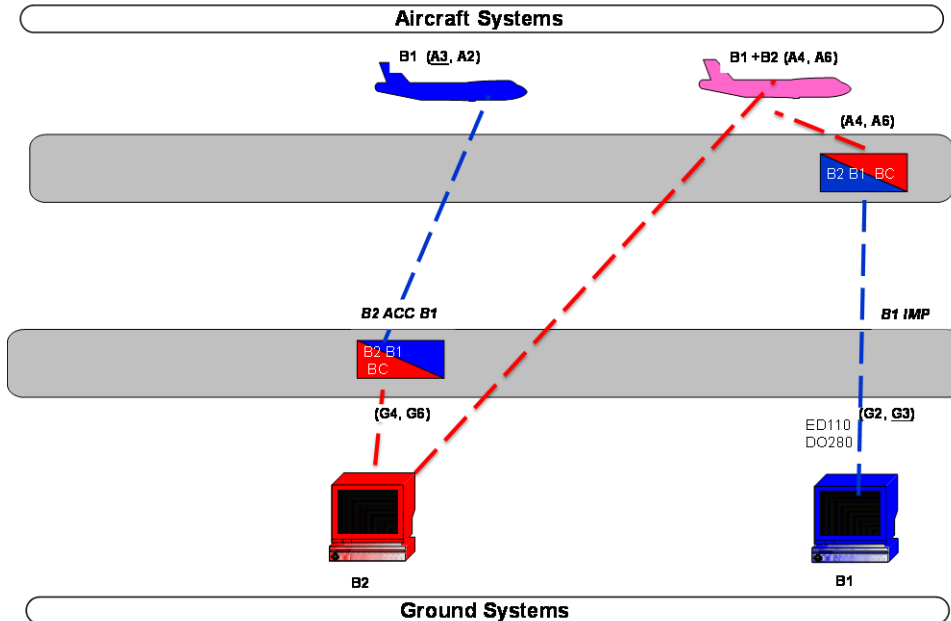


Figure 1-1: B2 / B1 Backward Compatibility