

DATA ITEM DESCRIPTION

Title: Air Traffic Services Systems Requirements and Objectives

Number: DI-SESS-81769

Approval Date: 20090518

AMSC Number: F9068

Limitation: N/A

DTIC Applicable: N/A

GIDEP Applicable: N/A

Preparing Activity: 11 (ASC/836 AESG/SYE)

Applicable Forms: N/A

Use/relationship: The Air Traffic Service Systems Requirements and Objectives (ATS SR&O) describes certain characteristics of the operational environment and the safety and interoperability requirements for the system and functions that support the ATS. The ATS SR&O also allocates the safety and interoperability requirements to the aircraft, communications network, ATS ground systems. The ATS SR&O will be used to develop the contractor's end-to-end ATS data link communication. It will substantiate interoperability of the end-to-end system.

This Data item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

Requirements:

1. Reference documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as cited in the contract.

Radio Technical Commission for Aeronautics (RTCA) documents may be obtained through <http://www.rtca.org/onlinecart/> or by mail from RTCA, Inc., 1828 L Street, NW, Suite 805, Washington, DC 20036.

2. Format. Contractor format is acceptable.

3. Content. The ATS SR&O shall contain the information needed to support the United States Air Force (USAF) operational approval for the overall ATS function.

3.1. The ATS SR&O shall cover the contractor's overall integration into the ATS infrastructure IAW *RTCA DO-258, "Interoperability Requirements for ATS Applications Using ARINC 622 Data Communications"*; *RTCA DO-264, "Guidelines for Approval of the Provision and Use of Air Traffic Services Supported by Data Communications"*; and *RTCA DO-305, "Future Air Navigation System 1/A (FANS 1/A)-Aeronautical*

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Telecommunications Network (ATN) Interoperability Standard". The ATS SR&O shall as a minimum:

- a) Define interfaces between airborne, satellite, and ground environments.
- b) Document interface decisions made during development.
- c) Document necessary changes or clarifications to existing industry requirements.
- d) Document limitations or exceptions of the ATS implementation.
- e) Describe the overall requirements for the ATS function as they relate to the aircraft.
- f) Support safety or failure analysis by identifying those requirements which substantiate assumptions of the analysis.
- g) Allocate the requirements to the aircraft systems environment and non-aircraft environment.
- h) Allocate the aircraft systems requirements to the functional subsystem.

4. End of DI-SESS-81769