

ARINC IA Project Initiation/Modification (APIM)

Name of proposed project

APIM #: 04-007

Commercial Of The Shelf (COTS) Network File Server

Suggested Subcommittee assignment

Generation of a COTS Network File Server document would be best accomplished in the Aircraft Network and File Server (ANFS) Subcommittee. This is the same group that generated the ARINC Characteristic 763, Network Server System.

Project Scope

Using ARINC 763 as the starting point, the group would restructure the document to reduce or eliminate the form and fit aspects of the characteristic. The focus of ARINC 763A would be on functionality, allocation of network protocol, service requirements, assumptions (from ARINC 664) for equipment, and identification of all interface signals. Pin assignments and hardware configuration would generally be discretionary.

Project Benefit

Since non-airborne COTS equipment focuses more on service and protocol interoperability, ARINC 763A would facilitate the use of COTS equipment but maintain control of the functionality and the signal interfaces. It would establish guidance for the allocation of network services and resources without compelling a fixed network architecture. This approach would help reduce the cost of equipment by allowing greater flexibility to the manufacturer and the airline. Existing equipment could become ARINC 763A compliant by adding a small modification rather than performing a total package redesign.

Airlines supporting effort

Christian Orłowski, ANFS Chairman, will lead this effort within the ANFS Subcommittee. Other airlines interested in the project include Emirates (EAD), Malaysia (MAS), Pakistan (PIA), and Lufthansa (DLH). Both Boeing and Airbus are interested and will support the project. Avionics vendors include Honeywell, Miltope, and Rockwell Collins.

Issues to be worked

The major challenge for the subcommittee is to create a document with sufficient flexibility for manufacturers, but at the same time contain all the elements described in the project scope.

Recommended Coordination with other groups

Worked performed on the ARINC 763A effort would be coordinated with the Aircraft Data Networks (ADN) Working Group, the Cabin Equipment Interface (CEI) Subcommittee, and the Software Data Loading Working Group.

Projects/programs supported by work

Projects benefiting from this effort would be the Boeing 7E7 Program and the Airbus 380 Program.

Timetable for projects/programs

Early drafts of the new document would be most useful to the above programs. Formal release of a finished document is envisioned by the end of 2005.

Documents to be produced and date of expected result

A likely number for this document could be ARINC 763A. It would be a companion document to ARINC 763 but harmonize with ARINC 763 only in function. The form and fit would be at the discretion of the manufacturer.

Comments

Anything else deemed useful to the committees for prioritization of this work.

Meetings

The following table identifies the number of meetings and proposed meeting days needed to produce the documents described above.

Activity	Mtgs	Mtg-Days
ARINC 763A	4	12

For IA staff use

Date Received _____ IA staff assigned: Roy Courtney

Potential impact: C
(A. Safety B. Regulatory C. New aircraft/system D. Other)

Forward to committee(s) (AEEC, AMC, FSEMC): AEEC Date Forward: _____

Committee resolution: 1
(0. Withdrawn 1. Authorized 2. Deferred 3. More detail needed 4. Rejected)

Assigned Priority: _____ Date of Resolution: Nov 27, 2004

A. – High (execute first) B. – Normal (may be deferred for A.)

Assigned to SC/WG ANFS Subcommittee