

ARINC Project Initiation/Modification (APIM)

- 1.0 Name of Proposed Project** **APIM 19-006**
Prepare new ARINC Project Paper xxx: Intersystem Network Infrastructure
- 1.1 Name of Originator and/or Organization**
Jim Haak, Panasonic Avionics
- 2.0 Subcommittee Assignment and Project Support**
- 2.1 Suggested AEEC Group and Chairman**
Network Infrastructure and Security (NIS) Subcommittee
- 2.2 Support for the activity (as verified)**
Airlines: American, TAP Portugal, United Airlines
Airframe Manufacturers: Airbus, Boeing, Embraer (TBC)
Suppliers: CMC Electronics, Honeywell, Zodiac Aerospace, Thales, Collins Aerospace, Panasonic Avionics
Others:
- 2.3 Commitment for Drafting and Meeting Participation (as verified)**
Airlines: United Airlines
Airframe Manufacturers: Boeing and Airbus
Suppliers: CMC Electronics, Zodiac Aerospace, Thales, Collins Aerospace, Panasonic Avionics
Others:
- 2.4 Recommended Coordination with other groups**
Cabin Systems, Ku/Ka, SAI
- 3.0 Project Scope (why and when standard is needed)**
- 3.1 Description**
Prepare ARINC Project Paper xxx to provide guidelines for the integration of networked aircraft systems, such as IFE, connectivity, and others. VLANs have been widely adopted to segregate communications between systems. When one supplier integrates with another, the implementations often do not align, which adds complexity in system integration. This reduces the airlines' ability to select their suppliers.
An extensible intersystem network infrastructure to facilitate resource sharing between systems will be standardized. The standard is needed to improve compatibility of networks. This is expected to reduce airline costs and speed deliveries.
- 3.2 Planned usage of the envisioned specification**
Note: New airplane programs must be confirmed by manufacturer prior to completing this section.

- Panasonic Avionics Corporation
- Thales InFlyt Experience
- Zodiac Inflight Innovations
- Gogo
- Collins Aerospace
- Honeywell
- Inmarsat
- CMC Electronics

4.2 Specific project benefits (Describe overall project benefits.)

4.2.1 Benefits for Airlines

- Ability to select different suppliers for IFE, IFC, and other systems without requiring custom integration work. Less lead time required.
- Reduces cost and weight as a single resource is shared among suppliers rather than each resource independently sourced and not shared.

4.2.2 Benefits for Airframe Manufacturers

- Simplifies the integration of an ever-increasing quantity of BFE systems.

4.2.3 Benefits for Avionics Equipment Suppliers

- Less time customizing interfaces and more time to add capabilities.

5.0 Documents to be Produced and Date of Expected Result

New ARINC Project Paper xxx (October 2020)

5.1 Meetings and Expected Document Completion

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

Activity	Mtgs	Mtg-Days (Total)	Expected Start Date	Expected Completion Date
<i>ARINC Project Paper xxx</i>	5	5 <i>(1 day of 3 day meeting)</i>	<i>May 2019</i>	<i>Oct 2020</i>

6.0 Comments

For more information, refer to related white paper attached to NIS SC meeting report January 2019.

6.1 Expiration Date for the APIM

April 2021

Completed forms should be submitted to the AEEC Executive Secretary.