

ARINC Project Initiation/Modification (APIM)

- 1.0 Name of Proposed Project** **APIM 16-010**
Supplement 9 to ARINC Specification 620: Datalink Ground System Standard and Interface Specification (DGSS/IS)
- 1.1 Name of Originator and/or Organization**
Jose Godoy, ARINC IA Staff
- 2.0 Subcommittee Assignment and Project Support**
- 2.1 Suggested AEEC Group and Chairman**
DLK Systems Subcommittee – Bob Slaughter, American Airlines
- 2.2 Support for the activity (as verified)**
Airlines: American, FedEx, BA, UAL
Airframe Manufacturers: Airbus, Boeing
Suppliers: Honeywell, Rockwell Collins, Universal Avionics Systems (TBC)
Others: SITA, Rockwell Collins IMS (TBC)
- 2.3 Commitment for Drafting and Meeting Participation (as verified)**
Airlines: American Airlines
Airframe Manufacturers: Airbus, Boeing
Suppliers: Honeywell, Rockwell Collins, Universal Avionics Systems (TBC)
Others: SITA, Rockwell Collins IMS (TBC)
- 2.4 Recommended Coordination with other groups**
Data Link Users Forum, EFB Standards, SAI
- 3.0 Project Scope (why and when standard is needed)**
- 3.1 Description**
It has been discovered that media independent ACARS messages that use a Message Function Indicator (MFI) are not being routed correctly. Datalink Service Providers (DSP), SITA and Rockwell Collins IMS, are not processing MIAM messages in the same manner. This was discovered in the preparation of ARINC 841, MIAM, and needs to be corrected.
Supplement 9 to ARINC 620 will:
- 1) Add guidance on how DSPs should process ACARS/AOA/MIAM messages that use MFIs.
 - 2) Address interoperability issue associated with EFB ACARS messages with a Supplementary Field Address (SFA).
 - 3) Assign MFIs to Onboard Network System (ONS) applications (Boeing requested).
 - 4) Correct ISO 5 Characters tables in Appendix E.
 - 5) Any editorial corrections viewed to be necessary.

3.2 **Planned usage of the envisioned specification**

Note: New airplane programs must be confirmed by manufacturer prior to completing this section.

- New aircraft developments planned to use this specification yes no
- Airbus: (aircraft & date)
- Boeing: (aircraft & date)
- Other: (manufacturer, aircraft & date)
- Modification/retrofit requirement yes no
- Specify: (aircraft & date)
- Needed for airframe manufacturer or airline project yes no
- Specify: (aircraft & date)
- Mandate/regulatory requirement yes no
- Program and date: (program & date)
- Is the activity defining/changing an infrastructure standard? yes no
- Specify (e.g., ARINC 429)
- When is the ARINC standard required?
- October 2017
- What is driving this date? A350 MIAM messages are not being routed correctly
- Are 18 months (min) available for standardization work? yes no
- If NO please specify solution: _____
- Are Patent(s) involved? yes no
- If YES please describe, identify patent holder: _____

3.3 **Issues to be worked**

(Describe the major issues to be addressed.)

4.0 **Benefits**

4.1 **Basic benefits**

- Operational enhancements yes no
- For equipment standards:
- (a) Is this a hardware characteristic? yes no
- (b) Is this a software characteristic? yes no
- (c) Interchangeable interface definition? yes no
- (d) Interchangeable function definition? yes no
- If not fully interchangeable, please explain: _____
- Is this a software interface and protocol standard? yes no
- Specify: Air - Ground Interoperability
- Product offered by more than one supplier yes no

Identify: SITA, Rockwell Collins IMS

4.2 Specific project benefits (Describe overall project benefits.)

4.2.1 Benefits for Airlines

MIAM AOC messages will be routed efficiently.

4.2.2 Benefits for Airframe Manufacturers

A350 aircraft use the MIAM protocol. This effort will improve the routing of MIAM messages.

4.2.3 Benefits for Avionics Equipment Suppliers

Incremental product requirement.

5.0 Documents to be Produced and Date of Expected Result

Supplement 9 to ARINC 620, October 2017

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.

Supplement 9 to ARINC 620	Mtgs	Mtg-Days (Total)	Expected Start Date	Expected Completion Date
2016	1	3	Oct 2016	
2017	2	6		Oct 2017

Meetings to develop Supplement 9 will take place within the DLK Systems Subcommittee. Dedicated web conferences will be held on a monthly basis or as needed.

6.0 Comments

6.1 Expiration Date for the APIM

April 2018

Completed forms should be submitted to the AEEC Executive Secretary.