

## **ARINC Project Initiation/Modification (APIM)**

### **1.0 Name of Proposed Project**

Supplement 4 to ARINC Characteristic 791 Part 1

Supplement 3 to ARINC 792

### **1.1 Name of Originator and /or Organization**

Amazon (Kuiper)

### **2.0 Subcommittee Assignment and Project Support**

#### **2.1 Suggested AEEC Group and Chairman**

KSAT Subcommittee

Ryan Torgerson, The Boeing Company

Chris Schaupmann, Airbus

#### **2.2 Support for the Activity (as verified)**

Airlines: Delta Air Lines, United Airline (TBC), American Airlines

Airframe Manufacturers: Airbus, The Boeing Company

Suppliers: Collins Aerospace, Intelsat, SCI Technology, Panasonic

Others: Amazon, TE, COTSWORK, Amphenol CIT (TBC), Totaport

#### **2.3 Commitment for Drafting and Meeting Participation (as verified)**

Airlines: Delta Air Lines, American Airlines

Airframe Manufacturers: Airbus, The Boeing Company

Suppliers: Collins Aerospace, Intelsat, SCI Technology, Panasonic

Others: Amazon, TE, COTSWORK, Amphenol CIT (TBD), Totaport

#### **2.4 Recommended Coordination with other Groups**

FOS and NIS

### **3.0 Project Scope (why and when standard is needed)**

#### **3.1 Description**

Draft guidelines for inclusion of terminals (e.g., LEO) with modems integrated in the outside antenna assembly.

Evaluate modman impact for configuration without a modem.

Re-evaluate 4 lug solution (Interface between the airplane and antenna)

Evaluate impact on standard wiring provisions.

Cleanup, add clarifications to existing supplement.

Incorporate ARINC 793.

Reference AR

INC 791 Part 3 where Part2 was previously referenced.

### 3.2 Planned usage of the ARINC Standard

New aircraft developments planned to use this specification yes ☐ no ☐

N/A

Other: (manufacturer, aircraft & date)

Modification/retrofit requirement yes ☒ no ☐

ARINC 791 equipped aircraft

Needed for airframe manufacturer or airline project yes ☒ no ☐

This project is to accommodate first Kuiper satcom installation

Mandate/regulatory requirement yes ☐ no ☒

Is the activity defining/changing an infrastructure standard? yes ☐ no ☒

When is the ARINC standard required? May 2026

What is driving this date? First Kuiper satcom installation

Are 18 months (min) available for standardization work? yes ☒ no ☐

Are Patent(s) involved? yes ☐ no ☒

### 3.3 Issues to be Worked

Create minimum of a quantity of 2, GbE interfaces to outside Antenna Unit.

Extra wiring from KPSU to modman.

Modman and Bulkhead Interfaces (BI) definition for GbE interfaces.

### 3.4 Security Scope

Is Cyber Security Impacted (if YES, check box(es) below) yes ☒ no ☐

Aircraft Control Domain yes ☐ no ☒

Airline Information Services Domain yes ☒ no ☐

PAX Information and Entertainment Systems yes ☒ no ☐

Other: \_\_\_\_\_ yes ☐ no ☐

Coordinate with NIS (Project Paper 857)

## 4.0 Benefits

### 4.1 Basic Benefits

Operation 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 ☒

Is this a software interface and protocol standard? yes ☐ no ☒

Product offered by more than one supplier yes ☒ no ☐

Starlink, Hughes/Onewe

### 4.2 Specific Project Benefits

(Describe overall project benefits.)

#### 4.2.1 Benefits for Airlines

Standard available for satcom installation

#### 4.2.2 Benefits for Airframe Manufacturers

Standard available for satcom installation

#### 4.2.3 Benefits for Avionics Equipment Suppliers

Standard installation kit

## 5.0 Documents to be Produced and Date of Expected Result

ARINC 791 P1-4

ARINC 792-3

### 5.1 Meetings an 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
A791 P1-4	5	15*	Oct 2024	May 2026
ARINC 792-3	5	15*	Oct 2024	May 2026

\* These meetings are in parallel (KSAT Subcommittee will develop ARINC 791 P1-4, ARINC 792-3 and ARINC 793 at the same meetings)

Online Conferences monthly or as needed.

**6.0 Comments**

**6.1 Expiration Date for the APIM**

October 2026

*Completed forms should be submitted to ([aeec@sae-itc.org](mailto:aeec@sae-itc.org))*