AEEC

Together "We Set the Standard."

To	Aviation Industry	**Date**	May 8, 2019
From	P. J. Prisaznuk AEEC Executive Secretary pjp@sae-itc.org tel +1 240-334-2579	**Reference**	19-056/AXX-222 lth

Subject **AEEC Work Program Expansion for 2019 – 2020**
Approved by the Airlines Electronic Engineering Committee (AEEC)
April 29 to May 2, 2019 – Prague, Czech Republic

Summary Adding to the ARINC Standards presently in development, the AEEC Executive Committee approved five project proposals at the AEEC General Session in Prague:

19-001 Preparation of Supplement 1 to **ARINC Characteristic 792:** *Second-Generation Ku-Band and Ka-Band Satellite Communication System*

19-002 Preparation of Supplement 4 to **ARINC Specification 485:** *Cabin Equipment Interfaces, Part 1, Head End Equipment Protocol* and Supplement 5 to **ARINC Specification 485:** *Cabin Equipment Interfaces, Part 2, Physical Layer - In-Seat Protocol*

19-003 Preparation of Supplement 4 to **ARINC Specification 628:** *Cabin Equipment Interfaces, Part 5, Cabin Electrical Equipment and Wiring Installation Guidelines*

19-005 Preparation of Supplement 4 to **ARINC Specification 633:** *AOC Air-Ground Data and Message Exchange Format*

19-006 New **ARINC Project Paper 8xx:** *Intersystem Network Architecture Design Guidelines*

The statement of work for each of these projects is attached to this document in the form of an APIM (ARINC Proposal to Initiate/Modify an ARINC Standard).

Invitation This letter informs the industry of AEEC Executive Committee actions and serves as an invitation for all interested parties to participate in ARINC Industry Activities.

For additional information on the AEEC work program, contact the AEEC Executive Secretary or visit the AEEC website: *www.aviation-ia.com/activities/aeec*.

cc AEEC Executive Committee, AOC, CSS, DLK, KSAT, NIS, SAI, SDL

Attachment 1

Attachment 1

ARINC Project Initiation/Modification (APIM)

1.0 Name of Proposed Project APIM 19-001

Prepare **Supplement 1 to ARINC Characteristic 792:** *Second-Generation Ku-Band and Ka-Band Satellite Communication System*

1.1 Name of Originator and/or Organization

Mark Sorenson – Delta Air Lines

2.0 Subcommittee Assignment and Project Support

2.1 Suggested AEEC Group and Chairman

Ku/Ka-band Satellite Subcommittee

Mark Sorenson – Delta Air Lines

Chris Schaupmann - Airbus

2.2 Support for the activity (as verified)

Airlines: Delta Air Lines, United Airlines

Airframe Manufacturers: Airbus, Boeing, Bombardier, Embraer (TBC), Gulfstream

Suppliers: GoGo, VIASAT, Zodiac, Smiths Interconnect, ThinKom, Astronics, Phasor (TBC), Carlisle, Collins Aerospace

Others: TotaPort, Seamless Alliance

2.3 Commitment for Drafting and Meeting Participation (as verified)

Airlines: Delta Air Lines, United Airlines

Airframe Manufacturers: Airbus, Boeing, Bombardier, Embraer (TBC), Gulfstream

Suppliers: GoGo, VIASAT, Zodiac, Smiths Interconnect, ThinKom, Astronics, Phasor (TBC), Carlisle, Collins Aerospace

Others: TotaPort, Seamless Alliance

2.4 Recommended Coordination with other groups

CSS, SAI

3.0 Project Scope (why and when standard is needed)

3.1 Description

Develop alternative form factor antenna installations for Ku and Ka Band Satcom systems.

Develop new interface between the Modem Manager (MODMAN) and Outside Antenna Equipment (OAE) using fiber and/or copper media.

- Migration of functionality from MODMAN to the OAE
- Provide antenna thermal management guidance.
- Add new MODMAN form factor to accommodate multiple interchangeable modem which is industry driven

- Airlines want to change service provider
- Service providers want to incorporate new modems
- Allows using multiple modem suppliers
- Multiple networks (location dependent: regional and global)

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:	Maybe Retrofit (To be confirmed)
Boeing:	B777-X (To be confirmed)
Bombardier	To be confirmed
Embraer	To be confirmed
Gulfstream	To be confirmed

Modification/retrofit requirement yes ☒ no ☐

Specify: There is interest but no commitment for alternative form factor/s.

Needed for airframe manufacturer or airline project yes ☐ no ☒

Mandate/regulatory requirement yes ☐ no ☒

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

When is the ARINC standard required?

April 2021

What is driving this date?

Maturing antenna technologies.

Alignment with the LEO Constellation timeline.

Operators desire for narrower profile antennas (lower weight and drag).

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

Are Patent(s) involved? yes ☐ no ☒

None that are known

3.3 Issues to be worked

Evaluate and Develop alternative feedthrough and fitting locations.

Support different modem solutions that can drive a MODMAN form factor and fiber optic application.

Facilitate new cooling solutions (Antenna/Radome).

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 ☐

Power and Cooling interfaces may be changed

(d) Interchangeable function definition? yes ☒ no ☐

Will reuse ARINC 791 and ARINC 792 provisioning (as much as possible).

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

Product offered by more than one supplier yes ☒ no ☐

Astronics, ThinKom, Phasor, Collins Aerospace, Smith Interconnect

4.2 Specific project benefits (Describe overall project benefits.)

4.2.1 Benefits for Airlines

Less fuel burn (lower operating cost/carbon emissions).

Regional Aircraft compatibility (move to satellite systems).

GEO and NGEO solutions with smaller antenna form factor.

Flexibility to change modem.

Reusing standard structural provisions

4.2.2 Benefits for Airframe Manufacturers

Lessen installation time and cost, reduce weight, reduce rework, consistency (narrow bodied and wide-bodied aircraft).

4.2.3 Benefits for Avionics Equipment Suppliers

Increase product line (Support for alternate antennas).

Ease of introducing new modems.

5.0 Documents to be Produced and Date of Expected Result

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
Supp 1 to ARINC 792	*6 meetings*	*18 days*	*May 2019*	*May 2021*

6.0 Comments

Meetings will take place within KSAT Subcommittee
Monthly conference calls will be held as needed.

6.1 Expiration Date for the APIM

October 2021

Completed forms should be submitted to the AEEC Executive Secretary.

Attachment 2

Attachment 2

ARINC Project Initiation/Modification (APIM)

1.0 Name of Proposed Project APIM 19-002

Update Bus Speed for Cabin Seat Networks and prepare:

- **Supplement 4 to ARINC Specification 485:** *Cabin Equipment Interfaces, Part 1, Head End Equipment Protocol*
- **Supplement 5 to ARINC Specification 485:** *Cabin Equipment Interfaces, Part 2, Physical Layer – In-Seat Protocol*

1.1 Name of Originator and/or Organization

Scott McMillan, Crane Aerospace and Electronics

1.2 Suggested AEEC Group and Chairman

Cabin Systems Subcommittee, Dale Freeman, Delta Air Lines

1.3 Support for the activity (as verified)

Airlines: Delta Air Lines

Airframe Manufacturers: Airbus, Boeing

Suppliers: Crane Aerospace and Electronics, TE Connectivity, Amphenol, KID-Systeme, Panasonic Avionics Corp, Recaro

Others:

1.4 Commitment for Drafting and Meeting Participation (as verified)

Airlines: Delta Air Lines

Airframe Manufacturers: Airbus, Boeing

Suppliers: Crane Aerospace and Electronics, TE Connectivity, Amphenol, KID-Systeme, Panasonic Avionics Corp, Recaro

Others:

1.5 Recommended Coordination with other groups

(List other AEEC subcommittees or other groups.)

2.0 Project Scope (why and when standard is needed)

2.1 Description

The ARINC 485 In-Seat Network currently specifies use of low-speed bus (9.6 kbps). This APIM would add the option of high-speed bus (115 kbps).

2.2 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:	All Aircraft with seats using ARINC 485
Boeing:	All Aircraft with seats using ARINC 485
Other:	All Aircraft with seats using ARINC 485

Modification/retrofit requirement yes ☒ no ☐

Specify: All Aircraft with seats using ARINC 485

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: ARINC 485, Parts 1 and 2

When is the ARINC standard required? April 2020

What is driving this date?

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: _____

2.3 Issues to be worked

In ARINC 485, Part 1:

- Update Section 2.2.4, *Bus Timing*, to define two bus speeds.
- Update Section 2.2.4.1, *High-Speed Bus Timing*, to specify high-speed bus.
- Update Section 2.2.4.2, *Low-Speed Bus Timing*, to specify low-speed bus.

In ARINC 485, Part 2:

- Update Section 2.1, *Physical Layer*, Bullet 4 to specify both the low-speed rate and the high-speed rate.
- Update Section 2.2.4*, Bus Timing*, to specify two bus speeds.

3.0 Benefits

3.1 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: _____

Product offered by more than one supplier yes ☒ no ☐

Identify: (company name)

3.2 Specific project benefits (Describe overall project benefits.)

3.2.1 Benefits for Airlines

Airlines would benefit from a more responsive and faster in-seat communication bus.

3.2.2 Benefits for Airframe Manufacturers

Airframe manufacturers will benefit from increased reliability and functionality.

3.2.3 Benefits for Avionics Equipment Suppliers

Suppliers could design increased functionality and communication capabilities into their products and services.

4.0 Documents to be Produced and Date of Expected Result

Supplement 4 to ARINC Specification 485: *Cabin Equipment Interfaces, Part 1, Head End Equipment Protocol*

Supplement 5 to ARINC Specification 485: *Cabin Equipment Interfaces, Part 2, Physical Layer – In-Seat Protocol*

4.1 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
Supp 4 to ARINC 485, Part 1	*2*	*6*	*May 2019*	*Apr 2020*
Supp 5 to ARINC 485, Part 2	*2*	*6*	*May 2019*	*Apr 2020*

Reflects all CSS meetings responsible for several APIMs in work. In addition to the proposed meetings identified above, the CSS will have virtual meetings to develop preliminary pin assignments and connector definitions.

5.0 Comments

None.

5.1 Expiration Date for the APIM

October 2020

Completed forms should be submitted to the AEEC Executive Secretary.

Attachment 3

Attachment 3

ARINC Project Initiation/Modification (APIM)

1.0 Name of Proposed Project APIM 19-003

Supplement 4 to ARINC 628: *Part 5, Cabin Electrical Interfaces, Equipment and Wiring Installation Guidelines*

1.1 Name of Originator and/or Organization

Cabin System Subcommittee (CSS)

Jecelin Peterson, Boeing

2.0 Subcommittee Assignment and Project Support

2.1 Suggested AEEC Group and Chairman

Cabin System Subcommittee (CSS)

Dale Freeman, Delta Air Lines

2.2 Support for the activity (as verified)

Airlines: Delta Air Lines

Airframe Manufacturers: Airbus, Boeing

Suppliers: Rockwell-Collins Seats, Zodiac Seats, Recaro,

Others:

2.3 Commitment for Drafting and Meeting Participation (as verified)

Airlines: Delta Air Lines

Airframe Manufacturers: Airbus, Boeing

Suppliers: Rockwell-Collins Seats, Zodiac Seats, Recaro,

Others:

2.4 Recommended Coordination with other groups

N/A

3.0 Project Scope (why and when standard is needed)

3.1 Description

ARINC 628 Part 5 will be updated to reflect the latest airframe manufacturer electrical installation practices and regulatory changes for airplane cabin interiors. Planned changes include the following:

- Add guidelines or references for meeting EN-3197 Electrical Wiring Interconnect System (EWIS) regulatory requirements for cabin interiors.
- Add guidelines or references for meeting SAE- AS50881 “Installation Rules” for wiring requirements for cabin interiors.
- Add bend radii guideline or reference for fiber optic cable (ARINC 802, etc.).
- Add guidelines for cable accessibility, spare wires, and application of splices.

The updates will support airframe and seat manufacturer proposal for inclusion of electrical installation aspects into a future revision of FAA TSO C127 (Seats).

3.2 Planned usage of the envisioned specification

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

Airbus: All

Boeing: All

Modification/retrofit requirement yes ☒ no ☐

Specify: Airlines refurbishing seats and cabin interiors.

Needed for airframe manufacturer or airline project yes ☒ no ☐

Specify: driven by the need to update common definitions for the airplane programs and retrofit programs, and to support airframer and seat manufacturer proposals for the next revision of FAA TSO C127

Mandate/regulatory requirement yes ☐ no ☒

Program and date: No mandate

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

Specify:

When is the ARINC Standard required? May 2020

What is driving this date? Estimated future revision to FAA TSO C127

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

If NO, please specify solution: Not applicable

Are Patent(s) involved? yes ☐ no ☒

If YES please describe, identify patent holder: Not applicable

3.3 Issues to be worked

Harmonize airframe manufacturer airplane interior electrical installation requirements, and guidelines for meeting EWIS regulatory requirements.

4.0 Benefits

4.1 Basic benefits

Operational enhancements yes ☒ no ☐

For equipment standards:

(a) Is this a hardware characteristic? yes ☒ no ☐

(a) Is this a software characteristic? yes ☐ no ☒

(b) Interchangeable interface definition? yes ☐ no ☒

(c) Interchangeable function definition? yes ☐ no ☒

If not fully interchangeable, please explain: _____

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

Product offered by more than one supplier yes ☒ no ☐

Identify:

4.2 Specific project benefits (Describe overall project benefits.)

Improved harmonization of electrical installation practices for cabin interiors, which increases standardization and reduces development cost of seats, other interior furnishings, and their installation.

4.2.1 Benefits for Airlines

See above

4.2.2 Benefits for Airframe Manufacturers

See above

4.2.3 Benefits for Avionics Equipment Suppliers

None

5.0 Documents to be Produced and Date of Expected Result

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
Supplement 4 to ARINC 628 Part 5	5	3	Jun 2019	Apr 2020

* Boeing and Airbus will have ad-hoc team working on drafting updates to the subject document. Majority of work will be done in ad-hoc team meetings supported by Boeing and Airbus.

* The CSS Subcommittee has several APIMs and projects in-work. This APIM will be worked in conjunction with the other products.

6.0 Comments

This APIM opens the following ARINC Standards.

- **ARINC Specification 628:** *Part 5, Cabin Electrical Interfaces, Equipment and Wiring Installation Guidelines*

6.1 Expiration Date for this APIM

October 2020

Completed forms should be submitted to the AEEC Executive Secretary.

Attachment 4

Attachment 4

ARINC Project Initiation/Modification (APIM)

1.0 Name of Proposed Project APIM 19-005

Supplement 4 to ARINC Specification 633, AOC Messaging

1.1 Name of Originator and/or Organization

Lufthansa German Airlines and Delta Air Lines

2.0 Subcommittee Assignment and Project Support

2.1 Suggested AEEC Group and Chairman

AOC Subcommittee

Dirk Zschunke – Lufthansa German Airlines

2.2 Support for the activity (as verified)

Airlines: Delta Air Lines, Lufthansa German Airlines,
KLM Royal Dutch Airlines

Airframe Manufacturers: Airbus (through NavBlue), The Boeing Company (TBC)

Suppliers: Honeywell, Lufthansa Systems, Jeppesen, Sabre, FlightKeys, NavBlue

Others:

2.3 Commitment for Drafting and Meeting Participation (as verified)

Airlines: Delta Air Lines, Lufthansa German Airlines, KLM Royal Dutch Airlines

Airframe Manufacturers: Airbus (through NavBlue), The Boeing Company (TBC)

Suppliers: Lufthansa Systems, Jeppesen, Sabre, FlightKeys, NavBlue

Others:

2.4 Recommended Coordination with other groups

None

3.0 Project Scope (why and when standard is needed)

3.1 Description

Create or expand the following data structures in ARINC 633 AOC definition:

Operational Flight Plan Updates

- WayPoint
  - Add Cumulated gnd/air distance since T/O
- Add WayPoint information with ATC restrictions, limits, target values, etc. (in SESAR and FAA NextGen context
- ETOPS
  - Gross weight at ETP
  - Great circle distance from ETP to suitable airport
- In Flight Update
- Electronic Signature

- Idle Factor
- Dispatch License

Crew List

- Duty Data
  - To facilitate EFB chaining flights
- Pilot email
- Pilot Identifier
  - Used to Identify Pilot on EFB
- EFB Reference Pin Code (for Identification)

RAIM

- Place in Flight Plan or Standalone RAIM

Fuel Header

- Add Taxi InFuel
- Include a Minimum Fuel Element
- Add Optional Cargo Fuel Element (to Load)

PIREP

- Add Aircraft Type element

ATIS

- ATIS runway condition per ICAO

General

- Language
  - Handle Chinese

Request / Response

- Expand Supplement 3 definition

Performance

- RNP
- RCP
- RSP

Terrain Clearance

- Elaborate route from critical point to escape airport

Special Loads / NOTOC

Upper Air Data

- Atmospheric conditions at different Flight Levels in the Flight Plan

Turbulence

- TURB at different WayPoints
- Light, Moderate, Severe or Extreme

Guidance

- Value of using Dictionary (complying with Waypoint functional elements

Take/Off Alternate

- Add Guidance and Clarification (where its located)

Rerouting Flight Plan

- Make eFlight Folder Manger

General Alternate Routes

- Include diversion airport
  - beyond existing T/O or Final Alternate

NOTAM

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?

Sept 2020

What is driving this date?

Airlines are still operating Supplement 1 and 2.

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

Are Patent(s) involved? yes ☐ no ☒

None that are known

3.3 Issues to be worked

- See Section 3.1
- Make the document more efficient – reduce links?

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 ☒

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

Product offered by more than one supplier yes ☒ no ☐

Identify: Lufthansa Systems, NavBlue, Jeppesen, Sabre

4.2 Specific project benefits (Describe overall project benefits.)

4.2.1 Benefits for Airlines

AOC messaging Standard will satisfy airline customer need.

4.2.2 Benefits for Airframe Manufacturers

This will enable a standard product to be developed applicable to many users. This reduces development cost.

4.2.3 Benefits for Avionics Equipment Suppliers

5.0 Documents to be Produced and Date of Expected Result

Identify Project Papers expected to be completed per the table in the following section.

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
Supplement 4 to ARINC 633	***4***	***12***	*May 2019*	***April 2021***

6.0 Comments

In an effort to minimize the number of meeting days, number of meetings was reduced from 5 to 4 meetings the AEEC General Session in Prague.

Monthly web conference or as needed.

6.1 Expiration Date for the APIM

October 2021

Completed forms should be submitted to the AEEC Executive Secretary.

Attachment 5

Attachment 5

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.

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 2020 (or earlier)

What is driving this date? many existing integrations between different suppliers of IFE & IFC

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

- Preserve and support existing OEM implementations while also supporting an optional path to extend the shareable resource infrastructure into those domains.
- Identify VLAN support that could be added to this standard to support existing ARINC Standards; Ku/Ka, MAGIC, MISON, Gatelink, 628, etc.
- Define APIs to interact with each known shareable resource

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: _____

Product offered by more than one supplier yes ☒ no ☐

Identify:

- 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
ARINC Project Paper xxx	*5*	*5 (1 day of 3 day meeting)*	*May 2019*	*Oct 2020*

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.