

# **Cabin Systems Subcommittee**

*Meeting Agenda*

*August 22-24, 2017  
Riga, Latvia*

*Dale Freeman, DAL, Chairman  
Gerald Lui-Kwan, Boeing, Co-Chairman  
Rolf Gödecke, Airbus , Co-Chairman*

# Cabin Systems Meeting Agenda

## ▶ Introductions

- Special Notes
  - ▶ Intellectual Property (Patent & Copyrights)
  - ▶ APIM Guidelines
  - ▶ Members and Corporate Sponsors
- Acceptance of Previous Meeting Report (17-087/CSS-596)
- Current Drafts
  - ▶ Draft 4 of Supplement 1 to ARINC 800 Part 2 (New)
  - ▶ Draft 4 of Supplement 3 to ARINC 664 Part 2
  - ▶ Draft 3 of ARINC Project Paper 836A (New)
  - ▶ Draft 1 of Supplement 8 to ARINC 628 Part 1
  - ▶ Draft 2 of Supplement 5 to ARINC 628 Part 9 (New)
  - ▶ Draft 1 of Project Paper 820
- Working Papers Identification
  - ▶ Requirements Matrices for 2-wire Ethernet connector and cables
  - ▶ Proposed APIM 17-011 – Video Surveillance System
  - ▶ Proposed APIM 17-012 – Updated 3GCN
  - ▶ Proposed APIM 17-013 – Cell Modems
  - ▶ PP820 - Thales response to action items
  - ▶ PP854 - Report from the cabin bus ad hoc working group –Thales
  - ▶ PP854 - Updated Strawman input from cabin bus ad hoc working group
  - ▶ **Others to be added**

# Objectives

- ▶ Review of Current CSS Program
- ▶ Consider New Supplement to ARINC 628 Part 0
- ▶ Connectors and Cables
  - Supplement 1 to A800 Part 2 (Specification of Connectors) - 10 Gbps Ethernet 8ax Contact
  - Supplement 1 to A800 Part 3 (Specification of Cables) – close action items
  - MT Fiber Optic Connectors
- ▶ ARINC 836A – mini-modules
- ▶ APIM for Cabin Surveillance
- ▶ PP648 -- Guidance for Seat Production Testing
- ▶ Supplement 8 to ARINC 628 Part 1
  - HD Landscape Camera and 4K Video
  - CWAP Automatic Region Code Adaptation
  - MultiGigabit CWAP
- ▶ APIM for Proposed Supplements to ARINC 808 and 809
- ▶ APIM for 5GCN
- ▶ APIM for Cell Modem Definition
- ▶ Supplement 5 to ARINC 628 Part 9
- ▶ Project Paper 820 (Wireless Networks)
- ▶ New Business – Airbus-proposed Cell Modem Definition
- ▶ New Cabin LAN Definition
  - ARINC 664, Part 2
  - Seat and Lighting Interfaces – PP 854
- ▶ ARINC 664 Part 2 (10 Gb Ethernet)
- ▶ Agenda and Location for Next Meeting

# Tuesday, 9:00 AM – 5:00 PM

- ▶ **Current CSS Program**
    - Review of current program
  - ▶ **ARINC 628 Part 0**
    - Revise A628P1 APIM to update A628P0 (A628P0-7)
  - ▶ **Review ARINC 800, Part 2 (Specification of Connectors)**
    - Revise wording in 800P2 sec 3.1.3.9.2 to including references to CAT6A spec (A800P2-108)
    - Add drawings for PC board configurations of the 8-AX contact (A800P2-110)
    - Verify Table 3-7 requirement 418 for Type 1 insertion force after cond as NA (A800P2-111)
    - Define Table 3-7 requirement 508 "x" length (A800P2-112)
    - Add US Customary units to drawings in appendix E (A800P2-113)
    - Develop proposed size 6 connectors for table 5-2 appendix D figure D-1 and 5-1 (A800P2-114)
    - Take input for 8ax from Radiall and Amphenol and create a new draft (A800P2-115)
    - Review 8ax test report and determine viability of the recorded performance. (A800P2-116)
    - **Consensus for submittal to AEEC at Mid-Term Session**
    - **Requirements for 2-wire Ethernet Connector**
  - ▶ **Review ARINC 800, Part 3 (Specification of Cables)**
    - Make editorial updates to A800 P3 to add cable referencing scheme for 8ax cable (A800P3-37)
    - **Requirements for 2-wire Ethernet Cable**
  - ▶ **Fiber Optic Connectors (PP846)**
    - Perform thermal testing on MT termini for 125C temp requirement (FOWG-24)
    - Provide the updated requirements matrix for the MT termini to FOS (FOWG-26)
    - Determine copper pin, high voltage and sealing requirements for hybrid MT insert (FOWG-27)
  - ▶ **Review ARINC Project Paper 836A (Mini-MRP)**
    - Include frame drawing view for the bonding spring clip height above the enclosure. (836-57)
- Delta/IA**  
**CSS**  
**CSS**  
IA  
**CSS/CWG**  
Boeing  
Amp/Radiall  
Amp/Radiall  
Amp/Radiall  
IA  
PAC  
IA  
Boeing  
**CSS**  
**CWG**  
**CSS/CWG**  
IA  
**CWG**  
**CSS**  
Suppliers  
IA  
Boeing/Airbus  
**CSS**  
IA

# Wednesday, 9:00 AM – 5:00 PM

## ▶ **APIM for Cabin Surveillance**

- Develop an outline for the camera surveillance system specification (CSS-M-4)
- Finalize Surveillance APIM and submit to SAI for review and approval (CSS-M-5)
- **Finalize APIM for AEEC ExComm review and approval**

## ▶ **PP648 - Guidance for Seat Production Testing**

- Prepare ATP template, remove supplier-specific references (648-15)
- Revise Figure 1-1 (648-20)
- Draft Section 2.3.1 – IFE (648-23)
- Provide a draft of Section 3.2.1 – IFES (648-30)
- Propose new wording for replacing troubleshooting and rework (648-38)
- Add a note to LRU flow for direct signals from the aircraft (e.g., emergency lights) (648-39)
- Provide a description of the scope of the testing of IFE equipment in the seat.(648-40)
- Rewrite section 3.2.2.3 for interface between the SAC/ECU and IFE Seat equip. (648-43)
- Request data on top causes of failures during production installation (648-44)
- Revise APIM 15-001 to change the completion date for PP648 to May 2018 (648-45)

## **CSS**

Airbus

IA

## **CSS**

## **CSS**

IA/BE

IA

Thales/PAC/Zii

PAC/Thales/Zii

IA

IA

IFE suppliers

Thales

Airbus/Boeing

IA

# Wednesday, 9:00 AM – 5:00 PM (continued)

- ▶ **Supplement 8 to ARINC 628 Part 1 – CWAP GCOM/HD Landscape Camera**
    - **GCOM Updates**
    - Review and revise Att 17 video formats and integrate APEX EETWG requirements (628 P1-195)
    - Develop executive summary of the proposed path forward to monitoring app. (628 P1-202)
    - Develop proposals for CWAP network to support 802.11ac Wave 2 operation (628 P1-203)
  - ▶ **APIM for Proposed Supplements to ARINC 808 and ARINC 809**
    - Develop an APIM to revise A808 and A809 (809-393)
    - **Finalize APIM for AEEC ExComm review and approval**
  - ▶ **APIM for Cabin Network Expansion (5GCN)**
    - Develop written summary of the proposed 5GCN architecture (CSS-M-6)
    - Perform analysis of proposed 5GCN architecture and provide feedback to CSS (CSS-M-7)
  - ▶ **Review Draft 1 of Supplement 5 to ARINC 628 Part 9**
    - Create review draft for next meeting (A628P9-13)
  - ▶ **Review Draft 1 of Project Paper 820 (Wireless Network)**
    - Update figure 2-2 and/or text of section 2.2 to identify connector (820-17)
    - Add shield pin throughs for A429 (optional) and A485 (required) in section 2.2.2.4 (820-18)
    - In Section 2.2.2 - indicate that the tables are applicable to the contact size (820-24)
- CSS**  
**ZII**  
Thales  
ZII  
CSS  
**Boeing**  
Boeing  
**CSS**  
**CSS**  
Airbus  
IFE Suppliers  
**CSS**  
IA  
**CSS**  
Thales  
Thales  
IA

# Thursday, 9:00 AM – 12:00 Noon

- ▶ **New Business**
  - Propose a behavior document for wireless systems (CSS-M-1)
  - **Discuss Airbus-proposed cell modem APIM**
- ▶ **New Cabin Equipment Bus (ARINC 664 P2 and PP 854)**
  - **Supplement 4 to ARINC 664, Part 2 (New Cabin LAN)**
    - ▶ **Discuss Needs and Requirements for 100/1000 BASE T1 Definition**
  - **New Cabin LAN (Seat and Lighting Interfaces)**
    - ▶ **Report from Ad hoc working group**
    - ▶ Provide a test plan for the 802.3bw physical wiring (854-004)
    - ▶ Schedule and organize a security meeting on the approach for A854 (854-007)
- ▶ **Supplement 3 to ARINC 664, Part 2 (10 Gb Ethernet)**
  - Revise the applicable APIM to include 802.3bz into A664P2 (664P2-13)
- ▶ **Discuss agenda and locations for next meetings**
- ▶ **Adjourn CSS**

**CSS**

RCI

**CSS**

**CSS**

**CSS**

**CSS**

**CSS**

**Thales**

Thales

Thales

**CSS**

**CSS**

**All**

## 2017-2018 CSS Meetings Planning (Tentative)

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
CSS S/C		22-24 Riga, Latvia			Oct 31- Nov 2 Brea, CA			20-22 Cocoa Beach, FL			15-17 Versailles
Connector WG		Same as CSS			Same as CSS			Same as CSS			Same as CSS
Ku/Ka SatCom SC			6-8 Annapolis				10-12 Hawthorne, CA		13-15 TBD		
GAIN S/C	Monthly WebEx Meetings										
NIS				10-12 Orlando							
FOS				3-5 Cleveland							
SAI				17-18 Brussels							
APEX			EXPO 25-28 Long Beach				TECH 23-24 Los Angeles				
AEEC				19-20 Midterm Session Brussels						23-26 General Session Dallas	