

Approved by General Counsel

TR-8.12 Meeting Report

Date(s): 06/19/2018 - 06/19/2018

Location: Hyatt Regency Atlanta

Approved: 06/26/2018



TR-8.12 Two Slot TDMA Meeting Report

18-011

Presiding: Jim Eastwood, Chairman
Date: Tuesday, June 19, 2018
Place: Hyatt Regency Atlanta

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Participation Notice

TIA is actively seeking participation in projects from the "User" and "General Interest" communities.

Important Notice for Participation

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TIA's Intellectual Property Rights Policy can be found in Statements of Policy (ANNEX C) and other clauses and annexes of TIA Standards Development Procedures. Participants in the work of the TIA Formulating Groups are urged to review the appropriate sections. Individual participants are encouraged to notify TIA of any patent(s) or published pending patent application(s) of which they are aware that may be essential to the practice of a proposed TIA Publication, including requirements introduced through normative references, early on in the development to reduce the possibility for delays in the development process and increase the likelihood that the proposed TIA Publication will become a Standard. However, a Patent Holder who has provided TIA with a TIA Patent Holder Statement with respect to the applicable proposed TIA Publication need not (but may elect to) identify its specific patent(s) or published pending patent application(s) that may be essential to the practice of the proposed TIA Publication in question. Patent searches are not required to comply with the TIA Intellectual Property Rights Policy.

1. Call to Order:

The Chair called the meeting to order at approximately 13:24 Eastern Time (Atlanta local time) and volunteered to act as secretary. The Chair indicated that all relevant documents are on the TR-8.12 FTP site.

2. Record of Attendance:

The electronic sign-in code was provided and a summary of the electronic attendance is provided later in this report. A quorum was established with 13 of 15 eligible voting organizations present.

3. Review and Approve Agenda:

The Chair noted that the meeting agenda had been distributed by TIA prior to the meeting and that it is available as 18-008. The Chair then called the participants' attention to the TIA Participation Notice and Important Notice for Participation (see above) and asked for a motion to accept the June meeting agenda. Dwight Smith moved, and John Lambrou seconded, a motion to accept the June meeting agenda as written. The motion passed unanimously by voice vote.

4. Review and Approve Last Meeting Report:

The Chair noted that the previous meeting report had been distributed by TIA prior to the meeting and that it is available as 18-007. The Chair then asked for a motion to accept the February meeting report. Dwight Smith moved, and Dale Reitsma seconded, a motion to accept the February meeting report as written. The motion passed unanimously by voice vote.

5. TIA IPR Policy:

The Chair called the participants' attention to Note 2 on the meeting agenda for information regarding the TIA IPR Policy (see above). The TIA IPR policy was read to the participants earlier in the day. The Chair asked the question "is there knowledge of patents, the use of which may be essential to any document being considered during this meeting that anyone would like to disclose at this time"? There was no new IPR identified.

6. Old Business:

The Chair called the participants' attention to 18-009 for a summary of the subcommittee activities since the previous meeting. The Chair then called the participants' attention to slide 2, and noted that no conference calls were held since the February meeting.

a. Disposition of TIA-PN-102.BBAC-A Two-Slot TDMA MAC Layer Specification:

The Chair called the participants' attention to slide 3 and indicated that a project for Revision A was approved during the February 6th quorum meeting. The Chair also indicated that Motorola Solutions is the editor.

The Chair indicated that the TIA assigned project number will be TIA-PN-102.BBAC-A once the Existing Project Request form has been fixed. The Chair also indicated that the issue with the TIA project database has been corrected, but the issue with the Existing Project Request form persists (unable to select the subcommittee and unable to select the meeting report for the meeting where the project was approved).

The Chair indicated that the scope of the revision is to specify Control Channel and Voice Channel logical channel structure, burst structures, burst field definitions, bearer service definitions, burst bit locations, and anticipate logical data channel and link layer encryption. The Chair also indicated that 18-005-R1 has been updated to propose moving TIA-102.BBAC Figure 1-1 and supporting text to the next revision of TSB-102.BBAA Two-Slot TDMA Overview.

The Chair indicated that he expects to distribute a Revision A draft proposal in July and hold comment cycles as necessary.

b. Disposition of TIA-PN-102.BBAD-A Two-Slot TDMA MAC Layer Messages:

The Chair called the participants' attention to slide 4 and indicated that a project for Revision A was approved during the February 6th quorum meeting. The Chair also indicated that Motorola Solutions is the editor.

The Chair indicated that the TIA assigned project number will be TIA-PN-102.BBAD-A once the Existing Project Request form has been fixed (unable to select the subcommittee and unable to select the meeting report for the meeting where the project was approved).

The Chair indicated that the scope of the revision is to specify Control Channel and Voice Channel protocol data units, message formats, message field definitions, and anticipate logical data channel and link layer encryption.

The Chair indicated that he expects to distribute a Revision A draft proposal in August and hold comment cycles as necessary.

c. Disposition of TIA-PN-102.BBAE Two-Slot TDMA MAC Layer Procedures:

The Chair called the participants' attention to slide 5 and indicated that a new project was approved during the February 6th quorum meeting. The Chair also indicated that Motorola Solutions is the editor.

The Chair indicated that the TIA assigned project number will be TIA-PN-102.BBAE once the New Project Request form has been fixed (unable to select the subcommittee and unable to select the meeting report for the meeting where the project was approved).

The Chair indicated that the scope of the revision is to specify Control Channel and Voice Channel procedures, and anticipate logical data channel and link layer encryption.

The Chair indicated that he expects to distribute a draft proposal in August and hold comment cycles as necessary.

d. Work Summary:

The Chair called the participants' attention to slide 6 for a summary of current and future work items for the subcommittee and provided a brief statement regarding each one.

The Chair provided a brief summary of the following documents:

- Two-Slot TDMA MAC Layer Specification 2nd Edition – drafting in progress
- Two-Slot TDMA MAC Layer Messages 2nd Edition – drafting in progress
- Two-Slot TDMA MAC Layer Procedures 1st Edition – drafting in progress

The Chair then indicated that anticipated future work is to add Link Layer Encryption (LLE) for the Two-Slot TDMA Voice Channel and Control Channel.

The Chair called the participants' attention to slide 7 for a summary of the TIA-102 documents published by this subcommittee. The Chair indicated that this content is provided for informational purposes.

7. New Business:

The Chair asked if there was any new business to bring before the TR-8.12 subcommittee. None was offered.

8. Review of Current Assignments:

The Chair is to submit an Existing Project Request form to the TIA Standards Department for revision of project number TIA-PN-102.BBAC, Phase 2 Two-Slot TDMA Media Access Control Layer Description. [Open]

The Chair is to submit an Existing Project Request form to the TIA Standards Department for revision of project number TIA-PN-102.BBAD, Two-Slot TDMA Control Channel MAC Layer Specification. [Open]

The Chair is to submit a New Project Request form to the TIA Standards Department for project number TIA-PN-102.BBAE, Two-Slot TDMA MAC Layer Procedures. [Open]

The Chair is to distribute a draft proposal for Revision A of the Two-Slot TDMA MAC Layer Specification in the July timeframe. [New]

The Chair is to distribute a draft proposal for Revision A of the Two-Slot TDMA MAC Layer Messages in the August timeframe. [New]

The Chair is to distribute a draft proposal for the Two-Slot TDMA MAC Layer Procedures in the August timeframe. [New]

9. Schedule Next Meeting:

The Chair requested 30 minutes of meeting time on the schedule for the next meeting.

10. Adjournment:

John Lambrou moved, and Dwight Smith seconded, a motion to adjourn the meeting at approximately 13:37 Eastern Time (Atlanta local time). The motion passed unanimously by voice vote. An electronic attendance roster is on file with the TIA Standards Department.

This meeting was conducted in accordance with the TIA Legal Guides and the engineering procedures.

Jim Eastwood, TR-8.12 Chair

Current Projects

| TIA Project Number | Title | Status |
|--------------------|---------------------------------------|----------|
| TIA-PN-102.BBAC-A | Two-Slot TDMA MAC Layer Specification | Drafting |
| TIA-PN-102.BBAD-A | Two-Slot TDMA MAC Layer Messages | Drafting |
| TIA-PN-102.BBAE | Two-Slot TDMA MAC Layer Procedures | Drafting |

TIA-102 Published Documents

| TIA Number | Title | Date | Status* | |
|--------------|--|----------------|---------|-----|
| TSB-102.BBAA | Two-Slot TDMA Overview | March 2010 | TIA | P25 |
| TIA-102.BBAB | Phase 2 Two-Slot Time Division Multiple Access Physical Layer Specification | July 2009 | TIA | P25 |
| TIA-102.BBAC | Phase 2 Two-Slot TDMA MAC Layer Description | December 2010 | TIA | P25 |
| TIA-102.BBAD | Two-Slot TDMA Control Channel MAC Layer Specification | August 2017 | TIA | P25 |
| TIA-102.BCAD | Phase 2 Two-Slot Time Division Multiple Access Trunked Voice Services Common Air Interface Conformance Specification | September 2011 | TIA | P25 |
| TIA-102.BCAE | Phase 2 Two-Slot Time Division Multiple Access Trunked Voice Messages and Procedures Conformance Specification | July 2011 | TIA | P25 |
| TIA-102.BCAF | Trunked TDMA Voice Channel Conformance Profiles | August 2012 | TIA | P25 |

* P25 in the 2nd Status column indicates the document has been adopted as part of the Project 25 Standard by the Project 25 Steering Committee

Voting Organizations

The following table shows the voting organization participation for previous meetings and current voting qualification. A check mark (✓) indicates the organization was present for the indicated meeting.

| Voting Organizations | Quorum Call 12-01-2016 | Orlando FL 01-31-2017 | Chicago IL 06-20-2017 | Mesa AZ 02-06-2018 | Atlanta GA 06-19-2018 | Eligible to Vote at Next Meeting |
|----------------------------------|------------------------------|-----------------------------|-----------------------------|--------------------------|-----------------------------|--|
| (1) Airbus DS Communications | ✓ | ✓ | ✓ | | | Yes |
| (2) APCO International | | | ✓ | ✓ | ✓ | Yes |
| (3) Bird Technologies | | ✓ | ✓ | ✓ | ✓ | Yes |
| (4) E.F. Johnson Technologies | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (5) Etherstack | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (6) FBI | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (7) Harris Corporation | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (8) Icom America Inc. | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (9) ISICSB | | ✓ | ✓ | ✓ | ✓ | Yes |
| (10) JVCKenwood Corporation | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (11) Motorola Solutions, Inc. | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (12) Relm Wireless Corp. | | | | ✓ | ✓ | Yes |
| (13) Technisonic Industries Ltd. | | ✓ | | | | No |
| (14) U.S. DHS OEC | ✓ | ✓ | ✓ | ✓ | ✓ | Yes |
| (15) U.S. DoI | | ✓ | ✓ | ✓ | ✓ | Yes |
| (16) Zetron | | ✓ | ✓ | ✓ | ✓ | Yes |

Non-Voting Organizations

A check mark (✓) indicates the organization was present for the indicated meeting.

| Non-Voting Organizations | Quorum Call 12-01-2016 | Orlando, FL 01-31-2017 | Chicago, IL 06-20-2017 | Mesa, AZ 02/06/2018 | Atlanta, GA 06/19/2018 |
|-----------------------------------|---------------------------|---------------------------|---------------------------|------------------------|---------------------------|
| (1) ACD Telecom | | ✓ | | | |
| (2) Booz Allen | | | | ✓ | |
| (3) Cisco Systems, Inc. | | ✓ | ✓ | | |
| (4) Cobham | | ✓ | ✓ | ✓ | |
| (5) Codan Radio | | ✓ | | ✓ | ✓ |
| (6) Compliance Testing, LLC | | | | ✓ | |
| (7) dbSpectra | | | | ✓ | |
| (8) DHS OEC Support | | | | ✓ | |
| (9) Fairfax County | | ✓ | | ✓ | ✓ |
| (10) FPIC Support | | | ✓ | | |
| (11) Grundy County 911 | | ✓ | ✓ | ✓ | |
| (12) InterTalk Critical Info Sys. | | ✓ | | ✓ | ✓ |
| (13) Iowa DPS | | | | ✓ | |
| (14) LARICS | | | | ✓ | |
| (15) Massachusetts State Police | | | | ✓ | |
| (16) Missouri Department of P. S. | | | ✓ | | |
| (17) NYSP | | ✓ | | ✓ | ✓ |
| (18) PTIG | | ✓ | ✓ | ✓ | ✓ |
| (19) Relm Wireless Corp. | | ✓ | ✓ | | |
| (20) Shapiro Consulting Services | | ✓ | ✓ | | |
| (21) Softwright | | ✓ | | | |
| (22) State of Colorado | | ✓ | | | |
| (23) State of Connecticut | | ✓ | ✓ | | |
| (24) State of Michigan | | ✓ | | ✓ | |
| (25) State of South Carolina | | | | ✓ | |
| (26) TIA | | ✓ | | | |
| (27) TX DPS | | ✓ | ✓ | | ✓ |
| (28) U.S. Coast Guard | | | | ✓ | |

Attendance Roster Summary

| Participant | Organization | Participant | Organization |
|-------------------|---|---------------------------|----------------------------------|
| John Mistro | <i>APCO International</i> | Angelina Seay | <i>JVC Kenwood Corporation</i> |
| Chris Wilson | <i>APCO International</i> | Andy Davis | <i>Motorola Solutions, Inc.</i> |
| Amy Sanvido | <i>Bird Technologies</i> | Jerry Drobka | <i>Motorola Solutions, Inc.</i> |
| Dale Reitsma | <i>Codan Radio Communications</i> | Jim Eastwood | <i>Motorola Solutions, Inc.</i> |
| Josh Johnson | <i>E.F. Johnson Technologies</i> | John Lambrou | <i>Motorola Solutions, Inc.</i> |
| Dwight Smith | <i>E.F. Johnson Technologies</i> | Tom Senese | <i>Motorola Solutions, Inc.</i> |
| Doug Chapman | <i>Etherstack</i> | Maribel Martinez-Bradwell | <i>NYSP</i> |
| Charlie Locke | <i>Fairfax County</i> | Stephen Nichols | <i>PTIG</i> |
| Richard Massie | <i>FBI</i> | Jim Holthaus | <i>RELM Wireless Corporation</i> |
| Harrison Reves | <i>Harris Corporation</i> | Christie Bielby | <i>TX DPS</i> |
| Derek Wells | <i>Harris Corporation</i> | James Downes | <i>U.S. DHS OEC</i> |
| Masaaki Takahashi | <i>ICOM America Inc.</i> | Brandon Diemer | <i>U.S. DoI</i> |
| Glenn Shirley | <i>InterTalk Critical Info. Systems</i> | Randy Richmond | <i>Zetron, Inc.</i> |
| Chris Maiers | <i>ISICSB (State of Iowa)</i> | | |

Correspondence Log

| Number | Date | Author | Subject |
|-----------|------------|---------------|--|
| 15-001-R1 | 09-10-2015 | Roy McClellan | October 2015 Meeting Notice-Agenda |
| 15-002 | 10-27-2015 | Roy McClellan | October 2015 Meeting Report |
| 16-001 | 01-26-2016 | Andy Davis | Cleaning Up TR-8.12 Work (2015-07-28 Email) |
| 16-002-R1 | 01-26-2016 | Roy McClellan | January 2016 Quorum List |
| 16-003 | 01-26-2016 | Roy McClellan | January 2016 Meeting Notice-Agenda |
| 16-004 | 01-26-2016 | Jim Eastwood | Two-Slot TDMA Control Channel Introduction |
| 16-005-R8 | 01-19-2017 | Jim Eastwood | Two-Slot TDMA Control Channel MAC Layer Specification |
| 16-006 | 01-26-2016 | Jim Eastwood | Template for Comments on 16-005 |
| 16-007 | 03-17-2016 | Roy McClellan | January 2016 Meeting Roster |
| 16-008 | 03-17-2016 | Roy McClellan | January 2016 Meeting Report |
| 16-009 | 04-29-2016 | Roy McClellan | Airbus Comments on 16-005 |
| 16-010 | 04-29-2016 | Mac Hartless | Harris Comments on 16-005 |
| 16-011 | 04-29-2016 | Josh Johnson | EF Johnson Comments on 16-005 |
| 16-012-R5 | 01-19-2017 | Jim Eastwood | Combined Comment Matrix for 16-005 |
| 16-013 | 09-23-2016 | Roy McClellan | Airbus Response to 16-012 Proposed Resolutions |
| 16-014 | 09-23-2016 | Mac Hartless | Harris Response to 16-012 Proposed Resolutions |
| 16-015 | 09-23-2016 | Josh Johnson | EF Johnson Response to 16-012 Proposed Resolutions |
| 16-016 | 10-19-2016 | Jim Eastwood | Two-Slot TDMA Control Channel Progress Report |
| 16-017 | 11-17-2016 | Roy McClellan | November 2016 Quorum Conference Call Notice-Agenda |
| 16-018-R2 | 12-08-2016 | Jim Eastwood | Two-Slot TDMA CCH Comment Resolution Status |
| 16-019 | 11-30-2016 | Roy McClellan | Airbus Comments on 16-018 |
| 16-020 | 12-01-2016 | Roy McClellan | December 2016 Quorum List |
| 16-021 | 12-07-2016 | Roy McClellan | November 2016 Quorum Conference Call Meeting Report |
| 16-022 | 12-01-2016 | Roy McClellan | December 15, 2017 Working Group Conference Call Agenda |
| 16-023 | 12-07-2016 | Roy McClellan | December 1, 2016 Meeting Report |
| 16-024 | 12-01-2016 | Roy McClellan | December 1, 2016 Meeting Notice |
| 16-025 | 12-15-2016 | Roy McClellan | January 19, 2017 Working Group Conference Call Agenda |
| 16-026 | 12-15-2016 | Roy McClellan | December 15 2017 Working Group Meeting Notes |
| 17-001-R2 | 01-19-2017 | Jim Eastwood | Combined Comment Matrix for 16-005-R5 |
| 17-002 | 01-18-2017 | Roy McClellan | January 19, 2017 Working Group Conference Call Agenda |
| 17-003 | 01-19-2017 | Roy McClellan | January 19, 2017 Working Group Meeting Notes |
| 17-004-R2 | 05-10-2017 | Jim Eastwood | Two-Slot TDMA Control Channel MAC Layer Specification |
| 17-005 | 01-19-2017 | Roy McClellan | January 2017 Meeting Notice-Agenda |
| 17-006 | 01-19-2017 | Roy McClellan | January 2017 Quorum List |
| 17-007 | 04-05-2017 | Roy McClellan | January 2017 Meeting Report |
| 17-008 | 01-31-2017 | Roy McClellan | January 2017 Activity Report |
| 17-009 | 04-11-2017 | Roy McClellan | TIA-PN-BBAD Motorola Ballot Comments |
| 17-010 | 04-11-2017 | Roy McClellan | TIA-PN-BBAD Ballot Summary Report |
| 17-011-R1 | 05-10-2017 | Jim Eastwood | TIA-PN-BBAD Ballot Comment Matrix |
| 17-012 | 04-11-2017 | Roy McClellan | TIA-PN-BBAD Voting Summary |
| 17-013 | 04-11-2017 | Roy McClellan | TIA-PN-BBAD Vote Comments |
| 17-014 | 05-25-2017 | Roy McClellan | June 2017 Meeting Notice-Agenda |
| 17-015 | 06-20-2017 | Roy McClellan | June 2017 Activity Report |
| 17-016 | 07-24-2017 | Roy McClellan | TIA Approved Meeting Report 2017-06-20 |
| 18-001 | 01-09-2018 | Jim Eastwood | June 2017 Attendance Log - Next Meeting Vote Eligibility |
| 18-002 | 01-12-2018 | Jim Eastwood | June 2017 Meeting Report |

| Number | Date | Author | Subject |
|---------------|-------------|---------------|---|
| 18-003 | 01-12-2018 | Jim Eastwood | February 2018 Meeting Notice-Agenda |
| 18-004-R1 | 02-06-2018 | Jim Eastwood | February 2018 Activity Report |
| 18-005-R1 | 06-19-2018 | Jim Eastwood | Two-Slot TDMA Document Suite Proposal |
| 18-006 | 03-05-2018 | Jim Eastwood | February 2018 Attendance Log -Next Meeting Vote Eligibility |
| 18-007 | 03-05-2018 | Jim Eastwood | February 2018 Meeting Report |
| 18-008 | 05-16-2018 | Jim Eastwood | June 2018 Meeting Notice-Agenda |
| 18-009 | 06-19-2018 | Jim Eastwood | June 2018 Activity Report |