



BUILDING GLOBAL COMMUNICATIONS

Approved by General Counsel

TR-41.1 Meeting Report

Date: 11/21/02

Location: Atlanta, Georgia

Approved: 01/15/07

T# 6935

2500 Wilson Boulevard
Suite 300
Arlington, VA 22201-3834
USA

+1.703.907.7700
FAX +1.703.907.7727

www.tiaonline.org

**TIA SUBCOMMITTEE TR-41.1
(MULTI-LINE TELECOMMUNICATION SYSTEMS)**

**MEETING REPORT
THE SHERATON, ATLANTA, GA
November 21, 2002**

Members Present	Organization Represented	
Absent	Broadcom	Q
Absent	Iwatsu	Q
Absent	Mitel Networks	Q
Absent	Sprint	Q
Absent	Telcordia	Q
Bishop, Trone	Verizon	Q
Britt, Roger	Nortel Networks	Q
Frank, Dick	Dietrich Lockard Group	
Lockard, Dorathy	Dietrich Lockard Group	Q
McMillen, Joanne	Avaya	Q
Melton, Peter	eOn Communications	
Patel, Kirit	Cisco Systems	Q
Pinier, Francois	Alcatel	Q
Pomy, Joachim	Tenovis GmbH	
Tung, Tailey (Chair)	Siemens ICN	Q
Vander Meiden, Dave	Siemens ICN	
Steve Whitesell	Vtech	Q

Q = Quorum member or alternative

1. INTRODUCTION AND WELCOME @ CHAIR

The meeting was called to order at 8:30 a.m., Thursday, November 21, 2002, by Tailey Tung, Chair of TR41.1, followed by a round of introductions. A quorum was declared with 8 of 13 voting member companies represented.

2. TIA INTELLECTUAL PROPERTY RIGHT POLICY @ CHAIR

In accordance with the TIA intellectual Property Right Policy, the Chair shown the new TIA IPR statement for contribution cover sheet (Contribution TR41.1/02-11-081) and read the following statement to the meeting members:

Participants are encouraged to notify TIA of any patents or pending patent applications that may be essential to the practice of a proposed TIA Publication. Such notification should be made early in the development process to reduce the possibility for delays and increase the likelihood that the proposed TIA Publication will be approved. The participant making such a disclosure will be requested to have his/her company submit a statement concerning its willingness to license the essential patents as set forth in Annex H to the TIA Engineering Manual. The disclosure need not (but may) identify the specific patents or pending patent applications that may be essential to the practice of the proposed TIA Publication.

The Chair asked if there was any knowledge of patents, the use of which may be essential to any standards being considered. There was no declaration of Intellectual Property Rights from the meeting members.

3. DISTRIBUTION OF CONTRIBUTIONS @ CHAIR

The Chair distributed the following TR41.1/02-11- contributions electronically to the TR41.1 members prior to and during the meeting.

- 056 TR41.1 - 11/21/2002 Atlanta meeting agenda. (1 page)
- 057 TR41.1 - 8/22/2002 Westminster meeting report. (9 pages)
- 058 ANSI/TIA-464-C standard download information. (250 pages)
- 059 Draft ANSI/TIA/EIA-689-A. (1 page)
- 060 ISO-11573 revision problem. (1 page)
- 061 TIA-689-A, SP3-3836-RV1 ballot request. (1 page)
- 062 ANSI/TIA/EIA-464-C publication request. (1 page)
- 063 TSB81 - Comparison of transmission requirements in TIA-464-B / ETS 300 439 withdrawal request (1 page)
- 064 EIA/RS-478 - Multi-line KTS for voiceband applications withdrawal request (1 page)
- 065 TSB103 - PBX & KTS support of E911 calling service withdrawal request (1 page)
- 066 ANSI/TIA/EIA-619 - Aggregation of multiple independent 56kbit/s or 64 kbit/s channels into a synchronized wideband connection reaffirmation request (1 page)
- 067 EIA/RS-487 - Line circuit for 1A2 generic multi-line Key Telephone Systems withdrawal request (1 page)
- 068 TIA/EIA-689 - PBS & KTS support of Enhanced E911 Emergency Service Calling ballot notice (1 page)
- 069 Draft ANSI T1.414 - standard for Enhanced 911 Analog Voicegrade PSAP Access Using Loop-Reverse Battery Signaling (42 pages)
- 070 ANSI/TIA/EIA-596 - NCTE for Public Switched Digital Service reaffirmation notice. (1 page)
- 071 TSB81 and TSB103 withdrawal notice. (1 page)
- 072 RS478, TIA-619 and RS487 withdrawal notice. (1 page)
- 073 Dietrich comments on TIA-689-A vs T1.414. (4 pages)
- 074 ANSI/T1.411-2001 - Analog voicegrade E911 switched access using network-provided reverse battery signaling. (24 pages)
- 075 Revision of TIA-912-A to correct errors from Nortel. (4 pages)
- 076 TIA request for TR41.1 document review. (4 pages)
- 077 Siemens comments on TIA-689-A vs T1.411. (3 pages)
- 078 TIA TSB32-A. (129 pages)
- 079 Mistakes TIA-464-C Figures 40(a) and (b). (2 pages)

- 080 TIA 596 Ballot summary. (2 pages)
- 081 TIA IPR statement for contribution cover sheet. (1 page)
- 082 FCC – Hatfield E911 report. (54 pages)
- 083 TIA-464-B withdrawal notice. (1 page)
- 084 Iwatsu comments on TIA-689-A vs T1.411. (2 pages)
- 085 Iwatsu comments on NENA FCC requests. (3 pages)
- 086 Introduction to need for MLTS E911. (1 page)
- 087 NENA request to FCC for MLTS integration to E911. (5 pages)
- 088 TIA mistakenly withdrawn TIA-619 on 9/30/2002. (1 page)
- 089 Avaya comments on inconsistencies between T1.411 and TIA-689-A. (2 pages)
- 090 Dietrich editorial comments on TIA-689-A. (1 page)
- 091 Dietrich clarification comments on TIA-689-A. (2 pages)
- 092 “Calling Party Pays (CPP)” impact on MLTS. (1 page)

4. REVIEW/APPROVAL OF AGENDA @ CHAIR

All members reviewed and approved the Atlanta meeting agenda (Contribution TR41.1/02-11-056).

5. REVIEW/APPROVAL OF THE WESTMINSTER MEETING REPORT @ CHAIR

All members reviewed and approved without changes the August 2002 Westminster meeting report (Contribution TR41.1/02-11-057) TIA emailed to them prior to the meeting.

6. UPDATE/REVISE TIA-464C, PN-3-3673-RV3 @ TUNG

Project closed. The Chair sent TIA the publication request (Contribution TR41.1/02-11-062) on 9/5/2002 to publish the ANSI/TIA-464-C standard for “Requirements for PBX switching equipment”. TIA published the ANSI/TIA-464-C standard (Contribution TR41.1/02-11-058) in October 2002 and sent out notice to withdraw the old ANSI/TIA/EIA-464-B standard (Contribution TR41.1/02-11-083) on November 13, 2002. Dorothy Lockard ordered a bottle of champagne from the hotel to celebrate the completion of the ANSI/TIA-464-C standard.

During the publication of ANSI/TIA-464-C standard, it was noticed the frequency response requirement figures 40(a) and (b) were reversely cut and pasted, this mistake was immediately corrected (Contribution TR41.1/02-11-079).

Nortel proposed 3 changes in TIA-912 standard to make it consistent with the ANSI T1.508 standard (Contribution TR41.1/02-11-075). Nortel identified the 3dB loss pad in ANSI T1.508 was intended for insertion in the Intra-LATA (with different LECs) connections using analog trunks and not on an interface to MLTS. Nortel proposed to change all references of 3dB EO (End Office) loss pads to 6dB. This change would affect the ANSI/TIA-464-C loss tables and would require the re-calculation of equivalent SLR, RLR and OLR. The current loudness ratings in ANSI/TIA-464-C assumed a 3dB loss pad in the digital EO for FXO / AAL(A) and FXD / AAL(D) ports. The members were requested to consider the Nortel proposal for approval in the next meeting.

7. REVISION OF ISO/IEC 11573 FOR ANSI/TIA/EIA-594-A STANDARD, PN-3-4676 @ TUNG

Because TIA was not allowed to make any changes or corrections to the ISO 11573 standard (Contribution TR41.1/02-11-060) adopted for ANSI/TIA/EIA-594-A published in July 2002, it was not possible to include the technical changes proposed by Nortel in Contribution TR41.1/02-05-021 in the standard. The best TIA could do was to point out the obvious editorial mistakes in ISO 11573 revealed by TR41.1 in an one-page errata sheet attached with the standard.

To add the Nortel proposed technical changes to ISO 11573 so that they can be adopted for ANSI/TIA/EIA-594-A standard required liaison with the responsible ISO standard working group. Alcatel found out the JTC1/SC6/WG6 that wrote the ISO 11573 standard is now disbanded (Contribution TR41.1/02-11-060). There were concerns on whether or not TR41.1 should devote resources to continue searching JTC1 for the owner of ISO 11573 or to re-write a new ANSI/TIA/EIA-594-A standard. Because the technology for T1 synchronization was pretty well developed, Nortel was requested to check with their synchronization experts to determine if it is worthwhile to devote resources to add their proposed changes to ANSI/TIA/EIA-594-A. If the answer is yes, are they willing to lead the re-write of the ANSI/TIA/EIA-594-A standard and submit contribution to the next meeting to kick off the project.

8. REAFFIRM TIA/EIA-596, PN-3-2023-RF1 @ TUNG

TIA sent TIA/EIA-596 ballot for the reaffirmation of the ANSI/TIA/EIA-596 - "Network Channel Terminating Equipment for Public Switched Digital Service" to 18 member companies. The ballot closing date was originally September 3, 2002 but extended to September 16, 2002. The following was the ballot summary (Contribution TR41.1/02-11-080):

- a. Disapprove = 0 vote.
- b. Abstains = 1 vote.
- c. Approve = 9 votes.
- d. Ballots not returned = 8 member companies.

TIA issued the reaffirmation announcement on 10/4/2002 (Contribution TR41.1/02-11-070). Project closed.

9. Other Technical Issues @ ALL

The meeting reviewed the following list of TR41.1 standards requested by TIA (contribution TR41.1/02-11-076).

a) Rescind TSB-81 – PN 3-3671-WD

Project closed. The Chair with the agreement of TR41 Plenary sent TIA the request for the withdrawal of TSB-81 – "Comparison of transmission requirements in ANSI/TIA/EIA-464-B standard and ETSI 300 439" on 9/6/2002 (Contribution TR41.1/02-11-063). TIA issued the notification of withdrawal on 9/30/2002 (Contribution TR41.1/02-11-071).

With the publication of the new ANSI/TIA-464-C standard, the meeting approved the Chair to request Plenary agreement to open a new project to create a joint TIA/ETSI document for the "Comparison of transmission requirements in ANSI/TIA/EIA-464-C / ETSI ES 201 168 version 1.2.1". Tailey Tung (Siemens), Joachim Pomy (Tenovis) and Francois Pinier (Alcatel) agreed to work on this joint project. The Chair will also request Plenary and TIA agreement to send a copy of the new ANSI/TIA-464-C to ETSI STQ Chair for distribution to their joint document working group.

Joachim Pomy reported ETSI STQ had approved WI-39 to work jointly with TR41.1 on this project. Jean Marie Notter (Alcatel) will be the rapporteur for the ETSI document with support from Volker Sypli (RegTP) and Ulrich Wichmann (Siemens). Joachim Pomy will handle the liaison with TIA.

- b) Rescind EIA/RS-478 – PN 3-1287-WD**
Project closed. The Chair with the agreement of TR41 Plenary sent TIA the request for the withdrawal of EIA/RS-478 – “Multi-line KTS for voiceband applications” standard on 9/6/2002 (Contribution TR41.1/02-11-064). TIA issued the notification of withdrawal on 9/30/2002 (Contribution TR41.1/02-11-072).
- c) Rescind EIA/RS-487 – PN 3-1394-WD**
Project closed. The Chair with the agreement of TR41 Plenary sent TIA the request for the withdrawal of EIA/RS-487 – “Line circuit for 1A2 generic multi-line Key Telephone Systems withdrawal request” standard on 9/6/2002 (Contribution TR41.1/02-11-067). TIA issued the notification of withdrawal on 9/30/2002 (Contribution TR41.1/02-11-072).
- d) Rescind TSB-103 – PN 3-3125-WD**
Project closed. The Chair with the agreement of TR41 Plenary sent TIA the request for the withdrawal of TSB-103 – “PBX & KTS support of E911 calling service” on 9/6/2002 (Contribution TR41.1/02-11-065). TIA issued the notification of withdrawal on 9/20/2002 (Contribution TR41.1/02-11-071).
- e) Reaffirm ANSI/TIA/EIA-619 – PN 3-3014-RF1**
Project closed. The Chair with the agreement of TR41 Plenary sent TIA the request for the reaffirmation of ANSI/TIA/EIA-619 – “Aggregation of multiple independent 56kbit/s or 64 kbit/s channels into a synchronized wideband connection” on 9/6/2002 (Contribution TR41.1/02-11-066). TIA mistakenly issued notice on 9/30/2002 to withdraw the standard (Contribution TR41.1/02-11-072). The Chair notified TIA on 11/15/2002 of the mistake and requested TIA to reaffirm TIA/EIA-619 as soon as possible. (Contribution TR41.1/02-11-088).
- f) Reaffirm TSB-32-A – PN 3-3672-RF1**
Although no copy has been sold in North America since it was published, TR-41.1 still voted to reaffirm TSB32-A – “Overall Transmission Plan Aspects for Telephony in a Private Network” (Contribution TR41.1/02-11-078) for the reason it provides a good basic tutorial of the E model and is a joint TIA/ETSI document still referenced and used in Europe. The Chair will request TR41 Plenary agreement to post TSB-32-A to the free download section of the TIA web page and send TIA the request for the reaffirmation of TSB-32-A.
- g) Revision of TIA/EIA 689 – PN 3-3836-RV1**
TR41.1 sent TIA the ballot request (Contribution TR41.1/02-11-061) on 9/11/2002. TIA sent out the notice for industry ballot of PN-3-3836-RV1 (Contribution TR41.1/02-11-068) on 9/30/2002 for the revision of “PBX and KTS Support of Enhanced 911 Emergency Service Calling” (Contribution TR41.1/02-11-059). The ballot closed on 11/11/2002. The ballot status was not available from the TIA web-site on-time for this meeting.

The meeting reviewed and approved the following changes to the draft TIA-689-A proposed by Siemens (Contribution TR41.1/02-11-077), Dietrich Lochard (Contribution TR41.1/02-11-073 & 90 & 91), Iwatsu (Contribution TR41.1/02-11-084), and Avaya (Contribution TR41.1/02-11-089).

- a. All Siemens comments in Contribution TR41.1/02-11-077 were accepted as submitted except for comment #6. The new sentence that will be added as a result of comment #6 should instead read, “There is no method by which the public network can maintain the connection, once the MLTS signals an on-hook condition.”

- b. All Dietrich Lockard comments in Contribution TR41.1/02-11-073 comparing draft TIA-689-A with the T1.414-2001 (Contribution TR41.1/02-11-069) were accepted. It also agreed to change "It" in second sentence to "This number".
 - c. All Dietrich Lockard editorial comments in Contributions TR41.1/02-11-090 and -091 submitted with their letter ballot were accepted.
 - d. All Iwatsu editorial comments in Contribution TR41.1/02-11-084 were accepted as submitted except for comment #4, it was agreed to add the definition of CAMA trunk in Section 4. ANSI T1.411-2001 (Contribution TR41.1/02-11-074) does not use the term "911CAMA trunk" or "CAMA trunk" as used in TIA-689. Comment #5, the group needs further clarification from Iwatsu in the next meeting as to what change is being proposed.
 - e. All Avaya comments in Contribution TR41.1/02-11-089 were accepted as submitted.
- h) **NENA request and FCC reports concerning MLTS support of E911 calling capability**
NENA request to FCC to amend Part 68 to require MLTS to support E911 calling capability submitted by Iwatsu (Contribution TR41.1/02-11-085 and -086 and -087) and FCC-Hatfield E911 report (Contribution TR41.1/02-11-082) were distributed to the members as background material for the update of TIA-689-A standard.
 - i) **TIA-464-C / TIA 968 loss plan**
Tailey Tung and Roger Britt volunteered to draft a contribution to TR41.9 to align TIA-968 net-amplification requirements with the ANSI/TIA/EIA-464-C and TIA-912 loss plan.

10. OLD BUSINESS @ ALL

None.

11. NEW BUSINESS @ ALL

a) TR41.1 Vice-chair nomination.

The election for vice-chair was conducted in accordance with the TIA Rules by Billie Zidek-Conner of TIA on 11/21/2002. Francois Pinier of Alcatel was the only nomination for TR41.1 vice-chair and was elected by acclamation.

b) Future TR41.1 projects.

Dave Vander Meiden submitted contribution TR41.1/02-11-092 concerning "Calling Party Pays (CPP)" service now being offered by some wireless carriers (e.g., Qwest) whereby the calling party is billed for the cellphone airtime charges, even if the call is originated from a wireline device (e.g., extension behind MLTS). CPP is becoming a growing problem for MLTS owners in hotel / motel, hospitals and universities because the billing from the wireless carrier for the airtime charges typically arrives weeks after the call was placed, leaving the MLTS owners (e.g the hotel owners instead of the hotel guests) to pay for these charges. There is currently no industry standard or FCC rule for MLTS to block CPP calls or to notify the MLTS owner when one of its users places a CPP call. The members were requested to consider how this issue should be addressed by TR41.1 in the next meeting.

12. LIAISON REPORTS @ ALL

a) ETSI/STQ/TIPHON

Joachim Pomy gave a brief overview of the ETSI/TIPHON activities. TIPHON working group #5 (QoS) is in the process of shutting down because of the low attendance. QoS is an essential requirement for VoIP. ETSI is deciding how QoS issues will be addressed in TIPHON.

ETSI has issued a call for papers on compensating for packet loss in real-time Applications

for the upcoming speech processing, transmission and quality aspects workshop.

b) T1E1 Liaison

No Liaison.

13. HOMEWORK ASSIGNMENTS @ ALL

The Chair will post contributions TR41.1/02-11-088, -089, -090, -091 and -092 to the TIA TR41.1 web-site after the meeting. The Chair requested all members to review their homework assignments for discussion in the next meeting.

14. NEXT MEETING @ CHAIR

The next meeting will be a full day meeting at the following address on Thursday morning.

The Sutton Place Hotel
4500 MacArthur Blvd
Newport Beach, CA 92660
February 17 - 21, 2003

15. ADJOURNMENT @ CHAIR

The Chair adjourned the meeting at 1:35 p.m.

The meeting was conducted in accordance with the TIA Legal Guide and TIA Engineering Manual.

Tailey Tung

Chair TR41.1, Siemens ICN

Dave Vander Meiden

Notes taken by: Dave Vander Meiden, Siemens ICN