



BUILDING GLOBAL COMMUNICATIONS

## **Approved by General Counsel**

TR-45 Meeting Report

Date: 12/1-2/05

Location: Maui, HI

Approved: 02/06/06

**T# 9082**

**Telecommunications Industry Association  
TR-45 Committee  
Mobile & Personal Communications Standards (TR-45)  
Report of Meeting  
December 1-2, 2005  
The Grand Wailea Hotel, Maui, HI, USA**

**Quorum List, Members Present**

Member	Representative	Attendance	
		Last	Prior
1. Alltel	D. Gentzler	X	X
2. Cingular Wireless	P. Musgrove	X	X
3. CommFlow Resources	G. Pellegrino	X	X
4. Ericsson	J. Ragsdale	X	
5. FBI (CIU)	R. Holman	X	X
6. InterDigital Communications, Corp.	S. Dick	X	X
7. LG Infocomm	S. Kwon	X	
8. Lucent Technologies, Inc.	C. Blum	X	X
9. Nokia Mobile Phones	W. Tamminen	X	
10. Nortel Networks	G. Patel	X	X
11. Qualcomm	F. Quick	X	X
12. Samsung	P. Rajkotia	X	
13. Sprint/Nextel	G. Turnipseed	X	
14. TelcomXChange International (TXI)	E. Hall	X	
15. Toshiba	J. Madrid	X	
16. Verizon Wireless	Z. Zhao	X	X

**Quorum List, Members Absent**

[Note: This table identifies the member companies not present at this meeting. Of these member companies, the ones who also have not attended the last two meetings (no "X" in either the "Last" or "Prior" column) will be dropped from the quorum list for the next meeting.]

Member	Representative	Attendance	
		Last	Prior
1. CDMA Development Group	S. Samra		
2. Cisco Systems	P. Yegani	X	
3. Motorola, Inc.	B. Bonner	X	
4. Rogers Wireless, Inc.	P. Oldfield	X	

**Others Present**

Member	Representative
1. Axalto	G. Wijaya
2. FBI (consultant)	J. Trakinat
3. FBI	K. Minsky
4. KDDI (observer)	C. Barber
5. Lucent Technologies, Inc.	J. Alphonse
6. Lucent Technologies, Inc.	J. Brownley
7. Lucent Technologies, Inc.	P. Nurse
8. Qualcomm	D. Crowe

9. Nortel	M. Bienn
10. Sprint/Nextel	D. Prochaska
11. TIA	J. Derr
12. TIA	H. Cuschieri

[Note: The number/letters associated with the sections/paragraphs are related to the agenda item number/letter and the order in which they were addressed during the meeting.]

- The TR-45 Committee was convened on December 1, 2005, at the Grand Wailea Hotel in Maui, HI, USA, at 1:15 PM local time.
  - C.Blum/Chair TR-45 called the meeting to order and welcomed the TR-45 membership to Hawaii.
- The Chair duly informed the meeting attendees of the Important Notice of Participation provided on the meeting agenda.
- Meeting attendance was recorded as indicated by the above list and quorum was established.
- The attached meeting agenda was reviewed and approved as amended.
- Regarding the early disclosure patent policy, the Chair duly informed the meeting attendees. There were no comments from the meeting attendees.
- Relative to contributions and submissions, the following documents were numbered and assigned accordingly. Everyone was strongly encouraged to upload contributions to the TIA ftpsite prior to the meeting.

Number	Title	Source	Agenda Item
TR45/05.12.01.00R1	Submission & Contribution Assignment List	J.Brownley Secretary	6
TR45/05.12.01.01R1	Meeting Agenda	C.Blum Chair TR45	4
TR45/05.12.01.02	TR-45 Meeting Report of July 27, 2004	J. Brownley Secretary	7
TR45/05.12.01.03R1	TR-45 Committee 2006 Meeting Schedule	J. Brownley Secretary	14a
TR45/05.12.01.04	TIA TR-45 Report to 3GPP2 Steering Committee	C.Blum Chair TR-45	12g
TR45/05.12.01.05	Subcommittee TR-45.2 Report	D. Crowe Chair TR-45.2	9b
TR45/05.12.01.06	Report of TR-45.3 to TR-45	P. Musgrove Chair TR-45.3	9c
TR45/05.12.01.07	TR-45.4 Report	G. Turnipseed Chair TR-45.4	9d
TR45/05.12.01.08	TR-45.5 Report	J. Alphonse Chair TR-45.5	9e
TR45/05.12.01.09	TR-45.6 Report to TR-45	P.Yegani Chair TR-45.6	9f
TR45/05.12.01.10/Ar 1/B	AHAG Report	F. Quick Chair AHAG	9g
TR45/05.12.01.11/a/b /c/d	AHG on ESN/UIM/MEID Report	G. Pellegrino, Chair AHG on ESN/UIM/MEID	9i
TR45/05.12.01.12/a/b	ESN Administrator's Report	J.Derr ESN Administrator	9i

TR45/05.12.01.13/a/b	AHG on LAES Report	T. Brooks Chair AHG on LAES	9j
TR45/05.12.01.14	AHG on Electronic Media Documentation (AHM) Report	P. Nurse Chair AHM	9h
TR45/05.12.01.15	TR-45 Standards Program Report	J. Alphonse TR-45 Program Mgr	9l
TR45/05.12.01.16	< not used >		
TR45/05.12.01.17	ITU-R Liaison Report	M. Epstein ITU-R Liaison	12c
TR45/05.12.01.18/a/b/c	ITU-T Liaison Report	D. Thompson ITU-T Liaison	12b
TR45/05.12.01.19	< not used >		
TR45/05.12.01.20	3GPP2 Response to TIA Regarding Comments on 3GPP2 S.P0110 v0.3 (TIA PN-3-0221)	N. Yamasaki Chair 3GPP2 TSG-S	9g
TR45/05.12.01.21	Project MESA Liaison Report	D. Thompson Project MESA Liaison	12k
TR45/05.12.01.22	< not used >		
TR45/05.12.01.23	IFAST Liaison Report	D. Crowe IFAST Liaison	12j
TR45/05.12.01.24	ATIS PTSC Correspondence Re: Cancellation of LI Information Sharing Meeting	G. Ratta Chair, ATIS PTSC LAES Subcommittee	9j
TR45/05.12.01.25	TR-45-6 LIG Correspondence Re: ETSI TC LI Information Sharing Meeting	R. Ryan Chair, TR-45.6 LIG	9f
TR45/05.12.01.26	ITU-R WP8F Correspondence Re: request for information on access technologies to support IP applications over mobile systems	C. Langtry Counselor, ITU-R SG8	11a, 12c
TR45/05.12.01.27	TR-45 Committee Correspondence Re: TR-45 transposition of 3GPP2 TSG-S IMS Security Framework Document	C. Blum Chair TR-45	9g
TR45/05.12.01.28	3GPP2 TSG-S Correspondence Re: Analysis and Consideration Regarding ESN Reclamation	N. Yamasaki Chair, 3GPP2 TSG-S	9i
TR45/05.12.01.29	TR-45.2 Subcommittee Correspondence Re: OBF Issues #2612 and #2614	D. Crowe Chair, TR-45.2	10c
TR45/05.12.01.30	TR-45 Committee Correspondence Re: Extension of V&V of S.P0086-B v0.3	C. Blum Chair TR-45	9g
TR45/05.12.01.31	TR-45 Committee Correspondence Re: Reply letters to 1 <sup>st</sup> default ballot ANSI ballot version J-STD-025-B	C. Blum Chair TR-45	9j
TR45/05.12.01.32	TR-45 Committee Correspondence To TIA TC regarding IETF IPR issue	C. Blum Chair TR-45	10f
TR45/05.12.01.33	CIU Correspondence Re: Change of ESTS Voting Members	E. Mason Unit Chief, CIU	12f
TR45/05.12.01.34	TR-45 Committee Correspondence Re: TR-45 V&V Comments on S.P0110-0 v0.1	C. Blum Chair TR-45	9g

TR45/05.12.01.35	TR-45 Committee Correspondence <i>Re: V&amp;V Comments on S.P0055-A v3.0 and S.P0078-A v3.0</i>	C.Blum Chair TR-45	9g
TR45/05.12.01.36	TR-45 Committee Correspondence Re: Updates on LAES Work	C.Blum Chair TR-45	9j
TR45/05.12.01.37R1	CDG Correspondence re: Request for AMPS/TDMA ESN Re-use	S. Samra CDMA Development Group	9i
TR45/05.12.01.38	TR-45.3 Participant Concerns on ESN Reclamation	P. Musgrove Chair TR-45.3	9I
TR45/05.12.01.39	J-STD-025-B Ballot Comments	S. Montgomery TIA	9j
TR45/05.12.01.40	ITU-R WP8A Liaison re: Broadband Wireless Access	D. Thompson TIA	11d
TR45/05.06.01.26R1	ATIS Correspondence Re: OBF Issue #2612 - Standardize Toll Free Call Processing for Vanity Numbers Exceeding 10 Digits	J.Bond, S.Pressler Co-Chairs ATIS SNAC Committee	10c
TR45/05.06.01.30	ATIS Correspondence Re: OBF Issue #2614 - OBF Issue #2614 – Standardize Wireless Toll Free Call Processing	J.Bond, S.Pressler Co-Chairs ATIS SNAC Committee	10c
TR45/05.09.01.29/a/b	TR-45 Committee Correspondence Re: OBF Issue #2614 Standardize Wireless Toll Free Call Processing	D.Crowe TR-45.2 Chair	10c

7. The meeting report of September 7-8, 2005 numbered TR45/05.12.01.02 was reviewed. A motion was made and passed with no objections to approve as provided.
8. Correspondence  
No additional correspondence was covered under this agenda item.
9. The following Subcommittee and Ad-Hoc Group reports were provided:
  - a. **TR-45.1 Subcommittee** – Subcommittee TR-45.1 remains dormant.
  - b. **TR-45.2 Subcommittee** – D.Crowe provided Document .05 as the written report.
  - c. **TR-45.3 Subcommittee** – P.Musgrove provided Document .06 as the written report.
  - d. **TR-45.4 Subcommittee** – G.Turnipseed provided Document .07 as the written report.
  - e. **TR-45.5 Subcommittee** – J.Alphonse provided Document .08 as the written report.
  - f. **TR-45.6 Subcommittee** – Document .09 was provided as the written report for information. Document .25 was provided for information.

- g. **Ad Hoc Authentication Group (AHAG)** – F.Quick provided Document .10 as the written report. TIA-946-1[E] was approved for publication by Committee TR-45. The AHAG was directed to go forward with the steps required for publication of TIA-946-1[E]. It was agreed to re-ballot PN-3-0221 as provided in Document .10AR1. The AHAG was directed to go forward with the steps required for a 30-day re-ballot of PN-3-0221. TR-45 plans to request of 3GPP2 TSG-S an extension of the V&V period for S.P0110 until 16 January 2006 at the earliest. C.Barber was asked to communication to 3GPP2 TSG-S that TIA would provide ballot comments, if any, on PN-3-0229 (i.e., S.P0086-B, IMS Security Framework) soon after the ballot closes on 6 December 2005. It was agreed that the AHAG would go forward to obtain the PNs required to ballot the two forthcoming security documents from 3GPP2 TSG-S WG-4 related to GBA. Moreover, the AHAG recommended that TR-45 consider improving the process of transposition so that the TR-45 Committee's quarterly scheduled ~~does not~~ interfere with timeliness. It was agreed to address this recommendation under agenda item 11e. Documents .20, .27, .30, .34 and .35 were provided for information.
- h. **AHG on Electronic Media Documentation (AHM)** – P.Nurse provided Document .14 as the written report.
- i. **AHG on ESN/UIM/MEID (EUMAG)** – G.Pellegrino provided Document .11 with attachments .11a through .11d as the written report. It was reported that the *"first MEID industry implementation presently cited as a January 2, 2006 milestone."* TR-45 was asked to review the industry readiness for this milestone. TR-45 plans to address these first implementations at it first meeting in 2006 in March. Documents .28, .37, and .38 were provided for consideration for information.

In Document .38, TR-45.3 raised concerns with ESN reclamation, in particular *"a concern regarding the implementation of non-standard "MIN/ESN roaming tables" that have been used in the industry for many years. The concern is if one of our AMPS users with a reclaimed ESN manufacturer code in the ranges discussed in the TIA question roams onto an MSC/VLR that supports UIM\_ID."* However, it was indicated in Document .37R1 by the CDG that *"based on preliminary review, no R-UIM equipped CDMA handsets support AMPS and/or TDMA air interface."* Documents .37R1 and .38 were remanded to the EUMAG to review, to address the concerns raised, and to generate recommendations to TR-45 by the next meeting of TR-45 in March 2006. TR-45 sought agreement to reuse three specific ESN Manufacturer Codes (MC) codes (i.e., 212, 213, and 224) for UIM-ID derivation. There were no objections to the reuse of the three specific MCs. The ESN Administrator was directed to notify the UIM\_ID Administration of the TR-45 decision reached to reuse the three specific MCs. TR-45, in conjunction with the EUMAG Chair, plans to draft correspondence in reply to the CDG correspondence in Document .37R1.

The Committee recessed for a break at 3:25 PM and reconvened at 3:45 PM.

- **ESN Administration** – J.Derr provided Document .12 as the written report. Attention was drawn to the note in Section III A of Document .12 related to the ranges of the ESN MFC Codes 212, 213, and 224 having been used only for AMPS and the assignee having given permission to consider use for UIM\_ID derivation. Documents .12a and .12b were provided for information.
- **MEID Administration** – H. Cuschieri provided a brief verbal report. It was noted that there now exists an MEID web page on the TIA website.
- j. **AHG on LAES** – On behalf of T.Brooks, G.Pellegrino presented Documents .13a and .13b as the written report. It was agreed without objection to approve the addendum for support of the MEID (SP-3-4465-RV1-AD1) for balloting immediately following approval for publication of ANS J-STD-025-B, provided that the text affected by the addendum is not modified during the 2<sup>nd</sup> default ballot resolution. Documents .24 and .36 were provided for information.

A motion was made by Nortel to "withdraw the PN-3-0224.000/001/002." The motion was seconded by Sprint/Nextel. The TR-45 meeting quorum voting members voted as follows: Yes=5, No=1, Abstain=10. Thus, the motioned passed to withdraw PN-3-0224.000/001/002. TR-45 will notify TIA to withdraw PN-3-0224.000/001/002.

TIA Staff took an action item to provide the status of the family of J-STD-025 standards including TIA, ANS, and ATIS documents. TIA agreed to notify the formulating group that the ballot period needs to be extended when insufficient votes were submitted. A request was made that when the ballot period is extended that those that voted previously be able to change their vote and/or re-submit comments.

TR-45 plans to distribute via the TR-45 reflector the ballot comment summary of J-STD-025-B in Document .39r1. Document .39r1 was remanded to the LAES Ad-Hoc Group to take action as appropriate. Documents .24 and .36 were provided for information.

- k. **TR-45 Network Architecture Group (NAG)** – There was no report. The NAG was disbanded. TR-45.2 was charged with the responsibility of TSB-151 going forward. The NAG will be removed from the TR-45 meeting agenda going forward.
- l. **TR-45 Standards Development Program Report** – J.Alphonse provided Document .15 as the program report for information.

10. Relative to old business, the following items were addressed:

- a. **Consideration for Publication of TSB-151-A**  
Publication of TSB-151-A remains on hold pending the publication of the corresponding 3GPP2 NAM specifications. TR-45 intends to send correspondence to 3GPP2 TSG-S to indicate that TR-45.2 has taken over responsibility for TSB-151-A and that going forward correspondence on the NAM should be directed to TR-45.2.
- b. **OID Administration Website**  
The EUMAG Chair agreed to work with TIA Staff to address the implementation of an OID Administration website.
- c. **OBF Issues re: Toll Free Call Processing**  
Document TR45/05.12.01.29 was provided for information. Carried-forward documents TR45/05.09.01.29, TR45/05.06.01.26R1, and TR45/05.06.01.30 were referenced for information. It was noted that TR-45.2 continues to address these OBF issues and this item will remain open on the TR-45 agenda.
- d. **Consideration for Publication of PN-3-0095-AD1 (as TIA-946-1)**  
The publication of PN-3-0095-AD1 was addressed under agenda item 9g.
- e. **Joint ATIS/TIA Standards Development Agreement**  
It was reported that a draft TIA/ATIS MOU was under consideration. Input from TR-45 leadership was solicited. Once the final draft is approved by TIA and ATIS, it will be shared with Committee TR-45, most likely at the next TR-45 meeting in March 2006. All were instructed that existing joint work should be continued with business as usual, at this time.
- f. **OMA and IETF Normative References in TIA Documents**  
Document TR45/05.12.01.32 was provided for information. It was reported that a preliminary TIA Advisory has been drafted that addresses the IETF normative references. Once the Advisory is approved by TIA legal the Advisory will be shared with the membership of TR-45. Regarding OMA normative references in TIA documents, resolution of this issue is on-going.

The Committee recessed at 5:30 PM Local Time on Wednesday, December 1, 2005 and re-convened at 8:05 AM Local Time on Thursday, December 2, 2005.

11. Relative to new business, the following items were addressed:

- a. **Access technologies to support IP applications over mobile systems**

Document TR45/05.12.01.26 was provided for consideration. It was noted that input would be provided directly to ITU-R WP8F via 3GPP2. TR-45.3 indicated that the ATIS WTSC plans to provide input to WP8F. It was noted that TR-45 intends to take no further action.

**b. GSC-11 June 2006 Preparations**

TIA is hosting the next GSC-11 meeting scheduled for 28 May through 2 June 2006 in Chicago, IL. It was noted that the Committee TR-45 Chair, Cheryl Blum, would serve as the GRSC Chair at the GSC-11 meeting. Committee TR-45 will be expected to support and contribute inputs to this TIA hosted meeting.

**c. TR-45 Subcommittee Leadership Elections in 2006**

TR-45 Subcommittee and Committee leadership elections are scheduled to take place in year 2006. The impacted Subcommittees were directed to conduct elections per the TIA Engineering Manual.

Group	Position	Date
Committee TR-45	Chair	12-2006
Subcommittee TR-45.2	Chair	07-2006
Subcommittee TR-45.2	Vice-Chair	07-2006
Subcommittee TR-45.4	Chair	01-2006
Subcommittee TR-45.4	Vice-Chair	02-2006
Subcommittee TR-45.6	Chair	07-2006
Subcommittee TR-45.6	Vice-Chair	07-2006

**d. ITU-R WP8A Liaison re: Broadband Wireless Access**

Document TR45/05.12.01.40 was provided for consideration for information. TR-45 plans to contact the U.S. 8A Chair for guidance relative to TR-45 input to the ITU-R WP8A liaison on broadband wireless access. Document .40 was remanded to TR-45.3 and TR-45.5 for review and to provide input to the next TR-45 meeting in March 2006.

**e. Transposition of 3GPP2 TSG-S Specifications**

The AHAG recommended that TR-45 consider improving the process of transposition 3GPP2 TSG-S specifications so that the TR-45 Committee's quarterly scheduled does not interfere with timeliness. The AHAG was given an action item to determine the anticipated workload associated with the transposition of 3GPP2 TSG-S specifications (i.e., not restricted to security) and recommend a course of action at the next TR-45 meeting in March 2006. Non-AHAG members will be invited to participate in the AHAG conference call meeting relative to this topic.

**12. In terms of Liaisons, the following was reported:**

- a. **CTIA** – There was no report. Nevertheless, it was noted that CTIA has established a Task Force (CATF) to address airborne [aircraft] wireless systems. For further information, all were encouraged to contact Ed Hall, the CATF convener.
- b. **ITU-T** – On behalf of D.Thompson, C.Blum introduced Document .18 as the written report. Document .18 was remanded to TR-45.2 to review relative to NGN.
- c. **ITU-R** – Document .17 was provided as the written report. In addition, Document .26 was addressed previously under agenda item 11a.
- d. **CITEL** – There was no report.
- e. **Wireless Communications Division (WCD)** – There was no written report.
- f. **TIA** – H.Cuschieri provided a brief verbal report. Documents .33 was provided for information.



- g. **3GPP2** – There was no report. Nevertheless, it was noted that an Advanced Technology Evolution (ATE) Ad-Hoc Group was established under the 3GPP2 Steering Committee. Document .04 was provided for information.
- h. **3GPP** – P.Musgrove provided a brief verbal report. It was reported that 3GPP is currently working on Release 7.
- i. **ATIS** – The Liaison remains vacant. There was no report. On behalf of TR-45, TIA plans to contact T.Jefferies at ATIS relative to filling the vacant TR-45 Liaison.
- j. **IFAST** – E.Hall provided Document .23 as the written report.
- k. **Project MESA** – On behalf of D.Thompson, J.Brownley introduced Document .21. Document .21 was remanded to TR-45.2, TR-45.3, TR-45.4, TR-45.5, and TR-45.6 to review and provide feedback directly to D.Thompson and copy-to TR-45 before the 28 February 2006 deadline.

13. In review of assignments, a summary of the assignments was as follows:

- 1. The AHAG was directed to go forward with the steps required for publication of TIA-946-1[E].
- 2. The AHAG was direct to go forward with the steps required for a 30-day re-ballot of PN-3-0221.
- 3. TR-45 plans to request of 3GPP2 TSG-S an extension of the V&V period for S.P0110 until 16 January 2006 at the earliest.
- 4. C.Barber was asked to communication to 3GPP2 TSG-S that TIA would provide ballot comments, if any, on PN-3-0229 (i.e., S.P0086-B, IMS Security Framework) soon after the ballot closes on 6 December 2005.
- 5. The AHAG will go forward to obtain the PNs required to ballot the two forthcoming security documents from 3GPP2 TSG-S WG-4 related to GBA.
- 6. Documents .37R1 and .38 were remanded to the EUMAG to review, to address the concerns raised, and to generated recommendations to TR-45 by the next meeting of TR-45 in March 2006.
- 7. The ESN Administrator was directed to notify the UIM\_ID Administration of the TR-45 decision reached to reuse the three specific MCs.
- 8. TR-45, in conjunction with the EUMAG Chair, plans to draft correspondence in reply to the CDG correspondence in Document .37R1.
- 9. TR-45 will notify TIA to withdraw PN-3-0224.000/001/002.
- 10. TIA Staff took an action item to provide the status of the family of J-STD-025 standards including TIA, ANS, and ATIS documents.
- 11. TIA agreed to notify formulating groups that the ballot period needs to be extended when insufficient votes are submitted.
- 12. TR-45 to distribute via the TR-45 reflector the ballot comment summary of J-STD-025-B in Document .39r1. Document .39r1 was remanded to the LAES Ad-Hoc Group to take action as appropriate.
- 13. TR-45 intends to send correspondence to 3GPP2 TSG-S to indicate that TR-45.2 has taken over responsibility for TSB-151-A and that going forward correspondence on the NAM should be directed to TR-45.2.
- 14. The EUMAG Chair agreed to work with TIA Staff to address the implementation of an OID Administration website.
- 15. TR-45 plans to contact the U.S. 8A Chair for guidance relative to TR-45 input to the ITU-R WP8A liaison on broadband wireless access.
- 16. Document .40 was remanded to TR-45.3 and TR-45.5 for review and to provide input to the next TR-45 meeting in March 2006.
- 17. The AHAG was given an action item to determine the anticipated workload associated with the transposition of 3GPP2 TSG-S specifications (i.e., not restricted to security) and recommend a course of action at the next TR-45 meeting in March 2006.
- 18. Document .18 was remanded to TR-45.2 to review relative to NGN.
- 19. On behalf of TR-45, TIA plans to contact T.Jefferies at ATIS relative to filling the vacant TR-45 Liaison.
- 20. Relative to Project MESA, Document .21 was remanded to TR-45.2, TR-45.3, TR-45.4, TR-45.5, and TR-45.6 to review and provide feedback directly to D.Thompson and copy-to TR-45 before the 28 February 2006 deadline.

14. Review meeting schedules,

- a. **TR-45 2006 Schedule** – Document .03R1 was provided for information. The TR-45 2006 meeting schedule is in the table below.

DATE	REGION	LOCATION
March 15-16, 2006	West	Las Vegas
June 8-9, 2006	Midwest	Chicago
September 6-7, 2006	East	TIA Headquarters
Nov 30 – Dec 1, 2006	South	Hawaii

- b. **Subcommittees and AHG 2006 Schedules** - Documents .05, .06, .07, .08, and .09 were provided for information.

15. Open Discussion

A few concerns were raised relative to Document .13b.

Having concluded the meeting's deliberations, a motion was made to adjourn. The meeting was conducted in accordance with the TIA Engineering Manual and TIA Legal Guide and was adjourned at approximately 10:30 AM local time December 2, 2005.

Cheryl J. Blum  
Chair  
Engineering Committee TR-45

Jane C. Brownley  
Secretary  
Engineering Committee TR-45