

Approved by General Counsel

TR-47 Meeting Report Date: 09/09/05 Location: Arlington, VA

Approved: 09/19/05 **T# 8862-R1**



The Telecommunications Industry Association represents the communications sector of 🖉

1		TIA TR-47
2		Terrestrial Mobile Multimedia Multicast
3		Inaugural Meeting
4		9:30 AM to 3:00pm EDT, September 9, 2005
5		TIA Headquarters
6		2500 Wilson Blvd.
7		Arlington, VA 22201
8		Facilitator, Eric Schimmel
9		
10	1.	Call to Order
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12	Eric S	Schimmel, Facilitator, called the meeting to order at 9:30 a.m. He int
13	himself to the group and indicated that he formerly served as the Vice Pre-	

Eric Schimmel, Facilitator, called the meeting to order at 9:30 a.m. He introduced himself to the group and indicated that he formerly served as the Vice President of TIA's Wireless Communications Division and has a high degree of familiarity with the TIA standardization process. He also indicated that Susan Hoyler had volunteered to serve as Interim Secretary for the first two meetings, and that her experience as former Director of Standards at TIA would be useful in drafting the meeting reports. Mr. Schimmel noted there is a need for a volunteer for a Secretary for future meetings, and asked those who might wish to serve as Secretary to let their interest be know to leadership.

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Attendee Introductions and Sign-In

1 4:	
1. Airvana	Roshan Rao (tel)
2. Alltel	Dennis Gentzler
3. Arraycom, LLC	Joanne Wilson
4. CEA	Brian Markwalter
5. Cingular Wireless (3)	Peter Musgrove
	DeWayne Sennett (tel)
	Brian Daly (tel)
6. Corning Cable Systems	Allen Dixon
7. Canadian Radio Council	Francois Lefebvre
8. Ericsson	Mark Racek
9. FAL	Fred Lucas (tel)
10. FLO Forum	Kamil Grajski
11. Harris Corporation (2)	David Glidden (tel)
	Tania Hanna
12. InterDigital	Brian Kiernan (tel)
13. J. Upton Consulting	Jerry Upton
14. LG Electronics	Sang Kim
15. Lucent Technologies	Cheryl Blum (tel)
16. Motorola	Carolyn Taylor
17. Newport Media	Nabil Yousef
18. Nokia	Walt Tamminen
19. Nortel	Girish Patel

20. PacketHop	Ambatipudi Sastry
20. Panduit	Bob Elliott (tel)
22. Qualcomm (4)	Mark Epstein
	Susan Hoyler
	Anil Kripalani (tel)
	MaryBeth Selby
23. Rogers Wireless (2)	Jean-Yves Bernard (tel)
e ()	Peter Oldfield
24. Rohde & Schwarz (2)	John Bowne
	Mike Simon
25. Samsung (3)	C.B. Patel
	G. H. Ryu
	Purva Rajkotia
26. Sanyo Fisher Company	Koichi Takahashi (tel)
27. Sharp	Yu Matsumoto
28. Siemens	Nag Rao (tel)
29. Sprint	Eric Jacks
	Mark Lipford
30. TELUS Mobility	Terrence Wong (tel)
31. Texas Instruments (2)	Yoram Solomon
	Charles Sestok
32. Thales Broadcast & Multimedia	Jean Macher
(2)	Brett Jenkins
33. TIA (3)	Bill Belt
	Dan Bart
	Henry Cuschieri
34. TXI	Ed Hall (tel)
35. Verizon Wireless	Mehmet Toy
36. Chair	Eric Schimmel

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3. Facilitator's Introduction and Sign-In

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After the introductions from the participants, the Facilitator asked Anil Kripalani,
Chairman, TIA Technical Committee, to provide opening remarks. Mr. Kripalani
welcomed all participants and thanked them for their interest in this new topic. He
indicated that this is the first new Engineering Committee created in 12 years at TIA and
that the TIA Board is enthusiastic about the creation. Mr. Kripalani also encouraged
participants to direct their questions either to TIA staff or him.

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4. Review and Approve Agenda

13 The agenda (TR47-20050909-001r2) was reviewed and approved as written.

15 5. Familiarization with TIA Engineering Manual

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1 2 3 4	Henry Cuschieri, TIA, presented "TIA Engineering Committees—Policies and Procedures" (TR47-20050909-003) and familiarized the participants with the TIA standardization program. Main areas covered in the presentation included:
5 6 7 8 9 10 11 12 13 14 15 16 17 18	 Important Notice for Participation Intellectual Property Rights (IPR) Policy Establishment of New Engineering Committee Election of Leadership – Chairs, Vice Chairs, Subcommittee Leadership Establishment of Subcommittees / Working Groups Establishment of Formulating Group Scope Meeting Locations Meeting Notice / Agenda Meeting Reports Quorum Voting Procedures Types of TIA Deliverables Copyrights and Submissions Disclosure of Essential Patents
19	 Balloting
20 21 22	Clarification was sought from the participants on the following:
23	Approval process for scope
24 25 26	• Is it necessary to wait until elected chair to submit committee scope to the TIA Technical Committee for approval?
27 28 29 30 31 32 33 34	 Eric Schimmel replied that it is possible in his role as facilitator to act as chair pro tem and the scope can be approved. He also indicated that the scope is decided by participants of the Committee not the Chair and the role of the chair is a conduit of information to the Technical Committee. What is the threshold for approval within the committee? Is it acclamation, consensus, majority vote?
35 36 37 38 39	Dan Bart replied that majority vote is used to approve scope and then the Chair submits to the TIA Technical Standards Subcommittee (TSSC) for review. Eric Schimmel also reminded the group that those who are present today or at the second meeting constitute the quorum, and that TIA rules are "one company, one vote."
40	Disclosure of IPR in contributions
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42 43 44 45	• Clarification was sought on TIA's IPR policy encouraging disclosure but not mandating disclosure. (Slide 7) It was asked if TIA required IPR disclosure on technical contributions to the committee

1 It was noted that TIA policy allows for and encourage "optional disclosure" of IPR on the 2 technical contribution and that the Engineering Manual provides a sample contribution 3 cover sheet (Annex G.1) which shows such language for a company who desires to 4 provide disclosure on a contribution cover. 5 6 **Contribution cover sheets** 7 8 Henry Cuschieri, TIA, noted that a sample template for the contribution cover sheet 9 (Annex G of the Engineering Manual) exists with contains the 4 required elements as 10 indicated in Slide 24 of the presentation; however, TIA does not mandate what form the 11 contributor uses as long as the 4 required elements are contained in the contribution cover 12 sheet. 13 14 Susan Hoyler, Secretary, noted that a process for document numbering is required for 15 contributions to be made to the group and that highlights of "How to Make a 16 Contribution" would be posted to the FTP site (TR47-20050909-009) 17 18 Third party writings 19 20 Henry Cuschieri expanded on the introduction of third party writings as a contribution 21 (slide 26) and the necessity of honoring the copyright of others. In particular, TIA has 22 agreement with certain key standards developers such as ETSI in which documents are

- frequently exchanged. Whatever the organization, the permission statement needs to be
 part of the contribution, and accordingly, it was noted that (TR47-20050909-007)
 included an ETSI deliverable (007a) and that the copyright permission should be part of
 the contribution.
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28 Relationship of TIA Wireless Division to TR-47

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Eric Schimmel also noted the relationship of the Standards Program to the Product
Divisions at TIA, in particular, the Wireless Communications Division (WCD). (Slide
Bill Belt, TIA, provided a brief overview of the activities of the WCD and
encouraged TIA member companies to participate. He also indicated that TIA has a

Spectrum Policy Subcommittee chaired by Mark Racek and encouraged those with an
 interest in the topic to make inquiries.

37 6. Consideration of Committee Scope

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A request was made to have a review of the document which precipitated the formation
of the TR-47 at the TIA Technical Committee and serves as a baseline for the scope
(TR47-20050909-002). Kamil Grajski presented the document and answered questions
from the floor. Questions included:

- 43 44
- How does the work of TR-47 differ from TR-45? And, how it is related? Are you proposing creating an independent network topology?
- 45

1	At a high level, there is synergy between the two Engineering Committees. TR-45 will
2	not change its mandate or focus, and broadcasting over cellular networks continues as it
3	is. The intent of the work of TR-47 is to create dedicated networks which operate
4	independently from 3G networks, and may also complement them.
5	
6	• If the scope of TR-47 is forward link only, does that mean it would have to
7	rely on a secondary network for the reverse link communication?
8	
9	Scope of TR-47 is forward link only, and when you start to address reverse link, then you
10	approach the "service" space which is being addressed by other groups. Presence of
11	reverse link can be leveraged but is NOT being included in the scope of TR-47.
12	reverse mix can be reveraged but is two r being included in the scope of the 47.
12	• How is broadcasting on the 3G system different than that for FLO?
13	• How is broadcasting on the 50 system different than that for FLO?
14	What is unique is the barrer level which is technology apprectic at the lower levers. Also
	What is unique is the bearer level which is technology agnostic at the lower layers. Also,
16	it is built different for multiplexing, encoding etc. At the service level, both can achieve
17	the same.
18	
19	• Expand on the use of the word "terrestrial"
20	The proposal for TR-47 is not looking at satellite, and it is not looking at broadcast other
21	than terrestrially mounted network.
22	
23	Yoram Solomn, TI commented that FLO is a trademark, and that a different naming
24	might be required for standardization since trademark names are discouraged in
25	standards.
26	
27	Walt Tamminen, Nokia introduced (TR47-20050909-004) and explained the reasons the
28	proposed changes were made to the scope. Nokia & Motorola do not believe that TR-47
29	should examine applications & services, and that the focus should be only on radio
30	interface.
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32	Considerable discussion was held on the meaning of "multicast" versus "broadcast" and
33	which word was suitable for the scope of TR-47. Some felt if scope is limited to just
34	radio interface and not the entire system, then "broadcast" was the appropriate word;
35	whereas if the entire system is included in scope, then it is "multicast". It was agreed to
36	have a narrow scope, with the assumption that the scope was part of a larger system, and
37	changes were made to Contribution 004.
38	
39	Many felt that multicast assumes bi-directional and requires reverse link and that
40	broadcasting means unidirectional and forward link only.
41	
42	It was agreed multicast is an "umbrella" term that encompasses many things, including
43	broadcast. The use of the word "multicast" leaves flexibility in the TR-47 scope.
44	Multicast has some connotation around Internet Protocol and this can be defined further
45	in the scopes of the subcommittees.
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1 "Broadcast" has many limits. It was noted that broadcast also has regulatory limitations, 2 and TR-47 wishes to stay out of the broadcast arena and stay clear in data transport, data 3 content (more Internet type of model). 4 5 Based on the discussion, further changes were made to Contribution 004 and a new 6 proposed scope was presented in (TR47-20050909-008) 7 8 A motion was made by Texas Instruments to approve the amended scope (TR47-9 20050909-008). J Upton Consulting seconded the motion. Discussion was held and a 10 friendly amendment was made by Corning Cable to include definition of multicast as 11 footnote. 12 13 The motion to approve the scope of TR-47 as shown in (TR47-20050909-008) passed 14 without any objections. 15 16 7. **Discussion of Committee Structure** 17 18 Mr. Schimmel suggested the establishment of subcommittees as the next order of 19 business, and asked for proposed structures. One possibility suggested was to create a 20 substructure based on different existing technologies for air interface for TM3. 21 22 Some members expressed concern with deciding the committee structure at the initial 23 meeting since there were no contributions, and that the committee scope had just been 24 approved. Additional time was requested to consider the structure and clarification from 25 DVB Project was also desired. (See item 8 below) 26 27 On behalf of FLO Forum, Kamil Grajski indicated that the FLO Forum intends to have a 28 technical contribution for a complete air interface specification by December, but that if 29 something were needed sooner it could be easily produced as is. As an alternative, he 30 requested an understanding that a placeholder for the FLO Forum contribution would be sufficient for the 2nd meeting. 31 32 33 **ACTION ITEM 2005-0909-001** 34 35 In order to reach a decision on the subcommittee structure at the second meeting of 36 TR-47, Eric Schimmel will make an explicit call for contributions on the proposed 37 subcommittee structure of TR-47. 38 39 8. **External Liaisons and Presentations** 40 41 **DVB** Project 42 43 Walt Tamminen presented (TR47-20050909-007) which was a request from the DVB 44 Project indicating an interest to work with TR-47. Mr. Tamminen indicated that he is not 45 a participant in the DVB Project and that this was just an introduction of the contribution 46

1 The DVB Project is not a standards developer but has close relation with ETSI which has 2 developed DVB-H standard, Contribution 007a. 3 4 The members sought clarification as to what kind of liaison relationship was desired by 5 the DVB Project. In particular, it was questioned whether contributions could be 6 expected into TR-47 since such contributions would help shape the committee structure. 7 8 **ACTION ITEM 2005-0909-002** 9 Eric Schimmel will prepare a response letter to the DVB Project on behalf of TR-47 10 and acknowledge the group's outreach, and also seek clarification of the intended 11 level of activity of the DVB Project. In addition, different avenues will be suggested 12 for cooperative work such as joint standards with ETSI or the ITU venue. 13 14 Eric Schimmel noted the near-term challenge may be to develop a Study Question for the 15 ITU, or possibly to analyze existing ITU Study Questions and seek modification. 16 17 Dan Bart, TIA, noted that TR-34, Satellite Communications, has a relationship with DVB 18 Project and that it may be useful to include this information in the response letter. Mr. 19 Bart requested that he also be consulted by Mr. Schimmel on the drafting of the liaison 20 response to DVB Project. 21 22 **ACTION ITEM 2005-0909-003** 23 Eric Schimmel will consult Dan Bart in the drafting of the response letter to the 24 DVB Project and draft liaison letter to the DVB Project from TR-47 will be 25 distributed via the TR-47 email reflector for comment by the TR-47 participants. 26 27 FLO Forum 28 29 Kamil Grajski presented an overview of the FLO Forum activities (TR47-20050909-30 005). It was asked if FLO Forum intended to bring a technical contribution into TR-47. Mr. 31 32 Grajski indicated that by year-end, a complete Air Interface Specification contribution 33 was expected, possibly including a corresponding draft Minimum Performance 34 Specification. Also, if required during the interim or if placeholders would not be 35 acceptable, draft or other informational contributions could be quickly produced. 36 It was asked if the technology being developed in FLO Forum required harmonized 37 38 spectrum. Mr. Grajski responded that the technology is spectrum independent. 39 40 **ACTION ITEM 2005-0909-004** 41 FLO Forum would like to request formal liaison to TR-47. 42 43 **Consumer Electronics Association (CEA)** 44 45 Brian Markwalter (CEA) introduced the work of R7 committee, Home Networking, and

46 reviewed the CEA request from Virginia Williams to TIA requesting a liaison

1 relationship (TR47-20050909-010). R7 has a working group that does wireless

2 evaluation and wishes to exchange information, and learn about air interface

3 characteristics and the protocol used in the TM3 technologies. The parameters for this

4 group include any audio visual content for any kind of device in the home and the work

5 might be of interest because it does contain performance & evaluation.

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7 ACTION ITEM 2005-0909-005

8 CEA R7 WG7 would like to request a formal liaison to TR-47.

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9. Meeting Venues and Support

The group agreed that the next meeting of TR-47 would be held on Thursday, November 3rd in the Washington DC area from 9am-5pm. TIA staff indicated that TIA does not have available meeting space but staff will seek out an appropriate venue and notify the facilitator.

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10. Leadership Election Procedures and Schedule

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The milestone dates for the leadership election process (TR47-20050909-006) were
reviewed. Henry Cuschieri, TIA, referred participants to Section 4.2 of TIA Engineering
Manual for the complete process of leadership elections. It was noted that the Chair and
Vice Chair cannot be from the same company.

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24 Clarification was requested on when the participants will be notified of the slate of

25 candidates. Per **Contribution 006**, September 23rd was the closing dates for all

26 candidates to indicate their intent to be a candidate. Discussion was held and it was

agreed to extend the closing date for nominations for chair of TR-47 to Friday,

28 September 30, 2005. Accordingly, Contribution 006 was updated to reflect the change in

closing date. (TR47-20050909-006r1) Upon the indicated closing date for nominations

30 (9/30/05), TIA staff will prepare the slate and the information will be distributed via the31 email reflector for this group.

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33 It was also highlighted that the TIA process allows for nominations from the floor at the 34 election. Clarification was sought on the difference in candidates that meet the deadline 35 and those who identify themselves from the floor at the time of the election. TIA staff 36 indicated that the difference will be on whose names are printed on the ballot. Those 37 candidates who meet the deadline for nominations will have their name on the pre-printed 38 ballots distributed at the time of the election and those who identify themselves as 39 candidates on the day of the election will have to have their name handwritten on the 40 ballot.

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42 **11. Other Business**

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44 Susan Hoyler encouraged all interested participants to make sure to register to the email 45 reflector at tr47@tiacomm.org to ensure that all information regarding the group is

1	received. In addition, documents will be posted on the FTP site which has subdirectories	
2	by meeting date at: ftp://ftp.tiaonline.org/TR-47/TR-47MAIN/Working	
3		
4	12. Next Meeting	
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6	As indicated in the selection of venue, the next meeting will be held on Thursday,	
7	November 3, 2005 in the Washington DC area. Details will be contained in the next	
8	meeting announcement and agenda.	
9		
10	13. Adjourn	
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12	The meeting was adjourned at 3:00 p.m.	
13		
14		
15	Respectfully submitted,	
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18		
19	Susan Hoyler	
20	Interim Secretary	