

# **Approved by General Counsel**

TR-41 Meeting Report Date: 11/09/07 Location: Albuquerque, NM

Approved: 1/04/08

T# 10821



The Telecommunications Industry Association represents the communications sector of 🖉

#### Telecommunications Industry Association Standards and Technology Department

#### Engineering Committee TR-41 User Premises Telecommunications Requirements

Meeting Report

Chair: Stephen R. Whitesell Vice-Chair: Al Baum Secretary: Phillip Havens Date: November 9, 2007 Venue: Embassy Suites City: Albuquerque, NM

# 1. Call to Order and Opening Business

#### a. Call to Order and Introductions

Chair Steve Whitesell called the meeting to order at 8:00 am, and the attendees introduced themselves.

#### b. Roll Call and Quorum

Roll call was taken and a quorum was declared with 10 of 13 voting member companies represented.

#### 1) Quorum Members or Alternates Present

AST – James Bress Cisco – Kirit Patel Embarq – Amar Ray Littelfuse – Phillip Havens Plantronics – Allen Woo

# 2) Quorum Members Absent Avaya – Joanne McMillen

Bourns – Mick Maytum

# 3) Others Present

ACTA Liaison – John Bipes Cisco – Tim Lawler ETSI Liaison – Joachim Pomy Industry Canada – Hazim Dawood Siemens – Solomon Wu Thomson – Roger Hunt UL – Randy Ivans Uniden – Al Baum VTech – Steve Whitesell

Nortel – (vacant)

Industry Canada – Efrain Guevara Telcordia – Randall McCarver TIA Staff – Stephanie Montgomery

#### c. Review of Notice for Participation

The Chair brought the attention of meeting participants to the following Important Notice for Participation as found in the TIA Engineering Manual:

Participation in, or attendance at, any activity of a TIA Formulating Group or any subelement thereof, constitutes acceptance of and agreement to be bound by all provisions of the TIA Engineering Manual and permission that all communications and statements, oral or written, or other information disclosed or presented, and any translation or derivative thereof, may without compensation, and to the extent such participant or attendee may legally and freely grant such copyright rights, be distributed, published, and posted on TIA's web site, in whole or in part, on a non-exclusive basis by TIA or TIA's licensees or assignees, or as TIA directs. Exceptions to the foregoing may be granted or permitted in writing to the Chair of the Formulating Group by TIA's Senior Vice President, Standards and Special Projects on a case-by-case basis.

#### d. Review and Approve Agenda

The agenda was submitted for review and approved with the addition of Liaison Report on the UL Technical Harmonization Committee by Randy Ivans as Item 4c and a report on ACTA by John Bipes as New Business Item 6b.

#### e. TIA Patent Policy

The Chair made the attendees aware of the following statement concerning TIA's Patent Policy and the desire for early disclosure of patents, the use of which may be essential to any standard or other document being developed for publication:

TIA's Intellectual Property Rights Policy can be found in Statements of Policy and subsequent sections of the TIA Engineering Manual. Participants in the work of the TIA Formulating Group 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 early on in its 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 the statement set forth in ANNEX H 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. Patent searches are not required to comply with the TIA Intellectual Property Rights Policy.

He pointed out that this policy encouraging disclosure of intellectual property rights applies equally to all normative elements of documents under development, whether included directly in the text or incorporated by reference. No disclosures were made.

#### f. Chair's Remarks

The Chair asked for comments on the venue and received positive feedback.

#### g. TIA Staff Remarks

Stephanie Montgomery made some comments regarding the writing of meeting reports. She also indicated that an advisory note concerning the reference to draft documents in TIA standards has been issued for the Engineering Manual. Chair Steve Whitesell has forwarded a copy of the Advisory Note to the TR-41 leadership team. Stephanie indicated the new numbering scheme discussed at the August meeting is being placed on hold pending TIA web site modifications.

### 2. Previous Meeting Report

The report of the previous meeting was reviewed and approved without change.

#### 3. Subcommittee Reports and Requests

TR-41's subcommittees and working groups met at various times from Monday through Thursday.

# a. TR-41.3 – Analog and Digital Wireline Terminals – James Bress

Subcommittee TR-41.3 met on Thursday afternoon, November 8, 2007. Its various working groups met from Monday through Wednesday and on Thursday morning.

Project Status: The following is a summary of the status of each Project assigned to TR-41.3.

 PN-3-0208, Comparison of TIA-470-C and ETSI TS 103 021 Requirements (to become TSB-470)

Current Status: Work may start on this project soon as the TR-41.3.11 (headset) working group will go inactive, which should open some time.

Target Completion Date: 08/2008

 PN-3-0271, Guidelines for Marking and Labeling CPE Complying with TIA Standards (to become TSB-177)

Current Status: TSB-177 was submitted to TIA for publication. The publication was being held by TIA so TIA can resolve the issues regarding licensing of the TSB-177 specified logos for TIA-1083 compliance. The document and logos may require revision due to the licensing program established by TIA.

Steve Whitesell agreed to send a liaison letter to HLAA informing HLAA of the TSB-177 status and a contact at TIA for further input.

The working group agreed to open a project to create an addendum to TIA-1083 to cover methods of testing telephones with a digital interface. The new procedures being put into TSB-31C addendum for FCC part-68.316 testing of digital telephones will likely be used to reference or copied into the addendum. Work on this addendum was started in the TR-41.3.9 working group meeting. Steve Whitesell agreed to add the fact that this new project for digital telephones is started in the liaison letter to HLAA. Al Baum agreed to be the editor for the TIA-1083 addendum.

Target Completion Date: 02/2008

Plenary Action Requested: TR-41.3 requests the concurrence of TR-41 to send a liaison letter to HLAA informing HLAA of the TSB-177 status and a contact at TIA for further input, and also to inform of the start of a new project to add digital interface telephones test methods to TIA-1083.

Plenary Action: Unanimous concurrence.

Plenary Action Requested: TR-41.3 requests the concurrence of TR-41 to start a new project to create an addendum to TIA-1083 to add digital interface telephones test methods.

Plenary Action: Unanimous concurrence.

 PN-3-4350.120-RV3, Speakerphone Acoustic Performance Requirements for Analog Telephones (to become TIA-470.120-C)

Current Status: Progress is being made in many areas of the standard. The working group met with participation from IEEE STIT members. There was significant discussion regarding newly proposed distortion measurements, newly proposed measurements for receive with signal level and loop variations, and appropriate source test signals considering newer technologies using coders.

Target Completion Date: 08/2008

 PN-3-4350.130-RV3, Headset Acoustic Performance Requirements for Analog Telephones (to become TIA-470.130-C)

Current Status: The ballot results were reviewed and the 2 yes with comments were discussed and resolved. There was a unanimous vote to send TIA-470.130-C for publication after final editorial clean up and review. There was also a unanimous vote to make the TR-41.3.11 working group inactive.

Target Completion Date: 02/2008

Plenary Action Requested: TR-41.3 requests the concurrence of TR-41 to send TIA-470.130-C for publication.

Plenary Action: Unanimous concurrence.

Plenary Action Requested: TR-41.3 requests the concurrence of TR-41 to make the TR-41.3.11 working group inactive.

Plenary Action Taken: Unanimous concurrence.

• PN-3-4350.330, Telephone Answering Devices (to become TIA-470.330-C)

Current Status: There was discussion regarding the test signals to be used related to product design including recorded voice compression which may make current signals and test methods for send and receive inaccurate. There was strong interest in pursuing using recorded real speech signals for testing. John Bareham from IEEE STIT stated he is working on developing test methods using real speech signals.

Target Completion Date: 02/2009

 PN-3-4705-RV1, Transmission Requirements for Wideband Digital Telephones (to become TIA-920-A)

Current Status: There was significant discussion regarding distortion measurements. There was also significant discussion regarding how to address the draft P.79 revision, which specifies loudness rating calculation weightings, and how it relates to wideband telephony. There was also discussion regarding appropriate source test signals considering newer technologies using coders.

Target Completion Date: 11/2008

• PN-3-4159-RV1, Automatic Stutter Dialtone Detection Performance (to become TIA-855-A)

Current Status: This project was just opened to revise TIA-855, Automatic Stutter Dialtone Detection. TR-41.3 voted to make the TR-41.3.2 working group active to handle this work with Steve Whitesell from VTech or James Bress from AST to edit the document. Technical input is expected from VTech and AST.

Target Completion Date: 08/2008

Plenary Action Requested: TR-41.3 requests the concurrence of TR-41 to make TR-41.3.2 active for this project.

Plenary Action Taken: Unanimous concurrence.

Additional Information: TR-41.3 would like to provide the following additional information.

- TR-41.3 held an election for chair, and Al Baum from Uniden was elected by unanimous vote.
- TR-41.3 held an election for vice-chair, and the previous TR-41.3 chair, James Bress from AST, was elected, also by unanimous vote.

# b. TR-41.4 – IP Telephony Infrastructure and Interworking – Joachim Pomy (for Joanne McMillen)

Subcommittee TR-41.4 met on Wednesday, November 7, 2007.

Project Status: The following is a summary of the status of each Project assigned to TR-41.4.

 PN-3-0103, Requirements for a Wireless LAN Based IP Telephony Endpoint (to become TIA-1003)

Current Status: Some editorials are still outstanding. An updated document will be circulated on the list to determine that "if all the changes were to be accepted it could go to publication". A vote was taken to send the document to publication after that – it was agreed.

The timeframe to reach that conclusion and ask for any further editorials will be 5 days.

Target Completion Date: 11/2007

Plenary Action Requested: Concurrence to publish TIA-1003 after the 5-day editorial comment period.

Plenary Action: Unanimous concurrence.

 SP-3-0290 (new project), Roll ANSI/TIA-464-C-1 into ANSI/TIA-464-C (to become ANSI/TIA-464-D)

Current Status: The document was merged according to instructions. However, it is advised that the document be updated as well to cover interim published standards and references. The target completion date should be moved to February 2008.

Target Completion Date: 2/2008

• Reaffirm TIA 596 (R2002), Network Channel Terminating Equipment for Public Switched Digital Service (ANSI/TIA/EIA-596-92)

Current Status: An administrative ballot was issued to submit the ballot request for reaafirmation. The closing date on that was November 2. The ballot will be issued to reaffirm. Target completion date is now February 2008.

Target Completion Date: 2/2008

 Reaffirm TSB-32-A (R2002), Overall Transmission Plan Aspects for Telephony in a Private Network

Current Status: Administrative ballot for this as believed from the last plenary was not acceptable. Hence, this was pushed out until the November meeting. A vote was taken again to reafirm TSB-32-A. It was unanimously approved. Reaffirmation request will be submitted.

Target Completion Date: 11/2007

Plenary Action Requested: Concurrence to reaffirm TSB-32-A

Plenary Action Taken: Unanimous concurrence.

Additional Information: TR-41.4 would like to provide the following additional information.

• There is still no indication of new work coming into this group. There has as yet been no indication that anyone is willing to fill the chair and vice-chair positions going forward although the group does have enough current work to carry it through at least one, if not two, more meetings. A call for candidates will be made and determination of the future of the group will result in February.

#### c. TR-41.7 – Environmental and Safety Considerations – Randy Ivans

Subcommittee TR-41.7 met on Thursday afternoon, November 8, 2007. Its 41.7.5 Working Group met on Wednesday and its 41.7.1 Working Group met on Thursday morning.

Project Status: The following is a summary of the status of each Project assigned to TR-41.7.

• PN-3-0129, Telecom Circuit Overcurrent Protectors (to be submitted to UL)

Current Status: The document was released to UL after the May meeting. UL standards formatted it into a formal Draft UL Outline of Investigation and returned it to TR41.7.5 for review and comment at this week's meeting. Comments for some changes were received and reviewed, and some significant changes were needed. These were nearly completed at the meeting, with temperature compensation curves still needed for a few of the technologies that the outline will cover. Manufacturers have committed to providing these by the end of next week. Once these are incorporated into the latest edited draft, it will go back to UL for handling.

Since Frank Ladonne from UL will be interfacing between TR41.7.5 and UL standards, he has agreed to take the lead in the final development stages for the outline. It is expected that at the next meeting there will be a final review of the last edits and changes and UL will then be able to go to publication of the outline.

TR41.7.5 is requesting a full day for the meeting schedule in February.

Target Completion Date: May 2008

Additional Information: TR-41.7 would like to provide the following additional information.

• TR41.7.1 reviewed a preliminary proposal to add what is commonly called the "candle flame test" to UL60950-1. A formal proposal to do so has been submitted to UL via their CSDS system for standards revision. TR41.7.1 reviewed this proposed test and requirements a few years ago and had serious concerns regarding the lack of substantiation or rationale for the test. The same concerns remain.

Plenary Action Requested: TR41.7 requests concurrence to send a comment letter to UL indicating that all of our earlier concerns have not been addressed and that our previous position regarding our objection to this test has not changed. The letter has not yet been drafted but the TR41.7 subcommittee has provided a vote of confidence for the chairman to draft an appropriate letter and send it to UL.

Plenary Action Taken: Unanimous concurrence.

• There have been concerns expressed regarding the protection or potential lack of protection provided on what is commonly referred to as "Ethernet First Mile (EFM) front end circuits. This is covered by the IEEE 802.3ah specification. These circuits can extend into the network up to a mile (currently) and can therefore be exposed to power fault and lightning conditions. It is also recognized that because of the 1 mile limitation, the characteristics of the potential faults may be different on these circuits compared to POTS lines for which the current power fault (Overvoltage) tests were originally developed. In addition to the above, there are concerns about the intermingling of circuits and the connection of circuits (i.e. traditional intrabuilding Ethernet ports) to the outside plant via EFM.

Plenary Action Requested: TR41.7 is seeking concurrence to open a project to research the technical background of the current requirements and develop appropriate requirements for EFM and similar communications technologies. Areas such as Ethernet circuits being connected to outside facilities like antennas, remote monitoring equipment and the like will also be explored. It is expected that the completion of this work will result in a proposal to UL to revise UL60950-1.

Plenary Action Taken: Unanimous concurrence.

- Because of the ongoing work on the new international safety standard for audio video, ITE and telecom equipment, TR41.7.1 will be asking UL to provide a presentation on the system and process related to the development of IEC and UL standards. This will include the various committees like TC108, US TAG, UL THC, UL STP, etc., how members join or are selected, criteria for membership, etc. This standard will be the basis for safety requirements for US telecom equipment in the future.
- TR41.7 held elections for chair and vice-chair. Randy Ivans was re-elected as chairman and Phillip Havens was re-elected as vice-chair.
- Reviewed TIA/EIA 631A, which is due for its 5-year review. It was the unanimous decision of TR41.7 to reaffirm.

Plenary Action Requested: Submit an ANSI ballot to reaffirm.

Plenary Action Taken: Unanimous concurrence.

#### d. TR-41.9 – Terminal Attachment Programs – Phillip Havens

Subcommittee TR-41.9 met on Tuesday, November 6, 2007. Its 41.9.1 Working Group met on Monday November 5, 2007.

Project Status: The following is a summary of the status of each Project assigned to TR-41.9.

• SP-3-0016-RV2, Technical Criteria for Terminal Equipment to Prevent Harm to the Telephone Network (to become ANSI/TIA-968-B)

Current Status: Contributions were received concerning organization of the document into a manner more consistent with its intent to be interface based. The document structure and style were improved for clarity.

Target Completion Date: 05/2008

• PN-3-3602-RV3, Rationale and Measurement Guidelines for TIA-968 (to become TSB-31-C)

Current Status: Final ballot resolution letters sent out.

Target Completion Date: 11/2007

 PN-3-0014-UGRV2, Telecommunications – Telephone Terminal Equipment – Label Requirements (to become TIA-168-B)

Current Status: Ballot comments resolved.

Target Completion Date: 11/2007

Plenary Action Requested: Proceed to publication.

Plenary Action Taken: Unanimous consensus.

PN-3-4124, Responses to Part 68 and TIA-968 Questions (On-going effort)

Current Status: New candidate question being studied.

Target Completion Date: N/A

• PN-?-???, TSB-129-A Telecommunications - Telephone Terminal Equipment - U.S.Network Connections Regulatory Approval Guide

Current Status: A new project number will be requested at the February 2008 meeting to revise and update this document, which is near its 5-year window review period.

Target Completion Date: 02/2009

Additional Information: TR-41.9 would like to provide the following additional information.

- An addendum to TSB-31-C, which is revising section 15, is currently being worked on. Expected request for publication is 05/2008.
- TR41.9 is reviewing the technical check list that the ACTA uses in their accreditation process.
- We discussed having a "global" representative of telecommunications be invited to discuss the possibility of internationalizing the scope of TR41.9. Two names were recommended; Ed Mikoski (TIA Standards Vice-President) and Steven Bipes (ANSI Director International Policy).

Plenary Action Requested: Request TR41 issue an invitation to these two gentlemen or whomever TIA staff may recommend for either the February 2008 or May 2008 meeting.

Plenary Action Taken: Unanimous consensus.

• TR 41.9 request TIA to include in the TIA website a "submit your question" slot on the page and directing questions to the correct committee.

Plenary Action Requested: Request TIA staff to provide a mini-webmaster to provide a TR41.9 "submit your question" link.

Plenary Action Taken: Unanimous consensus.

• TR 41.9 request TIA to add TR41.9 Chair and Vice-Chair email contact information to the Part 68 FAQ area.

Plenary Action Taken: Unanimous consensus and TIA agreement (TR 41.9 Chair will modify FAQ document adding this information.)

• TR 41.9 request TIA to consider generating newsletters 6-12 times annually that would be broadcast to the TR 41.9 exploder list as an attempt to generate and keep interest in TIA TR 41 activities.

Plenary Action Taken: One abstaining vote but otherwise unanimous consensus and TIA agreement if/when TR 41.9 provides such content.

• TR 41.9 request TIA to consider making a TIA TR41.9 dictionary available via web access. This would encourage and intercept internet searches for technical terms related to TR 41 activities. Can TIA provide a mini-webmaster for TR 41.9?

Plenary Action Taken: Unanimous consensus.

- Would TIA support a change in TR 41.9 scope that expands to an international view rather than just a North America view?
- Can TIA provide editing support in consideration of document users whose first language is not English? No, Stephanie Montgomery indicated TIA does not have staff that can provide this function; however, TIA's publisher is allowed to translate to other languages.

#### 4. Liaison Reports

#### a. ATIS NIPP-NAI – Steve Whitesell

TR-41.3 is continuing to work with NIPP-NAI on the issue of DSL splitter and filter impedance and its effect on sidetone performance. The subject will be discussed on Wednesday morning of the NIPP-NAI meeting next week in Vancouver if anyone can participate.

#### b. IEEE 802.11/19 - Steve Whitesell

Steve indicated his company has decided to withdraw from active participation in IEEE 802 work, so he will no longer be able to provide liaison reports.

#### c. UL Technical Harmonization Committee (THC) report – Randy Ivans

Randy indicated Phillip Havens of Littelfuse had obtained his company's approval to serve as TIA Representative to the UL Technical Harmonization Committee that is being formed to address the next generation Hazard-Based safety standard that is being developed to cover multiple product areas, including telecommunications.

#### 5. Old business

#### a. Project Status

Chair Steve Whitesell indicated that new vice-chair Al Baum had agreed to take over maintenance of the Project Status spreadsheet. Updates should be provided to Al following the meeting.

#### 6. New Business

#### a. TR-41 Operational Guidelines Update

Chair Steve Whitesell said he had done some work on this document to add a section covering recognition of contributions to the development of standards. What we have discussed previously is the recognition that goes into the published document. He asked if the semi-annual recognition events that we are now having should be included as well. There was general agreement that this would be a good idea.

#### b. ACTA Report – John Bipes

John Bipes reported on the restructuring of ACTA from six interest segments into four and the upcoming elections for representatives and chair. The restructuring was undertaken because of difficulty in filling open positions in some interest segments. The former Local Exchange Carriers (LEC) and Interexchange Carriers (IXC) interest segments have been combined into a new Service Provider Segment (SPS) with 4 representative positions available. Similarly, the former

Terminal Equipment Manufacturers (TEM) and Network Equipment Manufacturers (NEM) segments have been combined into a new Manufacturers Segment (MS), also with four representative positions. The Testing Laboratories (LAB) and Other Interested Parties (OIP) segments continue with two representatives each. Each segment can also elect one alternate to serve in the absence of a primary member.

#### 7. Meeting Schedules

# a. Next Meeting

The next meeting will be held the week of February 4-8, 2008 in New Orleans. IEEE STIT will be collocated with us for this meeting. The preliminary meeting schedule for the various TR-41 subcommittees and working groups along with the separate and joint IEEE STIT meetings is given in Appendix A. The details for the meeting hotel are as follows:

DoubleTree Hotel 300 Canal Street New Orleans, LA 70130 Phone: 504 581 1300 Room Rate: \$159 + tax Cut off date: 1/14/08

#### b. Future Meetings

The schedule for future TR-41 meetings is given below.

Date	Location
May 05-09, 2008	TBD
August 04-08, 2008	TBD
November 03-07, 2008	TBD

#### 8. Adjournment

There being no further business, the meeting was adjourned at 10:00 am. This meeting was conducted in accordance with the TIA Legal Guides and the Engineering Manual.

Phillip Havens Secretary, TR-41 Stephen R Whitesell Chair, TR-41

Appendix A				
Tentative TR-41 Meeting Schedule for February 4-8, 2008				

Room				
MONDAY	TR-41.3.3/IEEE STIT	TR-41.9.1		
0830 – 1230	Digital Xmission Perf	Regulatory Criteria		
4 Feb 2008	(Baum/Bareham – 20)	(Hunt – 20)		
MONDAY	TR-41.3.3/IEEE STIT	TR-41.9.1		
1330 – 1730	Digital Xmission Perf	Regulatory Criteria		
4 Feb 2008	(Baum/Bareham – 20)	(Hunt – 20)		
MONDAY		TR-41 Leadership		
1800 – 1930		User Premises Eqpmt		
4 Feb 2008		(Whitesell – 15)		
TUESDAY	TR-41.3.10/IEEE STIT	TR-41.9		
0830 - 1230	Hands Free Telephones	Regulatory		
5 Feb 2008	(Baum/Bareham – 20)	(Havens – 25)		
TUESDAY	TR-41.3.10/IEEE STIT	TR-41.9		
1330 - 1730	Hands Free Telephones	Regulatory		
5 Feb 2008	(Baum/Bareham – 20)	(Havens – 25)		
TUESDAY				
1900 - 2200				
5 Feb 2008				
WEDNESDAY	TR-41.3.2	TR-41.7.5	TR-41.4	IEEE STIT
0830 - 1230	Stutter Dial Tone	<b>Overcurrent Protection</b>	VoIP Systems	(Bareham – 10)
6 Feb 2008	(Bress – 20)	(Lindquist – 15)	(McMillen – 15)	, , , , , , , , , , , , , , , , , , ,
WEDNESDAY	TR-41.3.12	TR-41.7.5	TR-41.4	IEEE STIT
1330 - 1730	<b>Telephone Ans Devices</b>	<b>Overcurrent Protection</b>	VoIP Systems	(Bareham – 10)
6 Feb 2008	(Ray – 20)	(Lindquist – 15)	(McMillen – 15)	, , , , , , , , , , , , , , , , , , ,
WEDNESDAY				
1900 - 2200				
6 Feb 2008				
THURSDAY	TR-41.3.9	TR-41.7.1		IEEE STIT
0830 - 1230	Cordless Telephones	Int'l Safety Standards		(Bareham – 10)
7 Feb 2008	(Bress – 15)	(Ivans – 15)		()
THURSDAY	TR-41.3	TR-41.7		IEEE STIT
1330 – 1730	Wireline Terminals	Environmental & Safety		(Bareham – 10)
7 Feb 2008	(Baum – 20)	(Ivans – 15)		(
THURSDAY				
1900-2200				
7 Feb 2008				
FRIDAY	TR-41 Plenary			
0800 - 1030	User Premises Eqpmt			
8 Feb 2008	(Whitesell – 20)			
01 60 2000	(Wintesen - 20)			

# Appendix B Document List

<u>Number</u>	<u>Source</u>	Description
TR41-07-11-001-R1	Chair	Agenda for Albuquerque Meeting
TR41-07-11-002	Chair	Document List
TR41-07-11-003	Secretary	Ottawa Meeting Report
TR41-07-11-004-M	Chair	Attendance Spreadsheet
TR41-07-11-005-MR1	Bress	TR-41.3 Chair's Report
TR41-07-11-006-MR1	Pomy	TR-41.4 Chair's Report
TR41-07-11-007-MR1	Ivans	TR-41.7 Chair's Report
TR41-07-11-008-MR1	Hunt	TR-41.9 Chair's Report