IEEE 802.17 RPR Working Group Meeting Minutes

Interim Session, May 6-9, 2002 Crown Plaza Hotel, Ottawa, Canada

Secretary: BJ Lee

Note: Attendance list is attached as an Appendix.

Note: All the presentations are available on the RPRWG Web:

http://www.ieee802.org/17/documents/presentations/may2002/index.htm

May 6, Monday

8:00am: Seating, Everyone

8:20am: Welcome Slide and Meeting Goals, Mike Takefman

- Mike reminded administrative rules and procedures, and goals of the meeting and future meeting plans.
- July 15-18, Plenary in Vancouver, Canada
- September Interim is in conjunction with 802.3 and 802.1
 - Either September 30 Oct 3, or Oct 1-4
- Goals of this meeting:
 - o Presentations
 - o Comment resolutions on 0.2 draft
 - o Vote in baselines for clauses 6 and 10
 - o Other various motions

8:40am: Approval of Agenda, Mike Takefman

- Approved without objections

8:42am: Approval of Meeting minutes of March 2002 Plenary

- Deferred until July 2002 Plenary meeting

8:45am: Introduction, everyone

8:50am: P802.17 Draft and Comment Status, Tom Alexander, Chief Editor

- Tom goes over the status of Draft 0.2 and submitted comments, future plans, and the draft creation process
- Tom urges members to participate and submit comments. So far there are only 32 commenters out of about 150 members.
- Goals of this May meeting:
 - o Adopt proposals for missing clauses 6 and 10
 - o Resolve comments on D0.2 (total of 1112)
 - o Produce instructions for generation D1.0 from D0.2
 - o Authorize D1.0

9:10am: Preventing TB Overflow due to Nodal Clock Differences, Mike Takefman

- Mike claims the master distributed synchronous methods are out of the scope of 802.17, and presented a solution approach using a

separate gap control packet which is being protected by Cisco patent submission.

- C: Keeping low utilization is a much better solution, without additional control packets.
- C: Since each node is adjusting the clock independently, there is likely to be oscillation.
- A: The oscillation is only within 250ppm.
- C: There needs more corner case investigations to confirm that we are not solving non-existent problem.
- C: This should have been submitted as a comment, since there exists another comment regarding rate mismatch.
- Q: Why not create IPG (Inter Packet Gap) which can be made independent of line rate?
- A: Let us discuss more about it off-line.

9:40am: Bridging Ad-Hoc (BAH) Overview, Marc Holness and Robert Castellano

- Marc gave an overview on BAH activities and results. Presentations on findings and observations will follow.
- C: Was there a consensus within BAH on recommendation to the WG?
- A: Yes, except for one issue.

9:50am: Break

10:10am: Flooding in 802.17 Networks, Anoop Ghanwani, Lantern Communications

- Anoop presented an overview on BAH analysis and findings on various flooding methods in relations to frame duplication, misordering, and loss possibilities.
- C: If more than one node fail, frame duplication is still possible with source stripping.
- A: Yes.
- Q: What is the BAH recommendation?
- A: Unidirectional source-based stripping with steering, and unidirectional source and TTL-based stripping.

10:55am: Bridging on 802.17 LAN with 802.1D/Q Compliance, Marc Holness, Nortel

- Marc describes the key outcome of the compliance issue discussion, which should also be forward compatible with 802.17 spatial reuse property (if used).
- Q: Why DA stripping is not allowed when the flooding indicator is set?
- A: There are cases for 802.1D/Q compliance which will be covered in the next presentation.

11:25am: 802.1D/Q Compliance and Spatial Reuse, Robert Castellano

- Bob presented a set of procedures to address the 802.17 PAR requirement for spatial reuse while satisfying the 802.1D/Q compliance, including a proposal for SRCS (Spatial Reuse Control Sublayer).
- C: SSID and DSID are extremely useful, regardless of the bridging.
- C: If RPR supports ring of routers, all these problems do not exist. If there are only bridges on the ring (instead of mixture of hosts and bridges as shown in the slide), the persistent flooding problem still exists? What information does ARP expect to get, e.g., SSID or MAC address?
- C: It seems that as we are discovering more issues to resolve in this area.
- C: If the host also has to implement SRCS, it is too much.

12:10pm: **802.17** Frame Structure and Bridging Ad-Hoc Support, Marc Holness, Nortel

- Marc presented the requirements and recommendations for modified RPR frame format identified by BAH, and proposed the formation of frame format Ad Hoc.
- 12:35pm: Lunch Break
- 1:35pm: Rate Ad Hoc Report for Clause 6 to WG, Necdet Uzun, Cisco
- Necdet presented an overview report of Rate Ad Hoc work.
- 1:45pm: RPR Topology Discovery Proposal, Necdet Uzun, John Lemon, Luminous
- John presented a proposal for topology discovery protocol which is based on the Topology Ad Hoc group consensus.
- Q: Is topology discovery also triggered right after the protection event?
- A: No, the topology discovery is independent of protection.
- 2:05pm: Introduction to evening discussion on Interop testing at UNH, Scott Valcourt
 - Gave a prelude to the actual presentation planned in the evening.
- 2:15pm: Reference Model for RPR MAC, Anoop Ghanwani, Lantern
- Anoop presented a proposal for MAC reference model.
- 2:30pm: A Behavioural Description of the 802.17 MAC, Anoop Ghanwani, Lantern Communications
- Anoop presented a proposal for behavioural specification of MAC.
- C: If you do not guarantee delay jitter of excess traffic for Class B, there is potential for frame misordering.

- C: This new proposal could be added to the existing clause, but should not replace it.
- 2:50pm: Break
- 3:05pm: RPR Frame Format Proposal (Clause 8.2), John Lemon, Luminous
- John presented a proposal for new RPR header format.
- C: This work confirms the idea of forming a frame format ad hoc.

3:25pm: The Darwin MAC Protocol Mystery, Harmen Van As, Vienna University of Technology

- Harmen presented analysis and discussion of the current IEEE 802.17 work on fairness.

3:25pm: Performance of the Darwin MAC Protocol, Jon Schringa, Vienna University of Technology

- Jon Schringa presented simulation results on the performance Darwin proposal.
- Q: Have you considered multiple choke points?
- A: No
- C: We need a behavioural model to put an end to performance comparison issues.

4:30pm: Performance Analysis of Darwin: Steady State, Mark Joseph Francisco, Carleton University

- Mark Francisco presented OPNET simulation results on performance of Darwin fairness proposal under steady state condition.
- C: The simulation scenario used in this study is considered too simple.
- Q: How faithful is the simulation model to the current draft Specification? Is the model available in public?
- A: Yes, it will be made available.

4:50pm: IETF - SONET/SDH Emulation: draft-malis-pwe3-02.txt, Tom Johnson, Litchfield Communcations

- Tom Johnson presented an overview of IETF PEW3 activity and potential application over RPR.
- C: the draft does not assume any specific L2 technology, but need to consider the particular capabilities of the underlying L2 technology.

5:10pm: Performance Analysis of Darwin: Transient State, ChangCheng Huang, Carleton University

- ChangCheng presented OPNET simulation results on performance of Darwin fairness proposal under transient state condition.

5:25pm: Creation of an Ad Hoc to respond to ITU-SG17, Li Mo, ZTE

- Li Mo gave a brief overview on MSR, and an ad hoc group formed to draft a response letter.
- C: We cannot act on the MSR liaison letter until July Plenary? A: No, but we would like to start creating a draft response letter.
- 5:35pm: Presentation Conformance like and interoperability testing at the University of New Hampshire Interoperability Lab, Scott Valcourt
- Scott Presented various aspects of interoperability testing activities conducted at UNH, including pointers how UNH can help RPRWG.
- C: It would be helpful to have a timeframe to tell us when and what to do now to get ready for interoperability tests when the products become available.
- Q: So far, most interoperability testings are done on point to point connections such as Ethernet. How challenging would it be to test multiple devices on a single ring?
- A: It would be challenging. In a Fibre Channel case, a half page guideline on loop starting sequence ended up with 18 page detailed specification of sequences and state diagrams after UNH tests.
- 6:40pm: RPRWG adjourned, with RPR alliance, RAH, and Editors meetings continue concurrently into the night.

May 7, Tuesday

8:00am - 6:00pm: Multiple Concurrent Comment Resolution Sessions

May 8, Wednesday

8:00am - 6:00pm: Multiple Concurrent Comment Resolution Sessions

May 9, Thursday

8:00am -10:30am: Comment Resolution Sessions

10:30am: Seating for WG session, Everyone 10:40am: Agenda Scrub, Mike Takefman

10:45am: Presentation - BAH Summary, Bob Castellano

 Bob recapped flooding, 802.1D/Q compliance and spatial reuse, and frame format issues, and presented a motion to allow continuation of BAH work.

10:55am: P802.17 Editors' Report, Tom Alexander

- Tom presented a summary result of comment resolution sessions including a timeline for the next rounds of comment resolution process for Draft 1.0 until July meeting.
- Each section editors presented summary results, and unresolved comments to the WG.
- C: Comment resolution ad hoc should not make final decision to accept/reject comments, instead should defer the decision to the WG.
- C: Comments rejected due to missing suggested remedy should either be recirculated or indicated explicitly in the draft text (along with editor's comments)
- A: Chief editor will extract rejected comments from the CRD, and recirculate them with the new draft.
- WG proceeds to resolve the deferred unresolved comments in Clause 9:
 MAC Fairness
- . Comment resolution on Comment #163

Proposed resolutions:

- (1) This issue to be forwarded to Ad Hoc group chartered to resolve fairness issues. (David James)
- (2) Should be rejected due to the fact that the comment is an element of a new proposal for the fairness algorithm rather than a comment to address the issue found current accepted text. (Steve Wood)
- (3) Request the commenter to provide detailed information and interaction with what is in the existing draft. (Harry Peng)

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Result by WG voting members only
Proposal (1) Y: 19 N: 25 A: 2 (failed)
Proposal (2) Y: 27 N: 16 A: 4 (failed)
Proposal (3) Y: 15 N: 28 A: 1 (failed)

Result by everyone in the room
Proposal (1) Y: 20 N: 39 A: 5 (failed)
Proposal (2) Y: 40 N: 19 A: 6 (failed)
Proposal (3) Y: 21 N: 41 A: 1 (failed)
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* Comment # 163 remains unresolved.

12:15pm: Lunch Break

1:15pm: WG resolution of the unresolved comments in Clause 9 continues.

. Comment resolution on Comment #308

WG Proposed resolution:

To be forwarded to the RAH for detailed bit assignments with the intent that the type A fairness frame not exceed 16 bytes in size. (David James)

Result by everyone in the room Y: 48 N: 0 A: 11 Resolution adopted.

- . Comment resolution on Comment #183
 Follow the resolution for comment #308.
 Passed without objection.
- . Comment resolution on Comment #457

WG Proposed resolution:

- (1) Reject. Refine Clause 9 to be self-sufficient with all of the information without actually importing all of the contribution into the draft.
- (2) Invite the commenter to provide more detailed contribution text.
- (3) Accept those scenarios for inclusion in the informative annex (Annex I). The references to RIAS and mathematical equations not be included.

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Result by everyone in the room

Proposal (1) Y: 28 N: 12 A: 16 (failed)

Proposal (2) Y: 12 N: 38 A: 7 (failed)

Proposal (3) Y: 8 N: 31 A: 15 (failed)
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* Comment #457 remains unresolved.

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Motion 2002-5-09-01 (Time 2:10pm)
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Move to adopt all resolutions to comments on Section 4 (Clause 9), as resolved by comment resolution ad hoc, including requests for contributions and requests to form ad hoc groups as necessary. (Technical)

M: Necdet Uzun S: Anoop Ghanwani

Yes: 999 No: 0 Abstain: 0

Passed without objection.

C: Section editors should provide summary report on technical issues involved in the comment resolution before the actual voting on the motions.

C: These motions will have to be ratified at the July Plenary meeting.

Motion 2002-5-09-02 (Time 2:25pm)

Move to grant editors license to resolve and implement all unresolved editorial comments on Section 4 (Clause 9, Fairness) (Technical)

M: Necdet Uzun S: Anoop Ghanwani

Yes: 999 No: 0 Abstain: 0

Passed without objection.

2:27pm: Section 2 (Data path) Comment Resolution Summary, Steve Wood and Jim Mollenaur

- WG resolution of the unresolved comments follows:
- . Comment resolution on Comment #192

WG Proposed resolution:

Follow the ad hoc decision.

Resolution adopted without objection.

- . Comment resolution on Comment #194
 - WG Proposed resolution:

Follow the ad hoc decision.

Resolution adopted without objection.

. Comment resolution on Comment #539

WG Proposed resolution:

Accept the contribution with the action item to the RAH to provide less confusing names than AO and A1.

Y: 43 N: 0 A: 6 Resolution adopted.

. Comment resolution on Comment #775

WG Proposed resolution:

Two RAC representatives have verified that the IEEE RAC would reject any proposed STD that does not support 64 bit addressing unless transparent bridging is being supported by that same standard.

802.17 shall support transparent bridging. Therefore the use of 48 bit addresses is sufficient.

Resolution adopted without objection.

. Comment resolution on Comment #1139

WG Proposed resolution:

- (1) Control frames will not be less than 8 bytes.
- (2) Control frames will not be less than 8 bytes. The minimum data payload size shall be 46 bytes for transparent bridge compatibility with Ethernet.
- (3) Defer the resolution of this comment to another ad hoc.

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Proposal (1) Y: 21 N: 0 A: 17 (Resolution adopted)
Proposal (2) Y: 15 N: 19 A: 14 (failed)
Proposal (3) Y: 24 N: 9 A: 11 (failed)
Resolution adopted.
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. Comment resolution on Comment #1226

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WG Proposed resolution:
(Refer to CRD for the resolution and vote result).
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. Comment resolution on Comment #289

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WG Proposed resolution:
Resolution adopted without objection.
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. Comment resolution on Comment #298

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WG Proposed resolution:
Adopt the resolution to #308.
Resolution adopted without objection.
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. Comment resolution on Comment #295

WG Proposed resolution:

The TTL field in the payload of control frames be removed. If needed for specific control frames, it can be defined for them.

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Y: 11 N: 9 A: 20 (failed)
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. Comment resolution on Comment #665

WG Proposed resolution:

(Refer to CRD for the text for Resolution proposal one.)

(2) Accept as is. The remediy as specified was the recommendation accepted by 802.1.

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Proposal (1) Y: 4 N: 21 A: 15 (failed)
Proposal (2) Y: 30 N: 1 A: 12 (Adopted)
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Motion 2002-5-09-03 (Time 4:30pm)

Move to adopt all resolutions to comments on Section 2 (MAC), as resolved by comment resolution ad hoc, including requests for contributions and requests to form ad hoc groups as necessary. (Technical)

M: Steve Wood
S: David James

Yes: 999 No: 0 Abstain: 0

Passed without objection.
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Motion 2002-5-09-04 (Time 4:32pm)

Move to grant editors license to resolve and implement all unresolved editorial comments on Section 2 (MAC) (Technical)

M: Bob Love
S: Steve Wood

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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Motion 2002-05-09-05 (Time 4:38pm)

The contents of "clause06_MAC_datapath_rah_5.6.pdf" be adopted as the basis for the Clause 6 "MAC Datapath" in Task Force Working Document v1.0 of P802.17. (Technical)

M: John Lemon S: Raj Sharma

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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Motion 2002-05-09-06 (Time 4:40pm)

The contents of "clause10_topology_tah.pdf" be adopted as the basis for the Clause 10, "Topology" in Task Force Working Document v1.0 of P802.17. (Technical)

M: John Lemon
S: Italo Busi

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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4:40pm: Annex F (Section 7) Comment Resolution Summary, Bob Castellano

- WG resolution of the unresolved comments follows:
- . Comment resolution on Comment #176
 Deferred to BAH (without objection)
- . Comment resolution on Comment #177 Deferred to BAH (without objection)
- . Comment resolution on Comment #655 Deferred to BAH (without objection)

Passed without objection.

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Motion 2002-5-09-07 (Time 4:50pm)

Move to adopt all resolutions to comments on Section 7 (Bridging) as resolved by comment resolution ad hoc, including requests for contributions and requests to form ad hoc groups as necessary.

(Technical)

M: Marc Holness
S: Bob Castellano

Yes: 999 No: 0 Abstain: 0
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Motion 2002-5-09-08 (Time 4:52pm)

Move to grant editors license to resolve and implement all unresolved editorial comments on Section 7 (Bridging). (Technical)

M: Bob Love
S: Khaled Amer

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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4:55pm: Section 3 (PHY) Comment Resolution Summary, Harry Peng

 WG resolution of the unresolved comments follows: None.

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Motion 2002-5-09-09 (Time 4:58pm)

Move to adopt all resolutions to comments on Section 3 (PHY) as resolved by comment resolution ad hoc, including requests for contributions and requests to form ad hoc groups as necessary. (Technical)

M: Harry Peng
S: Rhett Brikovskis

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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Motion 2002-5-09-10 (Time 5:00pm)
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Move to grant editors license to resolve and implement all unresolved editorial comments on Section 3 (PHY). (Technical)

M: Rhett Brikovskis
S: Peter Jones

Yes: 999 No: 0 Abstain: 0

Passed without objection.

5:01pm: Section 5 (Topology/Protection) Comment Resolution Summary, Jason Fan and Jim Kao

 WG resolution of the unresolved comments follows: None.

Motion 2002-5-09-11 (Time 5:13pm)

Move to adopt all resolutions to comments on Section 5 (Topology and Protection) as resolved by comment resolution ad hoc, including requests for contributions and requests to form ad hoc groups as necessary. (Technical)

M: Jason Fan
S: Jim Kao

Yes: 999 No: 0 Abstain: 0

Passed without objection.

Motion 2002-5-09-12 (Time 5:15pm)

Move to grant editors license to resolve and implement all unresolved editorial comments on Section 5 (Topology and Protection). (Technical)

M: Jim Kao
S: Jason Fan

Yes: 999 No: 0 Abstain: 0

Passed without objection.

5:17pm: Section 1 (Overview) Comment Resolution Summary, Bob Sultan

• WG resolution of the unresolved comments follows: None.

Motion 2002-5-09-13 (Time 5:25pm)

Move to adopt all resolutions to comments on Section 1 (Overview) as resolved by comment resolution ad hoc, including requests for

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contributions and requests to form ad hoc groups as necessary.

(Technical)

M: Bob Sultan
S: Bob Love

Yes: 999 No: 0 Abstain: 0

Passed without objection.
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Motion 2002-5-09-14 (Time 5:27pm)

Move to grant editors license to resolve and implement all unresolved editorial comments on Section 1 (Overview). (Technical)

M: Bob Sultan
S: Khaled Amer

Yes: 999 No: 0 Abstain: 0

Passed without objection.
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5:27pm: OAM Section Comment Resolution Summary, Rhett Briskovskis

- WG resolution of the unresolved comments follows: None.
- C: Removal of P from "OAM&P" needs further investigation and clarification in collaboration with 802.3ah (EFM) group.
 - Chair will take an action on this.
- . Comment resolution on Comment #319

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WG Proposed resolution:
(Refer to CRD for the text of proposed resolutions one and two).

Proposal (1) Y: 8 N: 0 A: 31 (Adopted)
Proposal (2) Y: 2 N: 7 A: 30 (Failed)
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• Glenn Parsons volunteered to be a liaison to IETF for 802.17 MIB, and WG approved it without objections.

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Motion 2002-5-09-15 (Time 5:55pm)

Move to adopt all resolutions to comments on Section 6 (OAM & MIB)
Section as resolved by comment resolution ad hoc, including requests for contributions and requests to form ad hoc groups as necessary.

(Technical)

M: Peter Jones
S: Rhett Briskovskis

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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Motion 2002-5-09-16 (Time 5:58pm)

Move to grant the editors license to resolve and implement all unresolved editorial comments on Section 6 (OAM & MIB). (Technical)

M: Peter Jones
S: Bob Love

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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Motion 2002-5-09-17 (Time 6:00pm)

Move to adopt all resolutions to comments on Section 0 (Global Comments) Section as resolved by comment resolution ad hoc, including requests for contributions and requests to form ad hoc groups as necessary. (Technical)

M: Bob Love
S:

Yes: 999 No: 0 Abstain: 0
Passed without objection.
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Motion 2002-5-09-18 (Time 5:58pm)

Move to grant the editors license to resolve and implement all unresolved editorial comments on Section 0.

(Technical)

M: Bob Love
S: Tom Alexander

Y: 999
N: 0
Abstain: 0
Passed without objection.
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Motion 2002-5-09-19 (Time 6:02pm)

Move that the C Code and CRC Calculation Annex editor be given editorial license to resolve the comments against the C-code and CRC calculation informative annexes and to update them to conform with the changes adopted for the other clauses.

(Technical)

M: Bob Love
S: Tom Alexander

Y: 999
N: 0
Abstain: 0
Passed without objection.
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Motion 2002-5-09-20 (Time 6:03pm)

Move to authorize Chief Editor and Editors to create P802.17/D1.0 based on D0.2 and the instructions contained within those comment resolutions that have been formally approved by the TF at the May 2002 meeting. (Procedural)

M: John Lemon S: Lauren Schlicht

See the following Amendment.

Amendment to Motion 2002-5-09-20 (Time 6:10pm)

Move to authorize Chief Editor and Editors to create P802.17/D0.3 based on D0.2 and the instructions contained within those comment resolutions that have been formally approved by the TF at the May 2002 meeting . (Procedural)

M: Geoff Thomson
S: Bob Love

Yes: 19 No: 18 Abstain: 8

Amended.

Amended Motion 2002-5-09-20 (Time 6:10pm)

Move to authorize Chief Editor and Editors to create P802.17/D0.3 based on D0.2 and the instructions contained within those comment resolutions that have been formally approved by the TF at the May 2002 meeting . (Procedural)

M: John Lemon S: Lauren Schlicht

Yes: 999 No: 0 Abstain: 0 Passed without objections.

Motion 2002-5-09-21 (Time 6:18pm)

Move to extend the RAH to work on issues in the current draft and propose text, state machines and tables, as appropriate for fairness issues based on the existing draft (Procedural)

M: Khaled Amer
S: Bob Love

Yes: 999 No: 0 Abstain: 0

Passed without objection.

Motion 2002-5-09-22 (Time 6:30pm)

Move to change the name of Clause 3 from "Terms and Definitions" to "Terms, Definitions and Notation." (Procedural)

M: Bob Sultan S: Bob Love

Yes: 999 No: 0 Abstain: 0

Passed without objection.

6:30pm: End of May 2002 Interim Meeting.

Appendix: Attendance List (Total: 72)

#	(A	ttendees)
1	Thomas	Alexander
2	Khaled	Amer
3	Constantinos Bassias	
4	Med	Belhadj
5	Prasenjit	Biswas
6	Rhett	Brikovskis
7	Leon	Bruckman
8	Collier	Buffingtion
9	Italo	Busi
10	Robert	Castellano
11	Babu	Chilukuri
12	John	Coulter
13	William	Dai
14	Steve	Dool
15	Hesham	Elbakoury
16	Joshua	Etkin
17	Jason	Fan
18	Anoop	Ghanwani
19	Richard	Harvey
20	John	Hawkins
21	Carl	Hayssen
22	Asif	Hazarika
23	Shawn	Holiday
24	Marc	Holness
25	Chang	Huang
26	Wai-Chau	Hui
27	David	James

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#	(A	ttendees)
28	Pankaj	Jha
29	Bruce B	Johnson
30	Peter	Jones
31	Jim	Kao
32	Michael	Kelsen
33	Ed	Knightly
34	Byoung-Joor	n(BJ) Lee
35	Chuck	Lee
36	John	Lemon
37	Jeremy	Lin
38	Robert D.	Love
39	Dave	Meyer
40	Li	Мо
41	Jim	Mollenauer
42	Gal	Mor
43	Fredrick	Olsson
44	Fredrik	Orava
45	Glenn	Parsons
46	Chip	Paryzek
47	Diane	Patton
48	Harry	Peng
49	Komal	Rathi
50	Mike	Reynolds
51	Gady	Rosenfeld
52	Luis	Rovira
53	Nirmal	Saxena
54	Lauren	Schlicht
55	Jon	Schuringa
56	Raj	Sharma
57	Bob	Sultan
58	Michael	Takefman
59	Geoffrey	Thompson
60	Ali	Tohidi
61	Necdet	Uzun
62	Harmen R.	Van As
63	Kanaiya	Vasani
64	Nader	Vijeh
65	Steven	Wood
66	Donghui	Xie

#		(Attendees)
67	Yiming	Yao
68	Mete	Yilmaz
69	Pinar	Yilmaz
70	David	Zelig
71	Hui	Zhang
72	Daniel	Zhu

----- End of Attendance List -----