

Key: ME - Motion, External, MI - Motion, Internal, DT- Discussion Topic, II - Information Item

Special Orders					
Category (* = consent agenda)					
1.00		MEETING CALLED TO ORDER	Nikolich	1	01:00 PM
2.00	MI	APPROVE OR MODIFY AGENDA	Nikolich	9	01:01 PM
3.00	ME	Endorse David Law as RAC chair nominee	Nikolich	4	01:10 PM
3.01	MI	Confirm Clint Chaplin and Geoff Thompson as RAC representatives	Nikolich	0	01:14 PM
3.02					01:14 PM
4.00					01:14 PM
4.01					01:14 PM
					01:14 PM
5.00		IEEE Standards Board and Sponsor Ballot Items			01:14 PM
5.01	ME	802.1aj forward to RevCom	Jeffree	5	01:14 PM
5.02	ME	802.1Qav forward to RevCom	Jeffree	5	01:19 PM
5.03	ME	802.1AR forward to RevCom	Jeffree	5	01:24 PM
5.04	ME	802.1X revision forward to RevCom	Jeffree	5	01:29 PM
5.05	ME	802.1Qbg PAR for edge virtual bridging to NesCom	Jeffree	5	01:34 PM
5.06	ME	802.1Qbh PAR for bridge port extension to NesCom	Jeffree	5	01:39 PM
5.07	ME	802.1Qaz PAR modification for enhanced transmission selection for bandwidth sharing between traffic classes to NesCom	Jeffree	5	01:44 PM
5.08	MI	802.1Qat forward to Sponsor ballot (conditional)	Jeffree	5	01:49 PM
5.09	MI	802.1ag 2 interpretation responses	Jeffree	5	01:54 PM
5.10	ME	802.3bf PAR for MAC service interface and management parameters to support time synchronization protocols to NesCom	Law	5	01:59 PM
5.11	MI	802.3ba 40Gb/s and 100Gb/s Ethernet to Sponsor ballot (unconditional)	Law	5	02:04 PM
5.12	ME	802.3-2008/Cor 1 (IEEE 802.3bb) Timing Considerations for PAUSE Operation to RevCom (unconditional).	Law	0	02:09 PM
5.13	ME	8023 interpretation	Law	0	02:09 PM
5.14	ME	802.19.1 PAR for TV white space coexistence to NesCom	Shellhammer	15	02:09 PM
5.15	ME	802.22.3 PAR for scalable WRAN operation to NesCom	Hu	15	02:24 PM
5.16	ME	802.22 PAR modification to clarifying scope to NesCom	Hu	15	02:39 PM
5.17	ME	802.11af PAR for TV white spaces operation to NesCom	Kraemer	10	02:54 PM
5.18	ME	802.11ae PAR for prioritization of management frames to NesCom	Kraemer	5	03:04 PM
5.19	ME	802.15.4 Corrigendum to NesCom	Heile	0	03:09 PM
5.20	ME	802.15.1 Reaffirmation to Sponsor ballot	Heile	0	03:09 PM
5.21	ME	802.16h PAR extension to NesCom	Marks	5	03:09 PM
5.22	ME	802.17c to RevCom (conditional)	Lemon	5	03:14 PM
5.23	ME	802.17 PAR for revision to 802.17-2004 to NesCom	Lemon	5	03:19 PM
5.24	MI	802.20a forward to Sponsor Ballot	Klerer	5	03:24 PM
5.25	ME	802.20.3 forward to RevCom (conditional)	Klerer	5	03:29 PM
5.26	ME	802.20.2 forward to RevCom (conditional)	Klerer	5	03:34 PM
5.27	ME	802.21 PAR for single radio handover to NesCom	Gupta	5	03:39 PM
5.28					03:44 PM
6.00		Executive Committee Study Groups, Working Groups, TAGs			03:44 PM
6.01	MI	802.3 40Gb/s Ethernet Single-mode Fibre PMD (new SG)	Law	5	03:44 PM
6.02	MI	802.3 support for 802.1AS time synchronization protocol (2nd Extension)	Law	3	03:49 PM
6.03	MI	802.19 TVWS coexistence (2 nd extension)	Shellhammer	3	03:52 PM

6.04	MI	ES ECSG 1 st extension	Thompson	0	03:55 PM
6.05	II	ES ECSG status update	Thompson	5	03:55 PM
6.06	MI	802.16 GRIDMAN (new SG)	Marks	5	04:00 PM
6.07	MI	802.21 management of wireless heterogeneous networks (new SG)	Gupta	2	04:05 PM
6.08	MI	802.11 TV11 (1 st extension)	Kraemer	0	04:07 PM
6.09	MI	802.11 QoS MAN (1 st extension)	Kraemer	0	04:07 PM
6.10					04:07 PM
7.00		Break		10	04:07 PM
8.00		LMSC Internal Business			04:17 PM
8.01	II	Treasurer's report	Hawkins	5	04:17 PM
8.02	MI	P&P update	Sherman	20	04:22 PM
8.03	MI	Followup on July EC Workshop action items	Nikolich	5	04:42 PM
8.04	II	802 Task force report	Nikolich	15	04:47 PM
8.05	MI	Changes to registration and hotel deadlines	Rigsbee	10	05:02 PM
8.06	MI	30 th anniversary expenditure approval	Rigsbee	5	05:12 PM
8.07	MI	Attendance tool support	Gilb	5	05:17 PM
8.08					05:22 PM
9.00		LMSC Liaisons and External Interface			05:22 PM
9.01	ME	Telecommunications Technology Association MoU	Law	10	05:22 PM
9.02	ME	Letter to JTC1/SC6 regarding recent amendments and 802.11mb	Kraemer	5	05:32 PM
9.03	ME	Letter to SC6 in relation to the N14123 submission by China regarding their WAPI submission	Kraemer/ Nikolich	0	05:37 PM
9.04	ME	Authorize the RR-TAG to approve on behalf of the EC 802.16 IMT contributions to ITU-R WP5D, Doc. 18-09-0125	Lynch	5	05:37 PM
9.05	ME	Comments on EN 300 220, Doc. 18-09-0124	Lynch	0	05:42 PM
9.06	ME	Contribution to ITU-R M.1457 rev. 10 (IMT), Doc. 18-09-0120	Lynch	0	05:42 PM
9.07					05:42 PM
9.08					05:42 PM
9.09	II	802.1 liaison letter to MEF	Jeffree	3	05:42 PM
9.10	II	Joint 802.1 and 802.3 liaison letter to ITU-T SG15	Jeffree	3	05:45 PM
9.11	ME	802.16 GRIDMAN SG press release	Marks	5	05:48 PM
9.12	II	802.16 statement to Japan for review	Marks	5	05:53 PM
9.13					05:58 PM
9.14					05:58 PM
10.00		IEEE SA items			05:58 PM
10.01					05:58 PM
10.02					05:58 PM
11.00					05:58 PM
11.01	II				05:58 PM
11.02	II	Information Items			05:58 PM
11.03	II				05:58 PM
11.04	II	Network Services report	Alfvin	2	05:58 PM
11.05	II				06:00 PM
11.06	II				06:00 PM
11.07	II				06:00 PM
11.08	II				06:00 PM
11.09					06:00 PM
12.00		ADJOURN SEC MEETING	Nikolich		06:00 PM

3.00 ME Endorse David Law as RAC chair nominee Nikolich 4 01:08 PM

Motion is "The 802 Executive Committee endorses David Law as RAC chair nominee"

Moved by Jeffree, seconded by Lemon

Vote is 14/0/1, Motion passes

3.01 MI Confirm Clint Chaplin and Geoff Thompson as RAC representatives Nikolich 0

Approved as part of the consent agenda

5.00 IEEE Standards Board and Sponsor Ballot Items

5.01 ME 802.1aj forward to RevCom Jeffree 5 01:10 PM

Jeffree presented 2009-11-802-1-exec-motions.pdf, pages 1-3

Motion is "802.1 requests approval of the EC to forward P802.1aj to RevCom."

Moved by Jeffree, seconded by Law

Vote is 14/0/0, motion passes

802.1 Motions and supporting materials for EC - 11/2009

MOTION

- 802.1 requests approval of the EC to forward P802.1aj to RevCom.
- Proposed: Haddock Second: Messenger
- For: 32 Against: 0 Abstain: 0
- EC proposed: Jeffree Second:
-

P802.1aj supporting material

- The Sponsor ballot on Draft 4.0 closed on 19th August 2009. There were two Disapproval ballots, and a number of comments were submitted. The 802.1 Working Group considered the comments and generated a disposition of comments and instructions to the Editor to change the draft; Draft D4.2 was generated as a result, and was issued for a Recirculation ballot, the recirculation closing on 14th October 2009. The recirculation ballot closed with 100% approval, and no further comments were received. The draft submitted for approval is D4.2.

Jeffree presented 2009-11-802-1-exec-motions.pdf, pages 4-6

Jeffree presented 802-1qav-d7-0-dis.pdf

Thompson requested that the balloting instructions should include a statement of which page numbers to use when submitting comments.

Motion is "802.1 requests approval of the EC to forward P802.1Qav to RevCom."

Moved by Jeffree, seconded by Thaler

Vote is 14/0/0, motion passes

MOTION

- 802.1 requests approval of the EC to forward P802.1Qav to RevCom.
- Proposed: Fuller Second: Garner
- For: 22 Against: 0 Abstain: 2
- EC proposed: Jeffree Second:

P802.1Qav supporting material (1)

- P802.1Qav has now undergone a full Sponsor Ballot and a subsequent recirculation ballot. The Sponsor ballot on Draft 6.0 closed on 19th August 2009. There were nine Disapproval ballots, and a number of comments were submitted. The 802.1 Working Group considered the comments and generated a disposition of comments and instructions to the Editor to change the draft; Draft D7.0 was generated as a result, and was issued for a Recirculation ballot, the recirculation closing on 20th October 2009. The recirculation ballot closed with 96% approval, one outstanding disapprove vote, and eleven additional comments from the remaining disapprove voter (Geoff Thompson). His comments were addressed by the ballot resolution committee as follows:
- Comment #1 was considered to be a re-statement of the commenter's comment #67 on the D6.0 ballot; as such there is no requirement for this comment to be recirculated.
- Comments #2, #4, #5, #6, #7, and #8 are statements that previous comments on D6.0 have been addressed satisfactorily and do not propose any changes to the draft; therefore there is no requirement for these comments to be recirculated.
- Comment #3 was considered to be out of scope of the recirculation ballot, as it addresses procedural issues rather than the draft itself. Therefore, in accordance with the IEEE-SA SB OpMan 5.4.3.2, this comment need not be addressed in the current ballot, and will not be recirculated.
- Comment #9 was considered to be out of scope of the recirculation, as it was a comment on text that was unchanged from the D6.0 ballot and was not the subject of any comments in that ballot. However, as proposed in the suggested remedy, and in accordance with the IEEE-SA SB OpMan 5.4.3.2, this comment will be referred to the publications editor, and the comment will not be recirculated.
- Comment #10 was considered to be out of scope of the recirculation, as it was a comment on text that was unchanged from the D6.0 ballot and was not the subject of any comments in that ballot. However, as the comment was considered to be entirely editorial in nature, and in accordance with the IEEE-SA SB OpMan 5.4.3.2, this comment will be referred to the publications editor, and the comment will not be recirculated.
- Comment #11 was considered to be out of scope of the recirculation ballot, as it addresses issues the commenter has with the way the myBallot system operates. . Therefore, in accordance with the IEEE-SA SB OpMan 5.4.3.2, this comment need not be addressed in the current ballot, and will not be recirculated.
- Given the above, and as no changes to the draft are being made as a result of these comments, the ballot resolution committee decided not to run a further recirculation ballot. Draft 7.0 is therefore the draft being submitted for approval.

P802.1Qav supporting material (2)

- Comments and rebuttals:

http://www.ieee802.org/1/files/public/Exec_files/802-1qav-d7-0-dis.pdf

P802-1Qav-D7-0 Forwarding and queueing comments

Cl 00 SC 0 P 0 L # 1
 Thompson, Geoffrey Individual

Comment Type ER Comment Status R

Although there is nothing in the instructions as to which page numbering system to use, I will use the page number as shown on the PDF reader rather than the number printed on the page. I chose this because myBallot will not accept the non numerical pagination used on the printed draft.

SuggestedRemedy

Add specific ballot instructions as to which page numbering system to use during balloting - OR- (preferred) use a single page numbering system that is compatible with myBallot commenting. (thus my vote on D6.0 #54 stands)

Response Response Status U

REJECT. This is simply a re-statement of a previous comment by the commenter. As stated in the ballot resolution committee's response to the commenter's comment #67 on the D6.0 ballot, this approach (of numbering the pages as they will appear in the final printed standard, with Roman numerals used for the front matter) has been taken by the editor in response to ballot comments on other projects that complained that the page numbering changed radically between final draft and published text.

The comment #54 that the commenter refers to was submitted by another commenter (Tony Jeffree) and subsequently was withdrawn. So the commenter cannot maintain his Disapprove vote on the basis of D6.0 #54.

There is nothing at all to prevent the commenter from explicitly stating in his comments what page number he is referring to in the case of the early pages of the draft that use Roman numerals for page numbers. This is, for example, the way commenters make references to multiple pages or line number ranges, as myBallot currently does not permit any other solution. If the commenter dislikes the constraints imposed by the myBallot system then he is at liberty to make representations to the staff that maintain it; however, such representations are outside the scope of a Sponsor ballot.

Cl 00 SC 0 P 1 L 25 # 2
 Thompson, Geoffrey Individual

Comment Type G Comment Status A

Review to response to my ballot comment #63. Thank you for the change. The new text now makes it fully apparent that, in order to appropriately comment on this draft, I must have not only the base standard 802.1Q-2005 but also at least 8 amendments as reference documents in order to have the full text.

SuggestedRemedy

See next comment

Response Response Status C

ACCEPT. This comment does not specify any change to the document.

Cl 00 SC 0 P 1 L 25 # 3
 Thompson, Geoffrey Individual

Comment Type GR Comment Status R

A base standard and 8 amendments is too many to reasonably compare against for an outside balloter. Also, it appears that this project violates the requirements of the SA-OM cl. 9.2 & 8.1.2 (there being no documentation provided to the contrary).

SuggestedRemedy

Modify the PAR to be a revision PAR to 802.1Q and fold the text of this and all previously approved amendments into the revision.

Response Response Status U

REJECT. The comment is out of scope of this recirculation ballot, as it is a comment on procedural issues rather than on the draft itself. It is also based on a false premise, and the suggested remedy is inappropriate.

The Standards Board meeting in December 2007 passed the following motion:

Mover - Malcolm Thaden for RevCom

Motion - Whereas 802.1Q-2005 revision is currently required to be completed by Dec. 2008; and whereas significant work remains; and whereas Ops Man 8.1.2 allows for a two-year extension, RevCom recommends that the SASB approve a two-year extension for the completion of a revision of 802.1Q (until December 2010).

Result - Unanimously approved

The commenter was a participant in that Standards Board meeting, and therefore can be assumed (a) to have approved this motion, and (b) to be fully aware of the consequences of the motion.

Given the above motion, the premise that the project is in violation of the SA operating rules is false, as those rules explicitly allow for the granting of a 2-year extension, and the rules do not require that supporting documentation be provided as part of the Sponsor ballot package.

The suggested remedy is not a course of action that can be taken under current procedures; myProject does not provide the option to modify an amendment PAR to change it into a revision PAR. There is, in any case, already an active revision PAR approved for Std. 802.1Q.

P802-1Qav-D7-0 Forwarding and queueing comments

CI 00 SC 0 P L # 4
 Thompson, Geoffrey Individual
 Comment Type G Comment Status A
 Re: Thompson D6.0 Comment #62: the response to that comment that shows up in D7.0 is satisfactory
 SuggestedRemedy
 No further change required for that comment
 Response Response Status C
 ACCEPT. No action required.

CI 00 SC 0 P L # 7
 Thompson, Geoffrey Individual
 Comment Type G Comment Status A
 Re: Thompson D6.0 Comment #64: the response to that comment that shows up in D7.0 is satisfactory
 SuggestedRemedy
 No further change required for that comment
 Response Response Status C
 ACCEPT. No action required.

CI 00 SC 0 P L # 5
 Thompson, Geoffrey Individual
 Comment Type G Comment Status A
 Re: Thompson D6.0 Comment #66: the response to that comment that shows up in D7.0 is satisfactory
 SuggestedRemedy
 No further change required for that comment
 Response Response Status C
 ACCEPT. No action required.

CI 00 SC 0 P L # 8
 Thompson, Geoffrey Individual
 Comment Type G Comment Status A
 Re: Thompson D6.0 Comment #65: the response to that comment that shows up in D7.0 is satisfactory
 SuggestedRemedy
 No further change required for that comment
 Response Response Status C
 ACCEPT. No action required.

CI 00 SC 0 P L # 6
 Thompson, Geoffrey Individual
 Comment Type G Comment Status A
 Re: Thompson D6.0 Comment #67: the response to that comment that shows up in D7.0 is satisfactory
 SuggestedRemedy
 No further change required for that comment
 Response Response Status C
 ACCEPT. No action required.

CI 00 SC 0 P 34 L 34 # 9
 Thompson, Geoffrey Individual
 Comment Type E Comment Status R
 I believe that the copyright notice does not meet the US legal requirements for a copyright notice in that it does not state the year in which the affirmative copyright notice is being asserted.
 SuggestedRemedy
 Refer to publications editor to check. Add year to notice.
 Response Response Status C
 REJECT. This comment is out of scope of this recirculation ballot - the referenced text has not changed from the previous draft, and was not the subject of a comment in the previous Sponsor ballot on draft 6.0.
 This comment addresses issues of grammar, punctuation, and style, and will be referred to the publications editor for consideration during preparation for publication. Section 5.4.3.2 of the IEE-SA Standards Board Operations Manual states:
 "Comments addressing grammar, punctuation, and style, whether attached to an affirmative or a negative vote, may be referred to the publications editor for consideration during preparation for publication. It should be borne in mind that documents are professionally edited prior to publication."

P802-1Qav-D7-0 Forwarding and queueing comments

Cl 00 SC 0 P 34 L 36 # 10
Thompson, Geoffrey Individual

Comment Type E Comment Status R

802.1Q text is not a "draft"

SuggestedRemedy

Change to read: "see the base standard itself for full legal notices."

Response Response Status C

REJECT. This comment is out of scope of this recirculation ballot - the referenced text has not changed from the previous draft, and was not the subject of a comment in the previous Sponsor ballot on draft 6.0.

This comment addresses issues of grammar, punctuation, and style, and will be referred to the publications editor for consideration during preparation for publication. Section 5.4.3.2 of the IEE-SA Standards Board Operations Manual states:

"Comments addressing grammar, punctuation, and style, whether attached to an affirmative or a negative vote, may be referred to the publications editor for consideration during preparation for publication. It should be borne in mind that documents are professionally edited prior to publication."

Cl 00 SC 0 P L # 11
Thompson, Geoffrey Individual

Comment Type GR Comment Status R

Regarding my comment #52, the negative remains. I recognize that the 802.1 WG can not do anything about the deficiencies of myBallot but if I remove my negative then my comment will never reach RevCom or staff.

SuggestedRemedy

Ask staff to raise the priority on making the myBallot error messages on comment upload be more relevant to the actual errors.

Response Response Status U

REJECT. This comment is out of scope of this recirculation ballot; it is a comment on the myBallot system, not on the draft being balloted.

The commenter is perfectly at liberty to take the action detailed in the Suggested Remedy for himself.

Jeffree presented 2009-11-802-1-exec-motions.pdf, pages 7-8

Motion is "802.1 requests approval of the EC to forward P802.1AR to RevCom."

Moved by Jeffree, seconded by Law

Vote is 14/0/0, motion passes

MOTION

- 802.1 requests approval of the EC to forward P802.1AR to RevCom.
- Proposed: Seaman Second:
- For: 23 Against: 0 Abstain: 4
- EC proposed: Jeffree Second:

P802.1AR – supporting material:

- P802.1AR has now undergone a full Sponsor Ballot and a subsequent recirculation ballot.
- The Sponsor ballot on Draft D2.1 closed on 19th August 2009. There were three Disapproval ballots, and a number of comments were submitted. The 802.1 Working Group considered the comments and generated a disposition of comments and instructions to the Editor to change the draft; Draft D2.3 was generated as a result, and was issued for a Recirculation ballot, the recirculation closing on 20th October 2009. The recirculation ballot closed with 100% approval, and three comments from the Editorial staff, one of which was a duplicate comment, so there were effectively only 2 comments to address. In both cases, the comments referred to the use of “shall” in the text of informative NOTES; as can be seen from the dispositions of these comments as posted in the myBallot database, the text of these NOTES was intended to draw attention to identical normative text elsewhere in the document, and not to create additional normative requirements. The ballot resolution committee considers that, in both cases, replacement of “shall” with “is” could be made without having any effect on the technical content of the document. We have therefore proposed that these comments, and their proposed resolutions, should be passed to the Staff Editor assigned to the project for consideration rather than holding up the submission process for a further recirculation. I have discussed this course of action with Michelle Turner, and from her response I believe that this will be acceptable to the Editorial staff.

- Comments and dispositions are here:

http://www.ieee802.org/1/files/public/Exec_files/802-1ar-d2-3-recirc1-dis-v3.pdf

Jeffree presented 2009-11-802-1-exec-motions.pdf, pages 9-10

Motion is "802.1 requests approval of the EC to forward P802.1X-REV to RevCom."

Moved by Jeffree, seconded by Rigsbee

Vote is 14/0/0, motion passes

Nikolich takes item 5.08 out of order

MOTION

- 802.1 requests approval of the EC to forward P802.1X-REV to RevCom.
- Proposed: Seaman Second: congdon
- For: 24 Against: 0 Abstain: 2
- EC proposed: Jeffree Second:

P802.1X-Rev – Supporting material:

- P802.1X Revision has now undergone a full Sponsor Ballot and a subsequent recirculation ballot.
- The Sponsor ballot on Draft 4.0 closed on 23rd August 2009. There were eight Disapproval ballots, and a number of comments were submitted. The 802.1 Working Group considered the comments and generated a disposition of comments and instructions to the Editor to change the draft; Draft D4.5 was generated as a result, and was issued for a Recirculation ballot, the recirculation closing on 20th October 2009. The recirculation ballot closed with 96% approval, three outstanding disapprove votes, and six additional comments from two of the disapprove voters. The ballot resolution committee considered these six comments to be editorial in nature, and in the case of two of the comments that referred to supposed ambiguity in the text, the BRC referred the comments to a member of the editorial staff who confirmed the BRC view that there was no ambiguity. The BRC has therefore referred all six comments to the editorial staff for their consideration during final editing of the document before publication rather than running a further recirculation ballot.
- The comments and rebuttals are here:
http://www.ieee802.org/1/files/public/Exec_files/802-1X-rev-d4-5-recirc1-dis.pdf

Jeffree presented 2009-11-802-1-exec-motions.pdf, pages 11-12

Motion is "802.1 requests conditional approval of the EC to forward P802.1Qat to Sponsor ballot"

Moved by Jeffree, seconded by Law

Vote is 14/0/0, motion passes

MOTION

- 802.1 requests conditional approval of the EC to forward P802.1Qat to Sponsor ballot.
- Proposed: Fuller Second: Garner
- For: 21 Against: 0 Abstain: 9
- EC proposed: Jeffree Second:

P802.1Qat supporting material:

- WG Recirculation ballot closed
- Approve 13 (81.25%)
- Disapprove 3 (18.75%)
- Abstain 38 (70.37%)
- No. of Voters 99
- Voters responding 54 (54.55%)
- One “No” voter has indicated that his vote is now Approve, so 2 outstanding “No” votes and 87.5% approval
- Pat Thaler has one outstanding comment (#31) and Glenn Parsons 2 outstanding comments (#33, #34) – comments are here:

http://www.ieee802.org/1/files/public/Exec_files/802-1qat-d4-1-dis.pdf

Jeffree presented 2009-11-802-1-exec-motions.pdf, page 13

Motion is "802.1 requests EC approval to forward the draft PAR for 802.1Qbg Edge Virtual Bridging to NesCom. The PAR text and 5C text are: <http://www.ieee802.org/1/files/public/docs2009/new-bg-thaler-par-1109.pdf> and <http://www.ieee802.org/1/files/public/docs2009/new-bg-thaler-5c-1109.pdf>"

Moved by Jeffree, seconded by Thaler

Vote is 14/0/0, motion passes

MOTION

- 802.1 requests EC approval to forward the draft PAR for 802.1Qbg Edge Virtual Bridging to NesCom. The PAR text and 5C text are:

<http://www.ieee802.org/1/files/public/docs2009/new-bg-thaler-par-1109.pdf>

<http://www.ieee802.org/1/files/public/docs2009/new-bg-thaler-5c-1109.pdf>

- Proposed: thaler
- Second: gray
 - For:26
 - Against:0
 - Abstain: 3

Jeffree presented 2009-11-802-1-exec-motions.pdf, page 14

Motion is "802.1 requests EC approval to forward the draft PAR for 802.1Qbh Bridge Port Extension to NesCom. The PAR text and 5C text are: <http://www.ieee802.org/1/files/public/docs2009/new-bh-thaler-par-1109-v2.pdf> and <http://www.ieee802.org/1/files/public/docs2009/new-bh-thaler-5C-1109.pdf>."

Moved by Jeffree, seconded by Thaler

Vote is 14/0/0, motion passes

MOTION

- 802.1 requests EC approval to forward the draft PAR for 802.1Qbh Bridge Port Extension to NesCom. The PAR text and 5C text are:

<http://www.ieee802.org/1/files/public/docs2009/new-bh-thaler-par-1109-v2.pdf>

<http://www.ieee802.org/1/files/public/docs2009/new-bh-thaler-5C-1109.pdf>

- Proposed: thaler
- Second: congdon
 - For: 17
 - Against: 0
 - Abstain: 3

Jeffrey presented 2009-11-802-1-exec-motions.pdf, pages 15

Motion is "802.1 requests EC approval to forward the PAR modification for 802.1Qaz Enhanced Transmission Selection to NesCom <http://www.ieee802.org/1/files/public/docs2009/azthaler-draft-par-1109.pdf> (There were no changes to the 5C)"

Moved by Jeffrey, seconded by Thaler

Vote is 15/0/0, motion passes

MOTION

- 802.1 requests EC approval to forward the PAR modification for 802.1Qaz Enhanced Transmission Selection to NesCom

<http://www.ieee802.org/1/files/public/docs2009/az-thaler-draft-par-1109.pdf>

(There were no changes to the 5C)

- Proposed: thaler
- Second: gray
 - For:20
 - Against: 0
 - Abstain: 4

Jeffree presented 2009-11-802-1-exec-motions.pdf, pages 16-17

Motion is "EC approves the responses indicated on slides 16 and 17"

Nikolich indicated that this should be a motion external, not motion internal

Moved by Jeffree, seconded by Lemon

Vote is 15/0/0, motion passes

Motions

- 802.1 approves the response to the interpretation request on Loopback Response error reporting.

<http://www.ieee802.org/1/files/public/docs2009/ag-loopback-interp-1109.txt>

- Proposed: Haddock Second: Finn
- For: 20 Against: 0 Abstain: 8
-
- EC approves forwarding of this response
- Proposed: Jeffree Second:

We discussed the following interpretation request in the Interworking meeting, this morning, and came up with this resolution:

STANDARD: IEEE Std. 802.1ag-2007

SUBSECTION: 20.3.2 Linktrace Message reception, forwarding, and replying

APPLICABLE CONDITIONS:

If an Up MEP, as shown in Figure 20-13, case 8, transmits a Linktrace, the Linktrace Responder should see it, decrement the TTL field, respond (to the MEP) and forward the LTM out the appropriate port, as shown in that diagram. However, according to point f) of 20.3.2 on page 144, the LTM would not be forwarded; it must have been received by an MHF in order to be forwarded. The case of an LTM generated by an internal Up MEP seems to have not been taken into account when writing point f).

Clearly, an LTM generated by an Up MEP should be forwarded.

Point f) now reads:

f) The LTM was received by an MHF, not a MEP;

This should perhaps be changed to read:

f) The LTM was received via an MHF Linktrace SAP or a MEP LTI SAP, and not a MEP Linktrace SAP ;

RESOLUTION:

The document is in error; we agree that an LTM generated by an Up MEP should be forwarded. The error will be addressed in the next revision of IEEE Std 802.1Q.

Motions

- 802.1 approves the response to the interpretation request on Linktrace Message reception, forwarding and replying.

<http://www.ieee802.org/1/files/public/docs2009/ag-linktrace-interp-1109.txt>

- Proposed: Haddock Second: Finn
- For: 20 Against: 0 Abstain: 12
- EC approves forwarding of this response
- Proposed: Jeffree Second:

We discussed a second interpretation request in the Interworking meeting, this morning, and came up with another resolution:

STANDARD: IEEE Std. 802.1ag-2007

SUBSECTION: 20.31.1 ProcessLBR()

APPLICABLE CONDITIONS:

(Question from Henry Fowler, AT&T, edited for brevity.)

It seems that once any LBR with the incorrect LTID is received, then every LBR received after that will be considered to have an incorrect LTID, until LBIactive becomes false. This is because in action c)2), the received Loopback Transaction Identifier is copied to expectedLBRtransID, but expectedLBRtransID is not incremented after that.

It is possible that that was the intended behavior, that all subsequent LBRs are considered correct after one incorrect LBR is received.

However, it is also possible that it was intended for expectedLBRtransID to track the new LTID, so that the first LBR is considered incorrect but subsequent ones are considered correct.

Can you clarify what was intended in ProcessLBR()? Is it as written, or was there a typo in the standard? (e.g., was intended to say "2) The value from the received Loopback Transaction Identifier field is copied into expectedLBRtransID, then expectedLBRtransID and the number of incorrect LBRs received [item z) in 12.14.7.1.3] is incremented by 1.

RESOLUTION:

The intention of 802.1ag was that if LBRs 1 2 3 5 6 7 8 ... are received, only one error would be counted, for the 3-5 sequence. If LBRs 1 2 3 5 4 6 7 8 ... are received, then three errors would be counted, one for 3-5, one for 5-4, and one for 4-6. This is not the behavior of the standard as currently written; this will be addressed in a future revision of IEEE Std 802.1Q.

Law presented 802d3_1109_closing_EC.pdf, pages 2-12

Motion is "The LMSC Executive Committee approves the P802.3bf PAR and Five Criteria; and approves the PAR remaining on the December NesCom agenda."

Moved by Law, seconded by Jeffree

Vote is 14/0/0, motion passes

**IEEE P802.3bf
PAR for MAC service interface
and management parameters to
support time synchronization
protocols to NesCom**

IEEE P802.3bf PAR (Part 1)

P802.3bf

Submitter Email: david_law@ieee.org

Type of Project: Amendment to IEEE Standard 802.3-2008

PAR Request Date: 21-Sep-2009

PAR Approval Date:

PAR Expiration Date:

Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard 802.3-2008

1.1 Project Number: P802.3bf

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer SpecificationsAmendment: Media Access Control (MAC) service interface and management parameters to support time synchronization protocols

3.1 Working Group: Ethernet Working Group (C/LM/WG802.3)

Contact Information for Working Group Chair

Name: David Law

Email Address: david_law@ieee.org

Phone: +44 131 665 7264

Contact Information for Working Group Vice-Chair

Name: Wael Diab

Email Address: wael.diab@gmail.com

Phone: 4154468066

IEEE P802.3bf PAR (Part 2)

3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks (C/LM)

Contact Information for Sponsor Chair

Name: Paul Nikolich

Email Address: p.nikolich@ieee.org

Phone: 857.205.0050

Contact Information for Standards Representative

None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 01/2011

4.3 Projected Completion Date for Submittal to RevCom: 06/2011

5.1 Approximate number of people expected to be actively involved in the development of this project: 15

5.2 Scope: Amend IEEE Std 802.3-2008 to extend the Media Access Control service interface and add management parameters to provide support for the IEEE 802.1AS time synchronization protocol.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: Provide an accurate indication of the transmission and reception initiation times of certain packets as required to support IEEE P802.1AS.

5.5 Need for the Project: Ethernet can be applied in many new applications if a time synchronization capability is added. Potential new applications include: Audio-Video bridging; telecommunications; wireless backhaul; industrial control and SmartGrid. For example Audio-Video bridging is targeted at mass market consumer electronic products.

5.6 Stakeholders for the Standard: Stakeholders identified to date includes but are not limited to: users and producers of systems and components for Audio-Video bridging, telecommunications, wireless backhaul, industrial control and SmartGrid.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

IEEE P802.3bf PAR (Part 3)

7.1 Are there other standards or projects with a similar scope?: No

7.2 International Activities

a. Adoption

Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization?: No

b. Joint Development

Is it the intent to develop this document jointly with another organization?: No

c. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?: No

8.1 Additional Explanatory Notes (Item Number and Explanation):

Working Group vote: Y:48, N:0, A:8

The 5 Criteria

The DRAFT 5 Criteria and Objective were approved by the TSSG at the September 2009 802.3 Interim.

Updated 11/18/09

Updated 11/19/09 Approved by 802.3 WG

Compatibility slide:

Text in **red** was deleted; text in **blue** was added

Broad Market Potential

- **Broad set of applications**
- **Multiple vendors, multiple users**
- **Balanced cost, LAN vs. attached stations**
- Ethernet can be applied in many new applications if a time synchronization capability is added. Audio-Video Bridging is well understood, as it started in 802.3 as the Residential Ethernet SG. Other potential new applications include wireless backhaul, industrial control, and SmartGrid.
- This capability has been available from many vendors on a proprietary basis for some years. Having an interoperable standard will significantly expand the market.
- The introduction of time synchronization protocols will not change the cost balance.

Working Group vote: Y:54, N:0, A:2

Compatibility

- IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: IEEE 802. Overview and Architecture, IEEE 802.1D, IEEE 802.1Q, and parts of IEEE 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1.
 - Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.
 - Compatibility with IEEE Std 802.3
 - Conformance with the IEEE Std 802.3 MAC
 - Managed object definitions compatible with SNMP
- As an amendment to 802.3, the proposed project will remain in conformance with IEEE 802.1 Overview and Architecture as well as the bridging standards IEEE Std 802.1D and IEEE 802.1Q, and support of IEEE P802.1AS.
 - As an amendment to IEEE 802.3, the proposed project will follow the existing format and structure of IEEE 802.3 MIB definitions by providing a protocol-independent specification of managed objects.
 - Time synchronization capable **interface DTEs** will interoperate with legacy **interfaces DTEs**, though the time synchronization capability will not be active.
 - Support for the time synchronization will be limited to the full-duplex operation mode of the IEEE Std 802.3 MAC.
 - The project will include a protocol independent specification of managed objects with SNMP management capability to be provided in the future by an amendment to the yet-to-be-approved IEEE P802.3.1.

Distinct Identity

- Substantially different from other IEEE 802 standards
- One unique solution per problem (not two solutions to a problem)
- Easy for the document reader to select the relevant specification
- Ethernet currently has no time synchronization capability. This project does not overlap IEEE 802.1AS, but in fact complements it.
- We will pick a single solution.
- Time synchronization will be defined as an optional extension to existing interfaces and management clauses. There is no other definition of a time synchronization interface and management in 802.2

Technical Feasibility

- **Demonstrated system feasibility**
- **Proven technology, reasonable testing**
- **Confidence in reliability**
- This functionality has been successfully implemented and demonstrated by numerous parties for a number of years. The technology has been deployed with time synchronization capabilities.
- Laboratory work and existing implementations demonstrate the testability of time synchronization. See Garner, Geoffrey; Johas Teener, Michael; Gelter, Aaron; "New Simulation and Test Results for IEEE 802.1AS Timing Performance", 2009 International IEEE Symposium on Precision Clock Synchronization for Measurement, Control and Communication, October 12-16, 2009, University of Brescia, Brescia, Italy
- Nothing in the project is expected to decrease the reliability of Ethernet.

Economic Feasibility

- **Known cost factors, reliable data**
- **Reasonable cost for performance**
- **Consideration of installation costs**
- The cost, reliability and performance are well understood
- Time synchronization will require a small number of additional logic elements to provide the necessary information to the interface.
- This project will not affect the installation cost of Ethernet.

Working Group vote: Y:53, N:0, A:2

IEEE P802.3bf PAR and 5 criteria

Motion:

The LMSC Executive Committee approves the P802.3bf PAR and Five Criteria; and approves the PAR remaining on the December NesCom agenda.

M: D Law, S: Jeffree

Y: ??, N: ??, A: ??

Working Group votes

PAR:	Y:48	N:0	A:8
Broad Market Potential:	Y:54	N:0	A:2
Compatibility:	Y:49	N:1	A:2
Distinct Identity:	Y:52	N:0	A:3
Technical Feasibility:	Y:51	N:1	A:3
Economic Feasibility:	Y:53	N:0	A:2

5.11 MI 802.3ba 40Gb/s and 100Gb/s Ethernet to Sponsor ballot (unconditional)

Law

5

01:46 PM

Law presented 802d3_1109_closing_EC.pdf, pages 14-19

Law presented P8023ba-D20-D22-Unsatisfied_Comments_byID.pdf

Motion is "The LMSC Executive Committee grant approval to submit IEEE P802.3ba/D3.0 to Sponsor Ballot"

Moved by Law, seconded by Lemon

Vote is 14/0/0, motion passes

5.12 ME 802.3-2008/Cor 1 (IEEE 802.3bb) Timing Considerations for PAUSE Operation to RevCom (unconditional).

Law

0

Approved as part of the consent agenda

5.13 ME 8023 interpretation

Law

0

Approved as part of the consent agenda

IEEE P802.3ba 40Gb/s and 100Gb/s Ethernet to Sponsor ballot

IEEE 802.3ba 40Gb/s and 100Gb/s Ethernet Working Group balloting results

- 3rd Working Group recirculation ballot – draft D2.3
 - Ballot opened 16th October, closed 30th October 2009
 - 97% approval, 77 comments received

Comments received: 77	Initial Draft D2.0			1 st Recirculation Draft D2.1			2 nd Recirculation Draft D2.2			3 rd Recirculation Draft D2.3			Req %
	#	%	Status	#	%	Status	#	%	Status	#	%	Status	
Abstain	10	8	PASS	11	8	PASS	14	10	PASS	7	5	PASS	< 30
Disapprove with comment	32	-	-	30	-	-	21	-	-	4	-	-	-
Disapprove without comment	3	-	-	2	-	-	1	-	-	1	-	-	-
Approve	87	73	FAIL	97	76	PASS	108	83	PASS	134	97	PASS	≥ 75
Ballots returned	132	57	PASS	140	61	PASS	144	62	PASS	146	63	PASS	≥ 50
Voters	229	-	-	229	-	-	229	-	-	229	-	-	-

IEEE 802.3ba 40Gb/s and 100Gb/s Ethernet

3rd Recirculation ballot (D2.3) comments

- 77 comments received on last recirculation
 - 28 Technical Required (from one commenter)
 - 3 Editorial Required (from three commenters)
 - 21 Technical,
 - 25 Editorial
- Disposition of required comments
 - 22 Technical Required withdrawn
 - 6 Technical Required rejected
 - Commenter satisfied
 - 2 Editorial Required accepted
 - Resulted in non-substantive changes
 - 1 Editorial Required withdrawn
- No new unsatisfied comments on D2.3 ballot
- All comment responses available at the URL:
http://ieee802.org/3/ba/public/nov09/P8023ba-D23-Final_Responses_byID.pdf

IEEE 802.3ba 40Gb/s and 100Gb/s Ethernet

3rd Recirculation ballot (D2.3) comments

- Summary of unsatisfied comments
 - D2.0 through D2.2
 - No new unsatisfied on D2.3
 - Brad Booth – 9 TR
 - Naming of PHY and PCS
 - Paul Kolesar – 2 TR
 - Use of special fiber for test
 - Use of test noted above for development of informative annex for extended reach MMF
 - Ali Ghiasi – 3 TR
 - 2 TR related to Tx specs (DDJ / amount of de-emphasis)
 - 1 TR related to CRU BW (Under Measurement method – clock recovery unit in TDP measurement, commenter change 10MHz spec to 7 MHz, no consensus to change)
 - Bob Grow – 1 ER
 - Co-ordination of clause numbering between projects

IEEE 802.3ba 40Gb/s and 100Gb/s Ethernet

3rd Recirculation ballot (D2.3) changes

- Summary of non-substantive changes draft
 - Removal of editorial note
 - Spelling error
 - Removal of hyphens
 - “differential-to-common..” to “differential to common”
 - Correction to Table Reference
 - Font size adjustment to match within equation
 - Font enlargement on figure to make it easier to read
 - Addition of ‘dB” to equation
 - Format “e” to be non italic
 - Mathematical constants are upright font
 - Activated link in cross-reference
 - Box around figure removed

IEEE P802.3ba 40Gb/s and 100Gb/s Ethernet to Sponsor ballot

Motion:

The LMSC Executive Committee grant approval
to submit IEEE P802.3ba/D3.0 to Sponsor Ballot

M: D Law, S: J Lemon

Y: ??, N: ??, A: ??

Working Group vote:

Y: 70, N: 0, A: 0

Shellhammer presented 19-09-0098-00-0000-tvws-coexistence-par-motion.ppt

Motion is "Move to forward the TVWS Coexistence PAR (doc. 802.19-09/78r5) to NesCom and in addition convert 802.19 from a TAG to a Working Group as described in the Monday EC presentation"

Moved by Shellhammer, seconded by Sherman

Kraemer asked if Shellhammer had responded to the comments from 802.11 from Thursday.

Shellhammer said that 802.19 had already adjourned for the week, but that he had provided his opinion on the questions via an email to the 802 EC reflector on Friday morning. Shellhammer discussed the response he had given.

Kraemer indicated that members of 802.11 felt that the scope of P1900.4 and P1900.4a did overlap with 802.19's proposed scope.

Marks said that 802.19 is required to review coexistence assurance (CA) document, but it would have a conflict of interest if it had to review a CA document that it had generated. Marks said that his group voted guidance that the chair could support the PAR if the requirement that 802.19 perform CA document review was removed.

Shellhammer said that this would require a rules change, which would take time to resolve.

Thompson said that the title appeared to address coexistence even if the word does not appear in the title.

Shellhammer said that the presentation which covered P1900.4 showed that it looked like different work.

Law asked if rules were changed, who would review CA documents or would it just not get done.

Sherman spoke in favor of the motion.

Kraemer said that the 802.11 WG was OK if they could participate in the development of the standard. He wanted to know if EC wanted to make the completed standard optional or mandatory.

Straw poll: Is the application of the proposed 802.19 standard intended to be optional among other 802 wireless standards.

Heile felt that this is not something that we need to discuss now.

Thompson said that support for the PAR depends on the intention of the EC.

Marks said that this is related to 802.19's special role as a reviewer of CA documents.

Straw poll: 13 yes, 0 no, 0 abstain.

Thompson asked to note in the minutes that Shellhammer voted in favor of this straw poll.

Thaler asked about the CA document standard

Shellhammer summarized the process, which is to include the CA document during balloting. 802.19 gets one vote as an entity on coexistence issues.

Nikolich asked if it was OK to postpone action on this until all three groups had a chance to present.

The straw poll was 16/0/0, action on the motion was postponed.

TVWS Coexistence PAR Motion

Date: 2009-11-20

Authors:

Name	Company	Address	Phone	E-mail
Steve Shellhammer	Qualcomm	5775 Morehouse Dr San Diego, CA 92121	(858) 658-1874	Shellhammer@ieee.org

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Background Material

- **A presentation on the TVWS Coexistence PAR and the 802.19 Organization was presented at the Monday 802 EC Meeting**
 - Document IEEE 802.19-09/89r0

Responses to Comments Received on the PAR/5C

- **A document was prepared with responses to all the comments received on the PAR/5C**
 - IEEE 802.19-09/96r0

Study Group Vote

- **Motion to adopt the document IEEE 802.19-09/78r5 PAR**
 - Yes 14
 - No 0
 - Abstain 1

- **Motion to adopt the document IEEE 802.19-09/81r2 5C**
 - Yes 12
 - No 0
 - Abstain 3

802.19 Vote

- **Motion to adopt the document IEEE 802.19-09/78r5 PAR**
 - Yes 8
 - No 0
 - Abstain 0

- **Motion to adopt the document IEEE 802.19-09/81r2 5C**
 - Yes 8
 - No 0
 - Abstain 0

EC Motion

- **Move to forward the TVWS Coexistence PAR (doc. 802.19-09/78r5) to NesCom and in addition convert 802.19 from a TAG to a Working Group as described in the Monday EC presentation**
- **Move Steve Shellhammer**
- **Second Mat Sherman**
 - Yes
 - No
 - Abstain

Hu presented 22-09-00xx-00-0000-Modified-802-22-PAR-Motion.ppt

Motion is "Move to forward the Modified IEEE 802.22 PAR (doc. 802.22-09/159r10) to NesCom"

Moved by Hu, seconded by Sherman

Mark Cumming (envia) - believes that 802.22 and 802.11 should have the right to create their own standards to address how they respond to the FCC's R&O. Asks the EC to approve all three PARs.

Kraemer asked how 802.22 was going to progress rapidly if the scope is increased.

Hu said that they had been following the FCC's process and have already taken into account many of the issues.

Marks said the 802.16's comments had be addressed, but was worried that this would slow down the development of the standard.

Kraemer pointed out rules in this area are still changing and hopes that the groups are not surprised by changes.

Modified 802.22 PAR Motion

Date: 2009-11-19

Authors:

Name	Company	Address	Phone	E-mail
Wendong Hu	STMicroelectronics	2525 Augustine Dr Santa Clara, CA 95054	(408) 467-8410	whu@ieee.org

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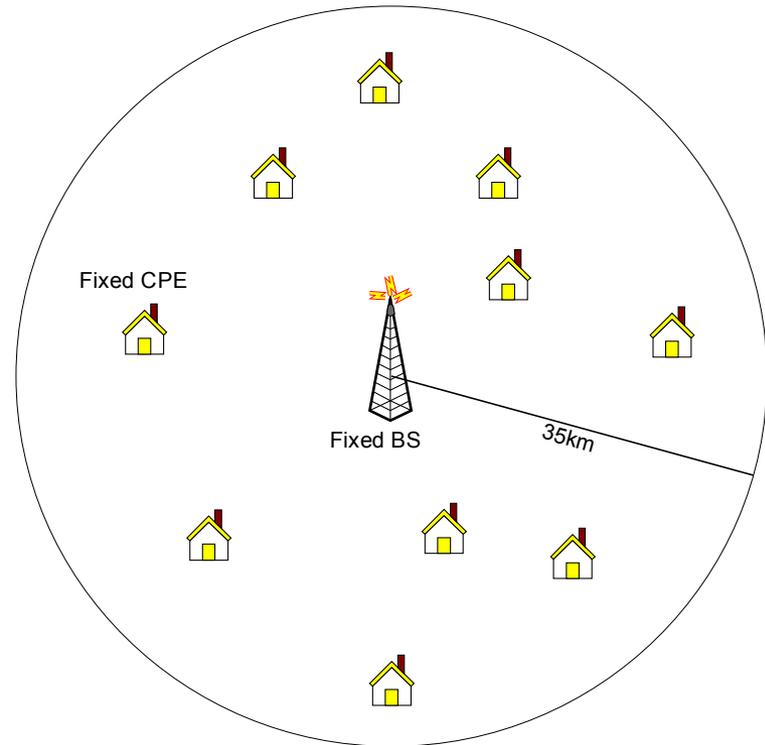
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Background Material

- **A presentation on the Modified IEEE 802.22 PAR**

Current 802.22 Scope

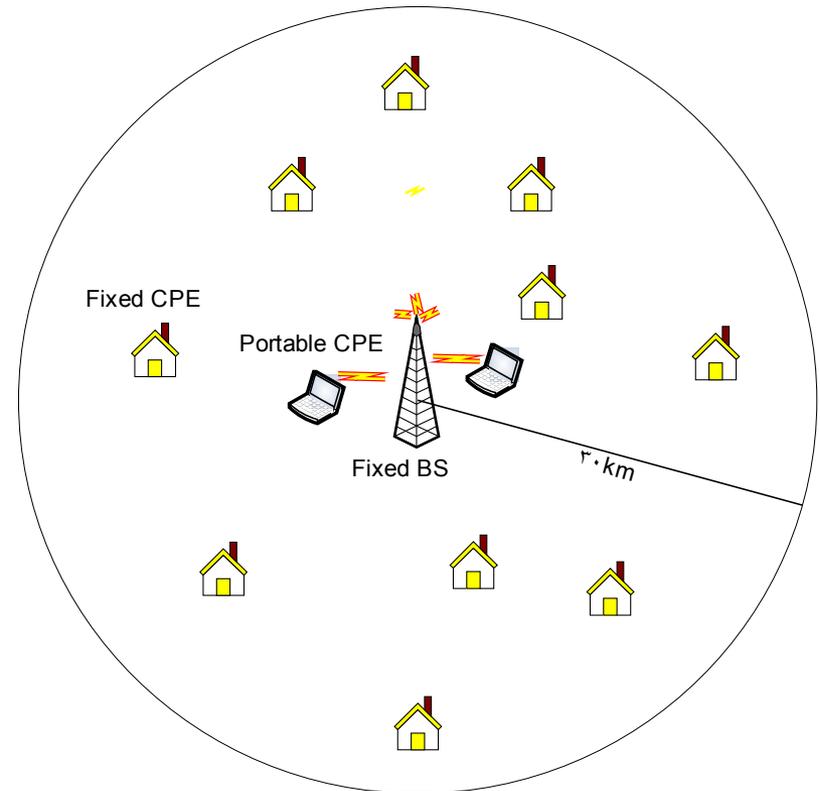
- **Features:**
 - Point-to-Multipoint Cell
 - Fixed BS and fixed CPEs
 - Long-range out-door coverage (typical radius of 30km)



Modified 802.22 Scope

- **Features:**

- Point-to-Multipoint Cell
- Fixed BS servicing both fixed and portable CPEs
- Long-range service coverage (with typical radius of 30km) for fixed CPEs
- Portable CPEs are served in a smaller area close to the BS.



Responses to Comments Received on the Modified 802.22 PAR/5C

- **A document was prepared with responses to all the comments received on the Modified 802.22 PAR/5C**
 - IEEE 802.22-09/236r0

802.22 Working Group Vote

- **Motion to adopt the document IEEE 802.22-09/159r10 Modified IEEE 802.22 PAR and 5C and forward it to the 802 EC for approval**
 - Yes 13
 - No 0
 - Abstain 0

EC Motion

- **Move to forward the Modified IEEE 802.22 PAR (doc. 802.22-09/159r10) to NesCom**
- **Move Wendong Hu**
- **Second Matthew Sherman**
 - Yes
 - No
 - Abstain

Nikolich noted that we had taken 5.15 and 5.16 out of order. We are now going to take up item 5.15

Hu presented 22-09-00xx-00-0000-802-22-3-PAR-Motion.ppt

Motion is "Move to forward the Modified IEEE 802.22.3 PAR (doc. 802.22-09/165r8) to NesCom"

Moved by Hu, seconded by Sherman

Gilb stated that he felt that the scope was too broad

Marks said that this appears to be a second separate standard

Grow said that the document said that it was intended to be merged into the base standard. It looks like an amendment that is called a new standard to get around the fact that the base standard is not yet finished. Grow asked Hu if the MAC from 802.22 would be used.

Hu said that it was an option, but is not required.

Grow said that there could be an issue with the letters of assurance for 802.22.

Thompson said that he would like to know if the intention is to keep it separate or to merge it.

Thaler stated that she asked a member of RevCom who said that the status of the text in the notes is not the same as the text in the scope and purpose.

Thompson said that if a group wants to initiate an amendment with a standard that is in sponsor ballot, the initial PAR is for an independent standard and then when the base standard is completed, a PAR modification is done to make it an amendment.

Hu said that this will be an independent, standalone standard.

802.22.3 PAR Motion

Date: 2009-11-19

Authors:

Name	Company	Address	Phone	E-mail
Wendong Hu	STMicroelectronics	2525 Augustine Dr Santa Clara, CA 95054	(408) 467-8410	whu@ieee.org

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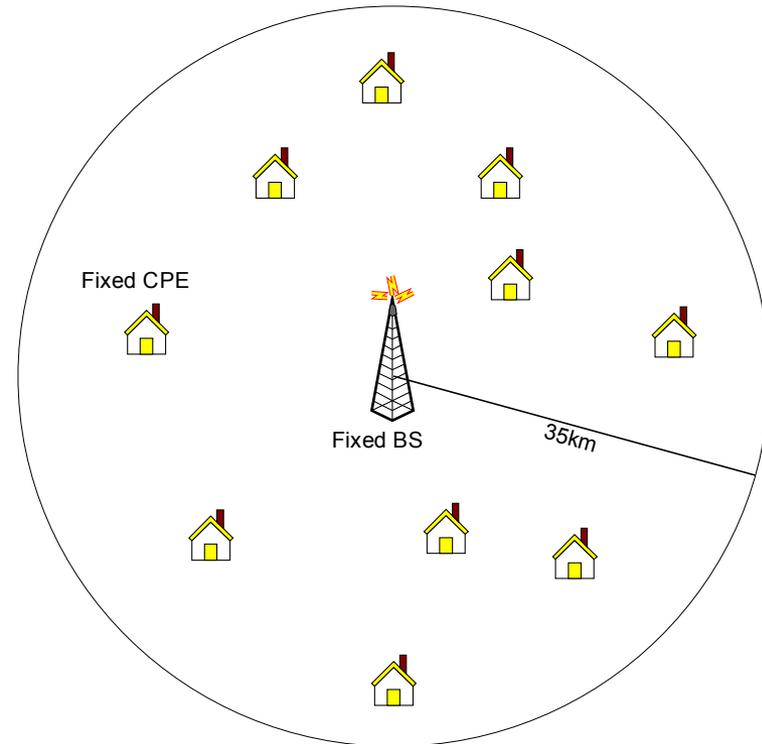
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Background Material

- **A presentation on the IEEE 802.22.3 PAR**

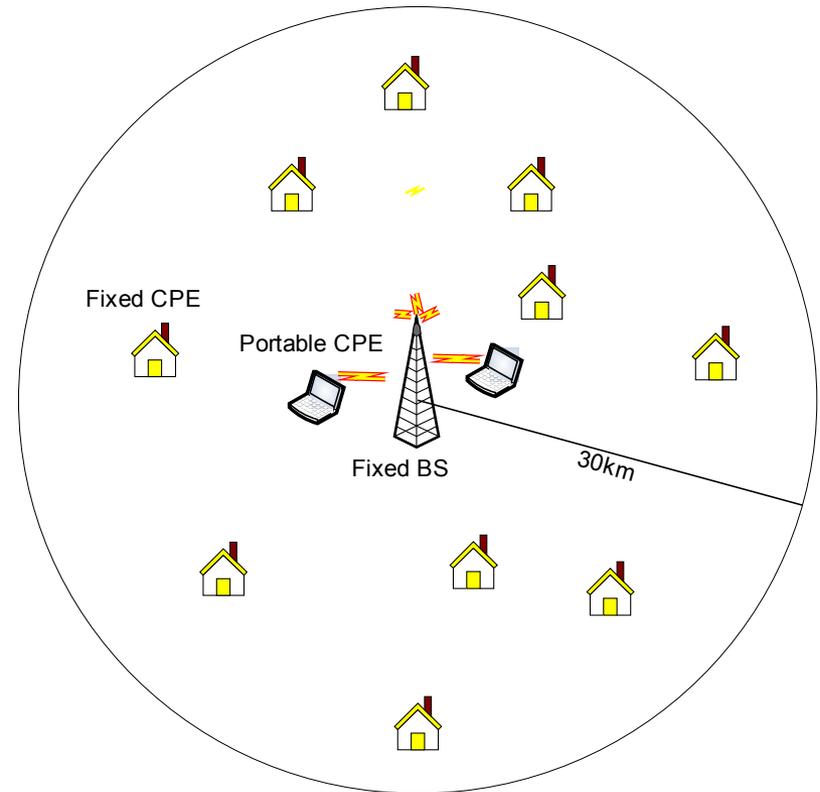
Current 802.22 Scope

- **Features:**
 - Point-to-Multipoint Cell
 - Fixed BS and fixed CPEs
 - Long-range out-door coverage (typical radius of 30km)
- **Limitations:**
 - Single network topology
 - Fixed Devices (BS and CPE)
 - Long-range out-door wireless broadband access



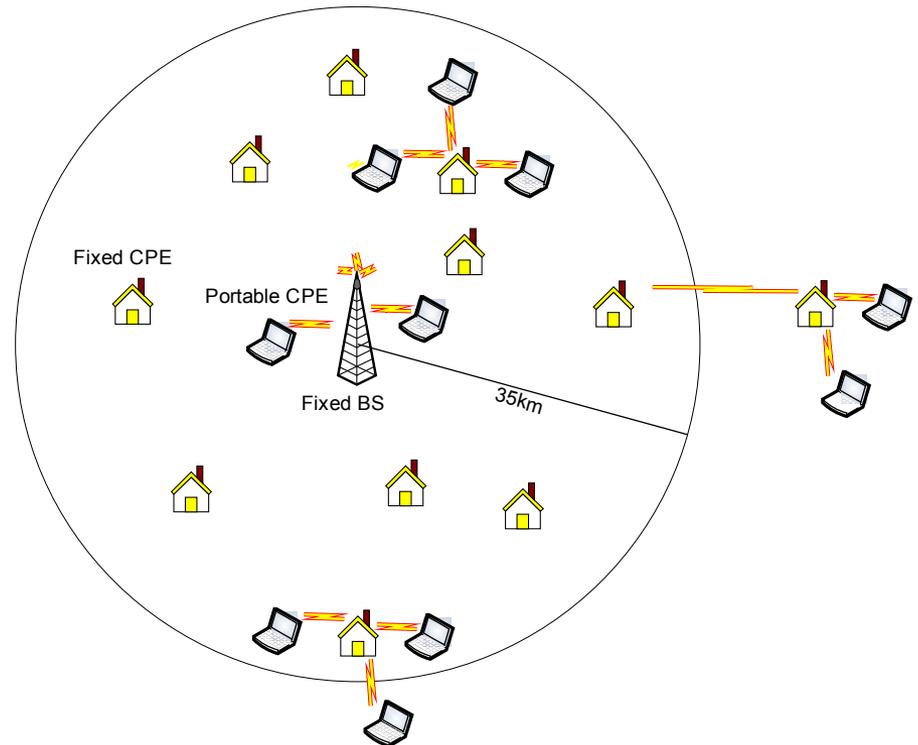
Modified 802.22 Scope

- **Features:**
 - Point-to-Multipoint Cell
 - Fixed BS servicing both fixed and portable CPEs
 - Long-range service coverage (with typical radius of 30km) for fixed CPEs
 - Portable CPEs are served in a smaller area close to the BS.
- **Limitations:**
 - Single network topology
 - Portable applications are only serviced in the close area of the BS

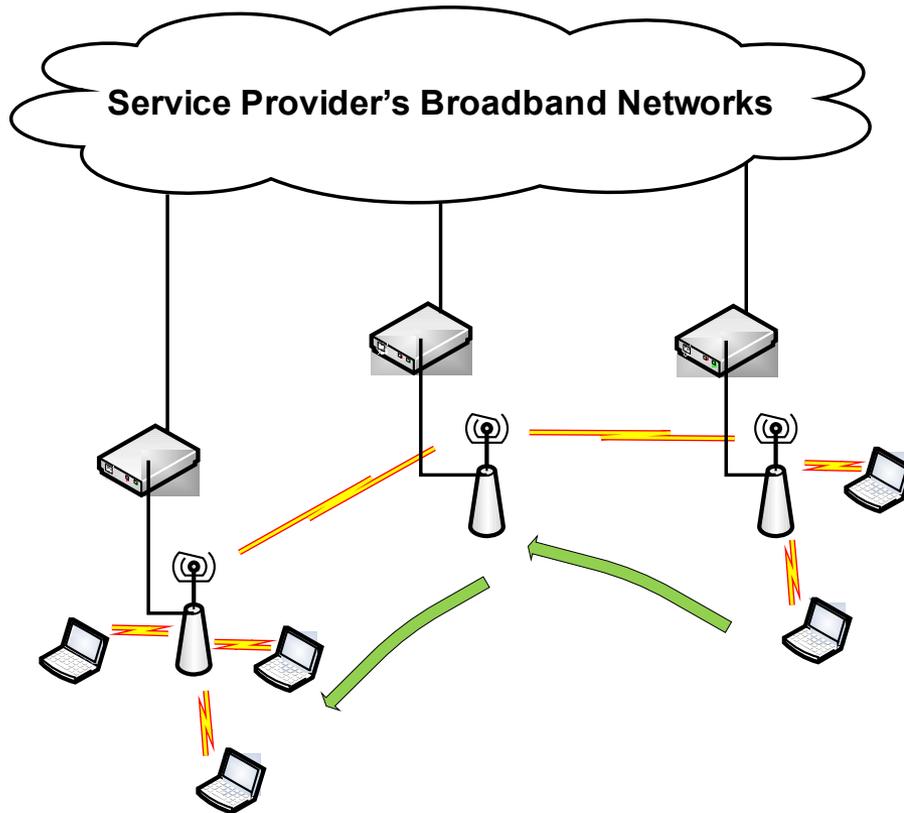


802.22.3 Scope

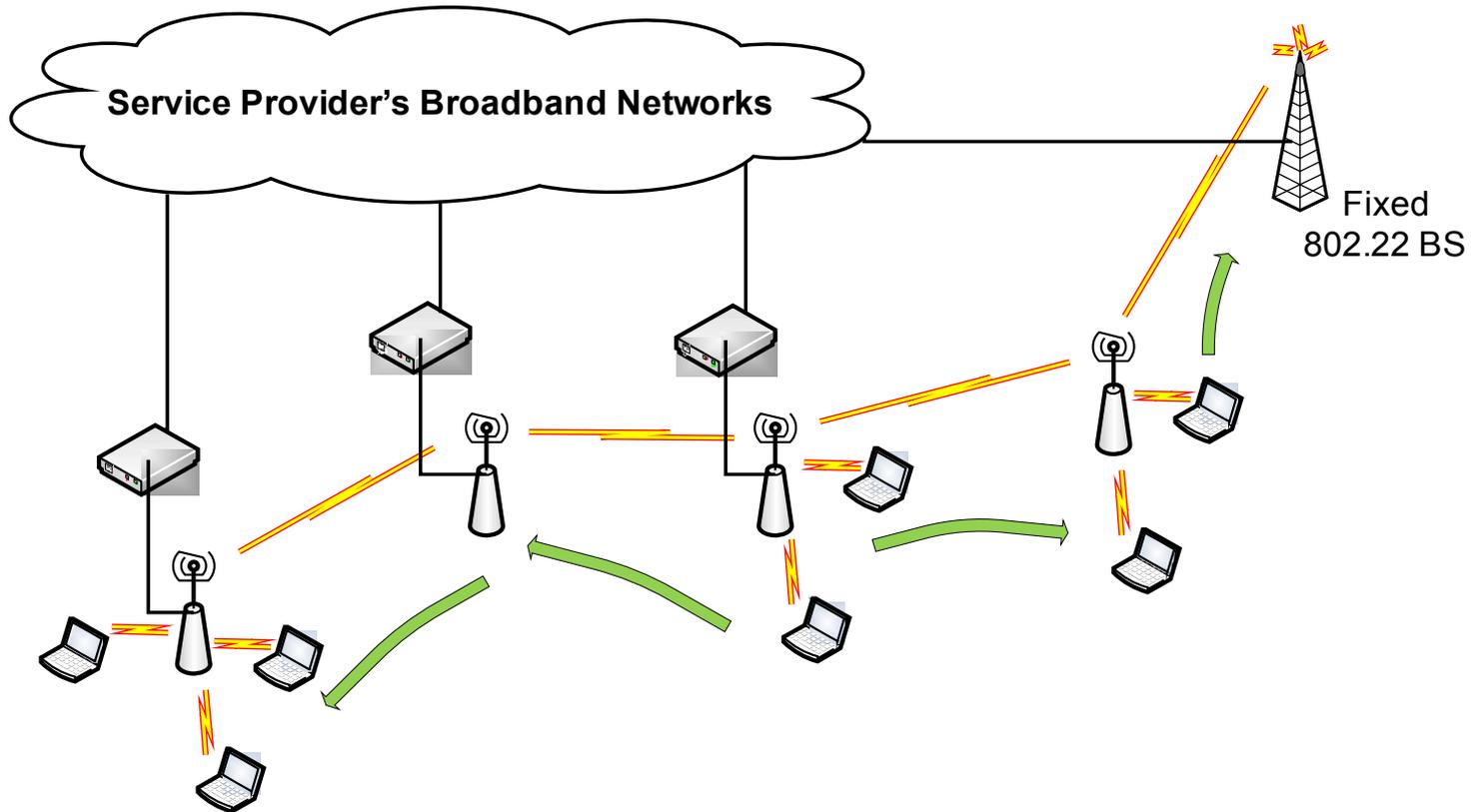
- **Specifications of cognitive physical layers (PHY) and Medium Access Control layers (MAC) that enable scalable WRAN operation (in range, coverage area, and topology) of TV band devices in TV band white space (e.g. as defined by the US FCC R&O 08-260) and provide mechanisms to prevent harmful interference to incumbent communication services.**



802.22.3 Operations without 802.22 networks



802.22.3 Operations interfacing with 802.22 networks



Responses to Comments Received on the 802.22.3 PAR/5C

- **A document was prepared with responses to all the comments received on the 802.22.3 PAR/5C**
 - IEEE 802.22-09/237r0

802.22 Working Group Vote

- **Motion to adopt the document IEEE 802.22-09/165r8
IEEE 802.22.3 PAR and 5C and forward it to the 802 EC
for approval**
 - Yes 12
 - No 0
 - Abstain 0

EC Motion

- **Move to forward the Modified IEEE 802.22.3 PAR (doc. 802.22-09/165r8) to NesCom**
- **Move Wendong Hu**
- **Second Matthew Sherman**
 - Yes
 - No
 - Abstain

Kraemer presented 11-09-0934-08-tvws-draft-par-and-5c.doc

Marks pointed out that revision 08 was not posted prior to the 5 pm Wednesday requirement.

Hu asked if this was intended for long range application as well.

Kraemer said that 802.11 is normally used as a LAN. In some cases, it is used in a long range, point-to-point application with high gain antennas.

Hu said that the FCC has requirements that are different from what 802.11 does now.

Kraemer said that based on the input from the engineers in the area, that it is as possible for 802.11 as it would be for any other technology.

Shellhammer this is similar to moving to a 5 MHz band, so it should be doable.

Motions are now considered (3:20 pm).

Motion is "Move to forward the TVWS Coexistence PAR (doc. 802.19-09/78r5) to NesCom and in addition convert 802.19 from a TAG to a Working Group as described in the Monday EC presentation"

Moved by Shellhammer, seconded by Sherman

Motion to divide the motions, the first motion would be "Move to forward the TVWS Coexistence PAR (doc. 802.19-09/78r5)", second motion would "Convert 802.19 from a TAG to a Working Group as described in the Monday EC presentation"

Thaler said that it could not be divided because the PAR identifies the group that it belongs to.

Moved by Shellhammer, seconded by Sherman

Marks said that approving the PAR will place it in 802.19, which is a TAG and would violate this procedure.

Shellhammer said that we have always held that it is up to the EC to decide which group to put it in.

Thaler spoke against the motion, wants to decide the group first.

Grow said that the number on the PAR is suggested to NesCom, the WG chair does apply.

Vote is 4/7/2, motion fails.

Now back to the main motion,

Motion is "Move to forward the TVWS Coexistence PAR (doc. 802.19-09/78r5) to NesCom and in addition convert 802.19 from a TAG to a Working Group as described in the Monday EC presentation"

Vote is 8/4/3, motion passes

Motion is "Move to forward the Modified IEEE 802.22 PAR (doc. 802.22-09/159r10) to NesCom"

Moved by Hu, seconded by Sherman

Vote is 12/0/3, motion passes.

Motion is "Move to forward the Modified IEEE 802.22.3 PAR (doc. 802.22-09/165r8) to NesCom"

Moved by Hu, seconded by Sherman

Vote is 4/8/3, motion fails

Kraemer presents 11-09-1300-00-0000-november-2009-ec-motions.ppt, page 3

Motion is "Move to forward the 802.11 TVWS PAR information from 11-09/934r2 to NesCom with edits as contained in 934r8."

Kramer was empowered by the 802.11 WG to modify the PAR to help pass the EC.

Moved by Kraemer, seconded by Lemon

Vote is 10/1/4, motion passes.

IEEE P802.11
Wireless LANs

TVWS PAR and 5C**Date:** 2009-09-17**Author(s):**

Name	Affiliation	Address	Phone	email
Rich Kennedy	Research In Motion	7305 Napier Trail Austin, TX 78729	972-207-3554	rikennedy@rim.com
Peter Ecclesine	Cisco Systems	170 W. Tasman Dr., San Jose, CA 95134	+1-408-527-0 815	petere@cisco.com

Abstract

This document proposes a TV White Spaces PAR in NesCom format plus 5 Criteria

Draft PAR Confirmation Number	
Submittal Email: rikennedy@rim.com	
Type of Project: PAR for an amendment to existing Standard 802.11-2007	
1.1 Project Number: P802.11	
1.2 Type of Document: Standard for	
1.3 Life Cycle: Full	
1.4 Is this project in ballot now? No	
2.1 Title of Standard: IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: TV White Spaces Operation	
3.1 Name of Working Group: Wireless LAN Working Group(C/LM/WG802.11) Contact information for Working Group Chair Bruce Kraemer 517 La Costa Court Melbourne, FL 32940 US bkraemer@marvell.com Working Group Vice Chair: Jon Rosdahl 10871 N 5750 West Highland, UT 84003 US, Email: jrosdahl@ieee.org	
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Contact information for Sponsor Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org Contact information for Standards Representative:	
4.1 Type of Ballot: Individual	
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2012-12	
4.3 Projected Completion Date for Submittal to RevCom: 2013-12	
5.1 Approximate number of people expected to work on this project: 50	
5.2 Scope of Proposed Standard: An amendment that defines modifications to both the 802.11 physical layers (PHY) and the 802.11 Medium Access Control Layer (MAC), to meet the legal requirements for channel access and coexistence in the TV White Space.	Old Scope:

5.3 Is the completion of this standard is dependent upon the completion of another standard: No
If yes, please explain:

5.4 Purpose of Proposed Standard: The purpose of this amendment is to allow 802.11 wireless networks to be used in the TV white space.

Old Purpose:

5.5 Need for the Project: With the global transition to Digital TV (DTV), sub-Gigahertz RF spectrum is becoming available, much of it for unlicensed, license exempt and/or lightly licensed use. This project will make the necessary MAC and PHY changes to enable 802.11 products to take advantage of this additional spectrum with its improved propagation characteristics and improved indoor wall penetration and hence range.

5.6 Stakeholders for the Standard: Manufacturers and users of semiconductor, personal computer, enterprise networking devices, consumer electronic devices, home networking equipment, mobile devices.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes

If yes, state date: 2009-xx-xx

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? Yes

Explanation: IEEE P802.22 addresses one product segment of the new regulatory rules.

Sponsor Organization: IEEE

Project/Standard Number: P802.22

Project/Standard Date: 0000-00-00

Project/Standard Title: Draft Standard for Wireless Regional Area Networks Part 22: Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Policies and procedures for operation in the TV Bands

Explanation: IEEE P1900.4a addresses mobile wireless access in white space frequency bands

Sponsor Organization: IEEE

Project/Standard Number: P1900.4a

Project/Standard Date: 0000-00-00

Project/Standard Title: Amendment: Architecture and Interfaces for Dynamic Spectrum Access Networks in White Space Frequency Bands

Explanation: Ecma International is standardizing communications in Television White Spaces

Sponsor Organization: Ecma International

Project/Standard Number: TC48-TG1

Project/Standard Date: 0000-00-00

Project/Standard Title: Wireless Communications using Television White Spaces (TVWS).

7.2 International Standards Activities

a. Adoptions

Is there potential for this standard to be adopted by another organization? **Do not know at this time**

Organization:
Technical Committee Name:
Technical Committee Number:
Contact person Name:
Contact Phone:
Contact Email:

b. Joint Development

Is it the intent to develop this document jointly with another organization? No

Organization:
Technical Committee Name:
Technical Committee Number:
Contact person Name:
Contact Phone:
Contact Email:

c. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No

Organization:
Technical Committee Name:
Technical Committee Number:
Contact person Name:
Contact Phone:
Contact Email:

8.1 Additional Explanatory Notes: (Item Number and Explanation)

5.2 Scope - TV White Space is defined in the US by the November 2008 FCC Part 15 Subpart H Television Band Devices rules. Ofcom (UK) is in the process of making this Digital Dividend band available, and the EU has conducted a consultation on the TV band. The project will adapt to changes in the regulations, as they progress. It is in the best interest of users and the industry to strive for a level of coexistence between wireless systems in the TVWS bands. This standard provides mechanisms for coexistence with other systems operating in the TV bands.

7.1 Are there other standards or projects with a similar scope? Yes

Explanation: IEEE P802.16h addresses one product segment of the new regulatory rules.

Sponsor Organization: IEEE

Project/Standard Number: P802.16

Project/Standard Date: 0000-00-00

Project/Standard Title: IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 16: Air Interface for Fixed Broadband Wireless Access Systems, Improved Coexistence Mechanisms for License-Exempt Operation

Contact the [NesCom Administrator](#)
[place document body text here]

Five Criteria

117.5.1 Broad Market Potential

A standards project authorized by IEEE 802 shall have a broad market potential.

Specifically, it shall have the potential for:

a) Broad sets of applicability. On November 4, 2008, the United States FCC approved Report & Order 08-260, allowing unlicensed use of TV band spectrum, in accordance with Part 15. Subpart H of FCC rules. Ofcom (UK) is in the process of making this Digital Dividend band available, and the EU has conducted a consultation on the band. Other regulatory domains are expected to follow.

b) Multiple vendors and numerous users. Current Wireless ISP services in these areas use the 900 MHz, 2.45 GHz and 5 GHz bands, operating under Part 15 rules. There are many vendors of IEEE 802 wireless equipment for indoor and outdoor operation, and it is expected that there will be several offering equipment for this band.

c) Balanced costs (LAN versus attached stations). The changes to meet FCC regulatory requirements are not expected to impact the cost of clients versus base stations, which is expected to be the same as the 5 GHz bands. The registration costs for operation in this band are not significant, unlike spectrum in bands that are auctioned.

117.5.2 Compatibility

IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802. Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

Compatibility with IEEE 802 requirements will result from keeping the MAC SAP interface the same as for the existing 802.11 standard. The proposed amendment shall introduce no 802.1 architectural changes. The MAC SAP definition shall not be altered, ensuring that all LLC and MAC interfaces are compatible to and in conformance with the IEEE 802.1 Architecture, Management and Internetworking standards. New managed objects shall be defined as necessary in a format and structure consistent with existing 802.11 managed objects.

117.5.3 Distinct Identity

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other IEEE 802 standards. There are no other IEEE 802 projects specifically addressing WLAN personal/portable operation under FCC Part 15 Subpart H.

Existing Standards and Projects			
Element	802.11	P802.16h	P802.22
	<i>PHY</i>		
Outdoor Timebase	20 ppm xtal	Internal clock and GPS	2 ppm
Indoor Timebase	20 ppm xtal	Internal clock and network sync.	—
Radio bands	2.4, 3.65, 4.9, 5 GHz	Any unlicensed	54-862 MHz
Master Transmissions	Listen Before Talk	Synchronous	Synchronous
	<i>MAC and System</i>		
Access method with others	Carrier Sense Multiple Access-Collision Avoid	5 msec frames	10 msec frames
Timebase (Master)	Per AP	GPS/IEEE 1588/NTP	UTC \pm 2 μ sec
Personal/portable	Yes, in 3.65 GHz	Yes	No
System	Distributed	Centralized and distributed in 802.16h	Centralized

Systems compliant to IEEE 802.16-2009 can operate in the TV bands in other regulatory domains and a coexistence protocol for P802.16h systems currently being addressed in the P802.16h project could be employed by devices operating in the US TV bands. P802.22 is working on a cognitive radio approach to sharing unused channels in the 54 MHz to 862 MHz TV broadcast bands, using spectrum sensing and location information to determine whether given transmit frequencies and power levels will cause harmful interference to licensed services. Neither of these projects currently addresses WLAN personal/portable operation under FCC Part 15 Subpart H rules.

- a) b) One unique solution per problem (not two solutions to a problem).** The 802.11 Project will define radio extensions, such that fixed stations and personal/portable stations can be operated in conformance to FCC Part 15 Subpart H rules. The central aspect of the ruling is accessing a TV bands database over the internet for all present and most future operation in the band. The project will define a protocol that consists of procedures for initiating new transmissions, procedures for determining the state of the channel (available or unavailable), and procedures for managing retransmissions in the event of a busy channel or incumbent occupancy. 802.16-2009 provides full mobile operation; 802.16h amendment covers fixed (including Nomadic operation).

c) **Easy for the document reader to select the relevant specification.** The Project will produce an amendment to the IEEE 802.11 specification.

117.5.4 Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:

a) **Demonstrated system feasibility.** Equipment that conforms to IEEE 802.11a and having frequency agility, the ability to sense signals from other transmitters, adaptive modulation, and Transmit Power Control are in use today in the 5.8 and 5.3 GHz band, sharing it with equipment approved under ISM and U-NII rules.

b) **Proven technology, reasonable testing.** The main components of radio technology and signalling are in use today.

c) **Confidence in reliability.** There are IEEE 802.11 systems in operation today, and their reliability is factored into the services offered. The Part 15 Subpart H TV Bands Device is expected to be as reliable as current CSMA-CA operation.

17.5.4.1 Coexistence of 802 wireless standards specifying devices for unlicensed operation

A working group proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable. The Working Group will create a CA document as part of the WG balloting process. If the Working Group elects not to create a CA document, it will explain to the EC the reason the CA document is not applicable.

The working group will create a CA document as part of the WG balloting process. The WG will maintain liaisons with the other WGs regarding coexistence in the TVWS. IEEE 802.11 will provide WG drafts with CA documents to 802.19 and 802.22 members for review and WG balloting.

317.5.5 Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:

a) **Known cost factors, reliable data.** The fundamental radio and baseband architecture of the WLAN is well known, and adding another supported band is a well-understood process.

b) **Reasonable cost for performance.** The extension of IEEE 802.11a products and/or chipsets to cover TV band operation is similar in cost to that of adding 3650 MHz operation as specified in IEEE 802.11y.

c) **Consideration of installation costs.** The installation cost of Part 15 Subpart H compliant WLAN equipment will not change from that of installing current 5 GHz band equipment.

References:

802.11 TVWS PAR Approval

- **Believing that the PAR and Five Criteria contained in the document referenced below meet IEEE-SA guidelines,**
- **Move to forward the 802.11 TVWS PAR information from 11-09/934r8 to NesCom.**
- **Moved by Bruce Kraemer**
- **Seconded by**
- **In the WG:**
 - Moved by Richard Kennedy
 - Seconded by Peter Ecclesine
 - Result: 43,0,3 passes
- **In the SG:**
 - Moved by Peter Ecclesine, seconded by Carl Kain
 - Result: unanimous (19 members in the room)

Kraemer presented 11-09-1300-00-0000-november-2009-ec-motions.ppt, page 4.

Motion is "Move to forward the 802.11 QoSMAN PAR information contained from 11-09-0942-08-00qm-qosman-par-nescom-form-plus-5cs.doc to NesCom."

Moved by Kraemer, seconded by Rigsbee

Vote is 14/0/1, motion passes.

IEEE P802.11
Wireless LANs

QOSMAN PAR plus 5C's**Date:** 2009-11-18**Author(s):**

Name	Affiliation	Address	Phone	email
Michael Montemurro	Research In Motion	4701 Tahoe Blvd, Mississauga, ON. Canada. L4W 0B4	+1-905-629-4746	mmontemurro@rim.com

Abstract

Prioritization of management frames PAR in NesCom format (plus 5C's – in progress)

Draft PAR Confirmation Number	
Submittal Email: mmontemurro@rim.com	
Type of Project: PAR for an amendment to existing Standard 802.11-2007	
1.1 Project Number: P802.11ae	
1.2 Type of Document: Standard	
1.3 Life Cycle: Full Use	
2.1 Title of Standard: IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Prioritization of management frames	
3.1 Name of Working Group: Wireless LAN Working Group(C/LM/WG802.11) Contact information for Working Group Chair Name: Bruce Kraemer Email Address: bkraemer@marvell.com Phone: 321-751-3988 Contact information for Working Group Vice Chair: Name: Adrian P Stephens Email Address: adrian.p.stephens@intel.com Phone: +44 1954 204609	
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Contact information for Sponsor Chair: Name: Paul Nikolich Email Address: p.nikolich@ieee.org Phone: 857.205.0050 Contact information for Standards Representative:	
4.1 Type of Ballot: Individual	
4.2 Expected Date of Submission for Initial Sponsor Ballot: 12/2012	
4.3 Projected Completion Date for Submittal to RevCom: 12/2013	
5.1 Approximate number of people expected to work on this project: 50	
5.2 Scope of Proposed Standard: This amendment defines mechanisms for prioritizing IEEE 802.11 management frames using existing mechanisms for medium access.	Old Scope:
5.3 Is the completion of this standard is dependent upon the completion of another standard: No If yes, please explain:	
5.4 Purpose of Proposed Standard: This amendment enables improved performance of IEEE 802.11 networks and the applications that	Old Purpose:

use these networks, by providing mechanisms to prioritize IEEE 802.11 management frames using existing mechanisms for medium access.

5.5 Need for the Project: IEEE 802.11-2007 and subsequent amendments have introduced additional Management frames that, under some circumstances, could adversely affect the performance of some IEEE 802.11 networks and the applications that use those networks.

5.6 Stakeholders for the Standard: Manufacturers and users of semiconductor, personal computer, enterprise networking device, consumer electronic device, home networking equipment, mobile devices.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes

If yes, state date: September 21, 2009

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

7.2 International Standards Activities

a. Adoptions

Is there potential for this standard to be adopted by another organization? Do not know.

Organization:

Technical Committee Name:

Technical Committee Number:

Contact person Name:

Contact Phone:

Contact Email:

b. Joint Development

Is it the intent to develop this document jointly with another organization? No

Organization:

Technical Committee Name:

Technical Committee Number:

Contact person Name:

Contact Phone:

Contact Email:

c. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No

Organization:

Technical Committee Name:

Technical Committee Number:

Contact person Name:

Contact Phone:

Contact Email:

8.1 Additional Explanatory Notes: (Item Number and Explanation)

Additional notes for Item 5.2 Scope:

- These mechanisms will be backward compatibility with currently deployed IEEE 802.11 networks.

- This project will consider the classification and prioritization of management frames
- This project will consider management frames that are used in both pre- and post- association.
- Management frames of subtype Action will be considered. Other management frame types may be considered.
- These mechanisms shall allow for administrative configuration of priorities.
- This project may consider default classification and prioritization of management frames.
- The security mechanisms defined in IEEE 802.11i-2004 (Security Enhancements), IEEE 802.11r-2008 (Fast Basic Service Set (BSS) Transition), and IEEE 802.11w-2009 (Protected Management Frames)" will be applicable to solutions considered by this project.

Additional notes for Item 7.1 Related Projects

- P802.11v (Wireless Network Management) defines encapsulated data frames to transport Event and Diagnostic reports. This project addresses the prioritization of all IEEE 802.11 management frames.

Contact the [NesCom Administrator](#)

[place document body text here]

Five Criteria

117.5.1 Broad Market Potential

A standards project authorized by IEEE 802 shall have a broad market potential.

Specifically, it shall have the potential for:

a) Broad sets of applicability.

The IEEE 802.11 standard has been used in a wide range of mainstream business and personal applications. The success of products has resulted in an increased dependency on IEEE802.11 as a primary method for the interconnection of networking equipment. Operations of IEEE 802.11 networks have become increasingly dependent on MAC management traffic.

All IEEE 802.11 MAC management frames are transmitted at the highest priority. IEEE 802.11 amendments 'k', 'y', 'w', 'v', and 'u' have introduced features that rely on management frames, which are essential for network operation. However in some cases, the management traffic will contend with network data traffic and reduce the performance of certain WLAN applications. Therefore, by providing a mechanism to prioritize management frames, the result of the work envisioned in this PAR will be applicable and of importance to all the current applications of IEEE802.11 and both existing and anticipated amendments.

b) Multiple vendors and numerous users.

A wide variety of vendors currently build numerous products for the WLAN marketplace. It is expected that the majority of those vendors, and others, will participate in the standards development process and subsequent commercialization activities

c) Balanced costs (LAN versus attached stations).

WLAN equipment is accepted as having balanced costs. The addition of management frame prioritization is expected to affect the complexity of APs and non-AP STAs equally and therefore will not disrupt the established balance.

1

2

317.5.2 Compatibility

IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802.

Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

Compatibility with IEEE 802 requirements will result from keeping the MAC SAP interface the same as for the existing 802.11 standard. The proposed amendment shall introduce no 802.1

architectural changes. The MAC SAP definition shall not be altered, ensuring that all LLC and MAC interfaces are compatible to and in conformance with the IEEE 802.1 Architecture, Management and Internetworking standards. New managed objects shall be defined as necessary in a format and structure consistent with existing 802.11 managed objects.

This amendment will be backward compatible and co-exist with IEEE 802.11-2007 and all published amendments.

117.5.3 Distinct Identity

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other IEEE 802 standards.

IEEE 802.11 Management frames are unique to IEEE 802.11.

b) One unique solution per problem (not two solutions to a problem).

IEEE 802.11 Management frames are currently specified to be sent at the highest priority. P802.11v and P802.11z have introduced an encapsulation feature that provides the ability to prioritize some management frames of sub-type action. P802.11v and P802.11z do not describe the assignment of priority for management frames that utilize this encapsulation feature. The new amendment will be the first solution to address the prioritization of different management action frames.

There is currently no solution for prioritization of management frames prior to IEEE 802.11 association.

c) Easy for the document reader to select the relevant specification.

The project will produce an amendment that describes the prioritization of management frames within the IEEE 802.11 specification

117.5.4 Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:

a) Demonstrated system feasibility.

It is expected that proposed solutions may be similar to those already defined for prioritizing IEEE 802.11 data frames.

b) Proven technology, reasonable testing.

The main components of the technology to be developed will be consistent with currently defined IEEE 802.11 technology.

c) Confidence in reliability.

Frame prioritization mechanisms already deployed in current WLAN products provides the confidence in the reliability of potential solutions.

17.5.4.1 Coexistence of 802 wireless standards specifying devices for unlicensed operation

A working group proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable. The Working Group will create a CA document as part of the WG balloting process. If the Working Group elects not to create a CA document, it will explain to the EC the reason the CA document is not applicable.

The working group will create a CA document as part of the WG balloting process.

217.5.5 Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:

a) Known cost factors, reliable data.

Support of the proposed amendment will probably require a manufacturer to develop minor modifications to firmware and possibly drivers. Hardware modifications should not be necessary, due to existing prioritization mechanisms for Data frames.

b) Reasonable cost for performance.

Since only minor changes in firmware and drivers are anticipated by the proposed amendment, manufacturers are likely to incur minimal costs.

c) Consideration of installation costs.

The proposed amendment has no known impact on installation costs.

References:

802.11 QoS Man PAR Approval

- **Believing that the QoS MAN PAR and Five Criteria contained in the document referenced below meet IEEE-SA guidelines,**
- **Move to forward the 802.11 QoS MAN PAR information contained from 11-09-0942-08-00qm-qosman-par-nescom-form-plus-5cs.doc to NesCom.**
- **Moved: Bruce Kraemer**
- **Seconded:**

In the WG:

- **Moved: Michael Montemurro**
- **Second: Jon Rosdahl**
- **Vote: 43,0,1, passes**

Nikolich called for a 10 minute break at 3:55 pm.

5.19	ME	802.15.4 Corrigendum to NesCom	Heile	0
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Approved as part of the consent agenda

5.20	ME	802.15.1 Reaffirmation to Sponsor ballot	Heile	0
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Approved as part of the consent agenda

5.21	ME	802.16h PAR extension to NesCom	Marks	5	04:04 PM
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Meeting called to order at 4:04 pm local time

Marks presented <http://www.ieee802.org/16/meetings/mtg64/lmsc/> (also at 802.16-motions.pdf)

Motion is "To forward to NesCom the IEEE 802.16h PAR extension request in IEEE 802.16h-09/0021r5"

Moved by Marks, seconded by Kraemer

Gilb asked how many ballots this year, Marks said 5 this year

Vote is 11/0/0, motion passes

IEEE 802.16 Issues for 802 LMSC EC Meeting of Friday 20 November 2009



#	Agenda Item	Agenda Type	Motion and Documentation	WG Result 2009-11-19 ("Yes/No /Abstain")	EC Result 2009-11-20 ("Yes/No /Abstain")
(a)	tbd	MI	<p>To approve the initiation of IEEE 802.16's "Greater Reliability In Disrupted Metropolitan Area Networks (GRIDMAN)" Study Group, with Mat Sherman as Chair</p> <ul style="list-style-type: none"> • IEEE 802.16-09/0069r2 <p>Motion: Marks / Seconded: ---</p>	X/Y/Z	X/Y/Z
(b)	tbd	ME	<p>To approve the GRIDMAN Study Group Press Release in IEEE 802.16-09/0072</p> <p>Motion: Marks Seconded: ---</p>	X/Y/Z	X/Y/Z
(c)	tbd*	ME	<p>To forward to NesCom the IEEE 802.16h PAR extension request in IEEE 802.16h-09/0021r5</p> <p>Motion: Marks / Seconded: ---</p>	X/Y/Z	X/Y/Z
(d)	tbd	II	<p>For review: Liaison statement to Japan concerning IEEE 802.16 IMT-Advanced Evaluation Group Coordination Meeting (IEEE L802.16-09/0133r1)</p> <p>Motion: Marks / Seconded: ---</p>	X/Y/Z	X/Y/Z

Relevant issues via IEEE 802.18 TAG

Agenda Item	Agenda Type	Issue (click for document)	WG Result 2009-11-19 ("Yes/No /Abstain")	EC Result 2009-11-20 ("Yes/No /Abstain")
tbd*	ME	<p>Approval of the Liaison to ITU-R WP5D: [Draft] Updated Material on IMT-2000 OFDMA TDD WMAN for Revision 10 of Recommendation ITU-R M.1457 (IEEE L802.16-09/0128) [Document 18-09-0120]</p>	X/Y/Z	X/Y/Z

Lemon presented "802.17c to RevCom conditional.pdf "

Motion is "Grant conditional approval, under Clause 13 of LMSC OM, to forward 802.17c to RevCom"

Moved by Lemon, seconded by Hawkins

Vote is 14/0/0, motion passes



Request For Conditional Approval To Send 802.17c To RevCom

Clause 13 Requirements

- *“motions requesting conditional approval to forward when the prior ballot has closed shall be accompanied by:”*
 - *Date the ballot closed: **7 November 2009***
 - *Vote tally including Approve, Disapprove and Abstain votes: **Y:38, N:1, A:3***
 - *Comments that support the remaining disapprove votes and WG responses: **There are no remaining disapprove votes with comments.***
 - *Schedule for recirculation ballot and resolution meeting: **Recirc ballot closes 26 November 2009. If new comments are received, then a resolution meeting would be held 30 November 2009.***

Additional Details

- The one disapprove voter did not submit any comments in support of the vote.
- All comments received were editorial.
- There are no comments carried forward from previous ballots.
- There are no disapprove votes carried forward from previous ballots.
- WG vote was Y:9, N:0, A:0

Motion

- Grant conditional approval, under Clause 13 of LMSC OM, to forward 802.17c to RevCom

Moved: John Lemon

Seconded:

Y:

N:

A:

Lemon presented "802.17d to NesCom.pdf"

Motion is "Grant approval to forward PAR for 802.17d to NesCom"

Moved by Lemon, seconded by Law

Law asked about the maintenance requests, they will make changes to the base standard.

Lemon said that they were approved by the WG, but not the sponsor pool.

Vote is 14/0/0, motion passes



Request For Approval To Send 802.17d PAR To NesCom

Details (1)

- Revision PAR
 - Described by
 - http://www.ieee802.org/17/projects/P802_17d/P802_17d_draft_PAR.pdf
 - http://www.ieee802.org/17/projects/P802_17d/802-17d_draft_5C.pdf
- No new material
- Combines:
 - 802.17-2004
 - 802.17b
 - 802.17c
 - 116 Approved Maintenance Requests
- PAR already pre-submitted

Details (2)

- WG vote on PAR was Y:9, N:0, A:0
- WG vote on 5C was Y:9, N:0, A:0
- Because no new material,
expect quick completion
 - Goal of Sponsor Ballot out of March Plenary
- Wraps 802.17 into complete, cohesive package before putting it into mothballs

Motion

- Grant approval to forward PAR for 802.17d to NesCom

Moved: John Lemon

Seconded:

Y:

N:

A:

Canchi presented "Closing EC Slide set with Motions.pdf" slides 1-4

Motion is "The 802 EC approves moving Draft 2.0 of P802.20a to Sponsor Ballot."

Moved by Shellhammer, seconded by Lynch

Vote is 13/0/0, motion passes

802.20 EC Closing Slides and Motions

November 2009
Atlanta, GA

Motion to Forward 802.20a to Sponsor Ballot

802.20a Letter Ballot Results

Initial Ballot

- Return rate, based on 12 voters, was 91.7%%
- YES - 10 (100%) [Y/(Y+N)]
- NO - 0 (0%)
- Abstain -1
- One ballot returned by a Non-Voter with 4 Comments

Recirculation Ballot to accommodate Non-Voter Comments

- No negative votes received - approval rate stays at 100%
- Commenting non-voter attended comment resolution meeting in September and indicated that his comments were resolved.

Move to Forward 802.20a to Sponsor Ballot

- | Motion: The 802 EC approves moving Draft 2.0 of P802.20a to Sponsor Ballot.
 - | Mover: Shellhammer
 - | Second: Lynch

- | Motion in WG Passed 3/0/0 (Chair did not vote)

Canchi presented "Closing EC Slide set with Motions.pdf" slides 5-8

Motion is "Move that conditional approval be granted to forward Draft 2.2 of P802.20.3 to RevCom."

Moved by Shellhammer, seconded by Lynch

Vote is 14/0/0, motion passes

Conditional Approval to Forward 802.20.3 to RevCom

802.20.3 Sponsor Ballot History

Sponsor Ballot Results

Sponsor Ballot closed Sept. 21, 2009

- | 86 Total voters in ballot pool.
- | 63 Affirmative votes with 13 comments
- | 0 Negative votes with comments
- | 1 Negative vote without comments
- | 5 abstention votes
- | **100% Approval Rate**

Sponsor Ballot Recirculation #1

Sponsor Ballot closes Nov. 26, 2009

| The recirculation draft includes changes made to improve draft in response to comments received with approve ballots. No vote changes are expected

| Comment resolution scheduled for January Interim

Motion in 802.20 Working Group

- | Request the 802 EC grant conditional approval for forwarding 802.20.3 Draft 2.2 to RevCom.
- | Motion Passed 4/0/0 (Chair did not vote)

802.20 has 12 eligible voters.

Conditional Approval to forward 802.20.3 to RevCom

- | Move that conditional approval be granted to forward Draft 2.2 of P802.20.3 to RevCom.
 - | Mover: Shellhammer
 - | Second: Lynch

Canchi presented "Closing EC Slide set with Motions.pdf" slides 9-12

Motion is "Move that conditional approval be granted to forward Draft 2.0 of P802.20.2 to RevCom."

Moved by Shellhammer, seconded by Lynch

Vote is 14/0/0, motion passes

Conditional Approval to Forward 802.20.2 to RevCom

802.20.2 Sponsor Ballot History

Sponsor Ballot Results

Sponsor Ballot closed Sept. 21, 2009

- | 79 total voters in ballot pool.
- | 58 Affirmative votes
- | 2 Negative votes with 9 comments
- | 1 negative vote without comments
- | 4 abstention votes
- | **96% Approval Rate**

Sponsor Ballot Recirculation #1

Sponsor Ballot closes Nov. 26, 2009

| The two negative votes each have a comment dealing with the level of detail provided in the PICS but provided no detailed proposed text. These are the only two comments left for the basis of the two negative votes. The ballot comment resolution group believed the level of detail was adequate.

| No new negative votes are expected to this recirculation

| Comment resolution scheduled for January Interim

Motion in 802.20 Working Group

- | Request the 802 EC grant conditional approval for forwarding 802.20.2 Draft 2.0 to RevCom.
- | Motion Passed 4/0/0 (Chair did not vote)

802.20 has 12 eligible voters.

Conditional Approval to forward 802.20.2 to RevCom

- | Move that conditional approval be granted to forward Draft 2.0 of P802.20.2 to RevCom.
 - | Mover: Shellhammer
 - | Second: Lynch

Gupta presented "802.21-EC-Slides-Nov-09.ppt", page 2

Motion is "The 802 EC for approval to forward the 802.21c PAR <<http://mentor.ieee.org/802.21/file/09/21-09-0146-05-SingleRadioHandovers-Par-5c.doc>> on Single Radio Handovers to NesCom."

Moved by Gupta, seconded Sherman

Vote is 14/0/0, motion passes



802.21c Single Radio Handover PAR Approval



- Motion the 802 EC for approval to forward the 802.21c PAR <[http://mentor.ieee.org/802.21/file/09/ 21-09-0146-05-SingleRadioHandovers-Par-5c.doc](http://mentor.ieee.org/802.21/file/09/21-09-0146-05-SingleRadioHandovers-Par-5c.doc)> on Single Radio Handovers to NesCom.
- Moved: Vivek Gupta
- Second:

- LMSC Vote:
- WG Vote: 10/0/0

6.00

Executive Committee Study Groups, Working Groups, TAGs

6.01 MI 802.3 40Gb/s Ethernet Single-mode Fibre PMD (new SG)

Law

5

4:25 PM

Law presented "802d3_1109_closing_EC.pdf" page 23-24

Motion is "The LMSC Executive Committee grants approval for the formation of the IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group within 802.3"

Moved by Law, seconded by Lemon

Vote is 14/0/0, motion passes

IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group

IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group

Motion:

The LMSC Executive Committee grants approval for the formation of the IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group within 802.3

M: D Law, S: J Lemon

Y: ??, N: ??, A: ??

88 CFI attendees, 40 interested in participating

Working Group vote:

Y: 46 N: 0 A: 1

Law presented "802d3_1109_closing_EC.pdf" page 13

Motion is "The LMSC Executive Committee grants approval to extent (2nd extension) of the IEEE P802.1AS time synchronization protocol Study Group within IEEE 802.3"

Moved by Law, seconded by Rigsbee

Vote is 14/0/0, motion passes

Ethernet support for the IEEE P802.1AS time synchronization protocol Study Group

Motion:

The LMSC Executive Committee grants approval to extend (2nd extension) of the IEEE P802.1AS time synchronization protocol Study Group within IEEE 802.3

M: D Law, S:

Y: ??, N: ??, A: ??

Working Group Vote

Y: 46 N: 0 A: 1

6.03 MI 802.19 TVWS coexistence (2nd extension)

Shellhammer

3

04:32 PM

No presentation

Motion is "To extend the 802.19 TVWS study group."

Moved by Shellhammer, seconded by Gupta

Vote is 14/0/0, motion passes

6.04 MI ES ECSG 1st extension

Thompson

0

Approved as part of the consent agenda.

6.05 II ES ECSG status update

Thompson

5

04:34 PM

Thompson presented "Report to 802 WGs ES-ECSG 91119.pdf"

The biggest issue is participation. The group needs participation from across 802.

Thaler asked if there was participation target that would justify continuing.

Thompson said that he had a number, but didn't want to say it.

Thaler said that there should be a higher level of participation.

**IEEE 802 Emergency Services EC Study Group
Session Number 02
19 November 2009**

**Located with
IEEE 802 Plenary
Hyatt Regency
Atlanta, GA USA**

Geoff Thompson Chair, IEEE 802 Emergency Services
ECSG

[<thompson@ieee.org>](mailto:thompson@ieee.org)

Agenda, minutes, documents:
<https://mentor.ieee.org/802-sg-emergency-services/documents>

Activities This Week (1)

- Monday: Gave reports in several plenaries
- SG met in Vining Tue/Wed/Thur
 - Joint with Dot 11 on Wed AM
- SG web page now up in 802 WG & SG area on Grouper
 - Link to it shows up in proper place
 - Reflector is up and running
 - All info on web page
 - Search in Google for “IEEE 802 ES-ECSG” gets it
- Review and refine new version of PAR & upload to Mentor
 - We believe that this is final for circulation 30 days in advance of March meeting

Activities This Week (2)

- Rework/Refine 5 Criteria
(as revised on slides posted on Mentor)
 - Still needs some final refinement before March
- Generate introductory presentation:
What is the problem we are trying to solve?
Why is it hard?
- Plan to do more in depth presentations at wireless interims in LaJolla, LA and 802.1 interim in Austin
- Plan to take action for PAR approval in March
- Will request 1st extension of Study Group to March '10

BIGGEST PROBLEM:

- LOW PARTICIPATION

Next meetings

- January Interim co-located with 802.16 et al at La Jolla (San Diego), CA, Jan 11 – 14, 2010 (Interim sponsor is IEEE 802)
- Propose also meeting with 802.11 at their Jan 17-22 interim (LA) and/or 802.1, Jan 18-22 in Austin.

KEY INFORMATION

- WEB PAGE

<http://grouper.ieee.org/groups/802/ecsg>

- DOCUMENTS

[https://mentor.ieee.org/
802-sg-emergencyservices/documents](https://mentor.ieee.org/802-sg-emergencyservices/documents)

- CHAIR

Geoff Thompson <thompson@ieee.org>

Marks presented <http://www.ieee802.org/16/meetings/mtg64/lmsc/> (also at 802.16-motions.pdf)

Motion is "To approve the initiation of IEEE 802.16's "Greater Reliability In Disrupted Metropolitan Area Networks (GRIDMAN)" Study Group, with Mat Sherman as Chair"

Moved by Marks, seconded by Rigsbee

Thompson said that we already have already accomplished this with 802.1 on for peer devices.

Marks said that the scope of the SG is better described in the supporting documents.

Vote is 14/0/0, motion passes

IEEE 802.16 Issues for 802 LMSC EC Meeting of Friday 20 November 2009



#	Agenda Item	Agenda Type	Motion and Documentation	WG Result 2009-11-19 ("Yes/No /Abstain")	EC Result 2009-11-20 ("Yes/No /Abstain")
(a)	tbd	MI	<p>To approve the initiation of IEEE 802.16's "Greater Reliability In Disrupted Metropolitan Area Networks (GRIDMAN)" Study Group, with Mat Sherman as Chair</p> <ul style="list-style-type: none"> • IEEE 802.16-09/0069r2 <p>Motion: Marks / Seconded: ---</p>	X/Y/Z	X/Y/Z
(b)	tbd	ME	<p>To approve the GRIDMAN Study Group Press Release in IEEE 802.16-09/0072</p> <p>Motion: Marks Seconded: ---</p>	X/Y/Z	X/Y/Z
(c)	tbd*	ME	<p>To forward to NesCom the IEEE 802.16h PAR extension request in IEEE 802.16h-09/0021r5</p> <p>Motion: Marks / Seconded: ---</p>	X/Y/Z	X/Y/Z
(d)	tbd	II	<p>For review: Liaison statement to Japan concerning IEEE 802.16 IMT-Advanced Evaluation Group Coordination Meeting (IEEE L802.16-09/0133r1)</p> <p>Motion: Marks / Seconded: ---</p>	X/Y/Z	X/Y/Z

Relevant issues via IEEE 802.18 TAG

Agenda Item	Agenda Type	Issue (click for document)	WG Result 2009-11-19 ("Yes/No /Abstain")	EC Result 2009-11-20 ("Yes/No /Abstain")
tbd*	ME	<p>Approval of the Liaison to ITU-R WP5D: [Draft] Updated Material on IMT-2000 OFDMA TDD WMAN for Revision 10 of Recommendation ITU-R M.1457 (IEEE L802.16-09/0128) [Document 18-09-0120]</p>	X/Y/Z	X/Y/Z

Gupta presented "802.21-EC-Slides-Nov-09.ppt" slides 3-6

Motion is "Move that the 802EC create a 802.21 Study Group to study issues related to Management of Heterogeneous Wireless Networks"

Moved by Gupta, seconded by Rigsbee

Kraemer asked that 802.21 coordinate with 802.11 as they would have an interest in this area.

Jeffree felt that the group's scope was not well stated, it should be focused on the management of objects rather than a link-layer primitive. Jeffree felt that the scope was too large and wants the group to come back when they have clarified the scope.

Subir Das (Telcordia) said that they had presentations that showed examples of cases when the back end nodes want to notify changes to improve performance.

Thompson since there is wired in the picture, wants to know if it should include wired cases.

Nikolich said that if approved, the group should come back with a narrowed scope

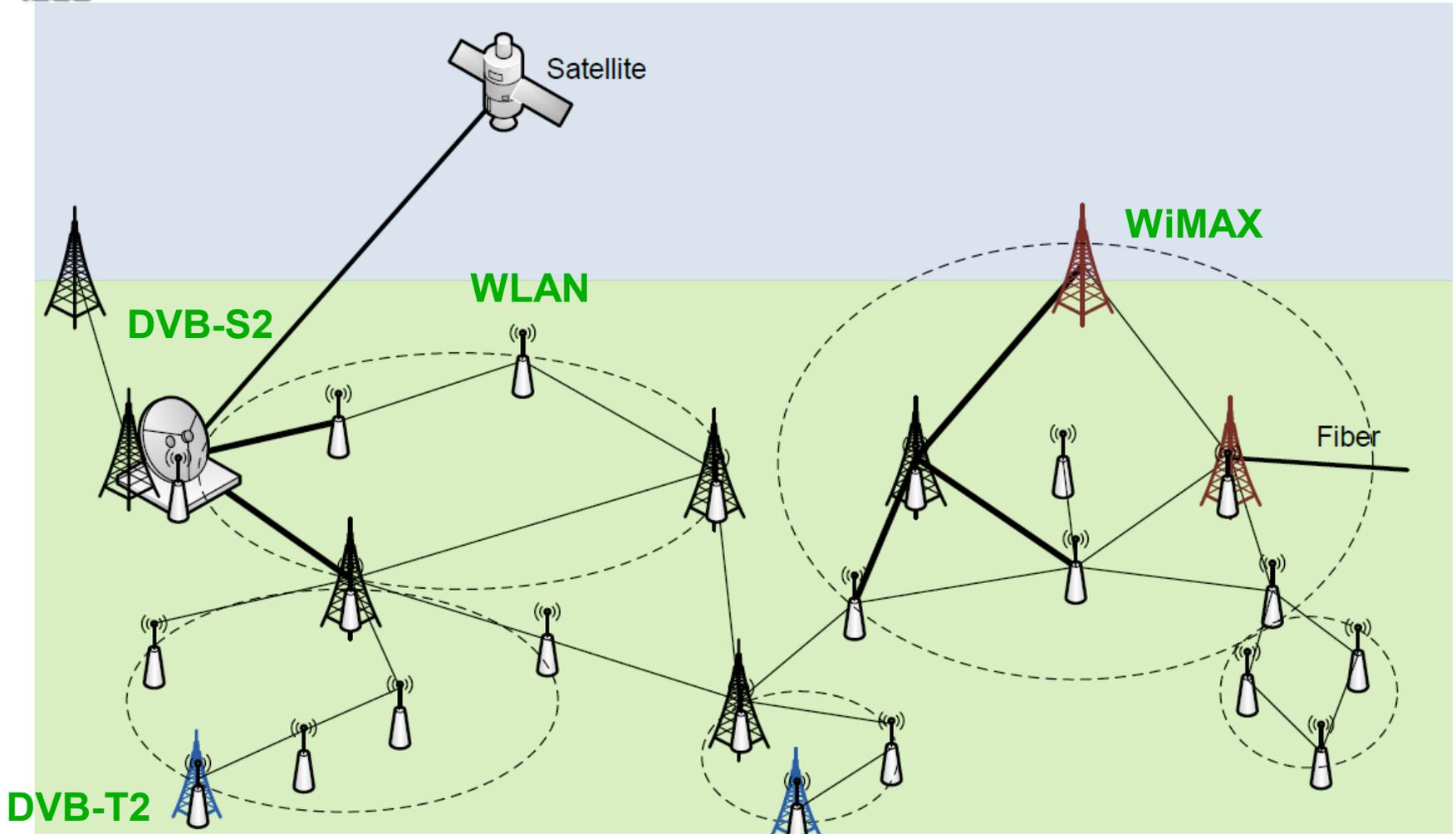
Vote is 10/1/2



802.21 Wireless Networks Management Study Group



- Motion: Move that the 802EC create a 802.21 Study Group to study issues related to Management of Heterogeneous Wireless Networks
- Moved: Vivek Gupta
- Second:
- LMSC Vote:
- WG Vote: 8/0/0

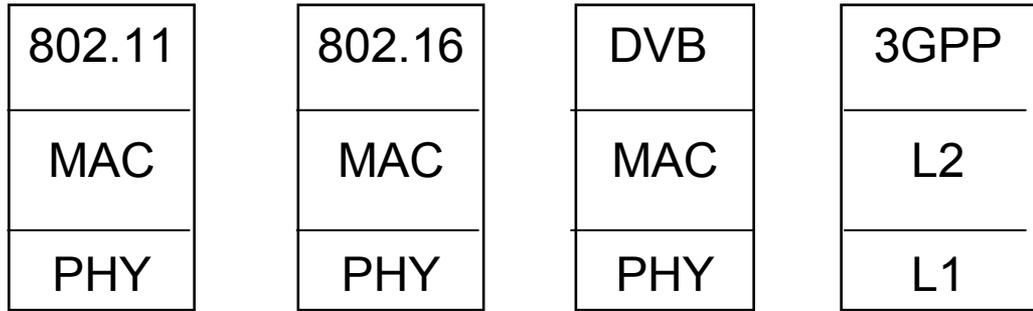


Management of Heterogeneous Wireless Networks

- Extend the 802.21 Abstract Link layer primitives for Management of 802 Wireless technologies
 - Neighbor discovery
 - Configuration
 - Monitoring events
 - Resource Reservation
- Use these primitives to enable/optimize a variety of upper layer applications
 - Load balancing
 - Fault tolerance, Reliability, Robustness
 - Efficient Routing
- Key users of this abstract interface
 - Back end equipment (Network nodes)

Management of Heterogeneous Wireless Networks

Abstract Link layer
primitives



6.08	MI	802.11 TV11 (1st extension)	Kraemer	0
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Approved as part of the consent agenda

6.09	MI	802.11 QoS MAN (1st extension)	Kraemer	0
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Approved as part of the consent agenda

7.00		Break		10
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Break was taken earlier

8.00		LMSC Internal Business		
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8.01	II	Treasurer's report	Hawkins	5	05:04 PM
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Hawkins presented "TreasClosingReportNov09.pdf"

IEEE Project 802
Statement of Operations
Jul 2009 Plenary Session
San Francisco, CA
As of Nov 14, 2009

Draft

Session Income	dB	Est/Act	Budget	Deviation
Net Registrations		1,148	1,100	48
77.9% 894 Early Registrations @ \$400	\$ 357,600			
20 Cancellations @ \$350	(7,000)			
9 Early cancellations @ \$400	(3,600)			
0 Visa cancellations @ \$400	0			
22.1% 254 Registrations @ \$500	127,000			
0 Cancellation @ \$500	0			
2 Cancellation @ \$450	(900)			
0.0% 0 Student @ \$150	0			
0 Other credits @ \$100	0			
Registraion Subtotal	\$ 473,100	\$ 473,100	\$ 463,540	\$ 9,560
0 Deadbeat Payment @ \$500		0	0	0
Interest		6	200	(194)
Other (Hotel comps and commission)		57,651	55,000	2,651
TOTAL Session Income		\$ 530,758	\$ 518,740	\$ 12,018

Session Expenses	Est/Act	Budget	Deviation
Audio Visual	34,104	25,500	(8,604)
Audit	0	0	0
Bank Charges	95	350	255
Copying	3,608	3,500	(108)
Credit Card Discounts & Fees	13,143	16,555	3,412
Equipment Expenses	0	2,500	2,500
Get IEEE 802 Contribution	83,400	80,850	(2,550)
Insurance	0	0	0
Meeting Administration	87,911	86,950	(961)
Misc Expenses	4,540 *	3,500	(1,040)
Networking	101,878	100,000	(1,878)
Other Expenses	5,600 !	5,600	0
Phone & Electrical	150	2,000	1,850
Refreshments	109,250	120,000	10,750
Shipping	8,326	15,000	6,674
Social	106,639	100,000	(6,639)
Supplies	550	800	250
TOTAL Session Expense	559,195	563,105	3,910

NET Session Surplus/(Deficit)	(28,437)	(44,365)	15,928
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Analysis	Est/Act	Budget	Deviation
Refreshments per registration	95	109	14
Social per registration	93	91	(2)
Meeting Admin per registration	77	79	2
Surplus/(Loss) per registration	(25)	(40)	16

* Misc items: Hotel gratuities, meeting room rental,

! Online education software and hosting

Cash recognized on hand as of Oct 14, 2009	\$ 1,147,184	
Reserve for unpaid expenses for prior sessions	\$ (1,000)	bank fees, CC fees, etc
Reserve for other outstanding commitments	\$ -	
Income received for current session (Nov 09)	\$ -	
Expenses prepaid for current session (Nov 09)	\$ 67,000	
Expenses prepaid for future sessions	\$ -	
Equipment Receivable Acct	\$ 37,331	

Operating Reserve	\$ 1,250,515
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IEEE Project 802
Estimated Statement of Operations
Nov 2009 Plenary Session
Atlanta, GA
As of Nov 20, 2009

Draft

Meeting Income	Estimate	Budget	Variance
Registrations	994	1,100	(106)
Registration income	419,468	473,000	(53,532)
Cancellation refunds	(10,067)	(9,460)	
Deadbeat collections	0	0	0
Bank interest	200	200	0
Other income	55,000	55,000	0
TOTAL Meeting Income	\$ 464,601	\$ 518,740	(54,139)
Meeting Expenses	Estimate	Budget	Variance
Audio Visual Rentals	21,000	\$ 25,500	4,500
Audit	0	0	0
Bank Charges	350	350	0
Copying	1,750	3,500	1,750
Credit Card Discount	14,681	16,555	1,874
Equipment Expenses	2,500	2,500	0
Get IEEE 802 Contribution	72,750	80,850	8,100
Insurance	0	0	0
Meeting Administration	81,074	86,950	5,876
Misc Expenses	2,500	3,500	1,000
Network	90,000	100,000	10,000
Other Expenses	740	5,600	
Phone & Electrical	150	200	50
Refreshments	85,000	100,000	15,000
Shipping	12,000	15,000	3,000
Social	50,000	100,000	50,000
Supplies	1,300	800	(500)
Other Discounts	0	0	0
TOTAL Meeting Expense	\$ 435,795	\$ 541,305	105,510
NET Meeting Income/Expense	\$ 28,806	\$ (22,565)	51,371
Analysis			
Refreshments per registration	86	91	5
Social per registration	50	91	41
Meeting Administration per reg	82	79	(3)
Networking per registration	91	91	0
Get IEEE 802 Contribution per r	75	75	0
Surplus/Deficit per registration	29	(21)	49
Pre-registration rate	78%	70%	

* Misc expenses: Hotel gratuities, overflow meeting room rentals

** Other expenses: CD Production

Sherman presented "VC1_20112009_r1_EC_Closing_Motions.ppt"

Sherman held a straw poll "Will you approve the LMSC OM revision if at the end of subclause 3.1.2.1 of the LMSC OM we add: "The following actions have exceptional voting requirements: <bullet> Approval of PARs and DRAFTS for forwarding to IEEE SA shall require approval by a majority of EC Members present with voting rights."

Vote in straw poll was 11/2/0

Motion is "To approve the LMCS OM revision ballot titled "Creation of LMSC Working Group (WG) P&P" as described in the document titled: 090717 Cover_letter_for_LMSC_OM_Revision_Ballot.pdf, replacing the two documents referenced in that ballot with the revised documents at:

<https://mentor.ieee.org/802-ec/dcn/09/ec-09-0006-00-00EC-draft-revision-of-the-lmsc-om-for-wg-p-p.pdf>

<https://mentor.ieee.org/802-ec/dcn/09/ec-09-0007-00-00EC-draft-lmsc-wg-p-p.pdf>"

Moved by Sherman, seconded by Shellhammer

Motion to amend, moved by Marks, seconded by Rigsbee

Motion is now

To approve the LMCS OM revision ballot titled "Creation of LMSC Working Group (WG) P&P" as described in the document titled: 090717 Cover_letter_for_LMSC_OM_Revision_Ballot.pdf replacing the two documents referenced in that ballot with the revised documents at:

<https://mentor.ieee.org/802-ec/dcn/09/ec-09-0006-00-00EC-draft-revision-of-the-lmsc-om-for-wg-p-p.pdf>

<https://mentor.ieee.org/802-ec/dcn/09/ec-09-0007-00-00EC-draft-lmsc-wg-p-p.pdf>

and with 802-EC/09-06 amended to add the following text at the end of subclause 3.1.2.1

"The following actions have exceptional voting requirements:

<bullet> Approval of PARs and DRAFTS for forwarding to IEEE SA shall require approval by a majority of EC Members present with voting rights."

Grow (Intel) thought that the wording was awkward, does it apply to SA, sponsor ballots, etc. Members of the EC indicated that it applied to all ballots.

Vote is 7/5/2, motion passes.

Now vote on amended motion

Vote is 8/3/3, motion fails

Nikolich stated that we have 17 voting members, this motion requires 2/3 approval of all voting members, even if not present. Thus this motion requires 12 affirmative votes to pass.

Motion is "To approve the LMCS OM revision ballot titled "Creation of LMSC Working Group (WG) P&P" as described in the document titled: 090717 Cover_letter_for_LMSC_OM_Revision_Ballot.pdf, replacing the two documents referenced in that ballot with the revised documents at:

<https://mentor.ieee.org/802-ec/dcn/09/ec-09-0006-00-00EC-draft-revision-of-the-lmsc-om-for-wg-p-p.pdf>

<https://mentor.ieee.org/802-ec/dcn/09/ec-09-0007-00-00EC-draft-lmsc-wg-p-p.pdf>"

Moved by Thaler seconded by Jeffree

Vote is 14/0/0, motion passes

Motion is "To approve incorporation of the changes in the LMSC P&P revision originally posted 7/16/09 on the EC reflector and amended in response to comments as reflected in the document:

<https://mentor.ieee.org/802-ec/dcn/09/ec-09-0005-00-00EC-draft-revised-lmsc-p-p-for-wg-p-p-ballot.pdf>"

Moved by Sherman, seconded by Shellhammer

Vote is 14/0/0, motion passes

1st Vice Chair Closing Motions

Author:

Matthew Sherman
1st Vice Chair, IEEE 802
BAE Systems - ES
Matthew.Sherman@BAESystems.com

Date: November 20th, 2009

EC Strawpoll

Will you approve the LMSC OM revision if at the end of subclause 3.1.2.1 of the LMSC OM we add:

"The following actions have exceptional voting requirements:

<bullet> Approval of PARs and DRAFTS for forwarding to IEEE SA shall require approval by a majority of EC Members present with voting rights."

For:

Against:

Abstain:

EC Motion

To approve the LMCS OM revision ballot titled “Creation of LMCS Working Group (WG) P&P” as described in the document titled:

- 090717 Cover_letter_for_LMSC_OM_Revision_Ballot.pdf

replacing the two documents referenced in that ballot with the revised documents at:

- <https://mentor.ieee.org/802-ec/dcn/09/ec-09-0006-00-00EC-draft-revision-of-the-lmsc-om-for-wg-p-p.pdf>
- <https://mentor.ieee.org/802-ec/dcn/09/ec-09-0007-00-00EC-draft-lmsc-wg-p-p.pdf>

Moved: Matthew Sherman

2nd:

For:

Against:

Abstain:

Potential Amended EC Motion

To approve the LMCS OM revision ballot titled “Creation of LMSC Working Group (WG) P&P” as described in the document titled:

- 090717 Cover_letter_for_LMSC_OM_Revision_Ballot.pdf

replacing the two documents referenced in that ballot with the revised documents at:

- <https://mentor.ieee.org/802-ec/dcn/09/ec-09-0006-00-00EC-draft-revision-of-the-lmsc-om-for-wg-p-p.pdf>
- <https://mentor.ieee.org/802-ec/dcn/09/ec-09-0007-00-00EC-draft-lmsc-wg-p-p.pdf>
- and with 802-EC/09-06 amended to add the following text at the end of subclause 3.1.2.1

"The following actions have exceptional voting requirements:

<bullet> Approval of PARs and DRAFTS for forwarding to IEEE SA shall require

approval by a majority of EC Members present with voting rights.
Moved: Matthew Sherman

2nd:

For:
Against:
Abstain:

EC Motion

To approve the LMSC P&P revision originally posted 7/16/09 on the EC reflector and amended in response to comments as reflected in the document:

- <https://mentor.ieee.org/802-ec/dcn/09/ec-09-0005-00-00EC-draft-revised-lmsc-p-p-for-wg-p-p-ballot.pdf>

Moved: Matthew Sherman

2nd:

For:

Against:

Abstain:

Nikolich said that only 2 people returned their status.

Nikolich asked each of the chairs to name a person to be assigned to work on the 802.0 revision project. If the chair did not have a nominee or if they were absent, the chair was designated the nominee.

802.3 - Matt Landry

802.17 - John Lemon

802.19 - Steve Shellhammer

802.21 - Juan Carlos Zuniga

802.1 - Everybody, Tony Jeffree

802.15 - Bob Heile

802.16 - Phil Barber

802.11 - David Bagby

ES ECSG - Geoff Thompson

802.18 - Mike Lynch

802.20 - Mark Klerer

802.22 - Wendong Hu

Will be sent by email. Document is "802 Task Force 18nov2009 draft minutes.pdf"

Draft Minutes

IEEE-SA/802 Task Force

Wednesday 18 November 2009, 2-3:30 pm
802 Plenary, Atlanta, GA – Heritage Boardroom

Attendees: Paul Nikolich, Susan Tatiner, Michael Kipness, Kathryn Cush, Moira Patterson, Jodi Haasz, Buzz Rigsbee, Mark Klerer, Bruce Kraemer, James Gilb, Michelle Turner, Bob Heile, David Law, Bob Grow

Meeting Started: 14:00

~~1. ISO/IEC JTC1 WG1 status update (Kipness)~~

2. Registration Authority – status ISO agreement, BoG plans (Nikolich)

- a. A copy of the agreement, executed by Judy Gorman, was sent to ISO and we are waiting for them to execute the agreement on their end
- b. The pricing policy was developed by an ad-hoc and will be presented to BOG at the December 2009 meeting. The policy was developed based on two principles: (1) cost recovery basis and (2) to cover costs over 5 years. The pricing is also set to ensure a prudent consumption of addresses – we are running out of OUIs.

3. Response from IEEE to 802 Letter 10min (Tatiner)

- a. Susan Tatiner summarized letter
- b. Sales status of Sep 09 approved 802 Standards 5min (Nikolich/Tatiner)
 - i. Getting docs ready for publication has been reasonably addressed
 - ii. Getting docs ready for sale has been reasonably addressed
 - iii. The Shop experience has not been reasonably addressed
 1. State of the art reseller like Amazon – Why wasn't this sought right away? Due to Amazon fees.
 2. Other standards resellers are being sought
 3. Bob Heile agreed that Amazon is the way to go and we have virtually nothing to lose
 4. Buzz Rigsbee advised Susan Tatiner that he has a contact at Amazon with whom he could discuss this.
 5. All resellers that IEEE currently partner with expressed concern about the Get802 window as a deterrent to single-copy sales
 6. Action Item: Paul Nikolich will follow-up with Markus Plessel & Karen Kenney on sales issues. Paul will gather more data regarding subscript sales and 3rd party reseller sales. Paul is also going to make sure Amazon is in the RFP and that we understand the barriers to working with this reseller.

4. Status of TTA MOU 5min (Patterson/Law)

- a. Moira Patterson provided some background on the IEEE-SA MOU Program. The SA is working on an MOU with TTA as a result of a past outreach meeting. This the first time that the SA has brought a technical cooperation annex to the WGs as a result of an outreach visit under this program; the goal is to facilitate technical cooperation at the technical levels between IEEE and TTA groups.
 - i. Some questions/concerns that were raised were:
 1. This should not impact the informal communication channels that currently exist.
 2. WGs need to be informed of this (draft annex has been provided to them).
 3. It is important that P&P, including copyright policies, need to be followed; this is not an exemption.
 4. Existing liaison officers questioned if this would impact their status. They should not be affected by this.

b. Action Item: David Law will work with Moira Patterson to contribute text for future MOUs.

5. GetIEEE802 2010 budget (Nikolich)

- a. Karen Kenney has indicated that the business case analysis is done and there will be a budget to review within next few months.
6. Action item review (Nikolich)
- a. Paul Nikolich will follow-up with Markus Plessel & Karen Kenney on sales issues. Paul will gather more data regarding subscription sales and 3rd party reseller sales. Paul is also going to make sure Amazon is in the RFP and that the barriers to working with this reseller are understood.
 - b. Action Item: David Law will work with Moira Patterson to contribute text for future MOUs.
7. Other Items
- a. Bruce Kraemer: Is looking for pre-editing of certain documents to avoid some problems that were realized during the publication phase of 802.11n. Susan and Michelle explained some of the difficulties of doing pre-editing, including best use of Publishing staff resources and duplication of work; however, they took an action item to review this matter back in NJ with Kim Breitfelder and make recommendations to 802.11, with the possibility of 802.11v being a test case.

Adjourn 3:15 pm

Rigsbee presented "802-1109-Fri-EC-Motion-RegProcedures-02.doc"

Motion is:

"IEEE-802 Registration Procedures will be adjusted beginning March 2010 as follows:

- 1) We will advance the registration cut-off date by 2-weeks, from 17-days prior to the meeting, to 31-days prior to the meeting.
- 2) We will advance the hotel room-block cut-off by the same amount so that both occur on the same date.
- 3) We will adjust the Session Registration Fees to the following formula:
 - Web Early-Registration Fee (prior to 31-day cut-off) will remain at \$400.US
 - Web Registration Fee (after the Early-Registration cut-off but at least 7-days before start of session (Monday) will now be \$500.US
 - Late Web or On-site Registration (less than 7-days before or during the session) will now be \$600.US
- 4) A \$300.US surcharge will be added to the registration fee for those attendees not booking and staying in the 802-contracted hotel. Proof of hotel stay will be required to prevent the surcharge."

Moved by Rigsbee, seconded by Hawkins

Lemon asked if this is consistent with policy used for wireless interims

Rigsbee said it was less harsh.

Lemon asked what form of proof is required? Is it automatic?

Rigsbee said that we can get it from the hotel records

Shellhammer - will local attendees pay the extra fee if they do not stay in the hotel?

Rigsbee said yes.

Rigsbee said that the fee is the portion of the cost that is offset by staying in the hotel.

Marks spoke against the motion because of item 4.

Thompson asked if this applied to the March 2010 meeting?

Change first line to be "will be effective fo the March 2010 meeting as follows:"

Gilb asked for a clarification, does this mean that all the attendee needs to do is to avoid the fee is to book one night in the hotel.

Rigsbee confirmed that this is the case.

Motion now reads

"IEEE-802 Registration Procedures will be effective for the March 2010 meeting as follows:

- 1) We will advance the registration cut-off date by 2-weeks, from 17-days prior to the meeting, to 31-days prior to the meeting.
- 2) We will advance the hotel room-block cut-off by the same amount so that both occur on the same date.
- 3) We will adjust the Session Registration Fees to the following formula:
 - Web Early-Registration Fee (prior to 31-day cut-off) will remain at \$400.US
 - Web Registration Fee (after the Early-Registration cut-off but at least 7-days before start of session (Monday) will now be \$500.US
 - Late Web or On-site Registration (less than 7-days before or during the session) will now be \$600.US
- 4) A \$300.US surcharge will be added to the registration fee for those attendees not booking and staying in the 802-contracted hotel. Proof of hotel stay will be required to prevent the surcharge."

Vote is 10/2/2, motion passes

EC-Motion:

Mover: John Hawkins

Second: Buzz Rigsbee

Date: 11/20/2009

IEEE-802 Registration Procedures will be adjusted beginning March 2010 as follows:

- 1) We will advance the registration cut-off date by 2-weeks, from 17-days prior to the meeting, to 31-days prior to the meeting.
- 2) We will advance the hotel room-block cut-off by the same amount so that both occur on the same date.
- 3) We will adjust the Session Registration Fees to the following formula:
 - **Web Early-Registration Fee** (prior to 31-day cut-off) will remain at **\$400.US**
 - **Web Registration Fee** (after the Early-Registration cut-off but at least 7-days before start of session (Monday) will now be **\$500.US**
 - **Late Web or On-site Registration** (less than 7-days before or during the session) will now be **\$600.US**
- 4) A **\$300.US** surcharge will be added to the registration fee for those attendees not booking and staying in the 802-contracted hotel. Proof of hotel stay will be required to prevent the surcharge.

Yes _____ No _____ Abstain _____

Rigsbee presented "802-1109-Fri-EC-Motion-AnniversaryGifts-01.doc"

Motion is "Approve expenditure of up to \$15,000.00 for attendee memorabilia (e.g. polo shirts, badge holders, etc.) to commemorate to 30th Anniversary of the IEEE-802 LAN/MAN Standards Committee at the March 2010 Plenary Session in Orlando, FL.

Final determination of appropriate gifts and expenditures to be approved by John Hawkins, Buzz Rigsbee, and Paul Nikolich."

Moved by Hawkins, seconded by Rigsbee

Vote is 12/1/0, motion passes

EC-Motion:

Mover: John Hawkins

Second: Buzz Rigsbee

Date: 11/20/2009

30th Anniversary Expenses:

Approve expenditure of up to **\$15,000.00** for attendee memorabilia (e.g. polo shirts, badge holders, etc.) to commemorate to 30th Anniversary of the IEEE-802 LAN/MAN Standards Committee at the March 2010 Plenary Session in Orlando, FL.

Final determination of appropriate gifts and expenditures to be approved by John Hawkins, Buzz Rigsbee, and Paul Nikolich.

Yes _____ No _____ Abstain _____

Rigsbee presented "802-1109-Fri-EC-StrawPoll-AnniversaryLogo-01.doc"

Straw poll was to vote for as many as you like

Option #1: Logo Only - 2

Option #2: Logo + dates - 8

Option #3: Logo + dates + speeds - 5

Straw poll, which color scheme is preferred, white on blue or blue on white

White on blue - 9

Blue on white - 3

EC-Straw Poll:

Mover: John Hawkins; **Second:** Buzz Rigsbee

Date: 11/20/2009

30th Anniversary Shirt Logo:



1980 → 2010

1 Mb/s → 100 Gb/s

Option #1: Logo Only
+ dates + speeds

Option #2: Logo + dates

Option #3: Logo

#1 _____

#2 _____

#3 _____

Final determination of appropriate Logo to be approved by John Hawkins, Buzz Rigsbee, and Paul Nikolich.

Gilb presented "Attendance-tool-support-v01.pdf" pages 14-15

Moved by Gilb, seconded by Marks

Vote is 13/4/0, motion passes

IMAT support - conclusions

- It is the attendees responsibility to maintain their webid (Chairs Guideline, J. Gilb, P. Nikolich). We will attempt to fix problems.
- VeriLAN has documentation at help desk to have users fix webid problems.
- Look into sharing myProject user list with approved vendor to improve finding userids. (S. Tatiner and C. Sahr)
- Get commitment from IEEE-SA that the service goal is 24 hours for webid and attendance record merging.

EC motion

- Motion is "The executive committee agrees with the following actions to handle IMAT support:
 - It is the attendees responsibility to maintain their webid. 802 volunteers will attempt to fix problems.
 - Request that our Network Services Provider keep documentation at help desk to be used to help attendees fix webid problems.
 - Look into sharing myProject user list with approved vendor to improve finding userids.
 - Get commitment from IEEE-SA that the service goal is 24 hours for webid and attendance record merging."

Law presented "802d3_1109_closing_EC.pdf" pages 25-26

Motion is "The LMSC Executive Committee approves the following Working Groups to be included in the IEEE-SA –TTA MOU Technical Cooperation Agreement annex

IEEE 802.3 [WG vote: Y:24 N:1 A:53]

IEEE 802.11 [WG vote: Y:39 N:0 A:1]

IEEE 802.15 [WG vote: Y:29 N:0 A:0]

IEEE 802.21 [WG vote: Y:9 N:0 A:1]"

Moved by Law, seconded by Heile

Vote is 13/0/0, motion passes

IEEE-SA – TTA (Telecommunications Technology Association) MoU

IEEE-SA – TTA (Telecommunications Technology Association) MoU

Motion

The LMSC Executive Committee approves the following Working Groups to be included in the IEEE-SA – TTA MOU Technical Cooperation Agreement annex

IEEE 802.3 [WG vote: Y:24 N:1 A:53]

IEEE 802.11 [WG vote: Y:39 N:0 A:1]

IEEE 802.15 [WG vote: Y:29 N:0 A:0]

IEEE 802.21 [WG vote: Y:9 N:0 A:1]

M: D Law, S: B Heile

Y: ??, N: ??, A: ??

Kraemer presented "11-09-1300-00-0000-november-2009-ec-motions.ppt", page 8

Motion is "Move that the letter contained in 11-09-1273r1 be liaised to ISO/IEC JTC1/SC6. This letter documents recent and planned future activities in the IEEE 802.11 Working Group, flags an intention to submit certain documents to ISO/IEC using the PDSO process, and offers JTC1 and SC6 National Bodies the opportunity to submit comments into the Sponsor Ballot process. The letter should be sent to the SC6 Secretariat. The IEEE 802.11 Working Group Chair should be authorised to make any necessary editorial changes."

Moved by Kraemer, seconded by Rigsbee

Vote is 13/0/0

802.11 Liaison to SC6 relating to plans to use the PSDO

- **Move that the letter contained in 11-09-1273r1 be liaised to ISO/IEC JTC1/SC6. This letter documents recent and planned future activities in the IEEE 802.11 Working Group, flags an intention to submit certain documents to ISO/IEC using the PSDO process, and offers JTC1 and SC6 National Bodies the opportunity to submit comments into the Sponsor Ballot process. The letter should be sent to the SC6 Secretariat. The IEEE 802.11 Working Group Chair should be authorised to make any necessary editorial changes.**
- **Moved Bruce Kraemer**
- **Seconded**
- **In the WG:**
 - Moved: Andrew Myles
 - Seconded: Ian Sherlock
 - Result: 41,0,1, passes

9.03	ME	Letter to SC6 in relation to the N14123 submission by China regarding their WAPI submission	Kraemer/ Nikolich	0
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Approved as part of the consent agenda

**IEEE P802.11
Wireless LANs**

Proposed liaison letter to SC6 in relation to N14123

Date: 2009-11-19

Author(s):

Name	Affiliation	Address	Phone	email

Abstract

This document contains a proposed liaison from IEEE 802 to ISO/IEC JTC1 SC6 and its National Body members. The liaison is based on ISO/IEC document ISO/IEC JTC 1/SC6 N 14123, which was sent to IEEE staff by the SC6 Secretariat. A copy of ISO/IEC JTC 1/SC6 N 14123 is embedded within 11-09-1221.

The proposed motion to approve the letter is as follows:

The IEEE 802.11 JTC1 ad hoc recommends to the IEEE 802.11 WG and IEEE 802 ExCom that the letter contained in 11-09-1254r1 be liaised to ISO/IEC JTC1/SC6. This letter provides a response to some of the material liaised to the IEEE staff in ISO/IEC JTC 1/SC6 N 14123. The letter should be sent to the SC6 Secretariat. It should also be CC'ed to the individuals and organisations addressed by the e-mail that notified IEEE staff about ISO/IEC JTC 1/SC6 N 14123. IEEE staff should be authorised to make any necessary editorial changes.

Dear <Name of appropriate person in SC6 Secretariat>

The IEEE 802.11 Working Group has been developing the IEEE 802.11 standard series since 1990 and continues to do so. Indeed, the Working Group recently completed 802.11n (to provide throughput of up to 600 Mb/s), 802.11r (to provide fast, secure roaming) and 802.11w (to provide improved security for management frames). Work is almost complete on a variety of additional amendments (802.11u, 802.11v and 802.11z) and work on the next generation of amendments is continuing. Further details are available on the IEEE 802.11 Working Group web site (www.ieee802.org/11).

On 29 October 2009, the ISO/IEC JTC1/SC6 Secretariat notified IEEE 802 that the China National Body had submitted a "proposal for a new work item" (ISO/IEC JTC 1/SC6 N 14123) to "provide an alternative security mechanism for use with ISO/IEC 8802-11". This alternative security mechanism is commonly known as WAPI (WLAN Authentication and Privacy Infrastructure). IEEE 802 appreciates the opportunity to review the new work item proposal and provide comments to SC6 and its National Body members.

IEEE 802 would like to make two points regarding the New Project proposal:

- 1) The evidence provided in ISO/IEC JTC 1/SC6 N 14123 does not support the assertion that there are serious security loopholes in current WLAN standards. There are no known attacks on the mandatory security components included in ISO/IEC 8802-11 and its amendments.

The "Purpose and justification" section of ISO/IEC JTC 1/SC6 N 14123 specifies three issues related to ISO/IEC 8802-11 and its amendments. None of the issues raised provides any evidence that the security provided by ISO/IEC 8802-11 and its amendments is in any way flawed when the mandatory security components are enabled:

- Issue 1 refers to a paper called *WiFi Epidemiology: Can Your Neighbors' Router Make Yours Sick?* by Hao Hu, Steven Myers, Vittoria Colizza and Alessandro Vespignani published in early 2008. A copy is available at <http://arxiv.org/pdf/0706.3146>.

The "Purpose and justification" section in ISO/IEC JTC 1/SC6 N 14123 implies that this paper documents a flaw in existing WLAN standards. In fact, the paper actually focuses on Access Points that either have no security or use WEP, a protocol that was deprecated with the ratification of IEEE 802.11i in 2004 (ISO/IEC 8802-11:2005 Amd6). Indeed, the authors of the paper explicitly "*assume that WPA is not vulnerable to attack*".

The cited paper does not call into question the security provided by ISO/IEC 8802-11 and its amendments.

- Issue 2 refers to an article in a trade magazine, *Network World*, in January 2008 that simply reports on a version of the paper referred to in Issue 1.

The cited article does not call into question the security provided by ISO/IEC 8802-11 and its amendments

- Issue 3 cites two papers published in late 2008 and early 2009 that describe similar mechanisms to attack WPA. The papers are available at:
 - <http://dl.aircrack-ng.org/breakingwepandwpa.pdf>
 - <http://jwis2009.nsysu.edu.tw/location/paper/A%20Practical%20Message%20Falsification%20Attack%20on%20WPA.pdf>

The existence of these attacks is not surprising. TKIP was designed in 2003 with a 5 year horizon to allow devices that implemented WEP to transition to a higher level of security without a hardware upgrade. The industry is in the process of deprecating TKIP, and it is notable that TKIP is prohibited in IEEE 802.11n.

The cited papers do not call into question the security provided by ISO/IEC 8802-11 and its amendments when the mandatory security components are enabled..

-
- 2) The best way to integrate WAPI technology into the international standard for WLAN is to bring the work into the IEEE 802 process.

The standardisation of WAPI independently from the IEEE 802.11 Working Group process will duplicate existing functionality and will isolate WAPI devices from most amendments to the IEEE 802.11 series since 2003, including 802.11e (QoS), 802.11j (Japan), 802.11k (Wireless Network Management), 802.11n (High Throughput), 802.11r (Fast roaming) and 802.11w (Management Frame Protection).

The IEEE 802.11 Working Group believes that the ongoing development of the 802.11 series should continue to occur in the Working Group, as it has since 1990. The success of this approach is proven by the current operation of over a billion devices worldwide. The development of the standard by the IEEE 802.11 Working Group will avoid duplication of effort and enable interoperable access to all 802.11 technologies by consumers around the world. We continue to encourage the ISO/IEC JTC1 and SC6 National Bodies to provide their vital review during the IEEE Sponsor Ballot process and when the IEEE 802.11 standards are proposed as ISO/IEC standards.

Any individual from any company or country is encouraged to propose improvements to the IEEE 802.11 standards by proposing amendments to the IEEE 802.11 Working Group. The IEEE 802.11 Working Group is an open and consensus based international forum, with active participation of recognized 802.11 experts from more than 30 countries. IEEE 802 renews its offer, made on numerous occasions during the last five years, to consider the WAPI technology in the IEEE 802.11 Working Group.

In summary, the justification in ISO/IEC JTC 1/SC6 N 14123, based on the assertion that there are security loopholes or flaws in ISO/IEC 8802-11 and its amendments, is not supported by the cited evidence. In addition, we believe the best way for the international community to gain the benefits of WAPI technology is to bring the work into the IEEE 802 standardization process. IEEE 802 again invites the contribution of WAPI technology for consideration.

Yours sincerely,

Paul Nikolich
Chairman of IEEE 802 Executive Committee

Marks presented "18-09-0125-00-0000-rr-tag-ec-motion-nov09.ppt"

Motion is "To authorize the 802.18 TAG to approve, on behalf of the EC, contributions to ITU-R WP5D meetings #7, #8 and #9 on IMT-Advanced topics, as agreed by the 802.16 WG. "

Moved by Gilb, seconded Marks

Vote is 13/0/0

802.18 Motion to SEC

Agenda: 9.04

Date: 11/20/2009

Time: 5:35 p.m.

Motion by: Lynch

Seconded by: Marks

Moved:

To authorize the 802.18 TAG to approve, on behalf of the EC, contributions to ITU-R WP5D meetings #7, #8 and #9 on IMT-Advanced topics, as agreed by the 802.16 WG.

Informative: This continues the 2009 procedure for IEEE 802 contributions to ITU-R WP5D regarding potential IMT-Advanced technologies

Approve: XX Do Not Approve: XX Abstain: XX Motion:

Approved as part of the consent agenda

Received:

**Document 5D/xxx-E
xx February 2010
English only**

Question: [Question ITU-R 229-1/8](#)

TECHNOLOGY ASPECTS

Institute of Electrical and Electronics Engineers (IEEE)

[DRAFT] IMT-2000 OFDMA TDD WMAN SUBMISSION TOWARD REVISION 10 OF RECOMMENDATION ITU-R M.1457 (MEETING X+1)

1 Source information

This contribution was developed by IEEE Project 802®, the Local and Metropolitan Area Network Standards Committee (“IEEE 802”), an international standards development committee organized under the IEEE and the IEEE Standards Association (“IEEE-SA”).

The content herein was prepared by a group of technical experts in IEEE 802 and industry and was approved for submission by the IEEE 802.16™ Working Group on Wireless Metropolitan Area Networks, the IEEE 802.18 Radio Regulatory Technical Advisory Group, and the IEEE 802 Executive Committee, in accordance with the IEEE 802 policies and procedures, and represents the view of IEEE 802.

2 Discussion

Following Document 5D/529, this contribution contains updated material on IMT-2000 OFDMA TDD WMAN toward Revision 10 of Recommendation ITU-R M.1457 in line with Circular Letter 8/LCCE/95 and the schedule received from ITU-R WP 5D contained in Att. 6.9 of 5D/526 (IEEE L802.16-09/0065r1). This material will be further updated in time for the final meeting addressing the development of Revision 10.

In particular, the material required as specified in the update procedure for revisions of Recommendation ITU-R M.1457 (8/LCCE/95) is addressed in the following Annexes:

Annex 1: Update of Section 5.6.2

Annex 2: Modifications to Section 5.6.1

Annex 3: Modifications to the GCS

Annex 4: Summary and rationale of the proposed update

Annex 5: Self-evaluation of the proposed update against the evaluation criteria

Annex 6: Self-declaration that the proposed amendments are self-consistent between Section 5.6.1, Section 5.6.2, and the GCS

Annex 7: Summary of the material that is planned to be submitted to the final meeting for
Revision 10

3 Proposed update to Section 6 of “Roadmap for current work relevant to future updates of Recommendation ITU-R M.1457”

IEEE Std 802.16-2009 (“IEEE Standard for Local and metropolitan area networks – Part 16: Air Interface for Broadband Wireless Access Systems”) was published by IEEE on 29 May 2009. This standard is a revision of IEEE Std 802.16-2004, consolidating material from IEEE Std 802.16e-2005, IEEE 802.16-2004/Cor1-2005, IEEE 802.16f-2005, and IEEE Std 802.16g-2007, along with additional maintenance items and enhancements to the management information base specifications.

IEEE Std 802.16j (“IEEE Standard for Local and metropolitan area networks – Part 16: Air Interface for Broadband Wireless Access Systems – Amendment 1: Multihop Relay Specification”) was published by IEEE on 12 June 2009. This amendment to IEEE Std 802.16-2009 updates and expands IEEE Std 802.16, specifying OFDMA physical layer and medium access control layer enhancements to IEEE Std 802.16 for licensed bands to enable the operation of relay stations. Subscriber station specifications are not changed.

The IEEE 802.16 Working Group is developing the following projects as draft amendments to IEEE Std 802.16:

- P802.16h: Amendment to IEEE Standard for Local and Metropolitan Area Networks – Part 16: Air Interface for Broadband Wireless Access Systems - Improved Coexistence Mechanisms for License-Exempt Operation.
- P802.16m: Draft IEEE Standard for Local and metropolitan area networks – Part 16: Air Interface for Broadband Wireless Access Systems – Advanced Air Interface.

4 Proposal

We propose that the information contained in this contribution and its Annexes be considered in development of Revision 10 of M.1457.

In addition, information contained in Section 3 of this document is proposed as an update to Section 6 of the “Roadmap for current work relevant to future updates of Recommendation ITU-R M.1457” (Att. 6.7 of WP 5D Chairman’s report).

Contact: Michael LYNCH
E-mail: mjlynch@mjlallc.com

Annex 1

Update of Section 5.6.2

It is anticipated that the updated Section 5.6.2 will be submitted to ITU-R WP 5D (as required by established ITU-R procedures) per the announced schedule.

Annex 2

Modifications to Section 5.6.1

It is anticipated that the update modifications to Section 5.6.1, if needed, will be submitted to ITU-R WP 5D, as per established procedures. These modifications will capture the outcome of the current activities on some of the technical areas as indicated in the Roadmap update (Section 3 of this document).

Annex 3

Modifications to the GCS

It is anticipated that the updated set of the Global Core Specifications (GCS) for IMT-2000 OFDMA TDD WMAN will be submitted to ITU-R WP 5D, as per established procedures.

Annex 4

Summary and rationale of the proposed update

The main purpose of this update is to align Recommendation ITU-R M.1457 to the most updated versions of the specifications underlying the radio interface IMT-2000 OFDMA TDD WMAN. It is anticipated that the summary and the rationale of the modifications to Section 5.6.1 will be submitted to ITU-R WP 5D, as per established procedures.

Annex 5

Self-evaluation of the proposed update against the evaluation criteria

The self-evaluation of the “total” radio interface update of IMT-2000 OFDMA TDD WMAN has been made against all evaluation criteria listed in the update procedure contained in Circular Letter 8/LCCE/95. The results are that the proposed updates meet the evaluation criteria as follows:

7.1 “The evaluation criteria” (Section 7.1 in Circular Letter 8/LCCE/95)

The “requirements and objectives of IMT-2000” and the “Minimum performance capabilities for IMT-2000” as per Attachments 4 and 6 of Circular Letter 8/LCCE/47 were considered. The values included in Circular Letter 8/LCCE/47 were used. The proposed update consists of enhancements to the existing IMT-2000 OFDMA TDD WMAN radio interface. The evaluation of the proposed update was done in the context of the “total” radio interface. As shown in the tables below, the conclusion is that the IMT-2000 OFDMA TDD WMAN radio interfaces with the proposed enhancements continues to meet all evaluation criteria in “Requirements and objectives of IMT-2000” and “Minimum performance capabilities for IMT-2000”.

TABLE 1

Requirements and objectives relevant to the evaluation of candidate radio transmission technologies

IMT-2000 Item description	Obj/Req	Source	Meets
Voice and data performance requirements			
1. One-way end to end delay less than 40 ms	Req	G.174, § 7.5	Yes
2. For mobile videotelephony services, the IMT-2000 terrestrial component should operate so that the maximum overall delay (as defined in ITU-T Recommendation F.720) should not exceed 400 ms, with the one way delay of the transmission path not exceeding 150 ms	Req	Suppl. F.720, F.723, G.114	Yes
3. Speech quality should be maintained during $\leq 3\%$ frame erasures over any 10 second period. The speech quality criterion is a reduction of ≤ 0.5 mean opinion score unit (5 point scale) relative to the error-free condition (G.726 at 32 kbit/s)	Req	G.174, § 7.11 and M.1079 § 7.3.1	Yes
4. DTMF signal reliable transport (for PSTN is typically less than one DTMF error signal in 10^4)	Req	G.174, § 7.11 and M.1079 § 7.3.1	Yes
5. Voiceband data support including G3 facsimile	Req	M.1079, § 7.2.2	Yes
6. Support packet switched data services as well as circuit switched data; requirements for data performance given in ITU-TG.174	Req	M.1034, §§ 10.8, 10.9	Yes

IMT-2000 Item description	Obj/Req	Source	Meets
Radio interfaces and subsystems, network related performance requirements			
7. Network interworking with PSTN and ISDN in accordance with Q.1031 and Q.1032	Req	M.687-1, § 5.4	Yes
8. Meet spectral efficiency and radio channel performance requirements of M.1079	Req	M.1034, § 12.3.3/4	Yes
9. Provide phased approach with data rates up to 2 Mbit/s in phase 1	Obj	M.687, § 1.1.14	Yes
10. Maintain bearer channel bit-count integrity (e.g. synchronous data services and many encryption techniques)	Obj	M.1034, § 10.12	Yes
11. Support for different cell sizes, for example: Mega cell Radius~100-500 km Macro cell Radius ≤35km, Speed ≤500 km/h Micro cell Radius ≤1km, Speed ≤100 km/h Pico cell Radius ≤50m, Speed ≤10 km/h	Obj	M.1035, § 10.1	Yes
Application of IMT-2000 for fixed services and developing countries			
12. Circuit noise- idle noise levels in 99% of the time about 100pWp	Obj	M.819-1, § 10.3	Yes
13. Error performance - as specified in ITU-R F.697	Obj	M.819-1, § 10.4	Yes
14. Grade of service better than 1%	Obj	M.819-1, § 10.5	Yes

TABLE 2

Generic requirements and objectives relevant to the evaluation of candidate radio transmission technologies

IMT-2000 Item description	Obj/Req	Source	Meets
Radio interfaces and subsystems, network related performance requirements			
1. Security comparable to that of PSTN/ISDN	Obj	M.687-1, § 4.4	Yes
2. Support mobility, interactive and distribution services	Req	M.816, § 6	Yes
3. Support UPT and maintain common presentation to users	Obj	M.816, § 4	Yes
4. Voice quality comparable to the fixed network (applies to both mobile and fixed service)	Req	M.819-1, Table 1, M.1079, § 7.1	Yes
5. Support encryption and maintain encryption when roaming and during handover	Req	M.1034, § 11.3	Yes
6. Network access indication similar to PSTN (e.g. dialtone)	Req	M.1034, §§ 11.5	Yes
7. Meet safety requirements and legislation	Req	M.1034, § 11.6	Yes
8. Meet appropriate EMC regulations	Req	M.1034,	Yes

IMT-2000 Item description	Obj/Req	Source	Meets
		§ 11.7	
9. Support multiple public/private/residential IMT-2000 operators in the same locality	Req	M.1034, § 12.1.2	Yes
10. Support multiple mobile station types	Req	M.1034, § 12.1.4	Yes
11. Support roaming between IMT-2000 operators and between different IMT-2000 radio interfaces/environments	Req	M.1034, § 12.2.2	Yes
12. Support seamless handover between different IMT-2000 environments such that service quality is maintained and signaling is minimized	Req	M.1034, § 12.2.3	Yes
13. Simultaneously support multiple cell sizes with flexible base location, support use of repeaters and umbrella cells as well as deployment in low capacity areas	Req	M.1034, § 12.2.5	Yes
14. Support multiple operator coexistence in a geographic area	Req	M.1034, § 12.2.5	Yes
15. Support different spectrum and flexible band sharing in different countries including flexible spectrum sharing between different IMT-2000 operators (see M.1036)	Req	M.1034, § 12.2.8	Yes
16. Support mechanisms for minimizing power and interference between mobile and base stations	Req	M.1034, § 12.2.8.3	Yes
17. Support various cell types dependent on environment (M.1035 § 10.1)	Req	M.1034, § 12.2.9	Yes
18. High resistance to multipath effects	Req	M.1034, § 12.3.1	Yes
19. Support appropriate vehicle speeds (as per § 7) Note: Applicable to both terrestrial and satellite proposals	Req	M.1034, § 12.3.2	Yes
20. Support possibility of equipment from different vendors	Req	M.1034, § 12.1.3	Yes
21. Offer operational reliability at least as good as 2nd generation mobile systems	Req	M.1034, § 12.3.5	Yes
22. Ability to use terminal to access services in more than one environment, desirable to access services from one terminal in all environments	Obj	M.1035, § 7.1	Yes
23. End-to-end quality during handover comparable to fixed services	Obj	M.1034-1 § 11.2.3.4	Yes
24. Support multiple operator networks in a geographic area without requiring time synchronization	Obj		Yes
25. Layer 3 contains functions such as call control, mobility management and radio resource management some of which are radio dependent. It is desirable to maintain layer 3 radio transmission independent as far as possible	Obj	M.1035, § 8	Yes
26. Desirable that transmission quality requirements from the upper layer to physical layers be common for all services	Obj	M.1035, § 8.1	Yes
27. The link access control layer should as far as possible not contain radio transmission dependent functions	Obj	M.1035, § 8.3	Yes
28. Traffic channels should offer a functionally equivalent capability to the ISDN B channels	Obj	M.1035, § 9.3.2	Yes

IMT-2000 Item description	Obj/Req	Source	Meets
29. Continually measure the radio link quality on forward and reverse channels	Obj	M.1035, § 11.1	Yes
30. Facilitate the implementation and use of terminal battery saving techniques	Obj	M.1035, § 12.5	Yes
31. Accommodate various types of traffic and traffic mixes	Obj	M.1036, § 1.10	Yes
Application of IMT-2000 for fixed services and developing countries			
32. Repeaters for covering long distances between terminals and base stations, small rural exchanges with wireless trunks etc.	Req	M.819-1, Table 1	Yes
33. Withstand rugged outdoor environment with wide temperature and humidity variations	Req	M.819-1, Table 1	Yes
34. Provision of service to fixed users in either rural or urban areas	Obj	M.819-1, § 4.1	Yes
35. Coverage for large cells (terrestrial)	Obj	M.819-1, § 7.2	Yes
36. Support for higher encoding bit rates for remote areas	Obj	M.819-1, § 10.1	Yes
Satellite component (Not required for RTT submission)			
37. Links between the terrestrial and the satellite control elements for handover and exchange of other information	Req	M.818-1, § 3.0	N/A
38. Take account for constraints for sharing frequency bands with other services (WARC-92)	Obj	M.818-1, § 4.0	N/A
39. Compatible multiple access schemes for terrestrial and satellite components	Obj	M.818-1, § 6.0	N/A
40. Service should be comparable quality to terrestrial component as far as possible	Obj	M.818-1, § 10.0	N/A
41. Use of satellites to serve large cells for fixed users	Obj	M.819-2, § 7.1	N/A
42. Key features (e.g. coverage, optimization, number of systems)	Obj	M.1167, § 6.1	N/A
43. Radio interface general considerations	Req	M.1167, § 8.1.1	N/A
44. Doppler effects	Req	M.1167, § 8.1.2	N/A

TABLE 3

**Subjective requirements and objectives relevant to the evaluation
of candidate radio transmission technologies**

IMT-2000 Item description	Obj/Req	Source	Meets
1. Fixed Service- Power consumption as low as possible for solar and other sources	Req	M.819-1, Table 1	Yes
2. Minimize number of radio interfaces and radio sub-system complexity, maximize commonality (M.1035, § 7.1)	Req	M.1034, § 12.2.1	Yes
3. Minimize need for special interworking functions	Req	M.1034, § 12.2.4	Yes
4. Minimum of frequency planning and inter-network coordination and simple resource management under time-varying traffic	Req	M.1034, § 12.2.6	Yes
5. Support for traffic growth, phased functionality, new services or technology evolution	Req	M.1034, § 12.2.7	Yes
6. Facilitate the use of appropriate diversity techniques avoiding significant complexity if possible	Req	M.1034, § 12.2.10	Yes
7. Maximize operational flexibility	Req	M.1034, § 12.2.11	Yes
8. Designed for acceptable technological risk and minimal impact from faults	Req	M.1034, § 12.2.12	Yes
9. When several cell types are available, select the cell that is the most cost and capacity efficient	Obj	M.1034, § 10.3.3	Yes
10. Minimize terminal costs, size and power consumption, where appropriate and consistent with other requirements	Obj	M.1036, § 1.12	Yes

TABLE 4

Minimum performance capabilities

Test environments	Indoor office	Outdoor to indoor and pedestrian	Vehicular
Mobility considerations	Mobility type (Low)	Mobility type (Medium)	Mobility type (High)
Handover	Yes	Yes	Yes
Support of general service capabilities			
Packet data	Yes	Yes	Yes
Asymmetric services	Yes	Yes	Yes
Multimedia	Yes	Yes	Yes
Variable bit rate	Yes	Yes	Yes

8.1 Compatibility with the existing IMT-2000 radio interfaces

The proposed update fits well within the framework of the existing IMT-2000 OFDMA TDD WMAN radio interface. All features supported in the existing IMT-2000 OFDMA TDD WMAN are still supported in the proposed update.

8.2 Harmonization within multiple proposals

See Section 9.2.

“Other considerations” (Section 9 in 8/LCCE/95)

9.1 Benefits of the proposed enhancement

The proposed enhancements improve the performance of IMT-2000 OFDMA TDD WMAN radio interface.

9.2 Harmonization and consensus building

Through their membership and through liaison communications, the SDO stakeholders, the IEEE and the WiMAX Forum, have established harmonization and consensus building. IEEE expects that the WiMAX Forum system profile will remain fully consistent with IEEE Std 802.16.

9.3 Enhanced performance capabilities

The proposed update is fully in line with the ongoing activities on the vision for the enhancements of IMT-2000, also reflected in the Roadmap for the future updates of Recommendation ITU-R M.1457.

Annex 6

Self-declaration that the proposed amendments are self-consistent between Section 5.6.1, Section 5.6.2, and the GCS

A formal statement will be provided stating that the proposed amendments are self-consistent between Sections 5.6.1, 5.6.2, and the GCS, as per established procedures.

Annex 7

Summary of the material that is planned to be submitted to the final meeting for Revision 10

It is planned that the following material will be submitted in its final form to ITU-R for the final meeting of Revision 10, as per established procedures.

- 1) Revised Section 5.6.2.
- 2) Final version of revised Section 5.6.1, if needed.
- 3) New set of Global Core Specifications, if needed.
- 4) Summary and rationale of the proposed update.
- 5) The final text of the self-evaluation (as per Annex 5 of the current contribution).
- 6) Formal self-declaration of consistency between Section 5.6.1, Section 5.6.2, and the GCS.

Letters of Conveyance will be submitted to ITU-R BR Counsellor, as per established procedures.

Approved as part of the consent agenda

IEEE 802.18

Radio Regulatory Technical Advisory Group

Homepage at: <http://ieee802.org/18/>

To:

Date: November 19, 2009

Subject: Comments and request for clarification regarding the recent revision of EN 300 220

[Add boiler plate]

IEEE 802¹ has identified concerns regarding draft EN 300 220-1 V2.3.1 and requests some clarification regarding the definitions of DSSS and FHSS, the duty cycle requirements and the radiated power limits in the bands where devices based on the IEEE 802.15.4 standard may operate, specifically in the 863-870 MHz band.

It would be very help if the terms DSSS and FHSS were more clearly defined either within the EN300 220 document or by reference to an acceptable external source. In particular it would be helpful toCan you please clarify whether Wideband transmissions using Forward Error Correction coding should or should not be considered as DSSS transmissonstransmissions for the purpose of interpreting EN300 220 rules?.

Similarly, it would be helpfulcan you clarify how if FHSS iswere explicitly differentiated from Adaptive Frequency Agility? In particular, i.e. should systems which transmit one or more entire bursts (preamble and all frame data) on a single channel within the dwell time limit of 400ms before changing operating frequency be considered FHSS or not?.

In EN 300 220-1 V2.3.1, section 9.2.5.2.3, appears to include a restriction that does not seem to be aligned with the current version of ERC Recommendation 70-03 published on the ECO web site. This restriction appears to place an additional duty cycle restriction of approximately 3% per 200 kHz on devices that implement both LBT and AFA. It would be very helpful to clarify whether there is an additional restriction and if so why it was introduced?

Respectfully submitted,

/s/

¹ The IEEE Local and Metropolitan Area Networks Standards Committee ("IEEE 802" or the "LMSC")

9.09 II 802.1 liaison letter to MEF Jeffree 3 05:49 PM

Jeffree said that 802.1 is sending a liaison letter to MEF. The letter is located at:

<http://iee802.org/1/files/public/docs2009/liaison-messenger-to-mef-ag-short-nameformat-1109-v02.pdf>

9.10 II Joint 802.1 and 802.3 liaison letter to ITU-T SG15 Jeffree 3 05:50 PM

Law said that the letter is in response to a liaison request from ITU-T SG15. The letter says that time has passed when it would be needed and so no thanks, but keep in touch, so long and thanks for all the fish.

9.11 ME 802.16 GRIDMAN SG press release Marks 5 05:51 PM

Marks presented "IEEE 802.16-09/0072.doc"

Motion is "To approve the GRIDMAN Study Group Press Release in IEEE 802.16-09/0072"

Moved by Marks, seconded by Sherman

Vote is 13/0/0, motion passes

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Draft IEEE 802.16 GRIDMAN Study Group Press Release	
Date Submitted	19 Nov 2009	
Source(s)	Arthur Wang LinQuest	Voice: +1-323-924-1502 E-mail: arthur.wang@linquest.com
Contributors	Matthew Sherman BAE Systems	Voice: +1-973-633-6344 E-mail: matthew.sherman@baesystems.com
	* http://standards.ieee.org/faqs/affiliationFAQ.html >	
Abstract	Draft press release for IEEE 802.16 GRIDMAN Study Group	
Purpose	This document provides a draft press release for consideration by the IEEE 802.16 WG should the IEEE 802.16 GRIDMAN SG be initiated.	
Notice	<i>This document does not represent the agreed views of the IEEE 802.16 Working Group or any of its subgroups. It represents only the views of the participants listed in the "Source(s)" field above. It is offered as a basis for discussion. It is not binding on the contributor(s), who reserve(s) the right to add, amend or withdraw material contained herein.</i>	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy	The contributor is familiar with the IEEE-SA Patent Policy and Procedures: < http://standards.ieee.org/guides/bylaws/sect6-7.html#6 > and < http://standards.ieee.org/guides/opman/sect6.html#6.3 >. Further information is located at < http://standards.ieee.org/board/pat/pat-material.html > and < http://standards.ieee.org/board/pat >.	

IEEE FORMS IEEE 802.16 GRIDMAN STUDY GROUP TO EXPLORE AMENDMENT OF IEEE 802.16 STANDARD

Study group targets WirelessMAN enhancements for Smart Grid and other applications

Roger Marks, Chair, IEEE 802.16 Working Group
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or

Karen McCabe, Director, IEEE-SA Marketing
+1 732-562-3824, k.mccabe@ieee.org

PISCATAWAY, N.J., USA, DD Month 2009 – The IEEE has formed a new study group to investigate synergies among metropolitan area network technologies aimed at Smart Grid, public safety, avionics, airport surface communication, and surveillance applications. The new “Greater Reliability In Disrupted Metropolitan Area Networks” (GRIDMAN) Study Group will endeavor to develop a project authorization request (PAR) and supporting material for approval by IEEE 802 at the March 2010 IEEE 802 session. The work follows previous work done in an IEEE 802.16 ad hoc committee on “Network Robustness and Reliability” (NRR). The first meeting of the new study group will take place at IEEE 802.16’s Session #65 <<http://ieee802.org/16/meetings/mtg65>> in San Diego, CA, USA. For more details on the group, please contact 802.16 WG Chair Roger Marks at r.b.marks@ieee.org or Study Group Chair Mat Sherman at matthew.sherman@baesystems.com.

Marks presents "IEEE 802.16-09/0133r1.doc". It is informational to the EC.

IEEE 802.16 Working Group on Broadband Wireless Access
<http://WirelessMAN.org>

Roger B. Marks
Chair, IEEE 802.16 Working Group
r.b.marks@ieee.org
19 November 2009

To: Yasushi Sakanaka
Director for Land Mobile Communications
Radio Department
Telecommunications Bureau
Ministry of Internal Affairs and Communications (MIC)

Subject: Liaison statement concerning IEEE 802.16 IMT-Advanced Evaluation Group Coordination Meeting

Dear Mr. Sakanaka,

Thank you for Japan's activities in support of IEEE's IMT-Advanced candidate RIT submission and its efforts leading to Japan's IMT-Advanced RIT proposal based on IEEE 802.16. Thanks to cooperation amongst all the parties, all of the three proposals for IMT-Advanced based on IEEE 802.16 were considered complete at the 6th meeting of the ITU-R Working Party 5D (WP 5D). This outcome was made possible through close cooperation between IEEE and ARIB regarding IMT-Advanced submission.

The IEEE 802.16 Working Group would like to invite representatives from Japan, as a proponent of the IMT-Advanced candidate RIT based on IEEE 802.16 (so-called "IEEE Technology"), to participate in its IMT-Advanced Evaluation Group Coordination Meeting of 13 January 2010 in San Diego, California, where we will take this opportunity to communicate directly with the Independent Evaluation Groups to help facilitate evaluations of the IEEE Technology. Please note that we are also inviting TTA to the meeting as the other proponent of the IEEE Technology.

Further information about the Coordination Meeting is contained in IEEE L802.16-09/0132, which invites Independent Evaluation Groups to the meeting. Information on registration, meeting agenda, etc. can be found at <<http://ieee802.org/16/imt-adv/mtg.html>>.

Sincerely,

Roger B. Marks

Chair, IEEE 802.16 Working Group on Broadband Wireless Access

2009-11-19

IEEE L802.16-09/0133

cc: Paul Nikolich, Chair, IEEE 802 Executive Committee
Michael Lynch, IEEE-SA Technical Liaison to ITU-R
Reza Arefi, ITU-R Liaison Group Chair, IEEE 802.16 Working Group

10.00 IEEE SA items

11.02 II Information Items

11.04 II Network Services report Alvin 2 05:56 PM

Alvin gave a summary of the network services for the week.

Gilb asked why on the graphic that illustrated the layout of the network in the hotel, Bert had Ernie's picture and Ernie had Bert's picture.

Alvin said that this was a security feature.

12.00 ADJOURN SEC MEETING Nikolich 05:58 PM

Meeting adjourned at 5:58 pm local time

Respectfully submitted
James Gilb
IEEE 802 recording secretary