MINUTES (Unconfirmed) - IEEE 802 LMSC
EXECUTIVE COMMITTEE MEETING, Revision 1

Friday, July 15, 2010 1:00 p.m. – 6:00 p.m.
All times Pacific Daylight Time (PDT)

San Diego, CA

EC members present:
Paul Nikolich – Chair, IEEE 802 LAN / MAN Standards Committee
Mat Sherman – Vice Chair, IEEE 802 LAN / MAN Standards Committee
Pat Thaler – Vice Chair, IEEE 802 LAN / MAN Standards Committee
John Hawkins – Treasurer, IEEE 802 LAN/MAN Standards Committee
James Gilb – Recording Secretary, IEEE 802 LAN / MAN Standards Committee
Jon Rosdahl – Executive Secretary, IEEE 802 LAN / MAN Standards Committee
Tony Jeffree – Chair, IEEE 802.1 – HILI Working Group
David Law – Chair, IEEE 802.3 – CSMA/CD Working Group
Bruce Kraemer – Chair, IEEE 802.11 – Wireless LANs Working Group
Bob Heile – Chair, IEEE 802.15 – Wireless PAN Working Group
Roger Marks – Chair, IEEE 802.16 – Broadband Wireless Access Working Group
John Lemon – Chair, IEEE 802.17 – Resilient Packet Ring Working Group
Mike Lynch – Chair, IEEE 802.18 – Regulatory TAG
Steve Shellhammer – Chair, IEEE 802.19 – Wireless Coexistence Working Group
Subir Das – Chair, IEEE 802.21 – Media Independent Handover Working Group
Apurva Mody – Chair, IEEE 802.22 – Wireless RANs Working Group

Non-voting members:
Geoff Thompson – Chair, IEEE 802.23 Emergency Services Working Group (unconfirmed)
Buzz Rigsbee – Meeting Planner, Member Emeritus (non-voting)

EC members absent:
Mark Klerer - Chair, IEEE 802.20 – Mobile Broadband Wireless Access Working Group

v02 DRAFT AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING
Friday, July 16, 2010 – 1:00PM-6:00PM

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

<table>
<thead>
<tr>
<th>Category (↑ = consent agenda)</th>
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<tbody>
<tr>
<td>1.00</td>
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</table>
Meeting called to order at 1:00 pm.

2.00  | APPROVE OR MODIFY AGENDA      | Nikolich | 9 | 01:01 PM |
Lynch asked for items 9.11 and 9.12 to be put on the consent agenda. There was no objection.
Rosedahl added item 11.08 Executive secretary report for 5 minutes.

Motion is to approve the agenda
Moved by Sherman, seconded by Jeffree
Vote is 13/0/0, Agenda is approved.
### DRAFT AGENDA - IEEE 802 LMSC EXECUTIVE COMMITTEE MEETING
Friday, July 16, 2010 – 1:00PM-6:00PM

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Item Description</th>
<th>Speaker</th>
<th>Time</th>
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<tbody>
<tr>
<td>1.00</td>
<td>MEETING CALLED TO ORDER</td>
<td>Nikolich</td>
<td>01:00 PM</td>
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<tr>
<td>2.00</td>
<td>MI APPROVE OR MODIFY AGENDA</td>
<td>Nikolich</td>
<td>01:01 PM</td>
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<td>3.00</td>
<td>II Announcements from the Chair</td>
<td>Nikolich</td>
<td>01:10 PM</td>
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<tr>
<td>3.01</td>
<td>MI 802.23 meeting report and election results, confirm chair of 802.23</td>
<td>Nikolich</td>
<td>01:15 PM</td>
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<tr>
<td>3.02</td>
<td></td>
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<td>01:20 PM</td>
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<tr>
<td>4.01</td>
<td>IEEE Standards Board and Sponsor Ballot Items</td>
<td>Kraemer</td>
<td>01:20 PM</td>
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<tr>
<td>4.02</td>
<td>ME 802.11 sub 1-GHz PAR to NesCom</td>
<td>Kraemer</td>
<td>01:20 PM</td>
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<tr>
<td>4.03</td>
<td>ME 802.11u Interworking forward to RevCom (conditional)</td>
<td>Kraemer</td>
<td>01:30 PM</td>
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<td>ME 802.11v Network management forward to RevCom (conditional)</td>
<td>Kraemer</td>
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<td>4.05</td>
<td>ME* 802.11 revision plan to RevCom</td>
<td>Kraemer</td>
<td>02:05 PM</td>
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<td>ME 802.11u Interworking PAR extension request to NesCom</td>
<td>Kraemer</td>
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<td>ME 802.11v Network management PAR extension request NesCom</td>
<td>Kraemer</td>
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<td>ME 802.11s Mesh networking PAR extension request NesCom</td>
<td>Kraemer</td>
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<td>ME 802.11mb Maintenance forward to Sponsor ballot (conditional)</td>
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<td>ME 802.11s Mesh networking forward to Sponsor ballot (conditional)</td>
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<td>4.12</td>
<td>ME 802.15.1 Reaffirmation forward to RevCom</td>
<td>Heile</td>
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<td>ME 802.15.4 revision PAR forward to NesCom</td>
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<td>II 802.15.7 Game plan for approval to start Sponsor ballot</td>
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<td>ME 802.16 Machine to machine communications to NesCom</td>
<td>Marks</td>
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<td>ME 802.20b forward to RevCom (conditional)</td>
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<td>ME 802.22 PAR extension for two years to NesCom</td>
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<td>ME 802.22.2 PAR extension for two years to NesCom</td>
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<td>ME 802.1AC PAR extension request to NesCom</td>
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<td>ME 802.1AS PAR extension request to NesCom</td>
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<td>ME 802.1Qbc forward to Sponsor Ballot</td>
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<td>Executive Committee Study Groups, Working Groups, TAGs</td>
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<td>MI* 802.11 Sub 1-GHz (1st extension)</td>
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<td>MI* 802.11 Fast initial authorization (1st extension)</td>
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<td>MI 802.21 Heterogeneous wireless networks management (2nd extension)</td>
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<td>802.15 Medical body area networks (MBAN) (1st extension)</td>
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<td>802.15 Low energy critical infrastructure monitoring (LECIM) creation</td>
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<td>7:00</td>
<td>Break</td>
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<td>LMSC Internal Business</td>
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<td>Plan for 802.17</td>
<td>Gilb</td>
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<td>Approve LMSC P&amp;P Revisions per AudCom in document EC-10-0014-00</td>
<td>Sherman</td>
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<td>Ballot LMSC P&amp;P Revisions per AudCom in document EC-10-0014-00</td>
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<td>Approve LMSC OM Revisions in document EC-10-0005-01</td>
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<td>8:05</td>
<td>Approve LMSC WG Revisions in document EC-10-0006-01</td>
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<td>EC electronic meetings</td>
<td>Rosdahl</td>
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<td>LMSC Liaisons and External Interface</td>
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<td>IEEE 802.3 Interpretation 1-7/10 response</td>
<td>Law</td>
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<td>IEEE 802.3 Liaison response to ISO/IEC JTC1 SC25 WG3 on optical return loss</td>
<td>Law</td>
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<td>IEEE 802.3 Liaison response to IEC/SC 46C on DC resistance unbalance</td>
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<td>9:04</td>
<td>Approve 802 representative to September 2010 ISO/JTC1 meeting</td>
<td>Kraemer</td>
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<td>9:05</td>
<td>Approve 802.11p press release</td>
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<td>9:06</td>
<td>EC to approve AAP last call comment in response to AAP40 for G.8021 and ask IEEE staff to submit the comment and ballot to ITU-T as an IEEE position</td>
<td>Jeffree</td>
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<tr>
<td>9:07</td>
<td>EC to nominate John Messenger as the IEEE external representative to ITU-T</td>
<td>Jeffree</td>
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<td>9:08</td>
<td>Liaison letter to ITU-T Q10/15 regarding Y.1731</td>
<td>Jeffree</td>
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<td>9:09</td>
<td>Liaison letter to ITU-T Q3/15 regarding OTN work plan</td>
<td>Jeffree</td>
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<td>9:10</td>
<td>Liaison letter to IETF BMWG</td>
<td>Jeffree</td>
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<td>9:12</td>
<td>Comments to the FCC regarding NOI 09-157, Fostering Innovation and Investment in the Wireless Communications Market - This is dealing with the harmful interference issue. Doc. 18-10-0046-03</td>
<td>Lynch</td>
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<td>IEEE SA items</td>
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<td>11:00</td>
<td>Information Items</td>
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<td>11:01</td>
<td>Treasurer’s report</td>
<td>Hawkins</td>
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<tr>
<td>11:02</td>
<td>Update on upcoming venues</td>
<td>Ringsbee</td>
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<td>11:03</td>
<td>Follow up on July EC Workshop action items</td>
<td>Nikolich</td>
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<td>11:04</td>
<td>802 Task force report</td>
<td>Nikolich</td>
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<td>11:05</td>
<td>P&amp;P report</td>
<td>Sherman</td>
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<td>11:06</td>
<td>Regulatory report</td>
<td>Lynch</td>
<td>5</td>
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<tr>
<td>11:07</td>
<td>802 work plan to assist in preparation of NIST PAP#2 report</td>
<td>Kraemer</td>
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<tr>
<td>11:08</td>
<td>Executive secretary report</td>
<td>Rosdahl</td>
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<td>11:10</td>
<td>Appeals report</td>
<td>Gilb</td>
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<td>11:11</td>
<td>Network Services report</td>
<td>Alfvin</td>
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<td>12:00</td>
<td>ADJOURN SEC MEETING</td>
<td>Nikolich</td>
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</table>
No announcements from the chair

Thompson presented "802.23 Chairs Report to EC.ppt"

Moved by Gilb, seconded by Law

Motion is That the 802 EC confirm Geoff Thompson as the elected chair of 802.23 with term to expire (at the normal date of) March 2012

Vote is 14/0/0, Geoff Thompson is confirmed as chair of 802.23.

Sherman reads the rules and says that there shall be a Chair and Secretary and should be a Vice Chair.

Thompson said that Faroukh Khatabi has volunteered to be secretary, but may not be able to attend all meetings.

Nikolich indicated that he wants there to be a Vice Chair of 802.23.
802.23 WORKING GROUP

802.23 Working Group Report
IEEE 802 Executive Committee
Friday, July 16, 2010

Geoff Thompson
WG Chair
<thompson@ieee.org>
802.23 Report

- Met in “Ford C” Tue, Wed AM, Thur AM
- Good participation, but no presentations offered.
- Developed “readable” project description document.
- Established voter list
- Held officer election, Chair only
  (Conducted by Nikolich)
- Geoff Thompson elected chair (7/0/0)
802.23 Report (2)

- Heavy emphasis on assigning action items
- 12 Voting members (many w/ XWG att. credit)
- Will have September interim meeting
  - Co-locate with .11, .15, etc in Hawaii
  - Meet in Hawaii Tues PM, Wed, Thur.
  - Register before July 23 to save BIG$$
- Project schedule, activity for November
MOTION: That the 802 EC confirm Geoff Thompson as the elected chair of 802.23 with a term to expire (at the normal date of) March, 2012.

Moved by:  James Gilb
Second:    David Law

APP: _____, DISAPP: _____, ABS: _____

PASS/FAIL
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slides 2-3
Kraemer presented "11-10-0001-13-0wng-900mhz-par-and-5c.doc"
Motion is "Move to forward the 802.11 Sub-1GHz PAR information contained from 11-10/0001r10 subject to the changes reflected in 11-10/0001r13 to NesCom."
Moved by Kraemer, seconded by Marks.
Heile said that the PAR arrived at the week without any content. There has not been an opportunity for interactive dialog between the group.
Heile moves to postpone until November, seconded by Lynch
Kraemer would prefer to proceed with debate on the motion.
Vote is 4/7/4, motion fails
Main motion is back on the table
Rosdahl said that there is 802.11 like equipment already operating in the market place today. This is an effort to standardize these proprietary solutions.
Heile asked why the technical solutions were excluded.
Kraemer said that the OFDM decision is based on the desire to re-band one of the OFDM PHYs. The OFDM decision was based on the desire to remove some of the vagueness of the PAR and allowed consideration of the 802.15.4g OFDM option. 802.15.4g asked for all PHY options to be considered.
Gilb mentioned that 802.15.4g was concerned that the OFDM requirement would prohibit the use of the 802.15.4g FSK CSM.
Sherman said that at one time the ISM bands required spreading for coexistence, it would be good to allow it here.
Shellhammer asked if the PAR would prohibit specifying an 802.15.4g control layer that used a different modulation like FSK.
Kraemer said that there could be a common signaling mode as a coexistence mode that did not use OFDM. The OFDM was intended for the data plane.
Shellhammer said that a "little PHY" using a modulation other than OFDM for coexistence would be in scope of the project.
Vote is 9/4/2, motion passes
Motion – S1G PAR (superseded)

- Believing that the PAR contained in the document 11-10/0001r13 meets IEEE-SA guidelines,
- Move to forward the 802.11 Sub-1GHz PAR information contained from 11-10/0001r13 to NesCom.
- Moved: Bruce Kraemer
- Seconded:

**URL:**
https://mentor.ieee.org/802.11/dcn/10/11-10-0001-13-0w1

- Result in the WG: 53.0.1
Motion – S1G PAR

- Believing that the PAR contained in the document 11-10/0001r13 meets IEEE-SA guidelines,
- Move to forward the 802.11 Sub-1GHz PAR information contained from 11-10/0001r10 subject to the changes reflected in 11-10/0001r13 to NesCom.
- Moved: Bruce Kraemer
- Seconded:
- Note: R10 was in the package circulated to the EC on Wednesday. Changes to respond to comments are present in R13.
- URLs:
  - https://mentor.ieee.org/802.11/dcn/10/11-10-0001-10-0wng-900mhz-
  - https://mentor.ieee.org/802.11/dcn/10/11-10-0001-13-0wng-900mhz-
- Result in the WG: 53,0,1 (on the original motion)
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 4
Kraemer presented 11-10-0872-02-000u-tgu-ec-report-to-revcom.ppt

Motion is "Grant condition approval to forward P802.11u to RevCom."

Moved by Kraemer, seconded by Heile

Law said that only one recirculation is allowed.

Thaler read the conditions from the rules. The procedure is for when balloting is substantially complete. Three recirculations is not "substantially complete. An email ballot would be OK. There is no need to do conditional approvals with email ballots.

Marks said that he had a different interpretation. He was said that Bob Grow had convinced them that there was no limit to the number of recirculations. In the past, there have been schedules showing more than one recirculation.

Heile said that there was ample precedence to interpret in the same way as Marks.

Sherman said that it was up to the Chair to make an interpretation.

Rodsahl asked for the rules to be put on the screen.

Thaler said that she was viewing the rules and that it says one recirculation and that it is substantially complete.

Jeffree said that the important sentence is with regards to "substantially complete". Is more interested in the number of unsatisfied no votes.

Kraemer said that his personal preference would be to proceed. 802.11 will update the EC with the status.

Jeffree asked for the portion of outstanding no votes.

Kraemer said that there are 4 no voters out of 154 voters.

Jeffree said that based on that it appears substantially complete.

Rodsahl said that there could be another recirculation based on new no votes or comments.

Das asked for the vote tally in Working Group.

Kraemer said that was 52/0/1

Gilb said the conditions could not be met if there were changes to the draft or if there were new no

Marks said that this only applies to the final recirculation call.

Vote is 11/4/0, motion passes
Motion – 802.11u conditional to RevCom

• Grant condition approval to forward P802.11u to RevCom.

• Moved: Bruce Kraemer

• Seconded:

• Document 11-10-0872-02-000u-TGu-EC-report-for-RevCom.ppt is the report the requirements for conditional approval to forward P802.11u to RevCom

• URL: https://mentor.ieee.org/802.11/dcn/10/11-10-0872-02-000u

• Result in WG: 52,0,1
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 5
Kraemer presented 11-10-0800-04-000v-tgv-ec-report-to-revcom.ppt
Motion is "Grant condition approval to forward P802.11v to RevCom."
Moved by Kraemer, seconded by Marks
Thompson asked for the recirculation plan.
Law has said that he has made his point regarding recirculation.
Vote is 14/1/0, motion passes
Motion – 802.11v conditional to RevCom

• Grant condition approval to forward P802.11v to RevCom.
• Moved: Bruce Kraemer
• Seconded:
• Document 11-10-0800-04 is the report on the requirements for conditional approval to forward P802.11v to RevCom
• URL: https://mentor.ieee.org/802.11/dcn/10/11-10-0800-04-000v-tgv-ec-report-to-revcom.ppt
• In the WG: 55,0,2
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 6
Kraemer presented 11-10-0854-03-000z-tgz-ec-report-to-revcom.ppt
Motion is "Grant condition approval to forward P802.11z to RevCom."
Moved by Kraemer, seconded by Das
Vote is 11/0/2, motion passes
Sherman asked for the recirculation schedule, two were listed, one with no changes.
Motion – 802.11z conditional to RevCom

• Grant condition approval to forward P802.11z to RevCom.
• Moved: Bruce Kraemer
• Seconded:
• Document 11-10-0854-03 is the report on the requirements for conditional approval to forward P802.11z to RevCom
• URL: https://mentor.ieee.org/802.11/dcn/10/11-10-0854-03-000
• In the WG: 53,0,1
<table>
<thead>
<tr>
<th>4.05</th>
<th>ME*</th>
<th>802.11 revision plan to RevCom</th>
<th>Kraemer</th>
<th>0</th>
</tr>
</thead>
</table>

Approved as part of the consent agenda.

<table>
<thead>
<tr>
<th>4.06</th>
<th>ME</th>
<th>802.11u Interworking PAR extension request to NesCom</th>
<th>Kraemer</th>
<th>5</th>
</tr>
</thead>
</table>

Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 8

Motion is "Move to approve the TGu PAR extension in 11-10-0607-02-000u-par-extension.doc, extending the TGu PAR for an additional 1 year, and forward the PAR Extension Request to NESCOM."

Moved by Kraemer, seconded by Sherman

Marks asked if they were asked to approve the extension PAR document.

John Messenger (Adva Optical Networking) asked if there was a previous extension.

Kraemer said he thought that there had not been a prior extension.

Grow (Intel) said that there should not be an extension in July if there is conditional approval for RevCom.

Rosdahl said that the deadlines were such that it had to be approved in July.

Grow said that it can be put on the agenda without EC approval.

Vote is 14/0/0, motion passes
Motion – 802.11 TG\text{u} PAR Extension

• Move to approve the TG\text{u} PAR extension in 11-10-0607-02-000u-par-extension.doc, extending the TG\text{u} PAR for an additional 1 year, and forward the PAR Extension Request to NESCOM.

• Moved: Bruce Kraemer

• Seconded:

• URL: 
  https://mentor.ieee.org/802.11/dcn/10/11-10-0607-02-000

• In the WG: 52,0,1
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 9

Motion is "Move to approve the TGv PAR extension in 11-10-0592-01-000v-par-extension.doc, extending the TGv PAR for an additional 1 year, and forward the PAR Extension Request to NESC.

Moved by Kraemer, seconded by Sherman

Vote 15/0/0, motion passes.
Motion – 802.11 TGv PAR Extension

• Move to approve the TGv PAR extension in 11-10-0592-01-000v-par-extension.doc, extending the TGv PAR for an additional 1 year, and forward the PAR Extension Request to NESCOM.
• Moved: Bruce Kraemer
• Seconded:

• URL: https://mentor.ieee.org/802.11/dcn/10/11-10-0592-01-000
• In the WG: 38,0,0
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 10

Motion is "Move to approve the TGs PAR extension in 11-10/0597r1, extending the TGs PAR for an additional 1 year, and forward the PAR Extension Request to NESCOM."

Moved by Kraemer, seconded by Sherman

Vote 14/0/1, motion passes.
Motion – 802.11 TGs PAR Extension

- Move to approve the TGs PAR extension in 11-10/0597r1, extending the TGs PAR for an additional 1 year, and forward the PAR Extension Request to NESCOM.
- Moved: Bruce Kraemer
- Seconded:
- URL: https://mentor.ieee.org/802.11/dcn/10/11-10-0597-01-000
- In the WG: 36,0,0
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 11
Kraemer presented 11-10-0801-02-000m-tgmb-ec-approval-to-sb.ppt.
Motion is "Grant conditional approval to forward P802.11REVmb to Sponsor Ballot."
Thaler said that all approved amendments have to go into the revision.
Moved by Kraemer, seconded by Rosdahl.
Vote is 15/0/0, motion passes
Motion – 802.11REVmb to Sponsor Ballot

- Grant conditional approval to forward P802.11REVmb to Sponsor Ballot.

- Moved: Bruce Kraemer
- Seconded:
- Working Group vote on the motion passes: y-n-a
- URL:
  https://mentor.ieee.org/802.11/dcn/10/11-10-0801-01-000n
- In the WG: 50,0,0
Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 12
Kraemer presented 11-10-0895-03-000s-p802-11s-report-to-ec-on-conditional-approval-to-go-to-sponsor-ballot.ppt
Motion is "Grant conditional approval to forward P802.11s to Sponsor Ballot."
Moved by Kraemer, seconded by Sherman
Vote is 14/0/0, motion passes
Chair calls for 5 minutes break at 2:32 pm, to return at 2:37 pm.
Meeting called to order at 2:37 pm.
Motion – 802.11s to Sponsor Ballot

• Grant conditional approval to forward P802.11s to Sponsor Ballot.
• Moved: Bruce Kraemer
• Seconded:
• Working Group vote on the motion passes: y-n-a
• URL:
  https://mentor.ieee.org/802.11/dcn/10/11-10-0895-03-000
• In the WG: 51,0,0
Heile presented 15-10-0622-00-0000-ec-actions-motions-san-2010-07.ppt, slides 6-17

Thompson asked why there two recirculations.

Heile said that John Barr was being careful.

Motion is "Move that the WG request the EC to forward IEEE Std 802.15.1-2005 reaffirmation to RevCom."

Moved by Heile, seconded by Gilb

Vote is 13/1/1, motion passes
Overview

• IEEE Std 802.15.1-2005 was up for reaffirmation in 2010
• John Barr was assigned the task of handling the reaffirmation sponsor ballot
• The sponsor balloting is now completed and the results are ready for submission to RevCom
Sponsor Ballot Schedule

• Initial Ballot: 25-Feb-2010 to 25-Mar-2010
  – 74 affirm, 2 negative, 5 abstention - 97% approve
• First Recirculation: 28-Apr-2010 to 8-May-2010
  – 78 affirm, 3 negative, 5 abstention – 96% approve
• Final Recirculation: 11-May-2010 to 21-May-2010
  – 79 affirm, 3 negative, 6 abstention – 96% approve

• Sponsor Ballot Process Completed
Final Ballot Results

• RESPONSE RATE
  – This ballot has met the 75% returned ballot requirement.
  – 99 eligible people in this ballot group.
    • 79 affirmative votes
    • 3 negative votes with comments
    • 0 negative votes without comments
    • 6 abstention votes
    • 88 votes received = 88% returned 6% abstention

• APPROVAL RATE
  – The 75% affirmation requirement is being met.
  – 79 affirmative votes, 3 negative votes with comments
  – 82 votes = 96% affirmative
Comment Resolution

• Three negative votes with comments
  – All negative comments and their resolution were recirculated to the sponsor ballot group
  – None of the negative voters changed their votes
  – No new NO votes, voters or comments were received
Comment: James Gilb

- The 802.15.1-2005 standard is out of date as the Bluetooth SIG has released 3 or 4 major updates to the specification. Few, if any devices adhere only to the 1.2 version of the Bluetooth Specification (the one used for this standard). In addition, this standard only has a small portion of the Bluetooth Specification and hence, a user would ultimately need to refer to the actual Bluetooth Specification in order to build a compliant implementation. At the very least, we should have a public statement from the Bluetooth SIG that it is acceptable to certify and get a logo today for devices that are compliant only to version 1.2 of the Specification. In addition, the Bluetooth Specification may be downloaded for free, so there is no need for the 802.15.1-2005 standard.
Response to James Gilb

- Disagree
- There are billions of devices in operation that utilize the core specifications defined by this standard. The Bluetooth SIG has released specifications incorporating the 802.15.1-2005 standard, and all of those releases are backwards compatible with 802.15.1-2005. The Bluetooth SIG specifications include higher layers of the communications stack than are specified in 802.15.1-2005. The Bluetooth SIG qualification program still includes the 1.2 version of the Bluetooth Specification. The Bluetooth Specification may only be downloaded by members of the Bluetooth SIG. While the lowest level of Bluetooth SIG membership requires no monetary fee, it does require those members to grant a royalty free license to any necessary claims required to implement a compliant portion of the Bluetooth specification. International regulatory bodies and academic researchers typically reference IEEE 802.15.1-2005 as the specification of a frequency hopping WPAN technology.
Comment: Michael McGillan

• The standard should be revised to support higher data rates using additional PHYs such as PSK or QPSK. Other existing POS WPAN standards support up to 3 Mbps using these technologies.
Response: Michael McGillan

- Out of Scope
- The purpose of the reaffirmation ballot is to continue to use the existing document "as is". This comment does not point out any significant erroneous or obsolete information in the current standard. Also, in a reaffirmation, no changes can be made in the draft of the standard. We thank you for your comments. They will be recorded and may be forwarded to the WG responsible for consideration during a possible future revision.
Comment: Emmanuel Monnerie

- 802.15.1 is obsolete. The use of GFSK at 1Mbit/s is not practical for most applications. The performance in multipath environment is poor and this modulation is not energy efficient.

- For short range applications, it would be better to target higher frequency bands (cf Wireless USB or Wireless HDMI) and leave the 2.4GHz for 802.11/Wifi. Low data rate, robust and energy efficient PHY options are proposed in 802.15.4 - TG4g.
Response: Emmanuel Monnerie

- Out of Scope
- This comment does not reference one of the existing disapprove comments from the first ballot and the draft has not been changed. In addition, there are billions of devices using GPSK at 1Mbit/s and each year a billion more are used in mobile phones, headsets, automobiles, and peripheral devices that depend on the energy efficient capabilities specified in this standard. The additional claim that 802.15.1-2005 is obsolete is not substantiated.
Motion in the Working Group

• Move that the WG request the EC to forward IEEE Std 802.15.1-2005 reaffirmation to RevCom.

• Passed 43/4/4  y/n/a
Executive Committee Action - 802.15.1-2005 Reaffirmation

- Move to forward IEEE Std 802.15.1-2005 reaffirmation results to RevCom.

Moved: Bob Heile
Second: James Gilb
Vote:
Heile presented 15-10-0622-00-0000-ec-actions-motions-san-2010-07.ppt, slides 19-20

Motion is "Move to forward the draft revision PAR for 802.15.4 as defined in IEEE P802.15-15-10-0387-03-0000 to NesCom"

Moved by Heile, seconded by Gilb

Kraemer asked to modify the motion to match the agreed upon procedure.

Motion is now "Move to forward the draft revision PAR for 802.15.4 as defined in IEEE P802.15-15-10-0387-02-000 with the mods as contained in R3 to NesCom."

Vote is 14/0/0, motion passes
Overview of PAR Review

- As contained in the NEED: There are three completed amendments necessitating a revision. However, since there are currently three active amendment projects in process affecting both MAC and PHY functionality, time is of the essence to complete this revision ahead of the in process amendments and not alter any functionality as a result of this revision. As a consequence the intention is to limit the revision to maintenance changes (editorial and technical corrections) to 802.15.4-2006 and incorporating the approved amendments, 802.15.4a-2007, 802.15.4c-2009 and 802.15.4d-2009.
- Comments were received from James Gilb, Jon Rosdahl, Bob Grow and Michael Kipness
  - Scope and Purpose should match original PAR and amendments
  - Need section is the proper place to highlight critical dependencies
  - Project number should be 802.15.4
- All comments were accepted and PAR further modified (WG approval 40/0/0) to reflect that over what was distributed Weds in doc IEEE P802.15-15-10-0387-02-0000
Executive Committee Action-
802.15.4 Revision PAR to NesCom

Move to forward the draft revision PAR for
802.15.4 as defined in
IEEE P802.15-15-10-0387-03-0000 to NesCom

Moved: Bob Heile
Second: James Gilb

Vote:
Heile presented 15-10-0622-00-0000-ec-actions-motions-san-2010-07.ppt, slide 22.

Heile is informing the EC that he plans to request an EC letter ballot to go to Sponsor ballot around October 2, 2010.
802.15.7 Gameplan for Sponsor Ballot

- Start Sponsor Ballot pool formation - done
- Inform EC of desire for email ballot to go to sponsor ballot, ballot to start Sept 17 and close Oct 2 - in process
- Complete comment resolution and get WG approval to start recirc - done
- Determine needed time for mandatory editorial review
- Thoroughly scrub the draft with target to complete by Aug 14 – Get draft a clean as possible.
- Start recirc Aug 20 - close recirc Sept 4
- Complete comment resolution and draft edits in Hawaii.
- Start EC ballot for approval to start Sponsor Ballot Sept 17, close Oct 2
- Start second recirc on Sept 19, close Oct 4
- Assuming no new NO votes or voters start Sponsor Ballot Oct 6
Marks presented 80216ppc-10_0003r9.doc

Motions is "To forward to NesCom the draft P802.16p PAR in IEEE 802.16ppc-10/0003r7, as modified per IEEE 802.16ppc-10/0003r9"

Moved by Marks, seconded by Kraemer

Kraemer thanked 802.16 for taking their comments into account.

Thaler was more pleased with the PAR but had a problem with "Machine to Machine Communications" as it is an industry buzzword.

Marks said that they had changed it so supporting machine to machine applications.

Vote is 15/0/0, motion passes
myProject™ >> Review PAR

Submitter Email: jose.p.puthenkulam@intel.com  
Type of Project: Amendment to IEEE Standard 802.16-2009  
1.1 Project Number: P802.16p  
1.2 Type of Document: Standard  
1.3 Life Cycle: Full Use  
2.1 Title: Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Broadband Wireless Access Systems – Enhancements to support Machine-to-Machine Applications  
3.1 Working Group: Broadband Wireless Access Working Group (C/LM/WG802.16)  
Contact Information for Working Group Chair  
   Name: Roger Marks  
   Email Address: r.b.marks@ieee.org  
   Phone: 1 619 393 1913  
Contact Information for Working Group Vice-Chair  
None  
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: 11/2011  
4.3 Projected Completion Date for Submittal to RevCom: 07/2012  
5.1 Approximate number of people expected to be actively involved in the development of this project: 100

5.2 Scope:  
This amendment specifies IEEE Std 802.16 medium access control (MAC) enhancements and minimal Orthogonal Frequency Division Multiple Access (OFDMA) Physical Layer (PHY) modifications in licensed bands to support lower power consumption at the
device, support by the base station of significantly larger numbers of devices, efficient support for small burst transmissions, and improved device authentication.

5.3 Is the completion of this standard dependent upon the completion of another standard: Yes. This amendment builds on top of the features in IEEE Std 802.16m specification.

5.4 Purpose: To enable a range of Machine-to-Machine applications in which the device communications require wide area wireless coverage in licensed bands, and are automated rather than human-initiated or human-controlled for purposes such as observation and control of these devices.

5.5 Need for the Project: Many Machine-to-Machine applications require network access that involves requirements significantly different from those used to support typical human-initiated or human-controlled network access. Such applications include secured access and surveillance, tracking, tracing and recovery, public safety sensors, vehicular telematics, healthcare monitoring of bio-sensors, remote maintenance and control, smart metering, automated services on consumer devices, retail digital signage management. The current IEEE 802.16 standard and the amendments under development do not address the unique requirements of these applications, such as very low power consumption, large number of devices, short burst transmissions, device tampering detection and reporting etc. While these requirements are not all encompassing to the Machine-to-Machine applications space, they will indeed enable many applications that need the enhancements proposed in this amendment.

5.6 Stakeholders for the Standard: Network operators, utility companies, government agencies, network equipment manufacturers, mobile and wireless device manufacturers, semiconductor manufacturers.

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


- 3GPP TS 22.368: Service requirements for Machine-Type Communications (MTC), Stage 1, Release 10, March 2010.

- 3GPP2 SC.R5003-0: Vision for 2009 and Beyond, Version 1.0, April 2009.

- 3GPP2 S.P0140-0: Study for Machine to Machine (M2M) communication for cdma2000 Wireless Networks
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?: Yes
      Organization: ITU
      Technical Committee Name: IMT Systems
      Technical Committee Number: Working Party 5D
      Contact Name: Mike Lynch
      Phone: 972 814 4901
      Email: MJLynch@mjlallc.com
   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
      Organization:
      Technical Committee Name:
      Technical Committee Number:
      Contact Name:
      Phone:
      Email:

8.1 Additional Explanatory Notes (Item Number and Explanation):

   (Item 5.2)

   **Definition of machine to machine communication:**

   This is information exchange between devices (subscriber station) through a base station, or between a device and a server in the core network through a Base Station that may be carried out without any human interaction.

   (Item 5.2)

   **Backward Compatibility:**

   This amendment provides continuing support for WirelessMAN-Advanced Air Interface and legacy WirelessMAN-OFDMA equipment.
FIVE CRITERIA

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.
b) Multiple vendors and numerous users.
c) Balanced costs (LAN versus attached stations).

Machine-to-Machine (M2M) communications is a very distinct capability that enables the implementation of the “Internet of things”. As per several market forecasts, the potential market for this is expected to be very large with millions of devices connected over the next 5 years.

a) Broad sets of applicability:
The variety of applications that are possible include Secured Access, Surveillance, Tracking, Tracing, Recovery, Public Safety, Payment systems, Healthcare, Remote Maintenance and Control, Metering, Consumer Electronics and Retail [1].

b) Multiple vendors and numerous users:
The technologies involved in enabling machine-to-machine communications can be enabled by a variety of base station and mobile device vendors, chipsets can be developed by a variety of vendors and also applications can be provided using this standard by numerous industry players.

c) Balanced costs (LAN versus attached stations):
The technologies used in M2M provide an appropriate degree of balance of costs between mobile devices and the network infrastructure including servers. Each server might be able to support several mobile devices.

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 which are compatible with systems management standards.

This amendment will be in compliance with the IEEE 802.1 Architecture, Management, and Interworking documents as required. There is no specific technology feature anticipated in the M2M amendment that could preclude this compliance.

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.
b) One unique solution per problem (not two solutions to a problem).
c) Easy for the document reader to select the relevant specification.

a) Substantially different from other IEEE 802 standards:
This amendment is unique in its objective of providing M2M enhancements for 802.16 networks using licensed bands. Such capabilities are clearly distinct in terms of what’s provided in other standards because it requires unique enhancements like handling of extremely large number of devices in a large coverage area, very low power operation, etc.

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

There is no other standard in IEEE 802 that is specifically targeting M2M applications in a wide coverage area supporting a large number of wireless devices in licensed bands at this time.

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

The title of this amendment and the scope is distinct enough for document readers to discern the application of this standard.

**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.*

*b) Proven technology, reasonable testing.*

*c) Confidence in reliability.*

a) **Demonstrated system feasibility.**

Machine-to-Machine (M2M) communications has been shown to be feasible in many technologies and 802.16 is similar in characteristics of some of these technologies and therefore it is reasonable to assert that it is feasible for 802.16 to support M2M applications.

b) **Proven technology, reasonable testing.**

Several IEEE Std 802.16 based systems have been deployed in the market place worldwide.

c) **Confidence in reliability.**

Reliability has been proven for several IEEE Std 802.16 based systems in the market place worldwide. This amendment is expected build on those features and maintain reliability in M2M applications.

**Coexistence of 802 wireless standards specifying devices for unlicensed operation**

The expectation is that only licensed band devices will be supported. Hence the co-existence requirement does not apply.

**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.*

*b) Reasonable cost for performance.*

*c) Consideration of installation costs.*
a) Known cost factors, reliable data.

The incremental cost of implementing this amendment over systems based on IEEE Std 802.16 are nominal and within the realm of economic feasibility. The significant cost elements are in the firmware or software components and they are expected to be feasible in the market friendly manner.

b) Reasonable cost for performance.

There is no expectation of significant costs incurred to support M2M capabilities in a device or a base station beyond a reasonable amount that is actually feasible.

c) Consideration of installation costs.

Seeing the wide economic feasibility of IEEE Std 802.16 based systems deployed in the field today worldwide, the additional installation costs incurred for supporting this standard are within reasonable bounds.

References:

Nikolich asked if anyone from 802.20 was present. None responded.

Shellhammer agreed to present the slides for Klerer.

Shellhammer presented "EC Closing Slideset-2010-07-15.ppt", slides 3-5

Motion is "Move that the 802 EC provide Conditional Approval to submit Draft 2 of P802.20b to RevCom subject to achieving the results required by Conditional Approval in a re-circulation ballot."

Moved by Shellhammer, seconded by Jeffree

Vote is 12/0/2, motion passes
Results of Initial Sponsor Ballot

- 802.20b Sponsor Ballot Closed
  - Passed by 96% with two negative votes (50/2/4)
  - Return Rate: 78% (56 of 71)
  - Abstain rate: 7% (4 of 56)
- Comments Received: 13
Recirculation Plans

- 13 Comments resolved during this meeting
  - 9 comments Agree/Principle
  - Comment resolution discussed with commenters
- 20 Day recirculation ballot to be initiated August 1, 2010
- Recirculation Comments to be resolved via conference call to be held September 1, 2010
Conditional Approval to forward 802.20b to RevCom

• Move that the 802 EC provide Conditional Approval to submit Draft 2 of P802.20b to RevCom subject to achieving the results required by Conditional Approval in a re-circulation ballot.
  • Mover: Shellhammer
  • Second: Jeffree
  • WG July Plenary 802.20 vote: 2/0/0
    (Chair not voting, 5 potential voters)
Apurva presented 22-10-0114-05-0000-802-22-motions-at-the-july-plenary-executive-committee-meeting.ppt, slides 3-14

Motion is: Motion to grant conditional approval as per the IEEE 802 Operations Manual to forward IEEE P802.22.1 to the IEEE Standards Review Committee.

Moved by Mody, seconded by Gilb

Marks asked about a comment on slide 28, where the response is "Monique is to reiterate previous rationale"

Nikolich said there should be some editorial changes made to the resolutions.

Grow said that there should be a cover letter sent with this to RevCom

Vote is 14/0/1, motion passes
Motion for a Conditional Approval to forward the IEEE P802.22.1 to the IEEE SA RevCom

Rules

Motions requesting conditional approval to forward when the prior ballot has closed shall be accompanied by:

- Date the ballot closed
- Vote tally including Approve, Disapprove and Abstain votes
- Comments that support the remaining disapprove votes and Working Group responses.
- Schedule for confirmation ballot and resolution meeting.
**Motion for a Conditional Approval to forward the IEEE P802.22.1 to the IEEE SA RevCom**

Number of People in the Sponsor Ballot Pool = 174

<table>
<thead>
<tr>
<th>IEEE Sponsor / Re-circ Ballot</th>
<th>Response Ratio</th>
<th>Approval Ratio</th>
<th>Negative Votes</th>
<th>Number of Negative Comments Received</th>
<th>Comment Resolution Status</th>
<th>Draft Status</th>
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</thead>
<tbody>
<tr>
<td>Sponsor Ballot #1</td>
<td>77%</td>
<td>91%</td>
<td>10 negative votes with comments, 1 negative vote without comments</td>
<td>= 41</td>
<td>Comments addressed &amp; resolved</td>
<td>P802.22 .1 Draft 7 prepared</td>
</tr>
<tr>
<td>Open – Feb 5 2009, Closed – Mar 23, 2009</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Sponsor Ballot Re-circ #1</td>
<td>79%</td>
<td>93%</td>
<td>8 negative votes with comments, 1 negative vote without comments</td>
<td>13</td>
<td>Comments addressed &amp; resolved</td>
<td>P802.22 .1 Draft 8 being prepared</td>
</tr>
</tbody>
</table>
Negative Comments and Commentor Details

- 13 Comments were received from Peter Ecclestine during the P802.22.1 Draft 7 Sponsor Ballot Re-circ #1
- Remaining 7 Negative Voters did not submit any comments during Re-circ #1
- The Comments were addressed and resolved. The comment resolutions are incorporated here-in entirely and can also be found at https://mentor.ieee.org/802.22/dcn/10/22-10-0104-03-0001-tg1-sponsor-ballot-comments-d7.xls
- Negative comments resolved but carried forward from the SB and the comment resolutions are also included in the references at the end of this presentation.
- The comment resolutions were circulated in the WG Electronic Confirmation ballot and we received >75% approval ratio for the proposed resolutions
- Peter Ecclestine and Shulan Feng have agreed to change their Dis-approve vote to APPROVE, based on the comment resolutions and the changes to the draft during SB and Re-circ #2.
### Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom

**Negative Comments from Peter Ecclestine Received During SB Re-circ #1 and the P802.22 WG Responses**

<table>
<thead>
<tr>
<th>Vote</th>
<th>Category</th>
<th>Must Be Satisfied</th>
<th>Comment</th>
<th>Proposed Change</th>
<th>Resolution Detail</th>
<th>Resolution Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disapprove</td>
<td>Technical</td>
<td>No</td>
<td>I disagree with the resolution to Initial SB comment 47 on the use of &quot;Shall&quot;, &quot;Should&quot;, &quot;Must&quot; and &quot;May&quot; as the 2009 IEEE Standards Style Manual clause 13 Word usage defines the use of these words in IEEE standards, and gives sample text for inclusion in the standard. The comment was agreed to, with resolution &quot;To be added&quot;, but it was not added.</td>
<td>Add &quot;Word usage&quot; paragraph per 2009 IEEE Standards Style Manual 13.1.</td>
<td>The reason why the Comment Resolution Committee disagrees with this comment is because: This type of indication is not present in other published standards by IEEE 802. Previous circulation promised to implement this, however, such &quot;Word usage&quot; is not present in other 802 Standards.</td>
<td>Disagree</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>E-mail from IEEE SA Sr. Program Manager - Michele Turner - <a href="mailto:m.d.turner@ieee.org">m.d.turner@ieee.org</a> - &quot;Comment # 1 The definition of shall, must, and should does not have to be added to the standard. The style manual gives guidance on the verbs however it is not a requirement to add them to the document.&quot;</td>
<td></td>
</tr>
<tr>
<td>Disapprove</td>
<td>Editorial</td>
<td>Yes</td>
<td>I disagree with the resolution to Initial SB comment 49 - renumber all occurrences of 802.22 to P802.22, as a published standard does not have the &quot;P&quot;, and in most cases the references are to devices compliant with the approved IEEE Std. 802.22-&lt;year&gt;, and there is no compliance (nor approved PICS) to an unapproved draft.</td>
<td>Only use P802.22 when referring to the draft standard, not the published standard or standards-compliant devices.</td>
<td>All occurrences of 802.22 should have a P in front of it. Apurva has scanned the document and there is no such occurrence of 802.22 without a P in front of it.</td>
<td>Agree in Principle</td>
</tr>
</tbody>
</table>


Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom

Negative Comments from Peter Ecclestine Received During SB Re-circ #1 and the P802.22 WG Responses

<table>
<thead>
<tr>
<th>Disapprove</th>
<th>Technical</th>
<th>Yes</th>
<th>Replace Certicom SEC 4 ECQV Implicit Certificate Scheme with TLS ECDHE ECDSA with a non-encumbered NIST Suite B ECC that conforms to FIPS-140-2.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out of scope and Disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This comment has been made for the section of the draft that does not have red lines and that has not changed from Draft D6 to D7. Neither any related comment was made during the Sponsor Ballot. So this comment is Out of Scope.

The technical reasons why the Comment Resolution Committee disagreed with this comment are as follows:

1) TLS use of ECDHE or ECDSA as specified in RFC 4492 "Elliptic Curve Cryptography (ECC) Cipher Suites for Transport Layer Security (TLS)" is not unencumbered. Implementers of that RFC require a copy of IPR disclosure that Certicom filed with IETF Secretariat. The details of this filing can be found at https://datatracker.ietf.org/ipr/1154/. IEEE 802.22 has also obtained a LOA from Certicom for similar purposes to allow implementors of 802.22.1 to make use of the ECC technology. The LOA can be found on the 802.22 Web site <www.802.22.org/22> under the Letter of Assurance section. Commentor's point/issue with regard to IPR issues is no longer valid.

2) Furthermore, the method the commentor is prescribing would result in usage of an authentication credential that is much larger in size (on the order of kB), and would not be feasible for implementation in a device with limited power for processing and limited data channel bandwidth for transmission. Performing a TLS ECDHE-ECDSA key exchange would add considerable protocol overhead.

3) Also, ECDHE-ECDSA, as specified in for TLS, is used to negotiate a session key, possibly mutual authenticated key agreement.

4) 802.22.1 use of certificates and signatures is for the purpose of authenticating messages by way of digital signatures. The techniques selected ECQV and ECPVS are the most efficient bandwidth wise and computationally.

5) The ECC implicit certificate mechanism is more appropriate to the

At www.secg.org, SEC 4 is not a published standard, rather it is a draft document. SECG patent policy seems circumspect http://www.secg.org/index.php?action=secg,about_patents about what the status of IPR in an unapproved SEC document are.
**Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom**

**Negative Comments from Peter Ecclestine Received During SB Re-circ #1 and the P802.22 WG Responses**

<table>
<thead>
<tr>
<th>Action</th>
<th>Editorial</th>
<th>Technical</th>
<th>Disapprove</th>
<th>Yes</th>
<th>Disapprove</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Disapprove**

- "An IEEE P802.22.1/D6 device" should be "An IEEE 802.22.1-compliant device", to be correct after this standard is published.
- I agree with Comment 67 on the initial ballot, "Due to the fact that there is no gap in the operation of the beacon in Figure 2 (b), the 802.22 CPE will not have an opportunity to report to the BS that there is a beacon present. That is, the beacon continuously "jams" without any respite.". I disagree with the approved comment resolution "Monique to reitterate previous rejection rationale."

**Editors’ Response**

- E-mail from IEEE SA Sr. Program Manager - Michele Turner - m.d.turner@ieee.org - The letter P needs to be there in front of 802.22.1 since the standard has not been approved to go to the RevCom. The IEEE staff will remove the letter P in front of 802.22.1 before the standard goes to the RevCom. Michelle - "When referring to the technology it is ok to leave as is. However, I would suggest leaving as is without the word 'compliant', since it is already implied that it is compliant."

**Technical Action**

- Replace "IEEE P802.22.1/D6" by "IEEE P802.22.1" on the downstream, the CPE will receive a 6 MHz wide signal from the BS which, if interfered by a narrowband beacon signal (77 kHz), survive the beacon signal due to the narrow-band nature of the interference. On the upstream, the likelihood of the beacon creating interference at the BS is unlikely because the beacon is located close to the CPE but far from the BS. The beacon is transmitted at a much lower power than the CPE upstream. In case where the beacon is close to the BS, the BS will detect it and abide by the Policies 4, 5 and 6 as defined in the IEEE P802.22 D3 base standard in Table 251.

**Disagree**

The gist of the policies is that the CPE should not be allowed to transmit if it is not registered to the BS since it would interfere with the wireless microphones that it tries to protect, however, if the CPE is already registered with the BS, then the CPE shall send a UCS to alert the BS of the presence of the detected signal in its coverage even if it did not plan to transmit because of the potential interference from the downstream transmission.
## Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom

### Negative Comments from Peter Ecclestine Received During SB Re-circ #1 and the P802.22 WG Responses

<table>
<thead>
<tr>
<th>Disapprove</th>
<th>Editorial</th>
<th>Technical</th>
<th>No</th>
<th>Per comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disapprove</td>
<td>Editorial</td>
<td>Technical</td>
<td>Yes</td>
<td>There are two periods at the end of the first sentence.</td>
</tr>
<tr>
<td>Disapprove</td>
<td>Editorial</td>
<td>Technical</td>
<td>Yes</td>
<td>I disagree with the resolution to Initial SB comment 1 about the NPD codewords - &quot;The RTS codewords that were chosen have been voted by the task group and approved by the working group.&quot; - the draft is in Sponsor Ballot, it is proper to comment on the complexity of implementation, and the Comment Resolution Committee is charged with responding to comments, the response should reference the decision of the CRC.</td>
</tr>
</tbody>
</table>

Per comment:

- **The RTS code words were changed in Draft D4 and since then the code words have remained the same, with no technical changes made to this section. The RTS codewords that were chosen have been voted by the task group and approved by the working group because of their superior synchronization performance as compared to the other codewords that were proposed.**

- **Bring back the RTS codewords in Draft 2.0, which has been shown by simulation results that it can fulfill the requirement sufficiently, and with a very simple implementation complexity.**

- **When 802.22.1 is qualifying a device, the word "compliant" is needed. If it is a portion of the Standard like the "PHY", the word "compliant" is not needed.**

E-mail from IEEE SA Sr. Program Manager - Michele Turner - m.d.tumer@ieee.org - The letter P needs to be there in front of 802.22.1 since the standard has not been approved to go to the RevCom. The IEEE staff will remove the letter P in front of 802.22.1 before the standard goes to the RevCom.

**Action:** Replace "IEEE P802.22.1/D6 PHY" by "IEEE P802.22.1 PHY"

_Pile-on comment from Shulan Feng from the SB. Since then, Shulan has agreed to change his vote from Disapprove to Approve for this comment._
# Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom

## Negative Comments from Peter Ecclestine Received During SB Re-circ #1 and the P802.22 WG Responses

<table>
<thead>
<tr>
<th>Disapprove</th>
<th>Technical</th>
<th>Yes</th>
<th>The cryptographic mechanisms should use a non-encumbered NIST Suite B ECC that conforms to FIPS-140-2, rather than the Certicom SEC 4 ECQV Implicit Certificate Scheme.</th>
<th>Replace Certicom SEC 4 ECQV Implicit Certificate Scheme with TLS ECDHE ECDSA with an unencumbered suite that can achieve FIPS-140-2 certification.</th>
</tr>
</thead>
</table>

This comment has been made for the section of the draft that does not have red lines and that has not changed from Draft D6 to D7. Neither any related comment was made during the Sponsor Ballot. So this comment is Out of Scope.

The technical reasons why the the Comment Resolution Committee disagreed with this comment are as follows:

1) For same reasons as response to Comment ID 3 (9218800023), We reject this comment on the technical basis.
2) ECDHE-ECDSA as specified for TLS is used to negotiate a session key, possibly mutual authenticated key agreement. 802.22.1 use of certificates and signatures is for the purpose of authenticating messages by way of digital signatures. The techniques selected ECQV and ECPVS are the most efficient bandwidth wise and computationally.
3) Suite B implementations require licensing from Certicom as well. Suite B is not unencumbered. In fact, Suite B licenses are only freely available for certain elliptic curve configurations if implementor is building a system for US federal government or US DoD. Other entities must negotiate directly with Certicom. Suite B is a suite of technology, that also implies other technologies (e.g. SHA-2, AES-256) which are not appropriate or necessary for the 802.22.1 beacon.
4) The ECC implicit certificate mechanism is more appropriate to the capabilities of the radio to be used for transmitting the beacon. The implicit certificate provides for a more compact credential so it can fit in the data channel for transmission, while not sacrificing security. In short they are providing different services and are not an even swap.
Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom

Negative Comments from Peter Ecclestine Received During SB Re-circ #1 and the P802.22 WG Responses

| Disapprove | Editorial | Yes | All references to 802.22.1 should be in the correct tense for reading after publication, not before. Rewrite, removing text about the 802.22.1 Task Group, as the draft is in the hands of the Sponsor. | Remove reference to Task Group and draft standard everywhere, including Annex E.2 p125 line 119. | See resolution of comment #2. Action: scan the Draft and align tense and remove reference to "Task Group". | Agree in Principle |
| Disapprove | Editorial | Yes | My comment 86 in the initial SB was agreed to, but no change to renumber the items in the bibliography was made. | Either renumber the items as G1, G2, etc. or move this to be | Action: Renumber the references as G1, G2, etc. | Agree in Principle |
| Disapprove | Editorial | Yes | There are no text references to B7, B9, B10, B13, B16, B17 or B18. | Remove uncited references from Bibliography. | All references in Bibliography that do not exist in draft, should be removed. Action: Remove Bibliography references that are not referred to: B7, B9, B10, B13, B16, B17 or B18 Action: Change the "B-s" to "G's" and re-order those references that exist in the text. (i.e., change B1 -> G1, B2 -> G2, B3->G3, B4->G4, B5->G5, B6->G6, B8->G7, B11->G8, B12->G9, B14->G10 in the main text and in Annex G.) | Agree in Principle |
Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom

Time-line for the Launch of IEEE SB Re-circ #2

- July 26\textsuperscript{th} - Issue IEEE P802.22.1 Draft 8.0
- July 26\textsuperscript{th} – August 9\textsuperscript{th} – Re-circulation #2
WG Motion

P802.22 WG Motion 8 – Document – 22-10-0127 Rev2

Motion: Request that the IEEE P802.22.1 Task Group Chair issue the P802.22.1 Draft 8.0 by July 26th and launch a 15 day Sponsor Ballot Recirculation #2 based on the modifications to P802.22.1 Draft v7.0 based on the comment resolutions as contained in 22-10-0104 Rev 3, to start by July 26th, 2010 and that the WG Chair request Conditional Approval to forward P802.22.1 to the IEEE SA RevCom.

Move: Gerald Chouinard
Second: Victor Tawil

For: 12
Against: 0
Abstain: 0
Motion for a Conditional Approval to forward the IEEE P802.22.1 Draft Standard to the IEEE SA RevCom

Motion to grant conditional approval as per the IEEE 802 Operations Manual to forward IEEE P802.22.1 to the IEEE Standards Review Committee.

Move: Apurva N. Mody,
Second: _________________
For: __________
Against: __________
Abstain: _________
Motion Passes / Fails
Apurva presented 22-10-0114-05-0000-802-22-motions-at-the-july-plenary-executive-committee-meeting.ppt, slides 16-19

Motion is "Motion for Extension of the IEEE P802.22 PAR by Two Years and Submission of the PAR Extension Request Form (Doc: 22-10-0117 Rev2) to IEEE NESCOM."

Moved by Mody, seconded by Gilb

Rosdahl asked about the approval rate when the ballot closed.

Mody said that the initial approval rate was 47%, but their rules allow people to change their vote after the ballot so that they can get to 75%.

Vote is 15/0/0, motion passes
### IEEE P802.22 Current Status of the Draft

<table>
<thead>
<tr>
<th>IEEE WG Letter Ballot</th>
<th>Launch Date</th>
<th>Response Ratio</th>
<th>Approval Ratio</th>
<th># of Comments Received</th>
<th>Comment Resolution Status</th>
<th>Draft Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>WG LB #1 (P802.22 Draft v1.0)</td>
<td>April 2008</td>
<td>59%</td>
<td>&lt;75%</td>
<td>978 (526 T, 452 E)</td>
<td>Comments were addressed and Resolved</td>
<td>P802.22 Draft v2.0 Prepared</td>
</tr>
<tr>
<td>WG LB #2 (P802.22 Draft v2.0)</td>
<td>July 2009</td>
<td>80%</td>
<td>&lt;75%</td>
<td>1383 (942 T, 707 E)</td>
<td>Comments were addressed and Resolved</td>
<td>P802.22 Draft v3.0 Prepared</td>
</tr>
<tr>
<td>WG LB #3 (P802.22 Draft v3.0)</td>
<td>March 2010</td>
<td>76%</td>
<td>78%</td>
<td>725 (432 T, 286 E)</td>
<td>Comments are being addressed and Resolved</td>
<td>P802.22 Draft v4.0 Being Prepared</td>
</tr>
</tbody>
</table>

Based on the Resolution to the Comments as contained in Document 22-10-0078 Rev 13
As per the IEEE P802.22 WG P&P as contained in 22-04-0001 Rev 0

IEEE P802.22 is ON TRACK to reach the Sponsor Ballot in Nov 2010
Reasons why Extension is Requested

• The IEEE P802.22 WG is responsible for three Projects. P802.22 (WG Letter Ballot Stage), P802.22.1 (Sponsor Ballot Re-circ Stage and likely to be sent to IEEE RevCom this year), P802.22.2 (Contributions Stage) – *We have made progress*.

• The regulatory rules for the targeted spectrum are still evolving and not finalized as yet –

• IEEE P802.22 has had two changes in leadership since the beginning.

• IEEE P802.22 is ON TRACK to reach the Sponsor Ballot by Nov. 2010
WG Motion

**P802.22 WG Motion 2 – Document – 22-10-0127 Rev2**
Move to authorize the P802.22 WG Chair to make a motion during the IEEE 802 Executive Committee Meeting to extend the IEEE P802.22 PAR by a duration of 2 years.

Move: Gerald Chouinard
Second: Tom Gurley

For: 12
Against: 0
Abstain: 0

**P802.22 WG Motion 4 – Document – 22-10-0127 Rev2**
Move to approve Document 22-10-0117 Rev 3 as the P802.22 WG response to the P802.22 PAR Extension Request Form.

Move: Winston Caldwell
Second: Victor Tawil

For: 11
Against: 0
Abstain: 1
Motion for Extension of the IEEE P802.22 PAR by Two Years and Submission of the PAR Extension Request Form (Doc: 22-10-0117 Rev2) to IEEE NESCOM

• Move: Apurva N. Mody,
• Second: _________________
• For: ____________
• Against: ____________
• Abstain: ____________
• Motion Passes / Fails
Apurva presented 22-10-014-05-0000-802-22-motions-at-the-july-plenary-executive-committee-meeting.ppt, slides 21-23

Motion is "Motion for Extension of the IEEE P802.22.2 PAR by Three Years and Submission of the PAR Extension Request Form (Doc: 22-10-0120 Rev2) to IEEE NESCOM."

Moved by Mody, seconded by Gilb

Rosdahl asked to see the PAR extension request form. He pointed out that it says two years in one place and three years in other places.

Marks wanted to know how the NesCom administrator had insight into the industry to suggest 3 years for the extension.

Yaccone (IEEE) said that based on the progress to date, it would be a good idea to request 3 years.

Law said a three year extension is more challenging than a 2 year extension.

Rosdahl makes a motion to amend the motion from three to two.

Seconded by Law.

Rosdahl said it would be easier to ask for a second extension rather than to try for three at this time.

Thaler agreed with Rosdahl's view.

Amended motion is "Motion for Extension of the IEEE P802.22.2 PAR by Twp Years and Submission of the PAR Extension Request Form (Doc: 22-10-0120 Rev2) with the changes to make it consistently two years in the appropriate locations to IEEE NESCOM."

Marks said that the dates would have to change as well.

Vote to accept the amendment is 13/1/1, motion passes

Marks asked about WG P802.22.2.

Mody said it was a typo, it should be P802.22.

Rosdahl asked if this could be done through email ballot.

Law said that PAR extension approval could be done through email ballot.

Thaler said that it should not go to ballot.

Motion now reads "Motion for Extension of the IEEE P802.22.2 PAR by Two Years and Submission of the PAR Extension Request Form (Doc: 22-10-0120 Rev2) with the changes to make it consistently two years in the appropriate locations to IEEE NESCOM, granting editorial license to the 802.22 chair (or his appointed agent)."

No objections to this being the motion on the floor.

Moved Mody, seconded by Gilb

Marks speaks against the motion, disagrees with the reasons.

Kraemer asked to make it clear when it was a TG request and when it was a WG request.

Grow suggested taking this off-line, presubmitting to NesCom and then approving in November.

Vote is 11/4/0, motion passes
Reasons why Extension is Requested

• The development of IEEE P802.22.2 is dependent upon the advancement of IEEE P802.22 Standard

• The regulatory rules for the targeted spectrum are still evolving and not finalized as yet

• IEEE P802.22.2 plans to launch its WG Letter Ballot 1.0 in August 2010.

• We talked to Lisa Yacone from IEEE-SA and she advised us to ask for a three year extension for this standard
WG Motion

P802.22 WG Motion 3 – Document – 22-10-0127 Rev2
Move to authorize the P802.22 WG Chair to make a motion during the IEEE 802 Executive Committee Meeting to extend the IEEE P802.22.2 PAR by a duration of 3 years.

Move: Winston Caldwell
Second: Jerry Kalke
For: 12
Against: 0
Abstain: 0

P802.22 WG Motion 5 – Document – 22-10-0127 Rev2
Move to approve Document 22-10-0120 Rev 2 as the P802.22 WG response to the P802.22.2 PAR Extension Request Form.

Move: Tom Gurley
Second: Charles Einolf
For: 11
Against: 0
Abstain: 1
Motion for Extension of the IEEE P802.22.2 PAR by Three Years and Submission of the PAR Extension Request Form (Doc: 22-10-0120 Rev2) to IEEE NESC

• Move: Apurva N. Mody,
• Second: _________________
• For: __________
• Against: __________
• Abstain: __________
• Motion Passes / Fails
Jeffree presented 2010-07-exec-motions.pptx, slides 2-3

Motion is "802.1 requests approval from the EC to forward the draft PAR extension request for 802.1AC to NesCom."

Moved by Jeffree, seconded by Rosdahl

Vote is 14/0/0, motion passes
MOTION

802.1 requests approval from the EC to forward the draft PAR extension request for 802.1AC to NesCom.

Proposed: Haddock  Second: messenger
For: 30  Against: 0  Abstain: 1

EC proposed: Jeffree  Second: XXX
For: XX  Against: XX  Abstain: XX
Supporting material – P802.1AC

- Draft PAR extension request is here (circulated Weds AM):
  http://
Jeffree presented 2010-07-exec-motions.pptx, slides 4-5

Motion is "802.1 requests approval of the EC to forward the draft PAR extension request for P802.1AS to NesCom"

Moved by Jeffree, seconded by Lemon

Vote is 13/0/0, motion passes
MOTION

- 802.1 requests approval of the EC to forward the draft PAR extension request for P802.1AS to NesCom.
- Proposed: johas-teener
- Second: garner
- For: 14   Against: 0   Abstain:  13

- EC proposed: Jeffree  Second: XXX
- For:   XX Against: XX   Abstain:   XX
Supporting material – P802.1AS

Draft PAR extension request is here (circulated Weds AM):
Jeffree presented 2010-07-exec-motions.pptx, slides 6-7

Motion is "802.1 requests approval from the EC to submit 802.1Qbc to Sponsor Ballot."

Moved by Jeffree, seconded by Lemon

Vote is 15/0/0, motion passes
MOTION

- 802.1 requests approval from the EC to submit 802.1Qbc to Sponsor Ballot.

- Proposed: Haddock  Second: Mack-Crane
- For: 34 Against: 0  Abstain: 0

- EC proposed: Jeffree  Second: XXX
- For: XX Against: XX  Abstain: XX
Supporting material – P802.1Qbc

- WG ballot closed 2nd July with 100% approval and no outstanding comments:
  - Approve 26 (100%)
  - Disapprove 0 (0%)
  - Abstain 27 (51%)
  - Total responses: 53 (58%)
  - Last balloted draft will be issued for SB with no changes
Jeffree presented 2010-07-exec-motions.pptx, slides 8-9

Motion is "802.1 request EC approval to forward P802.1Qat to RevCom."

Moved by Jeffree, seconded by Lynch.

Vote is 14/0/0, motion passes
MOTION

- 802.1 request EC approval to forward P802.1Qat to RevCom.
- Proposed: johas teener  Second: gunther
- For: 20  Against:  0  Abstain:  11

- EC proposed: Jeffree  Second: XXX
- For:  XX  Against: XX  Abstain: XX
Supporting material – P802.1Qat

- Sponsor recirc ballot closed 23rd June with 100% approval and no outstanding comments:
  - Approve 78 (100%)
  - Disapprove 0 (0%)
  - Abstain 6 (7%)
  - Total responses: 84 (85%)
Approved as part of the consent agenda.

Approved as part of the consent agenda

Das presented 802.21_SG_motion [Compatibility Mode].pdf

Motion is "Motion to extend the IEEE 802.21 Study Group “Heterogeneous Wireless Networks Management” to examine issues related to supporting management of heterogeneous wireless networks (as per ref: 21-09-0187-00-0000), and if necessary create a PAR and Five Criteria to form a new Task Group."

Moved by Das, seconded by Jeffree

Vote is 14/0/0, motion passes
802.21 Motion
(July 2010)
Motion

Motion to extend the IEEE 802.21 Study Group “Heterogeneous Wireless Networks Management” to examine issues related to supporting management of heterogeneous wireless networks (as per ref: 21-09-0187-00-0000), and if necessary create a PAR and Five Criteria to form a new Task Group."

Mover: Subir Das
Second: Tony Jeffree

Yes:
No:
Abstain:

Result:
Result of WG Motion

Motion to extend the IEEE 802.21 Study Group “Heterogeneous Wireless Networks Management” to examine issues related to supporting management of heterogeneous wireless networks (as per ref: 21-09-0187-00-0000), and if necessary create a PAR and Five Criteria to form a new Task Group."

Mover: Johannes Lessmann
Second: Yoshihiro Ohba

Yes: 15
No: 0
Abstain: 0

Result: Motion passes
Supporting Material

Study Group status is available at:

https://mentor.ieee.org/802.21/dcn/10/21-10-0152-00-0000-heterogeneous-wireless-networks-mgmt-sg-status-update
<p>| | | | | |</p>
<table>
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<tbody>
<tr>
<td>6.04</td>
<td>MI*</td>
<td>802.15 Personal space communications (1st extension)</td>
<td>Heile</td>
<td>0</td>
</tr>
<tr>
<td>6.05</td>
<td>MI*</td>
<td>802.15 Medical body area networks (MBAN) (1st extension)</td>
<td>Heile</td>
<td>0</td>
</tr>
<tr>
<td>6.06</td>
<td>MI</td>
<td>802.15 Low energy critical infrastructure monitoring (LECIM) creation</td>
<td>Heile</td>
<td>5</td>
</tr>
</tbody>
</table>

Approved as part of the consent agenda.

Heile presents 15-10-0622-00-0000-ec-actions-motions-san-2010-07.ppt, slides 24-26.

Motion is "Move to approve the formation a Study Group in 802.15 to draft a PAR and 5C addressing Low Energy Critical Infrastructure Monitoring"

Moved by Heile, seconded by Gilb

Vote is 15/0/0, motion passes
Low Energy Critical Infrastructure Monitoring

• The group presented a Tutorial on Monday evening. The documents are available on mentor. (15-10-519, 528, 529, 533)
• Roughly 25 companies and 60 people have been involved so far and expressed interest.
• Working Group approved forming an SG by a vote of 79/0/2 (Y/N/A)
Low Energy Critical Infrastructure Monitoring

The goal is to produce a PAR and 5C supporting the special communications requirements needed to support the monitoring and management of critical infrastructure like bridges, pipelines and transmission and distribution systems.
Executive Committee Action-
Low Energy Critical Infrastructure Monitoring

Move to approve the formation a Study Group in 802.15 to draft a PAR and 5C addressing Low Energy Critical Infrastructure Monitoring

Moved: Bob Heile
Second: James Gilb

Vote:
Meeting recessed at 3:40 pm.
Meeting called to order at 3:50 pm.

8.00  LMSC Internal Business

8.01  MI  Plan for 802.17
Gilb  10  03:50 PM

Gilb stated that there is not a motion.

Lemon described the plan for 802.17. The plan is to complete revision work in time to have it ready to send to Sponsor ballot by the November plenary.

Nikolich said that there would a working group ballot that will finish prior to the November plenary. We will encourage voters to carry their comments forward to Sponsor ballot.

Law said that the document is 6 years old.

Lemon said that it has an active amendment.

Nikolich stated that if for some reason we are not ready for Sponsor ballot by November, we should consider if it is worth the group’s time to continue with the project in November.

8.02  MI  Approve LMSC P&P Revisions per AudCom in document EC-10-0014-00
Sherman  5  03:55 PM

Sherman presented "VC1_16072010_r0_EC_Rules_Motions.ppt" slide 2.

Motion is "To approve incorporation of the revisions to the LMSC P&P Approved 11/20/2009 in document EC-10-0014-00."

Moved by Sherman, seconded by Shellhammer.

Thaler said that the changes are substantive, in particular now it is required to be an IEEE member. The other is that we will need to approve meeting venue selections at the EC.

Sherman said that the second item has been changed.

Rosdahl said that the membership requirement now brings us in line with the higher documents.

Thaler said that it was not the case.

Marks said that the membership requirement applies only to the officers of sponsor, not the members (e.g., the WG Chairs).

Marks was concerned that the new words might require that the Executive Secretary would select venues of WG meetings.

Sherman said that it applied only to plenary meetings.

Vote is 14/1/0, motion passes

Nikolich will send the approved document to AudCom
EC Motion

To approve incorporation of the revisions to the LMSC P&P

➢ https://mentor.ieee.org/802-ec/dcn/10/ec-10-0014-00-00EC-ieee-802-pandp-approved-091120-audcom-revisions.doc

Moved: Matthew Sherman

2nd: Steve Shellhammer

For:

Against:

Abstain:
Sherman presented "VC1_16072010_r0_EC_Rules_Motions.ppt" slide 3.

Motion is "Authorize 2nd Vice Chair to conduct a 30 day electronic ballot on the revisions to the LMSC P&P Approved 11/20/2009 in document EC-10-0014-00."

Motion not required and is withdrawn.
EC Motion

Authorize 2\textsuperscript{nd} Vice Chair to conduct a 30 day electronic ballot on the revisions to the LMSC P&P Approved 11/20/2009 in document EC-10-0014-00.

- https://mentor.ieee.org/802-ec/dcn/10/ec-10-0014-00-00EC-ieee-802-pandp-approved-091120-audcom-revisions.doc

Moved: Matthew Sherman
2\textsuperscript{nd}: Steve Shellhammer

For:

Against:

Abstain:
Sherman presented "VC1_16072010_r0_EC_Rules Motions.ppt" slide 4.

Motion is "To approve incorporation of the revisions to the LMSC OM in document EC-10-0005-01."

Moved by Sherman, seconded by Shellhammer.

Vote is 15/0/0
EC Motion

To approve incorporation of the revisions to the LMSC OM in document EC-10-0005-01.

- https://mentor.ieee.org/802-ec/dcn/10/ec-10-0005-01-00EC-ieee-802-lmsc-om-revisions-for-ballot-100319.doc

Moved: Matthew Sherman

2nd: Steve Shellhammer

For:

Against:

Abstain:
Sherman presented "VC1_16072010_r0_EC_Rules Motions.ppt" slide 5.

Motion is "To approve incorporation of the revisions to the LMSC WG P&P in document EC-10-0006-01."

Moved by Sherman, seconded by Shellhammer.

Vote is 15/0/0

Marks asked when the rules were available.

Nikolich said that they would be posted by Wednesday, next week.

Nikolich said that the Recording Secretary shall post the LMSC OM and LMSC WG P&P that are received from Sherman by COB today.
EC Motion

To approve incorporation of the revisions to the LMSC WG P&P in document EC-10-0006-01.

- https://mentor.ieee.org/802-ec/dcn/10/ec-10-0006-01-00EC-ieee-802-lmsc-wg-pandp-revisions-for-ballot-100319.doc

Moved: Matthew Sherman  
2nd: Steve Shellhammer  
For:  
Against:  
Abstain:
Rosdahl presented "ec-10-0015-00-00EC-802-ec-interim-meetings-proposal.ppt"
Discussion regarding if voting should be allowed in the meeting.
Shellhammer asked if we were allowed to vote on a conference call.
Sherman said that we can vote in a meeting and electronically. A call would be a meeting, but it is not clear if our meetings are required to be in person.
Heile favors the call, but not voting.
Thaler said that any pressing issue could be resolved in an email ballot faster than waiting to vote on it at a meeting.
Rigsbee said that we should only allow items that are an emergency and cannot be handled in an email ballot.
Rosdahl pointed out that an email ballot would be faster because the agenda has to be fixed 10 days in advance. Believes that it will work out well if we do the calls.
Lynch said that he is the only group that can take votes on a conference call. The process needs to monitored closely.
Thompson thinks that the agenda should only be items that are subject of an internal motion at a plenary meeting.
Law wanted to make sure that there were enough lines for the EC members.
Rosdahl said that there would be around 200 lines.
Law asked if there was a deadline for document submissions.
Rosdahl said the intent was that the documents would be due when the agenda is fixed, 10 days in advance.
Nikolich asked Rosdahl to prepare guidelines for the calls.
Rosdahl said that the first one would be arranged via an email ballot.
Nikolich would like to add to the agenda "substantially complete."
Rosdahl asked to make motion to execute to this plan.
Motion is "Move to hold an 802 EC interim telecom on October 5 1-3 pm Eastern Time with the proposed agenda as outlines in ec-10-0015-01."
Moved by Rosdahl, seconded by Kraemer
Vote is 15/0/0, motion passes.
# 802 EC Interim Meetings Proposal

**Date:** 2010-07-16

**Authors:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliations</th>
<th>Phone</th>
<th>email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jon Rosdahl</td>
<td>CSR</td>
<td>+1-801-492-4023</td>
<td><a href="mailto:jrosdahl@ieee.org">jrosdahl@ieee.org</a></td>
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Abstract

The 802 EC is planning on improving communication and efficiency in completion of Executive Committee assignments.

This Submission proposes the guidelines for teleconferences to be held 3 times a year to help increase the efficiency of the committee.

Comments/Requests from EC members are noted at the end.
802 EC Interim Meetings Proposal

• **Schedule:** 1st Tues of Feb, June, and Oct
• **Duration:** 2 hours
• **Scope:**
  - A – Items EC typically doesn’t have time to discuss
    • Architecture
    • Cross WG collaboration/competition
    • Stds. Dev Efficiency
  - B – make decisions (Optionally) (same list as current EC E-Mail Ballot capability)
    • Press release, Liaisons, MOU etc.
    • Approval for RevCom –
    • Approval for Sponsor Ballot –
    • Meeting venue selection approval
• **Out of Scope:**
  - PAR Approval
• **Telecon P&P**
  - Issue agenda 10-day prior – Announce on 802 and WG reflectors.
  - Open – provide up to 50 ports
  - Call limited in time and scope to announced agenda
802 EC Interim Meeting – Oct 2010

• Date: Oct 5, 2010
• Time: 1-3pm ET – 2 hour limit
• Proposed Agenda:
  – 802 Overview and Architecture
    • Revision status update
  – IEEE-SA items
    • Single channel sales update
    • 802 Task Force report
• Deadline for Agenda changes Sept 24, 2010
• Dial-in Number to be provided with Agenda.
802 EC interim Mtg – Feb 1, 2011

• Date: Feb 1, 2011
• Time: 1-3pm ET – 2 hour limit

• Proposed Agenda:
  – 802 Overview and Architecture
    • Revision status update
  – IEEE-SA Items
    • International policy updates
    • 802 Task Force report

• Deadline for Agenda changes Jan 21, 2011
• Dial-in Number to be provided with Agenda.
Requested Change (Shellhammer/Gilb)

- **From Slide 3:**
  - "B - make decisions (Optionally) (same list as current EC E-Mail Ballot capability)"

- **Request:**
  - May I suggest we eliminate making decisions on the calls and instead have the formal vote take place as email ballots immediately after the call.

- **Rational:**
  - Decisions can be made with an 10-day electronic ballot beginning right after the conference call. I think the 10-day delay is not too onerous and will fix the issue of voting on the call. We can even craft the wording of the motion on the call and fully discuss it. We can also have straw polls and update the wording until we think we have a good motion with reasonable support. Then we can run a ballot right after the call.

  - We can discuss and craft the motion language and then have a 10 day ballot. That way, EC members who cannot attend the meeting can still vote. The delay due to voting after the call is minimal.
References
9.01 ME* IEEE 802.3 Interpretation 1-7/10 response
Approved as part of the consent agenda

9.02 ME* IEEE 802.3 Liaison response to ISO/IEC JTC1 SC25 WG3 on optical return loss
Approved as part of the consent agenda

9.03 ME* IEEE 802.3 Liaison response to IEC/SC 46C on DC resistance unbalance
Approved as part of the consent agenda

9.04 ME Approve 802 representative to September 2010 ISO/JTC1 meeting

Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 15

Motion is "Approve that Bruce Kraemer be appointed as the IEEE 802 representative at the ISO/IEC JTC1/SC6 meeting in London in September 2010"

Moved by Kraemer, seconded by Hawkins

Vote is 15/0/0, motion passes.
Motion – Approval of JTC1 Representative

• Approve that Bruce Kraemer be appointed as the IEEE 802 representative at the ISO/IEC JTC1/SC6 meeting in London in September 2010

• Moved: Bruce Kraemer
• Seconded:

• In the WG: 58,0,0
Approved as part of the consent agenda

9.06 ME EC to approve AAP last call comment in response to AAP40 for G.8021 and ask IEEE staff to submit the comment and ballot to ITU-T as an IEEE position

Jeffree presented 2010-07-exec-motions.pptx, slide 10

Motion is "802.1 requests the EC to approve the AAP last call comment in response to AAP40 for G.8021, and to ask IEEE staff to submit the comment and ballot to ITU-T as an IEEE position.


Moved by Jeffree, seconded by Lemon

Grow indicated that it should be IEEE-SA, not IEEE as the sector member.

Motion now reads "802.1 requests the EC to approve the AAP last call comment in response to AAP40 for G.8021, and to ask IEEE staff to submit the comment and ballot to ITU-T as an IEEE-SA position.


Lynch confirmed that it is the IEEE-SA that is the member.

Marks thought it was the IEEE that was a member, but that is not critical to this item.

Vote is 15/0/0, motion passes.
MOTION

802.1 requests the EC to approve the AAP last call comment in response to AAP40 for G.8021, and to ask IEEE staff to submit the comment and ballot to ITU-T as an IEEE position.


Proposed: Haddock  Second:  Finn
For: 23    Against:   0    Abstain:       4

EC proposed:  Jeffree Second: XXX
For:  XX    Against:  XX Abstain:   XX
Jeffree presented 2010-07-exec-motions.pptx, slide 11

Motion is "Request that the EC nominates John Messenger as the IEEE external representative to ITU-T."

Moved by Jeffree, seconded by Law

Law asked how much involvement with the IEEE-SA is required for this position?

Grow said that the key is the ability to represent the IEEE-SA.

Messenger said that his understanding is that the job is to convey positions, not create them.

Lynch said that Liaisons are not just pipelines, but are there to represent the IEEE.

Vote is 14/0/0, motion passes
Request that the EC nominates John Messenger as the IEEE external representative to ITU-T.

Moved: lemon second: parsons
For:  23 Against:  0 Abstain:  4

EC proposed:  Jeffree  Second:  XXX
For:    XX Against:  XX  Abstain:  XX
Jeffree presented 2010-07-exec-motions.pptx, slide 12
MOTION

802.1 approves the liaison letter to the ITU-T Q10/15 regarding the Y.1731 amendment based on the file shown, final version to be posted at:


Proposed: Haddock  Second: Finn
For:  33  Against:  0  Abstain:  2
Jeffree presented 2010-07-exec-motions.pptx, slide 13
MOTION

802.1 approves the liaison letter to the ITU-T Q3/15 regarding OTN work plan:


Proposed: Haddock  Second: parsons
For: 28  Against: 0  Abstain: 1
Jeffree presented 2010-07-exec-motions.pptx, slide 14
MOTION

802.1 approves the liaison letter to the IETF BMWG:


Proposed: Thaler    Second: congdon

For:   19    Against:   0    Abstain:   6
Approved as part of the consent agenda


Approved as part of the consent agenda

9.12  ME*  Comments to the FCC regarding NOI 09-157, Fostering Innovation and Investment in the Wireless Communications Market - This is dealing with the harmful interference issue. Doc. 18-10-0046-03  Lynch  0

No IEEE SA items.

10.00  IEEE SA items

11.00  Information Items

11.01  II  Treasurer's report  Hawkins  5  05:04 PM

Hawkins presented TreasClosingJul10v1.pdf

Thompson asked if people who could not get into the hotel because the hotel was full would pay the penalty.

Hawkins said that there was no way to tell if someone tried and failed.

Rosdahl said that if they have a problem, it should have been brought up with the meeting planner.

Chaplin (Samsung) thinks that the penalty is because we are not making our room block, which should be automatic if the hotel is full. They should not be charged if the hotel was full.

Messenger said there should not be a penalty if the hotel is full.

Rigsbee said that the discount is because the room rates subsidized the meeting room costs.

Thompson said that some employers have processes that are difficult for people to book rooms.

Nikolich said that it will be put on the EC interim call.

Rigsbee said that the cancellation is up until 6 pm on day of arrival.
# IEEE Project 802

## Estimated Statement of Operations

Mar 2010 Plenary Session

Orlando, FL

As of Jul 16, 2010

### Income

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* 30-anniv. grats

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**IEEE Project 802**  
**Estimated Statement of Operations**  
**Jul 2010 Plenary Session**  
**San Diego, CA**  
**As of Jul 16, 2010**

### Income

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<td>13%</td>
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### Expenses

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<thead>
<tr>
<th>Description</th>
<th>Fee</th>
<th>Cxl</th>
<th>LCxl</th>
<th>Gross</th>
<th>Cxl</th>
<th>LCxl</th>
<th>Net</th>
<th>Net Amt</th>
<th>%</th>
<th>Gross</th>
<th>Cxl</th>
<th>LCxl</th>
<th>Net</th>
<th>Net Amt</th>
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* reg counters, grats

### Net Session Surplus/(Loss)

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
<th>Cxl</th>
<th>LCxl</th>
<th>Gross</th>
<th>Cxl</th>
<th>LCxl</th>
<th>Net</th>
<th>Net Amt</th>
<th>%</th>
<th>Gross</th>
<th>Cxl</th>
<th>LCxl</th>
<th>Net</th>
<th>Net Amt</th>
<th>%</th>
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</table>
Rigsbee updated the status on the meeting at Macao. Dates are reserved. They are doing a side visit to the Marina Bay Sands to verify that everything is OK.

Shellhammer asked if our plan is to do one nNA per year.

Rigsbee said that is our current plan and then we will look at how it turned out. Then we will decide if it was worth it.

Nikolich thinks we are making good progress on architecture, distribution of standards, improving process efficiencies. Wants to know if we should hold a workshop in July.

Nikolich asked Rosdahl and Rigsbee to come back with a proposal at the November plenary in 2010.

Thompson said that the session last summer was a success, in part because we prepared in advance. We should consider if the phone conferences can replace the workshop.

Nikolich discussed the results of the 802 Task Force, minutes will be posted next week.

Sherman has nothing to report for P&P.

Lynch said that there is a rumor that the FCC will announce changes to the TVWS in September. The FCC yesterday adopted an NPRM for 90 MHz total around 2 GHz. 802 responded to FCC regarding harmful interference.

Kraemer presented 11-10-0935-02-0000-july-2010-wg11-motions-for-the-ec.ppt, slide 16-17.
Information Item - Smart Grid

- **URL:**
  https://mentor.ieee.org/802.11/dcn/10/11-10-0934-00-000
Smart Grid -Report Publication Plan (likely)

NIST

Pieces

R4

R5

SDO Call for Comments

Webinar/call July 25

Comment Resolution

Webinars/calls

R6
(D0.1)
By Sep 12

R7
(D1.0)

SGIP St Louis

802 Call for Comments

802 Support

Thursday Comments

802 Interim

802 support

July

August

September
Rosdahl discussed virtual meetings and tools. VeriLAN presented an solution that they had for virtual presence for standards meetings.

Nikolich asked he was developing a set of requirements.

Rosdahl said yes, but he isn’t ready to distribute the document for review yet. He should have something to circulate in November.

Shellhammer asked what the intent of the study was, for the EC, for WGs, etc.

Rosalidh said that there are various hurdles to test. The TVWS group tried this last year, but the results were mixed.

Shellhammer asked if we would use one of these tools for the EC call.

Rosalidh said no, we will use the existing conference call system. Toll-free numbers are expensive for the host.

Law said that we should be charging the attendees, not the host.

Gilb said that there are no appeals.

Alfvin gave the Network Services report. Network was up on time, worked fine. Mid-week report was sent out on Tuesday.

Nikolich asked for any other business.

Marks said that he offered an ASN.1 session. Thompson asked if we could have another seminar. The presenter could do a workshop and/or a tutorial overview of ASN.1. The presenter needs to know what the other WGs would need.

Thompson said that his interest would be ASN.1 in support of SNMP. He would like to see a tutorial or if more time was required on Sunday afternoon.

Kraemer asked the number of attendees.

Marks said 20.

Kraemer has received only one response for attending the meeting.

Thompson said that if it was SNMP, it might have wider interest.

Marks said he would try to set up one oriented to SNMP.

Meeting adjourned at 5:51 pm.

Respectfully submitted
James Gilb
IEEE 802 LMSC Recording Secretary