Meeting called to order at 8:00 am local time.

<table>
<thead>
<tr>
<th>1.00</th>
<th>MEETING CALLED TO ORDER</th>
<th>Nikolich</th>
<th>1</th>
<th>08:00 AM</th>
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</thead>
<tbody>
<tr>
<td>2.00</td>
<td>MI APPROVE OR MODIFY AGENDA</td>
<td>Nikolich</td>
<td>4</td>
<td>08:01 AM</td>
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</table>

Motion to approve the agenda, revision 2, moved by Kraemer, seconded by Lynch 15/0/0, motion passes
<table>
<thead>
<tr>
<th>Time</th>
<th>Category</th>
<th>Description</th>
<th>Requestor</th>
<th>Duration</th>
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<td>1.00</td>
<td>ME</td>
<td>MEETING CALLED TO ORDER</td>
<td>Nikolich</td>
<td>00:00 AM</td>
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<tr>
<td>2.00</td>
<td>MI</td>
<td>APPROVE OR MODIFY AGENDA</td>
<td>Nikolich</td>
<td>00:01 AM</td>
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<tr>
<td>3.00</td>
<td>*</td>
<td>APPROVE / MODIFY Minutes of previous opening and closing meeting</td>
<td>Nikolich</td>
<td>00:05 AM</td>
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<tr>
<td>4.00</td>
<td></td>
<td>EC member affiliation updates</td>
<td>Nikolich</td>
<td>00:05 AM</td>
</tr>
<tr>
<td>4.01</td>
<td></td>
<td></td>
<td></td>
<td>00:07 AM</td>
</tr>
<tr>
<td>4.02</td>
<td></td>
<td></td>
<td></td>
<td>00:07 AM</td>
</tr>
<tr>
<td>5.00</td>
<td>II</td>
<td>BoG Actions</td>
<td>Nikolich</td>
<td>00:07 AM</td>
</tr>
<tr>
<td>5.01</td>
<td>II</td>
<td>Stds Board Actions (approved projects, standards, withdrawals)</td>
<td>Nikolich</td>
<td>00:12 AM</td>
</tr>
<tr>
<td>5.02</td>
<td>II</td>
<td>PARS to NesCom</td>
<td>Nikolich</td>
<td>00:17 AM</td>
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<tr>
<td>5.03</td>
<td>II</td>
<td>List of Drafts to Sponsor Ballot</td>
<td>Nikolich</td>
<td>00:19 AM</td>
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<td>II</td>
<td>List of Drafts to Revcom</td>
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<td>00:21 AM</td>
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<td>6.00</td>
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<td>IEEE Staff Introductions</td>
<td>Nikolich</td>
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<td>II</td>
<td>802 Task Force update</td>
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<td>II</td>
<td>Sale of IEEE Standards</td>
<td>Marks</td>
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<td>Registration Authority Committee meeting notice</td>
<td>Jeffree</td>
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<td>II</td>
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<td>6.05</td>
<td>II</td>
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<td>6.06</td>
<td>II</td>
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<td>6.07</td>
<td>II</td>
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<td>6.08</td>
<td>II</td>
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<td>00:45 AM</td>
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<td>II</td>
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<td>6.10</td>
<td>II</td>
<td></td>
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<td>00:45 AM</td>
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<tr>
<td>7.00</td>
<td>II</td>
<td>LMSC Email Ballot Recap</td>
<td>Nikolich</td>
<td>00:45 AM</td>
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<td>LMSC Meeting Fee Waivers</td>
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<td>7.02</td>
<td>II</td>
<td>Tutorial schedule</td>
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<td>09:00 AM</td>
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<td>7.03</td>
<td>II</td>
<td>Treasurer's report</td>
<td>Hawkins</td>
<td>09:10 AM</td>
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<td>7.04</td>
<td>II</td>
<td>uNA update</td>
<td>Rigsbee</td>
<td>09:15 AM</td>
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<td>II</td>
<td>JTC1/SC6 update</td>
<td>Thompson</td>
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<td>II</td>
<td>802.21 Status Update--change of scope</td>
<td>Gupta</td>
<td>09:19 AM</td>
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<td>II</td>
<td>802.22 Status Update--change of WG Chair</td>
<td>Chouinard</td>
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<td>EC Workshop agenda and logistics review</td>
<td>Thompson/Rigsbee</td>
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<td>Electronic vote tallying during meeting</td>
<td>Stevens</td>
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<td>7.12</td>
<td>II</td>
<td>Notice of Study Groups under consideration/status of existing SGs</td>
<td>WG chairs</td>
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<td>7.29</td>
<td>II</td>
<td>P&amp;P review</td>
<td>Sherman</td>
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<td>7.30</td>
<td>II</td>
<td>EC meeting schedule (rules, SA, etc.)</td>
<td>Nikolich</td>
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<td>7.31</td>
<td>II</td>
<td>Appreciation</td>
<td>Thompson</td>
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<td>7.33</td>
<td>DT</td>
<td>ADJOURN SEC MEETING</td>
<td>Nikolich</td>
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| 8.00 | PL | IEEE 802 PLENARY MEETING STARTS | Nikolich | 60 | 11:00 AM |
| 8.01 | PL | IEEE 802 PLENARY MEETING ENDS | | | 12:00 PM |

**Special Orders**
Opening EC Meeting
8 AM-10:30 AM
Approved as part of the consent agenda.

Affiliation changes
Thompson – Grand Cayman Standards Institute (GraCaSI)

Nikolich gave an update on the SA BoG.
JUNE 09
SA BoG Update

• Met in Tokyo Japan and Piscatway NJ via electronic means
• Replacing the missing IEEE/ISO Registration Authority agreement
• Via Licensing’s formation of the Power Over Enet patent pool approved
• Engaged with ISTO to implement the IEEE Conformity Assessment Program

The 2009 BoG consists of 13 members:
SA President: Chuck Adams
SA Past-President: George Arnold
Standards Board Chair: Bob Grow
Standards Board Past Chair & Corporate Advisory Group Chair: Steve Mills
IEEE-SA Treasurer: Don Wright
Secretary (non-voting): Judy Gorman
Members-At-Large: Ben Johnson, Ted Olsen, Greg Saunders, Phil Wennblom,
James Williamson, Jim Pauley, Paul Nikolich, John Barr

BoG ad hoc committees:
Strategic Planning chaired by Johnson
Business Development chaired by Nikolich
Nikolich asked what should be done with 802.2 ISO

Thompson – replace 802.2 references with ISO version as it is stabilized and requires no maintenance.
Standards Approved

New:
P802.1Qaw/D5 Amend: Mgmt of Data Driven and Data Dependent Connectivity Faults
P802.1Qay/D5.1 Amend: Provider Backbone Bridge Traffic Engineering
P802.15.4c/D6 Amend: Alternative PHY to Support One or More of the Chinese 314-316 MHz, 430-434 MHz, and 779-787 MHz Bands
P802.15.4d/D3 Amend: Alternative PHY to Support the Japanese 950MHz Band
P802.15.5/D7 Mesh Topology Capability in Wireless Personal Area Networks
P802.16j/D9 Amendment: Multihop Relay Specification

Revisions: P802.16/D9 Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems

Reaffirmations: 802.15.2-2003 (C/LM) Coexistence of Wireless Personal Area Networks with Other Wireless Devices Operating in Unlicensed Frequency Bands

Corrigendum: none


Withdrawals: none
MAR through JUN 2009
SA Standards Board Actions

Project Actions

New:  **P802.3bd**- Amend: MAC Control Frame for Priority-based Flow Control

Modified PAR: none

Revisions: none

Reaffirmations: none

Withdrawals: none

Extensions: none

P&P Actions

- Sponsor Policies & Procedures for Computer Society/Local and Metropolitan Area Networks were accepted. These P&Ps are valid until December 2014.
Jeffree requested to add a PAR extension for 802.1aq to the list.
Jeffree asked to move 802.1AR to the list of maintenance PARs.
Kraemer asked to correct the 802.11 to 802.11n
Nikolich reviewed the PARs that are due to time out.
Law said that 802.3at is dependent on 802.3bc and so 802.3at is finished, but will need to wait for 802.3bc to finish and so will need a PAR extension
Draft PARs to NesCom

- P802.1Qbc Provider Bridging -- Remote Customer Service Interface
- P802.1Qbe Multiple Backbone Service Instance Identifier (I-SID) Registration Protocol (MIRP)
- P802.1Qbf Provider Backbone Bridge Traffic Engineering (PBB-TE) Infrastructure Protection

- P802.21.1 Standard for Support for Emergency Services

- Maintenance PARs
  - P802.3at DTE Power Enhancements extension
  - P802.11n High Throughput PAR extension
  - P802.1aq PAR extension
  - P802.1AR Secure Device Identity PAR extension
PARs due to time out DEC09

- P802.1aq, P802.1AR – extensions requested

- P802.3at—extension requested, but contingent on P802.3bc

- P802.11n—extension requested
- P802.11w--tbd

- P802.15.3c--tbd

If these projects will not be submitted to RevCom in time for the December 2009 meeting, you need to take one of the following steps:

1. Request an extension for the project (PAR). Please note that this extension request can be from one to four years, although further justification may be requested for an extension request which exceeds two years.

2. Request withdrawal of the project (PAR).
802.1: 802.1aj, 802.1Qav, 802.1Qau (conditional), 802.1AR, 802.1Xrev, 802.1Qat (conditional)
802.3: 802.3bb
802.11: 802.11z TDLS (conditional), 802.11v management (conditional), 802.11u inter working (conditional)
802.15: none
802.16: none
802.17: 802.17c (conditional)
802.20: 802.20.3 minimum performance specification
802.21: none
802.22: none
Draft Standards to Sponsor Ballot

• Check with EC members
• 802.1: aj, Qav, Qau (cond), AR, Xrev, Qat (cond)
• 802.3: dot3bb (cond)
• 802.11: dot11z TDLS (cond), dot11v Mgmt (cond) & dot11u Interworking (cond)
• 802.15: none
• 802.16: none
• 802.17: dot17c (cond)
• 802.20: dot20.3 Minimum Performance Specification
• 802.21: none
• 802.22: none
802.1: none
802.3: 802.3at POE extension (conditional), 802.3av 10GPON, 802.3bc Ethernet TLV (conditional)
802.11: 802.11n high throughput, 802.11w protected management frames
802.15: 802.15.3c 60 GHz
802.16: 802.16h
802.17: none
802.20: none
802.21: none
802.22: none
Draft Standards to RevCom

- Check with EC members
- 802.1: none
- 802.3: dot03at POE ext. (cond), dot03av 10GPON, dot03bc Enet TLV (cond)
- 802.11: dot11n High Throughput, dot11w Protected Mgmt Frames
- 802.15: dot15.3c 60GHz
- 802.16: dot16h
- 802.17: none
- 802.20: none
- 802.21: none
- 802.22: none
Nikolich reviewed the list of 802 members who are participants in SASB.
Nikolich introduced the IEEE staff
802 Participants on SASB and its subcommittees

SASB members: Bob Grow (chair), Steve Mills (past Chair), John Barr, David Law, Glenn Parsons, Mark Epstein, Jon Rosdahl

NesCom: Young Kyun Kim, Mark Epstein

RevCom: David Law (chair), Clint Chaplin, Phil Barber, Wael Diab, Glenn Parsons, Jon Rosdahl, John Barr

ProCom: Steve Mills

PatCom: Steve Mills (chair), David Law

AudCom: Glenn Parsons, Clint Chaplin, Wael Diab
IEEE Staff Introductions

1. Michelle Turner: Program Manager, Document Development
2. Michael Kipness: Program Manager, Technical Program Development
3. Kathryn Cush: Program Manager, Technical Program Development
4. Susan Tatiner: Associate Managing Director, Technical Program Development and 802 Ombudsman
5. Jerry Walker: Director, Business Development
6. Carmen Hernandez: Business Development Administrator
Jeffree indicated that when 802.2 goes away, there was a desire to make sure that the electronic copy was still available.

Marks asked for agenda item 5 to be extended to include "timely sales of standards"

Thompson suggested it being "access to standards for sales"

Tatiner suggested adding "File retention policy and practice on grouper"

Thompson and Law indicated that there is a conflict with the time.

Jeffree asked for a description of item 7, "File retention policy and practice on grouper"

Tatiner asked if we could pilot an effort to put in place better practice with regards to volunteer sites file retention.

Law requested that the practice would be to keep records online forever. Suggest amending the IEEE policy to allow longer archiving.

Nikolich suggested changing item 7 to be at 3:00 pm.

Thompson asked that item 7 not be addressed prior to 3:30 pm

Thaler seconded Law's comment. As an example, when working on maintenance or update, the question comes up why something was done a specific way.

Nikolich ended discussion, it will be discussed 3:30-4:00 pm on Wednesday.
IEEE-SA/802 Task Force

• Wednesday 2-4pm
• Tentative Agenda

2. ISO/IEC JTC1 WG1 status update – Kipness
3. Smart Grid initiatives within IEEE SA - Tatiner
4. 802.2-1998 Logical Link Control pdf for download – Kipness
5. 8802-2-1998 LLC, retention of copyright in event of withdrawal -- Turner
6. GetIEEE802 2010 budget and access to stds for sale – Nikolich
7. Registration Authority – status regarding replacement of ISO/IEEE agreement – Nikolich
8. File retention policy and practice on Grouper – Tatiner (time sensitive, not before 3:30)
9. Action item review – Nikolich
10. Adjourn
Marks indicated that standards are not available to for sale, even ones that have been published. The staff is doing research to determine which ones are unavailable.

Marks indicated that finding out if a standard is for sale is a research product. If this is the case, then the chance of selling a standard is slim.

Marks suggested that there would be a tutorial on how to buy a standard for our participants since it requires special expertise to be able to purchase a standard online.

Marks suggested that there might be a motion to require that WGs be required to make sure that the standards are available for sale. This is a problem when participants cannot purchase a standard that they need for their work.

Gilb clarified that he was not laughing at Marks, but rather at the incompetence of the IEEE in selling standards.

Thompson indicated that this is an ongoing problem for a long period of time. The effort and time required to purchase a standard is unacceptable from a commercial point of view. Would like to elevate this to a new level via a position paper from 802 indicating our dissatisfaction with IEEE as a vendor of our product.

Nikolich would like a position to the BOG to present on this.

Kraemer asked for clarification, will this only be discussed on Wednesday afternoon?

Nikolich – Yes

Grow (BOG and business development ad-hoc) – suggested that one solution would be to do away with the waiting period on Get IEEE 802.

Tatiner indicated that there is a problem with getting the standards. The 802.16 standard in question was put on Xplore for purchase, but that Xplore has technical issues with large documents. They are working on a longer term solution. Additional pressure would help the staff to get this problem resolved.

Thompson this is part of a larger problem in which there is a captive customer and so there is insufficient motivation for them to compete.

Marks asked Tatiner, is there a list of standards that are not available. Tatiner said that the list will be provided to the EC later this week.

RAC will be meeting Thursday at 7 pm (item taken out order, announcement was made prior to taking up item 6.02.)

802.20.2 to sponsor ballot, passed 13/0/0/3 (y/n/abs/dnv)
LMSC Email Ballot Recap

- 09MAY P802.20.2D1.0 to SB 13/00/00/03 pass
IEEE Staff and Moshe Kam (for tutorial)
Meeting Fee Waivers

• The following individuals have had their registration fees waived for this plenary session by the LMSC chair.
  
  – IEEE-SA Staff Participants (per previous slide)
  – Invited Participants
    • Moshe Kam – Standards Education Tutorial (invited by Nikolich)
    • Steven Lanzisera – Energy Efficiency Tutorial (invited by Law)
Law spoke regarding the first tutorial, named "Incorporating Standards in Engineering Education" indicating that is with regards to using standards in education (e.g., in universities).

Law spoke on the second tutorial, which is to discuss the regulatory regime and promote cross group awareness.

Law indicated that the third tutorial (CFI) had to do with connections within a rack.
## Tutorial Slot Schedule

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
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<tbody>
<tr>
<td><strong>1) Incorporating Standards in Engineering Education</strong>&lt;br&gt;6:00-7:30PM sponsor: Nikolich</td>
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<tr>
<td><strong>2) Energy Efficiency</strong>&lt;br&gt;7:30-9:00PM sponsor: D. Law</td>
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<tr>
<td><strong>2) CFI 802.3 10GBASE-Copper R1</strong>&lt;br&gt;9:00-10:30PM sponsor: D. Law</td>
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</table>
Hawkins presented the treasurer's report.

Registrations for Vancouver were 184 less than projected. Room bookings were below budget as well. The budget did not include the new networking costs, which is higher now as they are providing the projectors. Net loss for Vancouver is approximately $16,000.

Thaler asked about the networking fee, thought that the rebate for the sales of projectors would have covered the increase in the network cost.

Hawkins added that Vancouver had two sites and so was more expensive.

Thompson asked if the wireless will be more expensive in this site.

Rigsbee said that there were some savings for this meeting

Hawkins – our current operating reserve is about 1.3 M

Hawkins – for this week, estimating 1100 attendees (we are 1060 right now)

Sherman asked about the social cost. ($100k)

Hawkins said that the current arrangement is that the meeting space is free in exchange for agreement to a certain amount of business with the hotel, one of which is the food and beverage budget. Deleting the social would require increases in costs in other areas, e.g., room rates.

Thompson asked about our room rate vs. the market rate.

Rigsbee indicated that we are sold out as we only reserved 600 rooms. The rate was negotiated 2 years ago when SemiCon was expected to fill many hotel rooms. We are scaling back future events.
## Session Income

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<td>25 Cancellations</td>
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<td>11 Early cancellations</td>
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<td>Interest</td>
<td>2,318</td>
<td>1,400</td>
<td>918</td>
<td></td>
</tr>
<tr>
<td><strong>Other (Hotel comps and commission)</strong></td>
<td><strong>$52,886</strong></td>
<td><strong>75,000</strong></td>
<td><strong>(22,114)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL Session Income</strong></td>
<td><strong>$468,354</strong></td>
<td><strong>$582,080</strong></td>
<td><strong>$113,726</strong></td>
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</tbody>
</table>

## Session Expenses

<table>
<thead>
<tr>
<th>Est/Act</th>
<th>Budget</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Visual</td>
<td>16,995</td>
<td>25,500</td>
</tr>
<tr>
<td>Audit</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Bank Charges</td>
<td>480</td>
<td>350</td>
</tr>
<tr>
<td>Copying</td>
<td>3,157</td>
<td>3,500</td>
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<tr>
<td>Credit Card Discounts &amp; Fees</td>
<td>17,271</td>
<td>14,964</td>
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<tr>
<td>Equipment Expenses</td>
<td>1,900</td>
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<tr>
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<td>88,200</td>
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<tr>
<td>Meeting Administration</td>
<td>82,634</td>
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<tr>
<td>Misc Expenses</td>
<td>1,461</td>
<td>3,500</td>
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<tr>
<td>Networking</td>
<td>110,115</td>
<td>70,000</td>
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<tr>
<td>Other Expenses</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Phone &amp; Electrical</td>
<td>1,231</td>
<td>2,000</td>
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<tr>
<td>Refreshments</td>
<td>103,078</td>
<td>150,000</td>
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<tr>
<td>Shipping</td>
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<td>15,000</td>
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<tr>
<td>Social</td>
<td>53,681</td>
<td>50,000</td>
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<tr>
<td>Supplies</td>
<td>483</td>
<td>800</td>
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<tr>
<td><strong>TOTAL Session Expense</strong></td>
<td><strong>484,335</strong></td>
<td><strong>524,714</strong></td>
</tr>
</tbody>
</table>

## NET Session Surplus/(Deficit)

<table>
<thead>
<tr>
<th>Analysis</th>
<th>57,366</th>
<th>(73,347)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refreshments per registration</td>
<td>101</td>
<td>125</td>
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<tr>
<td>Social per registration</td>
<td>53</td>
<td>42</td>
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<tr>
<td>Meeting Admin per registration</td>
<td>81</td>
<td>77</td>
</tr>
<tr>
<td>Surplus/(Loss) per registration</td>
<td>(16)</td>
<td>48</td>
</tr>
</tbody>
</table>

* Misc items: Hotel gratuities

---

**Cash recognized on hand as of Jul 12, 2009** $1,199,115

**Reserve for unpaid expenses for prior sessions** $(1,000) bank fees, CC fees, etc

**Reserve for other outstanding commitments** $-

**Income received for current session** $(22,387)

**Expenses prepaid for current session** $66,689

**Expenses prepaid for future sessions** $-

**Equipment Receivable Acct** $42,664

**Operating Reserve following this session** $1,285,081
## Estimated Statement of Operations

**IEEE Project 802**  
**Jul 2009 Plenary Session**  
**San Francisco, CA**  
**As of Jul 5, 2009**

### Meeting Income

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
<th>Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registrations</td>
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<td>1,100</td>
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<tr>
<td>Registration income</td>
<td>473,000</td>
<td>473,000</td>
<td>0</td>
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<tr>
<td>Cancellation refunds</td>
<td>(9,460)</td>
<td>(9,460)</td>
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<tr>
<td>Deadbeat collections</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Bank interest</td>
<td>2,000</td>
<td>2,000</td>
<td>0</td>
</tr>
<tr>
<td>Other income</td>
<td>73,720</td>
<td>75,000</td>
<td>(1,280)</td>
</tr>
</tbody>
</table>

**TOTAL Meeting Income**  
$539,260  
$540,540  
(1,280)

### Meeting Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
<th>Budget</th>
<th>Variance</th>
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</thead>
<tbody>
<tr>
<td>Audio Visual Rentals</td>
<td>12,167</td>
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<tr>
<td>Audit</td>
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<td>0</td>
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<tr>
<td>Bank Charges</td>
<td>350</td>
<td>350</td>
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<tr>
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<td>2,750</td>
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<td>750</td>
</tr>
<tr>
<td>Credit Card Discount</td>
<td>16,555</td>
<td>16,555</td>
<td>0</td>
</tr>
<tr>
<td>Equipment Expenses</td>
<td>2,000</td>
<td>2,500</td>
<td>500</td>
</tr>
<tr>
<td>Get IEEE 802 Contribution</td>
<td>80,850</td>
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<tr>
<td>Insurance</td>
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<td>0</td>
</tr>
<tr>
<td>Meeting Administration</td>
<td>86,950</td>
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<td>0</td>
</tr>
<tr>
<td>Misc Expenses</td>
<td>3,500</td>
<td>3,500</td>
<td>0</td>
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<tr>
<td>Network</td>
<td>100,000</td>
<td>100,000</td>
<td>0</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Phone &amp; Electrical</td>
<td>2,000</td>
<td>2,000</td>
<td>0</td>
</tr>
<tr>
<td>Refreshments</td>
<td>120,000</td>
<td>120,000</td>
<td>0</td>
</tr>
<tr>
<td>Shipping</td>
<td>15,000</td>
<td>15,000</td>
<td>0</td>
</tr>
<tr>
<td>Social</td>
<td>100,000</td>
<td>100,000</td>
<td>0</td>
</tr>
<tr>
<td>Supplies</td>
<td>800</td>
<td>800</td>
<td>0</td>
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<tr>
<td>Other Discounts</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**TOTAL Meeting Expense**  
$542,922  
$557,505  
14,583

**NET Meeting Income/Expense**  
$ (3,662)  
$ (16,965)  
13,303

### Analysis

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
<th>Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refreshments per registration</td>
<td>109</td>
<td>109</td>
<td>0</td>
</tr>
<tr>
<td>Social per registration</td>
<td>91</td>
<td>91</td>
<td>0</td>
</tr>
<tr>
<td>Meeting Administration per reg</td>
<td>79</td>
<td>79</td>
<td>0</td>
</tr>
<tr>
<td>Networking per registration</td>
<td>91</td>
<td>91</td>
<td>0</td>
</tr>
<tr>
<td>Get IEEE 802 Contribution per r</td>
<td>75</td>
<td>75</td>
<td>0</td>
</tr>
<tr>
<td>Surplus/Deficit per registration</td>
<td>(3)</td>
<td>(15)</td>
<td>12</td>
</tr>
<tr>
<td>Pre-registration rate</td>
<td>70%</td>
<td>70%</td>
<td>0</td>
</tr>
</tbody>
</table>

---

802 Operations12Jul2009.xls  
7/13/2009 12:46 AM
Rigsbee – we are in final stages of the contract for Singapore, which is the lead in for Macau and Las Vegas (possibly). Hopes to report that by the end of the meeting that we have agreement for the March 2011 meeting.

Gilb asked about Las Vegas

Rigsbee indicated that the Sands corporation offered Las Vegas Sands for a possible future meeting.

Thompson said that his experience with casino locations was that it was distracting from the meeting.

Rigsbee said that the Macau was different and the casino was separate.

Grow asked if there was interest in having the standards board to co-locate in Singapore. Many expressed interest.

Thompson said that he is not working in this area anymore. Walker is the current representative.

Gilb indicated that this agenda item will be deleted in the future unless a new person is assigned to it.

Gupta presented 802.21-Scope.ppt to discuss the current PARs in 802.21 (published Jan-2009). Proposed activities are starting to deal with issues beyond just handovers.

Jeffree asked about how "deal with multi-technology L2+ services across 802 media" was different from higher-level interface.

Thompson said that the more activities like this that is not done in 802.1 accentuates the split between 802.1 as wireline centric and the other projects as wireless.

Sherman said that the working groups in 802 act as sponsors, rather than working groups. Asked if we have the right structure. Putting 802.21 in 802.1 might make 802.1 wireless centric only.

Puthenkulam (Intel) said that we should enable work to go forward and have architectural issues resolved between working groups. Allow 802.21 to be more wireless focused but have joint sessions with 802.1 to discuss architectural issues.

Thompson – his experience is that is difficult for working groups to work together. Thinks that our current approach is a recipe for disaster.

Thaler – it is good to have the "old guard" available to provide institutional memory for new groups of people that join to do a new project. We have lost some because we restricted handover to wireless only.

Kraemer – wireless media is unique. How are we going to take this topic to conclusion? The time allotted is no sufficient.

Nikolich – we are not going to address it today, but it is a good topic for the workshop.

Sherman – Not suggesting a change of format

Klerer – On second slide, battery power is not a service. Handover is different from power management. The word specious was used twice in the discussion, a new high for the 802 EC.

Shellhammer – Asks to be notified when the whitespace discussion will take places
Gupta – Wed. PM2.

Marks – This is being driven by PAR proposals, one of which is scheduled for Friday.

Nikolich – recommended that 802.1 and 802.21 would engage in a discussion regarding emergency services.

Jeffree – That is nice in theory, but how would this happen within the existing tight schedules? Unlikely to happen in this meeting.

Sherman – time will need to be scheduled for EC to discuss this.

Rigsbee – Would like to suggest that 802.1 could schedule a tutorial on Wednesday morning.

Jeffree – Too late to do this now, the agenda has already been set for the week.

Thompson – This shows a conflict between emergency services and 802.1.
Current Active PARs in 802.21

- **Base Specification - Completed**
  - Optimize Handover between different technologies
  - IEEE 802.21-2008 Standard, Published in Jan-2009

- **Amendment**
  - Security Signaling during Handovers
  - IEEE 802.21a, PAR Approved in Dec-2008

- **Amendment**
  - Handovers to Downlink only Broadcast Technologies
  - IEEE 802.21b, PAR Approved in Jan-2009
802.21 PARs under Development

• **Emergency Services in 802 Networks**
  - IEEE 802.21.1
  - For 802EC consideration in July-2009
  - Deals with issues other than handovers

• **Battery Power Conservation in Multi-Radio devices**
  - PAR under development
  - Deals with issues other than handovers

• **TV White Space**
  - Proposal for Capability Negotiation b/w different technologies
    - Mark Cummings et al
    - Goes beyond handovers

Proposed activities in 802.21 starting to deal with issues beyond handovers
What Next?

• Discussions ongoing in WG

• One Thought
  • Change Group Title
  • Media Independent Handover Services
  • Deal with multi-technology L2+ services across 802 media

• Next Steps
  • Seek inputs from EC members on any viable next steps
Chouinard – There will be an election for the WG chair, Tue PM2, candidates are Apurva Mody (BAE systems), Wendong Hu (STMicroelectronics), Ivan Reede (Amerisys).

Hawkins – Are they SA members?

Chouinard – Has asked for proof they are SA members and letters of support.

Marks – How has this list of people been circulated.

Chouinard – This is a list of potential candidates, the nominations will happen this afternoon.

Marks – Would like a process in which the candidates were identified further in advance.

Chouinard – This process is defined in the 802.22 P&P.

Nikolich – Was there a thought to reducing the scope of 802.22?

Choinard – The standard is being done in "one chunk" rather than split among different task groups. Will look at the standard to see if there are some sections that should be moved forward faster, segmenting the standard.

Thompson – We are on track as announced except that it will be in the Marina room. Informal dinner is at 6:00 pm. There is a co-located rules meeting on Saturday at 2:30 pm to 5:00 pm on Saturday. Email Thompson with candidate topics for the meeting.

Motion is "The EC supports the IEEE P802.3az Energy-efficient Ethernet press release to be released contingent upon the IEEE 802.3 Working Group voting to forward the IEEE P802.3az draft to Working Group ballot with editorial changes as deemed necessary."

Moved Law, seconded, Sherman

Lemon – why is it contingent?

Gilb – it is contingent on the draft being forwarded to WG ballot by the WG.

Vote is 13/0/0, motion passes

Stevens presented 20090713 Report to 802 EC on Electronic Voting Requirements.ppt

Rigsbee – Wouldn't this make sense to tie it in to the attendance system?

Stevens – There is no way in the attendance system to determine if a person is actually in the room.

Thompson – Should allow a roll call vote that does not keep the names.

Law – Discussed ePoll. The scope of ePoll was originally to be used for working group ballot.

Stevens – There was a discussion if ePoll was close enough to this requirement. The necessity of verifying presence in the room is sufficiently different.

Law – The use of ePoll for WG ballot will be optional.

Grow – There are downsides for everything to be a roll call vote. Having every vote recorded could adversely impact our ability to vote as individuals.
Thaler – Not convinced this is an improvement over raising hands in a room.

Straw poll – Should we pursue this topic further?

7/9 (for/against)
Report to IEEE 802 EC on Requirements for Electronic Voting

2009-07-13

Adrian Stephens (adrian.p.stephens@intel.com)
802.11 WG Vice Chair
What’s happened

• March 2009 – 802 chair requests this topic be investigated
• March to June – development of a set of requirements, iterated amongst 802.11 leadership
• Discussion with Paul and Christina Sahr on relationship of this work to ePoll
  – ePoll is an electronic ballot/poll system that IEEE-SA is developing to replace “ebadmin” to support WG ballots and more
Primary Requirements

• Ensure that all voters understand the motion under consideration
• Validate and Count votes accurately
• Present results as quickly as possible after ballot close
• Vote records are anonymous unless otherwise agreed. Retain accurate records.
• Impose no restrictions on timing or location of votes within an 802 meeting
Goal of a system

• To replace manual voting during 802 meetings with an electronic system that allows votes to be conducted rapidly and accurately

• To keep accurate records of votes (i.e. for later analysis)

• To reduce time taken for certain votes (e.g. roll-call votes)
Main issues

• How to validate voters:
  • Only valid voters vote
  • Each voter votes once
  • Only those voters who would be able to vote in a non-electronic vote should be able to vote on an electronic vote.
    • i.e. Physically in the room at the time of the vote
• Electronic system needs to be really easy to use or it won’t get used
Analysis

• Are there overwhelming benefits to be gained from an electronic voting system?
  • Roll-call votes
  • Retrospective detection of anomalous voting patterns

• If not, do the costs of providing the system and addressing the issues outweigh the benefits?
Straw Poll

• Do you want to pursue this topic further?
  • Yes
  • No
802.1: none
802.3: Time synchronization study group, possible formation of 10baseCR1
802.11: No active study groups, but anticipating request for TV whitespace
802.15: none
802.16: none
802.17: none
802.18: none
802.19: TV whitespace SG
802.20: none
802.21: none
802.22: none
Status of Study Groups

• WG chairs to report
  – SGs?
    • 802.1 - none
    • 802.3 –
      – Time Sync Protocol Support SG (will req extension),
      – possible 10GBase-CR1 SG
    • 802.11 – possible TV WhitSpace SG
    • 802.15 - none
    • 802.16 - none
    • 802.17 - none
    • 802.18 - none
    • 802.19 - TV WhitSpace (will req extension)
    • 802.20 - none
    • 802.21 - none
    • 802.22 - none
Lynch presented 18-09-0080-01-0000_IMT_Advanced_Update.ppt.
IEEE 802.18 IMT Advanced Update

- IEEE 802 has continued active participation in ITU-R WP5D and the IMT-Advanced process
- WP5D has met twice in 2009
  - February
    - IEEE 802 had two contributions to that meeting
  - June
    - IEEE 802 had five contributions to that meeting
- Will meet again in October
IEEE 802.18 IMT Advanced Update

• At the June meeting WP5D approved revision 9 to ITU-R Recommendation M.1457
  – This revision was controversial – France and Germany objected to add 802.16 FDD and CDMA TDD modes
  – Germany has said they do not object to the approval but maintained a “reservation” – France had no support
  – Revision 9 will go to the December meeting of SG5 for approval – and then be sent for approval by correspondence by Administrations
IEEE 802.18 IMT Advanced Update

• The June WP5D meeting also agreed to begin work on M.1457 revision 10 at their October meeting

• IMT-Advanced inputs must be submitted for the WP5D October meeting

• WP5D has agreed to host an IMT-Advanced Workshop during the October meeting
  – Plan is to develop a response at this meeting accepting the invitation to present
Sherman presented VC1_13072009_r0_LMSC_Plenary_Meeting_P&P_Update.ppt

Jeffree – Will we need to have AudCom approve our modified P&P?
Sherman – Yes

Rosdahl – Missing vote to approve WG P&P in November
Sherman – The vote will be for both documents, WG P&P and OM revisions.

Kramer – There are some issues with the dates, 7/11 should be 7/12 and the second 7/17 should be 7/18.
Thaler – Why don't we just repeat information?
Nikolich – Time for item is over.
EC Update on LMSC Governance

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

Date: July 13th, 2009
Summary of P&P Activities

- New IEEE 802 Sponsor (LMSC) Policies and Procedures (P&P) and Operations Manual (OM) approved as of March 19, 2009!
- Current IEEE 802 Sponsor (LMSC) P&P can be found at
- Current LMSC OM can be found at
- Many improvements in OM are desired but…
- AudCom introduced requirement for Working Group (WG) P&P
  - Requirement effective March 31, 2009
  - AudCom will start WG P&P spot checks in March 2010
- LMSC focus is to have an LMSC WG P&P in force by March 2010
  - applicable to all LMSC WG
  - WG can supplement LMSC
- Kicked off WG P&P process last March
  - Held series of conference calls, and in-person P&P review Sunday 7/12/2009
- Draft revisions for LMSC P&P, LMSC OM, and LMSC WG P&P will be found at
  - http://grouper.ieee.org/groups/802/PNP/PNP-development.shtml
WG P&P Development Process

1. LMSC P&P
   - Extract material relating to WG operations

2. LMSC OM
   - Extract material relating to WG operations

3. AudCom WG Baseline P&P

4. WG Baseline + Relevant LMSC P&P Content

5. WG Baseline + Relevant LMSC P&P+ OM Content

6. Approve OM Split into OM+ WG P&P

7. Approve removal of LMSC P&P Material

New LMSC WG P&P
Updated LMSC P&P
Updated LMSC OM
WG P&P Development – Key Dates

- **7/11/2009 18:00 PM PDT** 4.0 hours  In Person
- **7/17/2009 13:00 PM PDT** Closing EC  Vote to initiate OM Rev
- **7/17/2009 14:30 PM PDT** 2.5 hours  In Person
- **8/21/2009 12:00 PM ET** 2.0 hours  Teleconference
- **9/18/2009 12:00 PM ET** 2.0 hours  Teleconference
- **10/16/2009 12:00 PM ET** 2.0 hours  Teleconference
- **11/13/2009 12:00 PM ET** 2.0 hours  Teleconference
- **11/15/2009 18:00 PM ET** 4.0 hours  In Person
- **11/20/2009 13:00 PM ET** Closing EC  Vote to approve OM Rev
- **11/20/2009 13:00 PM ET** Closing EC  Vote to approve P&P Rev
Issues

• P&P Clause 7 reads
  – Approval of an action requires approval by at least a majority vote of the Sponsor of voting members voting approve or disapprove…Adoption of new or revised Sponsor procedures

• OM Clause 3.1.4.2 reads
  – Approval for Distribution and Sponsor electronic ballot shall require the affirmative vote of at least two-thirds of Sponsor members with voting rights who vote to approve or disapprove

• P&P clause could be interpreted as requiring a majority vote (with anything greater than majority resulting in approval) or allowing for higher thresholds to be set elsewhere

• May want formal interpretation by LMSC chair that P&P Clause 7 allows setting of higher thresholds in other LMSC documents
Sunday P&P Review Meeting

- Ran about 3.5 hour
- discussed WG P&P development with focus on
  - The role of TAGs in IEEE 802
  - Approach to WG voting rules
- Based on straw polls ballot documents will be edited to
  - Clarify that TAG are a special form of a Standing Committee using WG rules but allowed to be assigned a PAR
  - Update WG voting rules to reflect current LMSC voting practices in an AudCom format
  - Reduce chairs constraints on procedural votes concerning RRoO
  - Set approval threshold to change WG OM’s to 75%
- IEEE SASB Chair will provide inputs for incorporation regarding WG member roster / list requirements
Nikolich presented the EC schedule, the only formal meeting is the 802 Task Force meeting. On Tuesday 3:30-4:00 pm for a Smart Grid brainstorm meeting.

Heile spoke regarding Smart Grid, this is an informal discussion of what is happening in the Smart Grid area.
EC meetings for the week
(held in Boardroom A)

• Monday 7-8pm      open
• Monday 8-9pm      open

• Tuesday 9-noon    reserved (Nikolich)
• Tuesday noon-1pm  open
• Tuesday 1-2pm     open
• Tuesday 3:30-4pm  Smart Grid brainstorm
• Tuesday 4-6pm     open
• Tuesday 6-10pm    open

• Wed 12:30-1:30    open
• Wed 2:00-4:00pm   802 Task Force (Nikolich)
• Wed 3-4pm         open
• Wed 4-5pm         open
• Wed 5-6           open

• Thursday 10-noon  open
• Thursday noon-1pm open
• Thursday 1-2pm    open
• Thursday 6:30-10:30pm  non-802 mtg FYI: Registration Authority Committee mtg
Thompson mentioned that 802 made a contribution to Rutgers chemistry department in the name of his brother who died in a traffic accident. He wanted to express his appreciation.

Law – has a person, Steven Lanzisera, who will be attending the Energy Efficiency Tutorial and needs a meeting waiver.

Meeting adjourned at 10:23 am.

Plenary meeting called to order at 11:00 am

Nikolich presented the agenda and 802 organization.

11:00

- Welcome and Introductions (Nikolich)
- Financial Report (Hawkins),
- Patent Policy (Thompson),
- Membership Policy and P&P update (Sherman),
- New Member/Mentoring update (Thaler),
- General announcements (tutorials, new PARs, etc.-Rigsbee) - 20 minutes
- Q&A on above topics - 10 minutes

11:30

- Smart Grid Overview + Q&A (Nada Golmie) - 15 minutes

11:45

- Closing remarks, notices, adjourn (Nikolich) - 5 minutes
IEEE802 Monday Plenary Agenda

• 11:00 Welcome
  – Financial Report (Hawkins),
  – Patent Policy (Thompson),
  – Membership Policy and P&P update (Sherman),
  – New Member/Mentoring update (Thaler),
  – general announcements (tutorials, new PARs, etc.-Rigsbee) - 20 minutes
  – Q&A on above topics - 10 minutes

• Smart Grid Overview + Q&A (Nada Golmie) - 15 minutes

• Closing remarks, notices, adjourn - 5 minutes
IEEE 802 ORGANIZATION

EXECUTIVE COMMITTEE (EC)

CHAIR
Paul Nikolich

WORKING GROUP/TAG CHAIRS

<table>
<thead>
<tr>
<th>WORKING GROUP/TAG CHAIRS</th>
<th>APPOINTED OFFICERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.1 BRIDGING/ARCH</td>
<td>1st VICE CHAIR</td>
</tr>
<tr>
<td>Tony Jeffree</td>
<td>Mat Sherman</td>
</tr>
<tr>
<td>802.3 CSMA/CD</td>
<td>2nd VICE CHAIR</td>
</tr>
<tr>
<td>David Law</td>
<td>Pat Thaler</td>
</tr>
<tr>
<td>802.11 WLAN</td>
<td>EXECUTIVE SECY</td>
</tr>
<tr>
<td>Bruce Kraemer</td>
<td>Buzz Rigsbee</td>
</tr>
<tr>
<td>802.15 WPAN</td>
<td>RECORDING SECY</td>
</tr>
<tr>
<td>Bob Heile</td>
<td>James Gilb</td>
</tr>
<tr>
<td>802.16 BWA</td>
<td>TREASURER</td>
</tr>
<tr>
<td>Roger Marks</td>
<td>John Hawkins</td>
</tr>
<tr>
<td>802.17 ResPackRing</td>
<td>MEMBER EMERITUS</td>
</tr>
<tr>
<td>John Lemon</td>
<td>Geoff Thompson</td>
</tr>
<tr>
<td>802.18 TAG Radio Regulatory</td>
<td>DISBANDED</td>
</tr>
<tr>
<td>Mike Lynch</td>
<td>802.4 Token Bus</td>
</tr>
<tr>
<td>802.19 TAG Coexistence</td>
<td>802.6 DQDB</td>
</tr>
<tr>
<td>Shellhammer</td>
<td>802.7 Broadband TAG</td>
</tr>
<tr>
<td></td>
<td>802.8 Fiber Optic TAG</td>
</tr>
<tr>
<td></td>
<td>802.9 ISLAN</td>
</tr>
<tr>
<td></td>
<td>802.10 Security</td>
</tr>
<tr>
<td></td>
<td>802.14 CATV</td>
</tr>
<tr>
<td></td>
<td>802.5 Token Ring</td>
</tr>
</tbody>
</table>

HIBERNATION
802.2 LLC (Dave Carlson)
802.12 Demand Priority (Pat Thaler)

DISBANDED
802.4 Token Bus
802.7 Broadband TAG
802.9 ISLAN
802.14 CATV
802.6 DQDB
802.8 Fiber Optic TAG
802.10 Security
802.5 Token Ring
IEEE Standards Organization

IEEE 802 is here:
Thompson presented the patent slides
Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy. Participants:

• “Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
  • “Personal awareness” means that the participant “is personally aware that the holder may have a potential Essential Patent Claim,” even if the participant is not personally aware of the specific patents or patent claims
• “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of such potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
• The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group

Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2

• Early identification of holders of potential Essential Patent Claims is strongly encouraged
• No duty to perform a patent search
Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws
http://standards.ieee.org/guides/bylaws/sect6-7.html#6

IEEE-SA Standards Board Operations Manual

Material about the patent policy is available at
http://standards.ieee.org/board/pat/pat-material.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit http://standards.ieee.org/board/pat/index.html

This slide set is available at http://standards.ieee.org/board/pat/pat-slideset.ppt
Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
  - Either speak up now or
  - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
  - Cause an LOA to be submitted
Other Guidelines for IEEE WG Meetings

- All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
  - Don’t discuss the interpretation, validity, or essentiality of patents/patent claims.
  - Don’t discuss specific license rates, terms, or conditions.
    - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
      - Technical considerations remain primary focus
  - Don’t discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
  - Don’t discuss the status or substance of ongoing or threatened litigation.
  - Don’t be silent if inappropriate topics are discussed … do formally object.

See IEEE-SA Standards Board Operations Manual, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy” for more details.
Nikolich introduced the IEEE staff present.
IEEE Staff Introductions

1. Michelle Turner: Program Manager, Document Development
2. Michael Kipness: Program Manager, Technical Program Development
3. Kathryn Cush: Program Manager, Technical Program Development
4. Susan Tatiner: Associate Managing Director Technical Program Development and 802 Ombudsman
5. Jerry Walker: Director, Business Development
6. Carmen Hernandez: Business Development Administrator

Member Introductions:

9. IEEE-SA Chairman: Bob Grow
10. Candidate for IEEE President: Moshe Kam (other candidates: Roberto Boisson De Marca and Joseph V. Lillie)
Nikolich recognized the work of volunteers who worked on standards that were published during the preceding 4 months.
Awards

IEEE Std 802.15.4c-2009 pub 17APR09
Pei Liu, Yafei Tian, Liang Zhang, ZhenFeng Zhao, Jay Bain, Kuor-Hsin Chang, Liang Li, Clinton Powell, DongYa Wu

IEEE Std 802.15.4d-2009 pub 17APR09
Jay Bain, Yasutaka Kawamoto, Michael Schmidt, Shusaku Shimada, Philip Beecher Kiyoshi Fukui, Shigeru Fukunaga

IEEE Std 802.15.5-2009 pub 8MAY09
Young-Ae Jeon, Yong Liu, Sebastian Max, Tae Rim Park, Sung-Woo Park, Chang Sub Shin, Jianliang Zheng, Sang Sung Choi Ho-in Jeon Myung J. Lee Chunhui (Allan) Zhu

IEEE Std 802.16j -2009 pub 12JUN09
Harry Bims, Wei-Peng Chen, Satoshi Imata, Hyunjeong Kang, Ting Li, Kanchei Loa, Michiharu Nakamura, Yousuf Saifullah, Gamini Senarath, Sheng Sun, Jeffrey Z. Tao, Yi-Hsueh Tsai, Sunil Vadgama, Chenxi Zhu, Michael Hart, Mitsuo Nohara, Jose Puthenkulam, Jung Je Son, Peiying Zhu

IEEE Std 802.16-2009
Joey Chou, Itzik Kitroser, Ron Murias, Scott Probasco, Peiying Zhu, Jonathan Labs, Roger Marks, Jose Puthenkulam, Joseph Schumacher
Hawkins presented the Treasurer's report
### Session Income

<table>
<thead>
<tr>
<th>Session Income</th>
<th>dB</th>
<th>Est/Act</th>
<th>Budget</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>80.4% 817 Early Registrations</strong> @ $400</td>
<td>1,016</td>
<td>1,200</td>
<td>(184)</td>
<td></td>
</tr>
<tr>
<td><strong>25 Cancellations</strong> @ $350</td>
<td>(8,750)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11 Early cancellations</strong> @ $400 (4,400)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>0 Visa cancellations</strong> @ $400</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>19.6% 199 Registrations</strong> @ $500</td>
<td>817</td>
<td>99,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>0 Cancellation</strong> @ $500</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2 Cancellation</strong> @ $450 (900)</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>0.0% 0 Student</strong> @ $150</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>0 Other credits</strong> @ $100</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Registration Subtotal</strong></td>
<td>$ 412,250</td>
<td>$ 413,150</td>
<td>$ (92,530)</td>
<td></td>
</tr>
<tr>
<td><strong>0 Deadbeat Payment</strong> @ $500</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interest</strong></td>
<td>2,318</td>
<td>1,400</td>
<td>918</td>
<td></td>
</tr>
<tr>
<td><strong>Other (Hotel comps and commission)</strong></td>
<td>52,886</td>
<td>75,000</td>
<td>(22,114)</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL Session Income</strong></td>
<td>$ 468,354</td>
<td>$ 582,080</td>
<td>$ (113,726)</td>
<td></td>
</tr>
</tbody>
</table>

### Session Expenses

<table>
<thead>
<tr>
<th>Session Expenses</th>
<th>Est/Act</th>
<th>Budget</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Visual</td>
<td>16,995</td>
<td>25,500</td>
<td>8,505</td>
</tr>
<tr>
<td>Audit</td>
<td>6,000</td>
<td>6,000</td>
<td>0</td>
</tr>
<tr>
<td>Bank Charges</td>
<td>480</td>
<td>350</td>
<td>130</td>
</tr>
<tr>
<td>Copying</td>
<td>3,157</td>
<td>3,500</td>
<td>343</td>
</tr>
<tr>
<td>Credit Card Discounts &amp; Fees</td>
<td>17,271</td>
<td>14,964</td>
<td>2,307</td>
</tr>
<tr>
<td>Equipment Expenses</td>
<td>1,900</td>
<td>2,500</td>
<td>600</td>
</tr>
<tr>
<td>Get IEEE 802 Contribution</td>
<td>73,425</td>
<td>88,200</td>
<td>14,775</td>
</tr>
<tr>
<td>Insurance</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Meeting Administration</td>
<td>82,634</td>
<td>92,400</td>
<td>9,766</td>
</tr>
<tr>
<td>Misc Expenses</td>
<td>1,461 *</td>
<td>3,500</td>
<td>2,039</td>
</tr>
<tr>
<td>Networking</td>
<td>110,115</td>
<td>70,000</td>
<td>(40,115)</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Phone &amp; Electrical</td>
<td>1,231</td>
<td>2,000</td>
<td>769</td>
</tr>
<tr>
<td>Refreshments</td>
<td>103,078</td>
<td>150,000</td>
<td>46,922</td>
</tr>
<tr>
<td>Shipping</td>
<td>12,424</td>
<td>15,000</td>
<td>2,576</td>
</tr>
<tr>
<td>Social</td>
<td>53,681</td>
<td>50,000</td>
<td>(3,681)</td>
</tr>
<tr>
<td>Supplies</td>
<td>483</td>
<td>800</td>
<td>317</td>
</tr>
<tr>
<td><strong>TOTAL Session Expense</strong></td>
<td>484,335</td>
<td>524,714</td>
<td>40,379</td>
</tr>
<tr>
<td><strong>NET Session Surplus/(Deficit)</strong></td>
<td>(15,981)</td>
<td>57,366</td>
<td>(73,347)</td>
</tr>
</tbody>
</table>

#### Analysis

| Analysis | | | |
|----------|----------|----------|
| Refreshments per registration | 101 | 125 | 24 |
| Social per registration | 53 | 42 | (11) |
| Meeting Admin per registration | 81 | 77 | (4) |
| Surplus/(Loss) per registration | (16) | 48 | (64) |

* Misc items: Hotel gratuities

---

**Cash recognized on hand as of Jul 12, 2009** $ 1,199,115

**Reserve for unpaid expenses for prior sessions** $ (1,000) bank fees, CC fees, etc

**Reserve for other outstanding commitments** $ -

**Income received for current session** $ (22,387)

**Expenses prepaid for current session** $ 66,689

**Expenses prepaid for future sessions** $ -

**Equipment Receivable Acct** $ 42,664

**Operating Reserve following this session** $ 1,285,081
### Meeting Income

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
<th>Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registrations</td>
<td>1,100</td>
<td>1,100</td>
<td>0</td>
</tr>
<tr>
<td>Registration income</td>
<td>473,000</td>
<td>473,000</td>
<td>0</td>
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<tr>
<td>Cancellation refunds</td>
<td>(9,460)</td>
<td>(9,460)</td>
<td>0</td>
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<tr>
<td>Deadbeat collections</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bank interest</td>
<td>2,000</td>
<td>2,000</td>
<td>0</td>
</tr>
<tr>
<td>Other income</td>
<td>73,720</td>
<td>75,000</td>
<td>(1,280)</td>
</tr>
<tr>
<td><strong>TOTAL Meeting Income</strong></td>
<td><strong>$ 539,260</strong></td>
<td><strong>$ 540,540</strong></td>
<td><strong>(1,280)</strong></td>
</tr>
</tbody>
</table>

### Meeting Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
<th>Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Visual Rentals</td>
<td>12,167</td>
<td>$ 25,500</td>
<td>13,333</td>
</tr>
<tr>
<td>Audit</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bank Charges</td>
<td>350</td>
<td>350</td>
<td>0</td>
</tr>
<tr>
<td>Copying</td>
<td>2,750</td>
<td>3,500</td>
<td>750</td>
</tr>
<tr>
<td>Credit Card Discount</td>
<td>16,555</td>
<td>16,555</td>
<td>0</td>
</tr>
<tr>
<td>Equipment Expenses</td>
<td>2,000</td>
<td>2,500</td>
<td>500</td>
</tr>
<tr>
<td>Get IEEE 802 Contribution</td>
<td>80,850</td>
<td>80,850</td>
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</tr>
<tr>
<td>Insurance</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Meeting Administration</td>
<td>86,950</td>
<td>86,950</td>
<td>0</td>
</tr>
<tr>
<td>Misc Expenses</td>
<td>3,500</td>
<td>3,500</td>
<td>0</td>
</tr>
<tr>
<td>Network</td>
<td>100,000</td>
<td>100,000</td>
<td>0</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Phone &amp; Electrical</td>
<td>2,000</td>
<td>2,000</td>
<td>0</td>
</tr>
<tr>
<td>Refreshments</td>
<td>120,000</td>
<td>120,000</td>
<td>0</td>
</tr>
<tr>
<td>Shipping</td>
<td>15,000</td>
<td>15,000</td>
<td>0</td>
</tr>
<tr>
<td>Social</td>
<td>100,000</td>
<td>100,000</td>
<td>0</td>
</tr>
<tr>
<td>Supplies</td>
<td>800</td>
<td>800</td>
<td>0</td>
</tr>
<tr>
<td>Other Discounts</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL Meeting Expense</strong></td>
<td><strong>$ 542,922</strong></td>
<td><strong>$ 557,505</strong></td>
<td><strong>14,583</strong></td>
</tr>
</tbody>
</table>

**NET Meeting Income/Expense**

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
<th>Budget</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>$ (3,662)</strong></td>
<td><strong>$ (16,965)</strong></td>
<td><strong>13,303</strong></td>
</tr>
</tbody>
</table>

### Analysis

- Refreshments per registration: 109 / 109 (0)
- Social per registration: 91 / 91 (0)
- Meeting Administration per reg: 79 / 79 (0)
- Networking per registration: 91 / 91 (0)
- Get IEEE 802 Contribution per r: 75 / 75 (0)
- Surplus/Deficit per registration: (3) / (15) (12)
- Pre-registration rate: 70% / 70%
LMSC Governance Update

Author:

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

Date: July 13th, 2009
What is LMSC Governance?

- LMSC governance are the ‘rules’ that govern the IEEE 802 LMSC
- LMSC Governance consists of
  - LMSC Policies and Procedures (LMSC P&P)
  - LMSC Operation Manual (LMSC OM)
  - LMSC Working Group (WG) P&P
    - Under development!
- WG also have P&P
  - The IEEE Standards Association Standards Board Audit Committee (AudCom) is requiring all WG to have P&P
  - To simplify things for LMSC WG we are developing a single WG P&P applicable to all LMSC WG
  - For rules specific to a single WG, creation of a WG OM is being encouraged
- Other ‘Governance’ documents from
  - IEEE Standards Association
  - IEEE Computer Society
- P&P Review Session usually held Sunday Night before Plenary
  - Review current P&P issues
  - All participants welcome
Summary of Governance Activities

• New IEEE 802 Sponsor (LMSC) Policies and Procedures (P&P) and Operations Manual (OM) approved as of March 19, 2009!
• Current IEEE 802 Sponsor (LMSC) P&P can be found at
• Current LMSC OM can be found at
• Many improvements in OM are desired but…
• AudCom introduced requirement for Working Group (WG) P&P
  – Requirement effective March 31, 2009
  – AudCom will start WG P&P spot checks in March 2010
• LMSC focus is to have an LMSC WG P&P in force by March 2010
  – applicable to all LMSC WG
  – WG can supplement LMSC
• Kicked off WG P&P process last March
  – Held series of conference calls, and in-person P&P review Sunday 7/12/2009
• Draft revisions for LMSC P&P, LMSC OM, and LMSC WG P&P will be found at
  – http://grouper.ieee.org/groups/802/PNP/PNP-development.shtml
Questions?

• Contact Matthew Sherman
  – matthew.sherman@baesystems.com
Nikolich presented the tutorial schedule

Moshe Kam gave a brief overview of topics that would be discussed in the tutorial on standards in education.

Law gave a brief overview of the topics that would be discussed in the energy efficiency tutorial.

Law gave an overview of the CFI for 10baseCR1
# Tutorial Slot Schedule

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Incorporating Standards in Engineering Education</td>
<td></td>
</tr>
<tr>
<td>6:00-7:30PM sponsor: Nikolich</td>
<td></td>
</tr>
<tr>
<td>2) Energy Efficiency</td>
<td></td>
</tr>
<tr>
<td>7:30-9:00PM sponsor: D. Law</td>
<td></td>
</tr>
<tr>
<td>2) CFI 802.3 10GBASE-Copper R1</td>
<td></td>
</tr>
<tr>
<td>9:00-10:30PM sponsor: D. Law</td>
<td></td>
</tr>
</tbody>
</table>
Nikolich presented the PARs that are under consideration at this meeting.
Draft PARs to NesCom

- P802.1Qbc Provider Bridging -- Remote Customer Service Interface
- P802.1Qbe Multiple Backbone Service Instance Identifier (I-SID) Registration Protocol (MIRP)
- P802.1Qbf Provider Backbone Bridge Traffic Engineering (PBB-TE) Infrastructure Protection

- P802.21.1 Standard for Support for Emergency Services

- Maintenance PARs
  - P802.3at DTE Power Enhancements extension
  - P802.11n High Throughput PAR extension
  - P802.1aq PAR extension
  - P802.1AR Secure Device Identity PAR extension
Nikolich presented the schedule for EC meetings for the week.
EC meetings for the week
(held in Boardroom A)

- Monday 7-8pm open
- Monday 8-9pm open
- Tuesday 9-noon reserved (Nikolich)
- Tuesday noon-1pm open
- Tuesday 1-2pm open
- Tuesday 3:30-4pm Smart Grid brainstorm
- Tuesday 4-6pm open
- Tuesday 6-10pm open
- Wed 12:30-1:30 open
- Wed 2:00-4pm 802 Task Force (Nikolich)
- Wed 3-4pm open
- Wed 4-5pm open
- Wed 5-6 open
- Thursday 10-noon open
- Thursday noon-1pm open
- Thursday 1-2pm open
- Thursday 6:30-10:30pm non-802 mtg FYI: Registration Authority Committee mtg
Nikolich asked if there were any questions.
Rene Struik (Certicom) asked about the RAC meeting
Nikolich said that Jeffree could answer that question.
Peter Eccelsine (Cisco) asked if there would be office hours for the 802 chair.
Nikolich said that he would be available as needed if anyone had any questions.
Randy Rannow (Tyco Electronics) What about adjusting the meeting fees for late registration
Hawkins – we have adjusted fees before, this seems to work OK.
Rannow suggested looking at IEEE intermeg(?)
Rigsbee said that we are about 90% registering before the deadline.
Naftali Chayat? (Alvarion) The 802.11n PAR is being extended, but standards are dragging on even when products are in the field.
Kraemer – the expiration is December 2009, .11n is on schedule to be finished in September, but because .11 does not have control over the process at the Standards Association, they are extending in case there are issues in the process.
Nada Golmie presented Smart-Grid-802.ppt
Sherman asked for the slides to be sent the EC reflector, Golmie said that it was OK for Gilb to forward her email to the EC reflector.
Eccelsine – there is substantial overlap between this and task force 4 in another IEEE group.
Grow – There are 3000 utilities (and 50 regulatory regions). For a single utility, there may be multiple groups that regulate that utility. 802 has the ability to define things that allow the products to evolve. It is important to get the architecture right and it will be related to our technologies.
Golmie – It will be an open process and allow things to evolve.

Nikolich asked Rigsbee for an update on logistics
Rigsbee – families are invited to the social
Smart Grid Interoperability Standards

George W. Arnold, Eng.Sc.D.
National Coordinator for Smart Grid Interoperability
National Institute of Standards and Technology
July 13, 2009
In cooperation with the DoE, NEMA, IEEE, GWAC, and other stakeholders, NIST has “primary responsibility to coordinate development of a framework that includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems...”
NIST Three Phase Plan

PHASE 1
Recognize a set of initial existing consensus standards and develop a roadmap to fill gaps

PHASE 2
Establish public/private Standards Panel to provide ongoing recommendations for new/revised standards to be recognized by NIST

PHASE 3
Testing and Certification Framework

March 2009 to September 2010
Release 1.0 Standards Identified for NIST Interoperability Framework

Following the April 28-29 Smart Grid Interoperability workshop, NIST deemed that sufficient consensus has been achieved on 16 initial standards on May 18, NIST announced intention to identify these standards in the interoperability framework following 30 day comment period.

NIST’s announcement recognized that some of these standards will require further development and many additional standards will be needed.

NIST will identify additional standards for inclusion on a rolling basis.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Application</th>
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<tbody>
<tr>
<td>AMI-SEC System Security Requirements</td>
<td>Advanced metering infrastructure (AMI) and Smart Grid end-to-end security</td>
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<tr>
<td>ANSI C12.19/MC1219</td>
<td>Revenue metering information model</td>
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<tr>
<td>BACnet ANSI ASHRAE 135-2008/ISO 16484-5</td>
<td>Building automation</td>
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<tr>
<td>DNP3</td>
<td>Substation and feeder device automation</td>
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<tr>
<td>IEC 60870-6 / TASE.2</td>
<td>Inter-control center communications</td>
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<tr>
<td>IEC 61850</td>
<td>Substation automation and protection</td>
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<tr>
<td>IEC 61968/61970</td>
<td>Application level energy management system interfaces</td>
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<tr>
<td>IEC 62351 Parts 1-8</td>
<td>Information security for power system control operations</td>
</tr>
<tr>
<td>IEEE C37.118</td>
<td>Phasor measurement unit (PMU) communications</td>
</tr>
<tr>
<td>IEEE 1547</td>
<td>Physical and electrical interconnections between utility and distributed generation (DG)</td>
</tr>
<tr>
<td>IEEE 1686-2007</td>
<td>Security for intelligent electronic devices (IEDs)</td>
</tr>
<tr>
<td>NERC CIP 002-009</td>
<td>Cyber security standards for the bulk power system</td>
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<tr>
<td>NIST Special Publication (SP) 800-53, NIST SP 800-82</td>
<td>Cyber security standards and guidelines for federal information systems, including those for the bulk power system</td>
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<tr>
<td>Open Automated Demand Response (Open ADR)</td>
<td>Price responsive and direct load control</td>
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<tr>
<td>OpenHAN</td>
<td>Home Area Network device communication, measurement, and control</td>
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<tr>
<td>ZigBee/HomePlug Smart Energy Profile</td>
<td>Home Area Network (HAN) Device Communications and Information Model</td>
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</tbody>
</table>
EPRI Report: Key Gaps and Issues

- Over 80 candidate existing standards identified
- 70 Standards gaps and issues identified
- Some key action items:
  - Understand RF interference issues for unlicensed band communications
  - Define Internet Protocol suite profiles for various applications
  - Develop common pricing information model
  - Develop smart meter software upgradeability standard
  - Develop an open access protocol for energy usage information
  - Develop an interface to grid for energy storage (in IEEE 1547)
  - Develop standard demand response signals
  - …
Phase I Next Steps

- EPRI report to NIST posted for public comment (June 18)
  - [http://www.nist.gov/smartgrid](http://www.nist.gov/smartgrid)
- Address comments and include in Draft NIST Roadmap
- Third workshop August 3-4, 2009—will focus on SDO roles/responsibilities to fill gaps
- NIST Roadmap to be published mid-September
  - Leads into Phase II
IEEE 802 can help by

- Expediting the development of standards that can be used within the smart grid framework
- Developing guidelines for wireless communications for the smart grid
- Analyzing interference issues and developing coexistence guidelines for operation in unlicensed bands.
- Participating in SDO Workshop in August.
Meeting adjourned at 11:51 am.

8.01 PL IEEE 802 PLENARY MEETING ENDS 12:00 PM

Respectfully submitted
James Gilb
IEEE 802 recording secretary