IEEE 802 LAN/MAN Standards Committee

REPORT FOR YEAR 2010 (01 OCT 2011 – 01 OCT 2012)

Submitted by Paul Nikolich
Chairman, IEEE LMSC

2012 Accomplishments

Highlights

• LMSC is responsible for 69 Active Standards. A summary of the activity in 802 for 2012 is as follows:

• Projects Started 20
• Projects in Process 23
• Projects Completed 21
• Projects Withdrawn 00
• Withdrawn Standards 01

  Total 802 activities 65

• LMSC held 3 Plenary Sessions with an average attendance of 700 volunteers across 10 active Groups with Interim Sessions held between Plenary Sessions

• In addition to their normal duties, the EC and 802 Participants worked closely with the SA Standards Board, SA staff, and SA Board of Governors to:
  o Implement a low cost single copy sales channel
  o Comply with financial reporting requirements
  o Manage the Get IEEE 802™ program
  o Obtain SASB approval of LMSC Policies and Procedures
  o Diligently support the Patent Disclosure policy and procedure
  o Maintain an 802 Ombudsman

• IEEE 802 maintains liaisons and communications with the IETF, ISO/IEC JTC1-SC6 (Category C Liaison), JTC1-SC25, ITU-R, ITU-T, the FCC and several other standards and regulatory related bodies. For example, 802 and IETF management met in July 2012 to enable closer cooperation and 802 regularly sends a delegation to SC6 meetings.
IEEE Project 802 LMSC Background

The scope of the Local and Metropolitan Standards Committee (LMSC) is to develop and maintain global standards for local, metropolitan and other area networks primarily within layers 1 and 2 of the Open System Interconnection Reference Model. In the IEEE 802 context "Local" means building/campus and "Metropolitan" means intra-city. Some IEEE 802 Standards are being used for Wide Area (inter-city) and Personal Area (in-room & in/on-body) Networks as well.

LMSC follows an open and accredited process and enables and advocates them on a global basis.

The LMSC is responsible for the following:
a) Developing, evaluating, approving or rejecting project proposals (PARs)
b) Developing LMSC Standards within its scope
c) Conducting Sponsor ballots of proposed standards
d) Maintaining active LMSC standards
e) Responding to requests for interpretations of the standards developed by the LMSC
f) Acting on other matters requiring LMSC effort
g) Cooperating with other appropriate standards development organizations
h) Protecting against actions taken in the name of the LMSC without committee authorization

The committee has met three times per year in Plenary Session since it was formed in February 1980. It is comprised of Working Groups and Technical Advisory Groups. Depending on the work load, additional Interim Sessions are held by the Groups as needed.

The 802 Executive Committee (EC) consists of the individuals shown below:
Chair   Paul Nikolich Self-employed, YAS Broadband Ventures, LLC., Samsung, Intel, HP, SSN
Vice Chair  Pat Thaler, Broadcom Corporation
Vice Chair  James Gilb, Tensorcom
Treasurer  Clint Chapline, Samsung
Recording Secretary  John D’Ambrosia, Dell
Executive Secretary  Jon Rosdahl  CSR Technologies
802.1 High Level Interface, Tony Jeffree Self-employed, Broadcom, Hewlett-Packard
802.3 Ethernet   David Law, Hewlett Packard
802.11 Wireless Local Area Network (WLAN)  Bruce Kraemer, Marvell Semiconductor
802.15 Wireless Personal Area Network, Bob Heile, Wireless Communication Consulting, LLC., Zigbee Alliance
802.16 Broadband Wireless Access, Roger Marks, Consensii, Mobile Pulse, Inc.;WiMAX Forum
802.17 Resilient Packet Ring John Lemon  ADTRAN
802.18 Radio Regulatory TAG Mike Lynch  MJ Lynch and Associates
802.19 Wireless Coexistence Steve Shellhammer  Qualcomm
802.20 Mobile Broadband Wireless Access, Radhakrishna Canchi  Kyocera Communications, Inc
802.21 Media-independent Handover Subir Das  Telcordia Technologies, Inc.
802.22 Wireless Regional Area Networks Apurva Mody  BAE Systems
802.24 Smart Grid TAG, James Gilb, Tensorcom
Member Emeritus, Geoff Thompson, self employed
Meeting Manager Member Emeritus, Buzz Rigsbee, self employed
Disbanded Working Groups
P802.2 Logical Link Control Dave Carlson
P802.4 Token Bus Paul Eastman
P802.5 Token Ring Robert D. Love
P802.6 Metropolitan Area Network (MAN) James Mollenauer
P802.7 Broadband TAG Robert Russell
P802.8 Fiber Optic TAG J. Paul Benson
P802.9 Integrated Services LAN (ISLAN) Dhadesugoor Vaman
P802.10 Standard for Interoperable LAN Security (SILS) Kenneth G. Alonge
P802.12 Demand Priority Patricia Thaler
P802.14 Cable-TV Based Broadband Comm Network Robert Russell
P802.23 Emergency Services Geoff Thompson
ECSG TV Whitespace (Document archive) Mat Sherman
IEEE 802 has Multiple Working Groups (WGs) and Technical Advisory Groups (TAGs) as described below.

- **Active Working Groups, Technical Advisory Groups and Study Groups**
  - 802.1 Higher Layer LAN Protocols Working Group
  - 802.3 Ethernet Working Group
  - 802.11 Wireless LAN Working Group
  - 802.15 Wireless Personal Area Network (WPAN) Working Group
  - 802.16 Broadband Wireless Access Working Group
  - 802.18 Radio Regulatory Technical Advisory Group TAG
  - 802.19 Coexistence Working Group
  - 802.21 Media Independent Handoff Working Group
  - 802.22 Wireless Regional Area Networks (WRAN) Working Group
  - 802.24 Smart Grid Technical Advisory Group TAG

- **Hibernating (i.e., inactive) Working Groups and Technical Advisory Groups**
  - 802.17 Resilient Packet Ring Working Group
  - 802.20 Mobile Broadband Wireless Access Working Group

- **Disbanded Working Groups and Technical Advisory Groups**
  - 802.2 Logical Link Control Working Group
  - 802.4 Token Bus Working Group
  - 802.5 Token Ring Working Group
  - 802.6 Metropolitan Area Network Working Group
  - 802.7 Broadband TAG
  - 802.8 Fiber Optic TAG
  - 802.9 Isochronous LAN Working Group
  - 802.10 Security Working Group
  - 802.12 Demand Priority Working Group
  - 802.14 Cable Modem Working Group
  - 802.23 Emergency Services Working Group

For more information on IEEE 802, see the [IEEE 802 Home Page](https://www.ieee802.org).
Below are the titles of Projects that have been started (Approved PARs) and the Projects that have completed (Ratified Standards) this year.

**APPROVED PARs**

**DECEMBER 2011**

New PARs

P802.15.9 Recommended Practice for Transport of Key Management Protocol (KMP) Datagrams


P802.22b Policies and Procedures for Operation in the TV Bands Amendment: Enhancement for Broadband Services and Monitoring Applications

Modified PARs

P802.15.6 Standard for Wireless Body Area Networks

P802.16n Amendment: Higher Reliability Networks

P802.16p Amendment: Enhancements to Support Machine-to-Machine Applications

PAR Extension Requests

P802.15.4e Part 15.4: Low Rate Wireless Personal Area Networks (LR-WPANs) Amendment to the MAC sub-layer

802.15.6 Part 15.6: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Wireless Personal Area Networks (WPANs) used in or around a body

Admin Withdrawal: 802.11mb Amendment: Accumulated maintenance changes

**[JANUARY]**

P802.1Q-2011/Cor Corrigendum 2: Technical and editorial corrections

**[MARCH]**

P802.3bk Amendment: Physical Layer Specifications and Management Parameters for Extended Ethernet Passive Optical Networks

P802.15.4n Part 15.4: Low-Rate Wireless Personal Area Networks (LR-WPANs) Amendment: Physical Layer Utilizing Dedicated Medical Bands in China

P802.15.4p Part 15.4: Low-Rate Wireless Personal Area Networks (LR-WPANs) Amendment: Positive Train Control (PTC) System Physical Layer

P802.15.8 Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Peer Aware Communications (PAC)

P802.21d Part 21: Media Independent Handover Services Amendment: Multicast Group Management

**[MAY]**

P802.1APEbw Amendment: Extended Packet Numbering

P802.1Qbu Amendment: Frame Preemption.

P802.1Qbv Amendment: Enhancements for Scheduled Traffic

P802.1Xbx Amendment: MAC Security Key Agreement protocol (MKA) extensions

**[JUNE]** None
[AUGUST]
P802.1AB-2009/Cor Station and Media Access Control Connectivity Discovery - Corrigendum
1: Technical and editorial corrections
P802.3bm Amendment: Physical Layer Specifications and Management Parameters for 40 Gb/s and 100 Gb/s Operation Over Fiber Optic Cables
P802.3bn Amendment: Physical Layer Specifications and Management Parameters for Ethernet Passive Optical Networks Protocol over Coax
P802.11aj Amendment: Enhancements for Very High Throughput to support Chinese millimeter wave frequency bands
P802.16.3 Standard for Mobile Broadband Network Performance Measurements
P802.16q IEEE Standard for Air Interface for Broadband Wireless Access Systems Amendment for Multi-tier Networks

RATIFIED STANDARDS

DEC2011
P802.1Qbf (New) P802.1Qbf/D1.4 (C/LM) Standard for Local and Metropolitan Area Networks -Virtual Bridged Local Area Networks - Amendment: PBBTE Infrastructure Segment Protection
JAN2012
P802.15.4e/D08 (C/LM) Standard for Local and Metropolitan Area Networks Part 15.4: Low Rate Wireless Personal Area Networks (LR-WPANs) Amendment to the MAC sub-layer
P802.15.4f/D7 (C/LM) Standard for Local and Metropolitan Area Networks Part 15.4: Low Rate Wireless Personal Area Networks (LR-WPANs) Amendment: Active Radio Frequency Identification (RFID) System Physical Layer (PHY)

MARCH 2012
P802.1aq/Draft D4.6 Amendment 9: Shortest Path Bridging
P802.1AXbk/Draft D2.1 Link Aggregation Amendment: Protocol Addressing
P802.11aa/Draft 9.0 Amendment 2: MAC Enhancements for Robust 12 Audio Video Streaming
P802.11ae/Draft 8.0 Amendment: Prioritization of Management Frames
P802.15.4g/Draft 7 Amendment: Physical Layer (PHY) Specifications for Low Data Rate Wireless Smart Metering Utility Networks
P802.21a/Draft D06 Amendment for Security Extensions to Media Independent Handover Services and Protocol
P802.21b/Draft D06 Amendment: Handovers with Downlink Only Technologies

MAY2012
P802.1BR/Draft 3.3 Virtual Bridged Local Area Networks - Bridge Port Extension
P802.1Qbg/Draft D2.2 Amendment XX: Edge Virtual Bridging

JUN2012
REVISION--P802.16/Draft D6 (C/LM) Standard for Local and Metropolitan Area Networks Part 16: Air Interface for Broadband Wireless Access Systems

AUGUST 2012]
NEW
P802.1AC/Draft D2.1 (C/LM) Standard for Media Access Control (MAC) Service Definition
P802.22.2/Draft Part 22.2: Recommended Practice for the Installation and Deployment of IEEE 802.22 Systems
REVISION--P802.3/Draft D3.2 (C/LM) Standard for Ethernet
## IEEE 802 Plenary Sessions

### 2012

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<td>July 14-19</td>
<td>ITU facilities, Geneva Switzerland</td>
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<td>Hyatt Regency, Dallas TX</td>
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### 2014

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