

IEEE 802 LAN/MAN Standards Committee

REPORT FOR YEAR 2006 (01 OCT 2005 – 01 OCT 2006)

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Chairman, IEEE LMSC**

IEEE 802 LMSC

The IEEE 802 Local and Metropolitan Area Network Standards Committee is chartered to create, maintain, and encourage the use of IEEE/ANSI and equivalent IEC/ISO JTC1 standards primarily within layers 1 and 2 of the OSI (Open System Interconnection) Reference Model. The committee has met at three times per year in Plenary Session ever since it was formed in February 1980. Depending on the work load, additional Interim Sessions are held by the Working Groups as needed.

As determined by the individual Working Groups, certain IEEE 802 series of standards are internationalized in JTC1. The IEEE series of standards are known as IEEE 802.xxx and the JTC 1 series of equivalent standards are known as ISO/IEC 8802-nnn.

In the IEEE 802 context "Local" means campus and "Metropolitan" means intra-city. Some of the IEEE 802 Standards are being used for Wide Area Network and Regional Area Network applications as well (such as IEEE 802.3, 802.17 and 802.22).

Standards Family

IEEE 802 has Multiple Working Groups (WGs) and Technical Advisory Groups (TAGs) with average total participation of about 1,500 individuals per Plenary Session. The IEEE 802 activities are 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
- 802.17 Resilient Packet Ring Working Group
- 802.18 Radio Regulatory TAG
- 802.19 Coexistence TAG
- 802.20 Mobile Broadband Wireless Access Working Group
- 802.21 Media Independent Handoff Working Group
- 802.22 Wireless Regional Area Networks (WRAN) Working Group

- **Inactive Working Groups and Technical Advisory Groups**

- 802.2 Logical Link Control Working Group
- 802.5 Token Ring Working Group
- 802.12 Demand Priority Working Group

- **Disbanded Working Groups and Study Groups**

- 802.4 Token Bus 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
- 802.14 Cable Modem Working Group (Temporarily housed off-site)

The level of activity in 2007 within IEEE 802 should remain stable with attendance at Plenary Sessions in the range of 1,500. For more information on IEEE 802, see the [IEEE 802 Home Page](#).

IEEE 802 Status 2006 (01 OCT2005 – 01 OCT 2006)

Highlights

- The 802 Executive Committee consists of 18 positions as listed at the URL <http://www.ieee802.org/wgchairs.html>.
- The EC and 802 Participants worked closely with IEEE-SA staff, Standards Board and Board of Governors to:
 - Automate attendance monitoring and registrations process
 - Comply with financial reporting requirements (e.g. contract execution)
 - Implement on-line training programs (<http://www.ieee802.org/training.htm>)
 - Modify the Get IEEE 802™ program
 - Reorganize 802.20 Mobile Broadband Wireless Group
 - Established an 802 Ombudsman (<http://www.ieee802.org/IEEE%20802%20Ombudsman.ppt>)
- IEEE 802 maintains liaisons and communications with ISO/IEC JTC1-SC6 (Category C Liaison), JTC1-SC25, ITU-R, ITU-T and the FCC.
 - IEEE 802.11i Security was ISO/IEC JTC-1 approved in 2006
 - IEEE 802 submitted recommendations on modifying the cooperative working procedures to SC6 27SEP2006

Project Summary Status

- Projects Completed 12
- PARs Approved 18
- Ongoing projects and ad hocs 33
- Projects Withdrawn 0
- Withdrawn Standards 0
 - Total activity 63

Risks/Issues

- managing growth and enforcing SA principles in a highly competitive environment

2007 Planning

- attempt to automate attendance monitoring
- improve training
- improve feedback from members to management (EC, SASB, staff, BoG, CS-SAB)

12 Projects Completed (01 OCT2005 – 01 OCT2006)

1) 802.1Q-2005

IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks

2) 802.1ad-2005

IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks---Amendment 4: Provider Bridges

3) 802.1AE-2006

Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Security

4) 802.3-2005/Cor1-2006

IEEE Standard for Information Technology -Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Corrigendum 1

5) 802.3an-2006

Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Amendment: Physical Layer and Management Parameters for 10 Gb/s Operation, Type 10GBASE-T

6) 802.3aq-2006

IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Amendment: Physical Layer and Management Parameters for 10 Gb/s Operation, Type 10GBASE-LRM

7) 802.3as-2006

IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Amendment: Frame Format Extensions

8) 802.15.3b-2005

Amendment to Standard for Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks Specific Requirements - Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPAN): Amendment to MAC Sublayer

9) 802.15.4-2006

Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 15.4: Wireless Medium Access Control (MAC)and Physical Layer (PHY) Specifications for Low Rate Wireless Personal Area Networks (WPANs)

10) 802.16-2004/Cor1-2005

Corrigendum to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed Broadband Wireless Access Systems

11) 802.16e-2005

IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems - Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands

12) 802.16/Conformance04-2006

Standard for Conformance to IEEE 802.16 - Part 4: Protocol Implementation Conformance Statement (PICS) Proforma for Frequencies below 11 GHz

18 PARs Approved (01 OCT2005 – 01 OCT2006)

1) P802.1AS

Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks

2) P802.1H

Local and Metropolitan Area Networks: Recommended Practice for Media Access Control (MAC) Bridging of Ethernet in Local Area Networks

3) P802.1Q amendment 9

Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks Amendment 9: Stream Reservation Protocol (SRP)

4) P802.Q amendment 10

Standard for Local and Metropolitan Area Networks-Virtual Bridged Local Area Networks Amendment 10: Congestion Notification

5) P802.3av

Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications Amendment: Physical Layer Specifications and Management Parameters for 10Gb/s Passive Optical Networks

6) P802.11k extension

Standard for Information Technology-Telecommunications and information exchange between systems-Local and metropolitan area networks-Specific requirements-Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications Amendment: Radio Resource Measurement of Wireless LANs

7) P802.11n

Standard for Information Technology-Telecommunications and information exchange between systems-Local and metropolitan area networks-Specific requirements-Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications Amendment : Enhancements for Higher Throughput

8) P802.11p

Standard for Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications Amendment : Wireless Access in Vehicular Environments

9) P802.11r

Standard for Information Technology-Telecommunications and information exchange between systems-Local and metropolitan area networks-Specific requirements-Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications Amendment : Fast BSS-Transition

10) P802.11s

Standard for Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical

Layer (PHY) specifications Amendment: ESS Mesh Networking

11) P802.11y

Amendment to Standard for Information Technology-Telecommunications and Information Exchange between systems-Local and Metropolitan networks-Specific requirements-Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: 3650-3700 MHz Operation in USA

12) P802.16-2004/Cor2

Standard for Local and metropolitan area networks - Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems Corrigendum 2

13) P802.16i

Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Broadband Wireless Access Systems - Mobile Management Information Base

14) P802.16j

Amendment to IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems - Multihop Relay Specification

15) P802.16k

Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Bridges - Bridging of 802.16

16) P802.19

Recommended Practice for Information Technology - Telecommunications and information exchange between systems - Local and metropolitan networks - Specific requirements - Part 19: Methods for assessing coexistence of wireless networks

17) P802.22.1

Standard to enhance harmful interference protection for low power licensed devices operating in TV Broadcast Bands

18) P802.22.2

Information Technology - Telecommunications and information exchange between systems - Wireless Regional Area Networks (WRAN) - Specific requirements - Part 22.2: Recommended Practice for the Installation and Deployment of IEEE 802.22 Systems

33 Projects and ad-hocs in process (01 OCT2005 – 01 OCT2006)

00 Withdrawn Projects (PARS) (01 OCT2005 – 01 OCT2006)

Numerous Tutorials given (http://www.ieee802.org/802_tutorials/index.htm)

Future IEEE 802 Plenary Sessions

2006

March 5-10	Hyatt Regency Denver at the Colorado Convention Center, Denver, Colorado USA
July 16-21	Grand Hyatt Manchester, San Diego, CA USA
November 12-17	Hyatt Regency Dallas, TX USA

2007

*January 14-19	Hilton London Metropole, London, UK *(IEEE 802 Hosted Interim Session)
March 11-16	Caribe Royale, Orlando Florida USA
July 15-20	Hyatt Regency San Francisco, CA USA
November 11-16	Hyatt Regency Atlanta, GA USA

2008

March 16-21	Hyatt Regency New Orleans, Louisiana USA
July 13-18	Hyatt Regency Denver at the Colorado Convention Center, Denver, Colorado USA
November 9-14	Hyatt Regency Dallas, TX USA