

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTEL CORPORATION,

Petitioner

v.

PROXENSE, LLC

Patent Owner.

IPR2025-00328

U.S. Patent 8,219,129

**DECLARATION OF JUNE ANN MUNFORD
IN SUPPORT OF INTER PARTES REVIEW OF U.S. PATENT 8,219,129**

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

1. My name is June Ann Munford. I am over the age of 18, have personal knowledge of the facts set forth herein, and am competent to testify to the same.
2. I earned a Master of Library and Information Science (MLIS) from the University of Wisconsin-Milwaukee in 2009. I have over ten years of experience in the library/information science field. Beginning in 2004, I have served in various positions in the public library sector including Assistant Librarian, Youth Services Librarian and Library Director. I have attached my Curriculum Vitae as Appendix A.
3. During my career in the library profession, I have been responsible for materials acquisition for multiple libraries. In that position, I have cataloged, purchased and processed incoming library works. That includes purchasing materials directly from vendors, recording publishing data from the material in question, creating detailed material records for library catalogs and physically preparing that material for circulation. In addition to my experience in acquisitions, I was also responsible for analyzing large collections of library materials, tailoring library records for optimal catalog

search performance and creating lending agreements between libraries during my time as a Library Director.

4. I am fully familiar with the catalog record creation process in the library sector. In preparing a material for public availability, a library catalog record describing that material would be created. These records are typically written in Machine Readable Catalog (herein referred to as “MARC”) code and contain information such as a physical description of the material, metadata from the material’s publisher, and date of library acquisition. In particular, the 008 field of the MARC record is reserved for denoting the date of creation of the library record itself. As this typically occurs during the process of preparing materials for public access, it is my experience that an item’s MARC record indicates the date of an item’s public availability.
5. Typically, in creating a MARC record, a librarian would gather various bits of metadata such as book title, publisher and subject headings among others and assign each value to a relevant numerical field. For example, a book’s physical description is tracked in field 300 while title/attribution is tracked in field 245. The 008 field of the MARC record is reserved for denoting the creation of the library record itself. As this is the only date reflecting the inclusion of said materials within the library’s collection, it is my experience

that an item's 008 field accurately indicates the date of an item's public availability.

6. I have reviewed Exhibit INTEL-1006, a document entitled IEEE Standard 802.15.3: Part 15.3 Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPANs) - hereto referred to in this declaration as IEEE Standard 802.15.3-2003.
7. Attached hereto as Appendix B is a screen capture of the Internet Archive Wayback Machine entry for <http://standards.ieee.org:80/reading/ieee/std/numerical.html>. I secured these screen captures myself from <https://web.archive.org/web/20031008231748/http://standards.ieee.org:80/reading/ieee/std/numerical.html>. This record was captured as of October 8, 2003.
8. Appendix B is an Internet Archive capture of a web page entitled Numerical Listing of IEEE Standards as hosted on the IEEE website. This page contains a list of PDF files available for download from the IEEE website. Page 5 of Appendix B contains a link to '802.15.3-2003.pdf', indicating that

IEEE Standard 802.15.3-2003 was available for download from the IEEE website as of October 8, 2003.

9. Attached hereto as Appendix C is a screen capture of the Internet Archive Wayback Machine entry for

<http://standards.ieee.org/reading/ieee/std/lanman/>. I secured these screen captures myself from

<https://web.archive.org/web/20031011112106/http://standards.ieee.org/reading/ieee/std/lanman/>. This record was captured as of October 11, 2003.

10. Appendix C is an Internet Archive capture of a web page entitled Local and Metropolitan Area Networks + Drafts (LAN/MAN 802s) Standards Subscription as hosted on the IEEE website. This webpage contains a list of IEEE standards available in a subscription service sold by IEEE at the time as of October 11, 2003. Page 4 of Appendix C contains a link entitled 'IEEE 802.15.3-2003', indicating IEEE Standard 802.15.3-2003 was available to subscribers of IEEE's standards subscription as of October 11, 2003.

11. Attached hereto as Appendix D is a screen capture of the Internet Archive Wayback Machine entry for <http://standards.ieee.org/cgi-bin/status?Local%20and%20Metropolitan%20Area%20Network>. I secured

these screen captures myself from

<https://web.archive.org/web/20031205121321/http://standards.ieee.org/cgi-bin/status?Local%20and%20Metropolitan%20Area%20Network>. This record was captured as of December 5, 2003.

12. Appendix D is an Internet Archive capture of a web page entitled Local and Metropolitan Area Network Standards Status as hosted on the IEEE website. This page is a listing of all existing IEEE Standards related to LAN/MAN networking, describing the status of the standard as it stands in December 2003. Page 36 of Appendix D contains an entry for IEEE Standard 802.15.3-2003, indicating the standard was considered to be an approved and published IEEE document as of December 2003. Appendix C also contains the following passage discussing methods to order a copy of IEEE Standard 802.15.3-2003: “For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org”.

13. Attached hereto as Appendix E is a screen capture of the Internet Archive Wayback Machine entry for <http://standards.ieee.org:80/catalog/sol/index.html>. I secured these screen

captures myself from

<https://web.archive.org/web/20030803225114/http://standards.ieee.org:80/catalog/sol/index.html>. This record was captured as of August 3, 2003.

14. Appendix E is an Internet Archive capture of a web page entitled Web Delivery of Individual IEEE Standards as hosted on the IEEE website. This page describes multiple routes in which a member of the general public could purchase an individual IEEE standard such as IEEE Standard 802.15.3-2003. Appendix E indicates member of the public as of August 3, 2003 would be able to purchase individual standards via telephone, fax machine, traditional mail, e-mail, the IEEE Online bookstore or the IEEE subscription service.

15. Attached hereto as Appendix F is a screen capture of the Internet Archive Wayback Machine entry for <http://www.ili-info.com:80/ieee802drafts/description.shtml?id=8>. I secured these screen captures myself from <https://web.archive.org/web/20031009113725/http://www.ili-info.com:80/ieee802drafts/description.shtml?id=8>. This record was captured as of October 9, 2003.

16. Appendix F is an Internet Archive capture of a web page entitled P802.15.3 Draft Standard as hosted on the IEEE 802 Drafts website. This page describes a draft of IEEE Standard 802.15.3-2003 sold by IEEE to members of the general public on the IEEE Online bookstore. Appendix F indicates that members of the public were able to purchase standards drafts such as drafts for IEEE Standard 802.15.3-2003 prior to the standard's approval and formal publication.
17. Attached hereto as Appendix G is a true and correct copy of the MARC record for the IEEE Standards database as held by the Notre Dame University Library. I secured this record myself from the library's public catalog. The MARC record contained within Appendix G accurately describes the title, author, publisher, and ISBN number of IEEE Standards.
18. The 008 field of the MARC record in Appendix G indicates the date of record creation. The 008 field of Appendix G indicates the Notre Dame University Library first acquired IEEE Standards as of October 27, 2005. Considering this information, it is my determination that IEEE Standards was made available to the public shortly after its initial acquisition as of October 27, 2005.

19. Field 520 of Appendix G contains the following passage describing the breadth of the IEEE Standards digital subscription as held by Notre Dame University Library: ‘Contains searchable documents authored by the IEEE Standards Association, as well as standards developed in conjunction with or dually approved by other standards organizations. Includes ANSI/IEEE standards, ANSI standards, and AIEE standards. Also includes IEEE draft standards’. As Appendix B and C indicate IEEE Standard 802.15.3-2003 was included within the IEEE’s subscription service, it is reasonable to assume patrons of the Notre Dame University Library would have been able to access IEEE Standard 802.15.3-2003 soon after October 27, 2005.

20. Appendix B indicates IEEE Standard 802.15.3-2003 was available for download as October 8, 2003. Appendix C indicates IEEE Standard 802.15.2003 was available for download as of October 11, 2003. Appendix D indicates IEEE Standard 802.15.3-2003 was available for purchase from the IEEE as of December 5, 2003. Appendix G indicates the Notre Dame University Library made the IEEE Standards collection available to the public soon after October 27, 2005. Considering this timeline of availability, it is my determination that IEEE Standard 802.15.3-2003 was first made available to the public as of October 8, 2003 and certainly no later than October 27, 2005.

21. I have reviewed Exhibit INTEL-1005, Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard by James P.K. Gilb.

22. Attached hereto as Appendix H is a true and correct copy of the MARC record for Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard as held by the Carnegie Mellon University Library. I secured this record myself from the library's public catalog. The MARC record contained within Appendix H accurately describes the title, author, publisher, and ISBN number of Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard.

23. Attached hereto as Appendix I is a true and correct copy of passages from Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard as held by the Carnegie Mellon University Library. These scans were secured from the library's collection. In comparing Exhibit INTEL-1005 to Appendix I, it is my determination that Exhibit INTEL-1005 is a true and correct copy of Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard by James P.K. Gilb.

24. The 008 field of the MARC record in Appendix H indicates the date of record creation. The 008 field of Appendix H indicates the Carnegie Mellon University Library first acquired Wireless Multimedia: A Guide to the IEEE

802.15.3 Standard as of May 1, 2003. Considering this information, it is my determination that Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard was made available to the public via the Carnegie Mellon University Library shortly after its initial acquisition as of May 1, 2003.

25. Attached hereto as Appendix J is a document downloaded from a webpage entitled VTechWorks Repository as hosted on the University of Virginia website. I secured this download myself from <https://vtechworks.lib.vt.edu/server/api/core/bitstreams/b092396b-42f6-47c8-9522-5301155b2a51/content>.

26. Appendix J is a dissertation entitled “Medium Access Control in Impulse-Based Ultra Wideband Ad Hoc and Sensor Networks” by Nathaniel J. August. Page 1 of Appendix J indicates this dissertation was submitted to the University of Virginia as of May 5, 2005. Page 209 contains a citation to Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard by James P.K. Gilb, indicating the book was consulted during the drafting process of the dissertation prior to May 5, 2005.

27. Attached hereto as Appendix K is a screen capture of the Internet Archive Wayback Machine entry for <http://scholar.lib.vt.edu/theses/available/etd->

05082005-223850/. I secured these screen captures myself from <https://web.archive.org/web/20051119154406/http://scholar.lib.vt.edu/theses/available/etd-05082005-223850/>. This record was captured as of November 19, 2005.

28. Appendix K is an Internet Archive capture of a web page entitled Title page for ETD etd-05082005-223850 as hosted on the University of Virginia website. This page describes “Medium Access Control in Impulse-Based Ultra Wideband Ad Hoc and Sensor Networks” by Nathaniel J. August and offers a download of the dissertation via a link entitled ‘Disseration_NA_final_print.pdf’ visible on page 2 of Appendix K. As such, it is my determination that “Medium Access Control in Impulse-Based Ultra Wideband Ad Hoc and Sensor Networks” by Nathaniel J. August was made available to the public as of November 19, 2005. Appendix K also confirms the dissertation was defended as of May 5, 2005.

29. Appendix H indicates the Carnegie Mellon University purchased Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard by James P.K. Gilb as of May 1, 2003 and made the book available to the public soon after the book arrived from the publisher. Appendix J indicates Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard by James P.K. Gilb was published

and available to the public prior to May 5, 2005, the date of the August dissertation defense. As such, it is my determination that Wireless Multimedia: A Guide to the IEEE 802.15.3 Standard by James P.K. Gilb was made available to the public soon after May 1, 2003 and certainly no later than May 5, 2005.

30.I have reviewed Exhibit INTEL-1008, “A Novel Design of IEEE 802.15.3 MAC over UWB” by Yu Cai, et al as published in Proceedings of the 2004 IEEE Vehicular Technology Conference.

31.Attached hereto as Appendix L is a true and correct copy of the MARC record for Proceedings of the 2004 IEEE Vehicular Technology Conference as held by the Linda Hall Library. I secured this record myself from the library’s public catalog. The MARC record contained within Appendix L accurately describes the title, publisher and ISBN number of Proceedings of the 2004 IEEE Vehicular Technology Conference. In comparing Exhibit INTEL-1008 to Appendix L, it is my determination that Exhibit INTEL-1008 is a true and correct copy of “A Novel Design of IEEE 802.15.3 MAC over UWB” by Yu Cai, et al as published in Proceedings of the 2004 IEEE Vehicular Technology Conference.

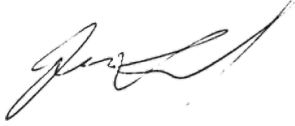
32.The 008 field of the MARC record in Appendix L indicates the date of record creation. The 008 field of Appendix L indicates the Linda Hall Library first acquired Proceedings of the 2004 IEEE Vehicular Technology Conference as of March 7, 2005. Considering this information, it is my determination that Proceedings of the 2004 IEEE Vehicular Technology Conference and therefore “A Novel Design of IEEE 802.15.3 MAC over UWB” was made available to the public shortly after March 7, 2005.

33.I have been retained on behalf of the Petitioner to provide assistance in the above-illustrated matter in establishing the authenticity and public availability of the documents discussed in this declaration. I am being compensated for my services in this matter at the rate of \$200.00 per hour plus reasonable expenses. My statements are objective, and my compensation does not depend on the outcome of this matter.

34.I declare under penalty of perjury that the foregoing is true and correct. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made the knowledge that willful false statements and the like so made are punishable by fine or

imprisonment, or both, under Section 1001 of Title 18 of the United States
Code.

Dated: 12/20/2024

A handwritten signature in black ink, appearing to read 'June Ann Munford', with a stylized, flowing script.

June Ann Munford

APPENDIX A

June A. Munford
Curriculum Vitae

Education

University of Wisconsin-Milwaukee - MS, Library & Information Science, 2009
Milwaukee, WI

- Coursework included cataloging, metadata, data analysis, library systems, management strategies and collection development.
- Specialized in library advocacy, cataloging and public administration.

Grand Valley State University - BA, English Language & Literature, 2008
Allendale, MI

- Coursework included linguistics, documentation and literary analysis.
- Minor in political science with a focus in local-level economics and government.

Professional Experience

Researcher / Expert Witness, October 2017 – present
Freelance ● Pittsburgh, Pennsylvania & Grand Rapids, Michigan

- Material authentication and public accessibility determination.
Declarations of authenticity and/or public accessibility provided upon research completion. Experienced with appeals and deposition process.
- Research provided on topics of public library operations, material publication history, digital database services and legacy web resources.
- Past clients include Alston & Bird, Arnold & Porter, Baker Botts, Fish & Richardson, Erise IP, Irell & Manella, O'Melveny & Myers, Perkins-Coie, Pillsbury Winthrop Shaw Pittman and Slayden Grubert Beard.

Library Director, February 2013 - March 2015
Dowagiac District Library ● Dowagiac, Michigan

- Executive administrator of the Dowagiac District Library. Located in

Southwest Michigan, this library has a service area of 13,000, an annual operating budget of over \$400,000 and total assets of approximately \$1,300,000.

- Developed careful budgeting guidelines to produce a 15% surplus during the 2013-2014 & 2014-2015 fiscal years while being audited.
- Using this budget surplus, oversaw significant library investments including the purchase of property for a future building site, demolition of existing buildings and building renovation projects on the current facility.
- Led the organization and digitization of the library's archival records.
- Served as the public representative for the library, developing business relationships with local school, museum and tribal government entities.
- Developed an objective-based analysis system for measuring library services - including a full collection analysis of the library's 50,000+ circulating items and their records.

November 2010 - January 2013

Librarian & Branch Manager, Anchorage Public Library • Anchorage, Alaska

- Headed the 2013 Anchorage Reads community reading campaign including event planning, staging public performances and creating marketing materials for mass distribution.
- Co-led the social media department of the library's marketing team, drafting social media guidelines, creating original content and instituting long-term planning via content calendars.
- Developed business relationships with The Boys & Girls Club, Anchorage School District and the US Army to establish summer reading programs for children.

June 2004 - September 2005, September 2006 - October 2013

Library Assistant, Hart Area Public Library

Hart, MI

- Responsible for verifying imported MARC records and original MARC

cataloging for the local-level collection as well as the Michigan Electronic Library.

- Handled OCLC Worldcat interlibrary loan requests & fulfillment via ongoing communication with lending libraries.

Professional Involvement

Alaska Library Association - Anchorage Chapter

- Treasurer, 2012

Library Of Michigan

- Level VII Certification, 2008
- Level II Certification, 2013

Michigan Library Association Annual Conference 2014

- New Directors Conference Panel Member

Southwest Michigan Library Cooperative

- Represented the Dowagiac District Library, 2013-2015

Professional Development

Library Of Michigan Beginning Workshop, May 2008

Petoskey, MI

- Received training in cataloging, local history, collection management, children's literacy and reference service.

Public Library Association Intensive Library Management Training, October 2011

Nashville, TN

- Attended a five-day workshop focused on strategic planning, staff management, statistical analysis, collections and cataloging theory.

Alaska Library Association Annual Conference 2012 - Fairbanks, February 2012

Fairbanks, AK

- Attended seminars on EBSCO advanced search methods, budgeting, cataloging, database usage and marketing.

Depositions

2019 ● Fish & Richardson

Apple v. Qualcomm (IPR2018-001281, 39521-00421IP, IPR2018-01282 and 39521-00421IP2)

2019 ● Erise IP

Implicit, LLC v. Netscout Systems, Inc (Civil Action No. 2:18-cv-53-JRG)

2019 ● Perkins-Coie

Adobe Inc. v. RAH Color Technologies LLC (Cases IPR2019-00627, IPR2019-00628, IPR2019-00629 and IPR2019-00646)

2020 ● O'Melveny & Myers

Maxell, Ltd. v. Apple Inc. (Case No. 5:19-cv-00036-RWS)

2021 ● Pillsbury Winthrop Shaw Pittman LLP

Intel v. SRC (IPR2020-1449)

2022 ● Perkins-Coie

Realtek v. Future Link (IPR2021-01182)

2023 ● Fish & Richardson

Neuroderm Ltd. v. Abbvie, Inc (Case No. PGR2022-00040)

2023 ● Fish & Richardson

Nearmap US Inc. v. Pictometry International Corp. (IPR2022-00735)

2023 ● Fish & Richardson

Samsung Electronics v. MemoryWeb LLC (Case No. 39843-0136PS1)

2023 ● Pillsbury Winthrop Shaw Whitman LLP

Gravel Rating Systems v. Costco Wholesale Corp. (Civil Action No. 4:21-cv-149-ALM)

2024 ● Willkie-Farr

Netflix, Inc. v. VideoLabs. Inc. (IPR2023-00628)

Limited Case and Clientele History

Alston & Bird

- Ericsson

v. Collision Communications (IPR2022-01233)

- Nokia

v. Neptune Subsea, Xtera (Case No. 1:17-cv-01876)

- Universal Electronics Inc

v. Roku Inc (IPR2022-00818)

Arnold & Porter

- Ivantis

v. Glaukos (Case No. 8:18-cv-00620)

- Samsung

v. Jawbone (Case No. 2:21-cv-00186)

Benesch Friedlander Coplan & Aronoff

- Voyis

v. Cathx (Case No. 5:21-cv-00077-RWS)

Deschert LLP

- Smaxtec Animal Care

v. ST Reproductive Technologies, LLC (IPR2024-00885)

Erise I.P.

- Apple

v. Ericsson Inc. (IPR2022-00715)

v. Future Link Systems (IPRs 6317804, 6622108, 6807505, and 7917680)

v. INVT (Case No. 20-1881)

v. Navblazer LLC (IPR2020-01253)

v. Qualcomm (IPR2018-001281, 39521-00421IP, IPR2018-01282, 39521-00421IP2)

v. Quest Nettech Corp (Case No. 2:19-cv-00118-JRG)

v. Telefonaktiebolaget LM Ericsson (IPR2022-00275)

v. Theta IP, LLC (IPR2024-00818)

- Fanduel

v. CGT (Case No. 19-1393)

- Garmin

v. Phillips North America LLC (Case No. 2:19-cv-6301-AB-KS)

- Netscout

- v. Longhorn HD LLC (Case No. 2:20-cv-00349)

- v. Implicit, LLC (Civil Action No. 2:18-cv-53-JRG)

- Sony Interactive Entertainment LLC

- v. Bot M8 LLC (IPR2020-01288)

- v. Infernal Technology LLC (Case No. 2:19-CV-00248-JRG)

- Unified Patents

- v. GE Video Compression (Civil Action No. 2:19-cv-248)

Fish & Richardson

- Apple

- v. AliveCor (3:21-cv-03958)

- v. LBS Innovations (Case No. 2:19-cv-00119-JRG-RSP)

- v. Koss Corporation (IPR2021-00305)

- v. Masimo (IPR 50095-0012IP1, 50095-0012IP2, 50095-0013IP1, 50095-0013IP2, 50095-0006IP1, 50095-0135IP1)

- v. Neonode (Case No. 21-cv-08872-EMC)

- v. Qualcomm (IPR2018-001281, 39521-00421IP, IPR2018-01282, 39521-00421IP2)

- Dell

- v. Neo Wireless (IPR2022-00616)

- Dish Network

- v. Entropic Communications, LLC (Case No. 2:2023-CV-01043)

- v. Realtime Adaptive Streaming (Case No. 1:17-CV-02097-RBJ)
- v. TQ Delta LLC (Case No. 18-1798)
- Evapco Dry Cooling
 - v. SPG Dry Cooling (IPR2021-00688)
- Genetec
 - v. Sensormatic Electronics (Case No. 1:20-CV-00760)
- Huawei
 - v. Bell Northern Research LLC (IPR2019-01174)
- Kianxis
 - v. Blue Yonder (Case No. 3:20-cv-03636)
- LG Electronics
 - v. Bell Northern Research LLC (Case No. 3:18-cv-2864-CAB-BLM)
- Metaswitch
 - v. Sonus Networks (IPR2018-01719)
- Microsoft
 - v. Throughputer Inc (IPR2022-00757)
- Mom Enterprises
 - v. Ddrops Company (Case No. 1:22-cv-00332)
- MLC Intellectual Property

- v. MicronTech (Case No. 3:14-cv-03657-SI)
- Nearmap Inc
 - v. EagleView Technologies (IPR2022-01009)
- Neuroderm Ltd.
 - v. Abbvie, Inc (Case No. PGR2022-00040)
- Realtek Semiconductor
 - v. Future Link (IPR2021-01182)
- Quectel
 - v. Koninklijke Philips (Case No. 1:20-cv-01710)
- Samsung
 - v. Aire Technology (IPR2022-00877)
 - v. Bell Northern Research (Case No. 2:19-cv-00286-JRG)
 - v. Communication Technologies Inc (IPR2022-01221)
 - v. Jawbone Innovations (IPR2022-00865)
 - v. MemoryWeb LLC (IPR2022-00885)
 - v. Dodots Licensing Solutions (IPR2023-00701)
 - v. Telefonaktiebolaget LM Ericsson (IPR2021-00615)
- Texas Instruments
 - v. Vantage Micro LLC (IPR2020-01261)
- Xilinx
 - v. Sentient Sensors LCC (Case No. 1:22-cv-00173)

Groombridge Wu

- Nearmap

v. Eagle View Technologies Inc. and Pictometry International Corp.
(Case No. 2:21-cv-00283-TS-DAO)

Irell & Manella

- Curium

O'Melveny & Myers

- Apple

v. Maxell (Case No. 5:19-cv-00036-RWS)

- Disney Media & Entertainment Distribution LLC

v. Digital Media Technology Holdings, LLC (Case No. 2:22-cv-01642)

- Micron Technology Inc.

v. Besang Inc (IPR2023-00900)

- Samsung

v. Daedalus Prime LLC (1335 Investigation)

Perkins-Coie

- Amazon

v. Nokia (IPR2024-00847 and IPR2024-00848)

- Heru Industries
 - v. The UAB Research Foundation (IPR2022-01148)
- Intel Corporation
 - v. BeSang Inc. (IPR2023-00991)
 - v. BitMICRO (Case No. 5:23-cv-00625)
 - v. Telefonaktiebolaget L M Ericsson (IPR2024-00610)
- Realtek Semiconductor
 - v. Future Link (IPR2021-01182)
- Twitter Inc
 - v. VOIP-Pal.com (Case No. 3:20-cv-02397-JD)
- TCL Industries
 - v. Koninklijke Philips NV (IPR2021-00495, IPR2021-00496 and IPR2021-00497)

Pillsbury Winthrop Shaw Pittman

- Intel
 - v. FG SRC LLC (Case No. 6:20-cv-00315)
- Gravel Rating Systems
 - v. Costco (Case No. 4:21-cv-149)
 - v. Lowe's Home Centers (Case No. 4:21-cv-150)
 - v. T-Mobile USA (Case No. 4:21-cv-152)
 - v. Kohl's Inc. (Case No. 4:21-cv-258)
 - v. Under Armor (Case No. 4:21-cv-356)

Quinn Emanuel

- ServiceNow, Inc.
 - v. InQuisient, Inc. (Case No. 22-900-CJB)
- Wolfspeed
 - v. The Trustees of Purdue University (Case No. 1:2021-cv-00840)

Sheppard, Mullin, Richter & Hampton LLP

- Cadence Design Systems Inc.
 - v. Semiconductor Design Technologies (Case No. 3:23-cv-01001)

Stern, Kessler, Goldstein & Fox

- Preliminary Research

Willkie, Farr & Gallagher LLP

- Neurent
 - v. The Foundry, LLC (IPR2024-00669)
- Netflix, Inc.
 - v. VideoLabs, Inc. (IPR2023-00628)

APPENDIX B



WEB TEXTS VIDEO AUDIO SOFTWARE IMAGES

SIGN UP | LOG IN | UPLOAD

Search

ABOUT BLOG PROJECTS HELP DONATE CONTACT JOBS VOLUNTEER PEOPLE

INTERNET ARCHIVE

DONATE

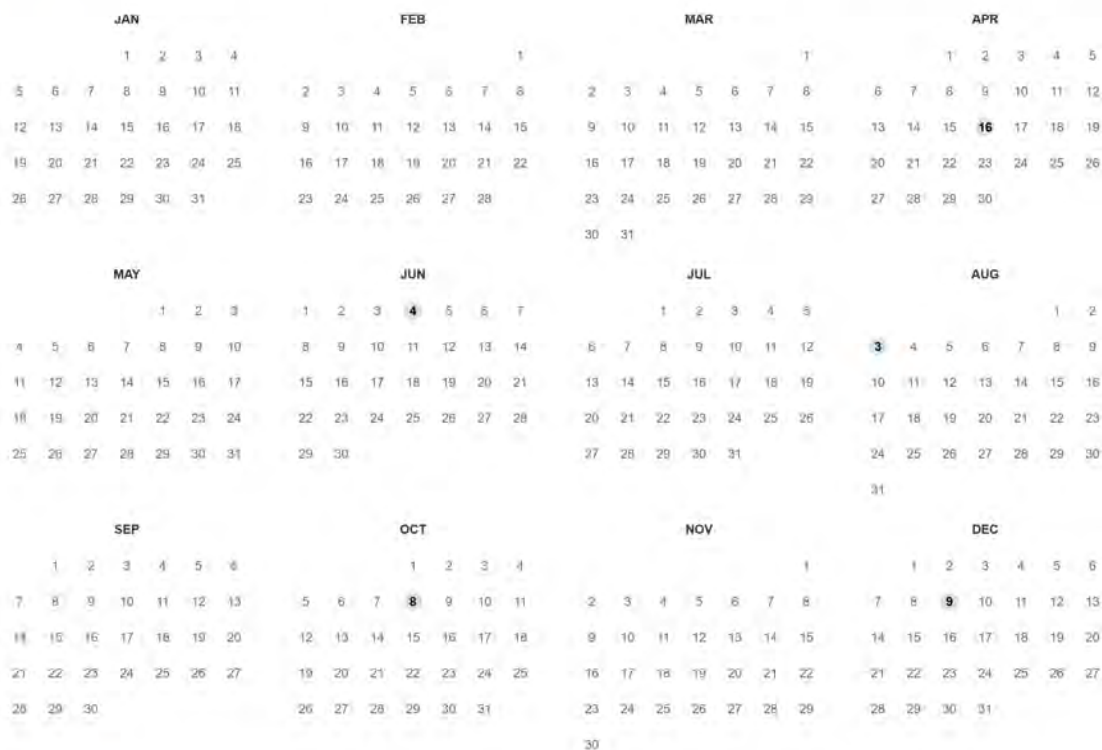
Wayback Machine

Explore more than 916 billion web pages saved over time

http://standards.ieee.org/reading/ieee/std/numerical.html

Calendar Collections Changes Summary Site Map URLs

Saved 71 times between October 22, 2002 and October 26, 2022.



Note

This calendar view maps the number of times

<http://standards.ieee.org/reading/ieee/std/numerical.html> was crawled by the Wayback Machine, *not* how many times the site was actually updated. More info in the [FAQ](#).

[FAQ](#) | [Contact Us](#) | [Terms of Service](#) (Dec 31, 2014)



The Wayback Machine is an initiative of the Internet Archive, a 501(c)(3) non-profit building a digital library of Internet sites and other cultural artifacts in digital form. Other projects include [Open Library](#) & [archive-it.org](#).

Your use of the Wayback Machine is subject to the Internet Archive's [Terms of Use](#).

Wayback Machine 71 captures 22 Oct 2002 - 26 Oct 2002

http://standards.ieee.org/reading/ieee/std/numerical.html

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IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE

Membership Publications Services Standards Conferences Careers/Jobs

IEEE standardsonline
Your Direct Connection to IEEE Standards

Subscription Portfolio Features & Benefits Pricing & Licensing How to Order Help IEEE-SALinks

Wednesday, 8 October 2003 Home

Numerical Listing of IEEE Standards

(generated Wed Oct 8 19:05:08 2003)

Filename - Special Status - Subscription Packages

jstd016-1995.pdf [Software Engineering]
1-1986.pdf **archived** [Electrical Insulation]
1-2000.pdf [Electrical Insulation]
4-1995.pdf [Instrumentation and Measurement]
4a-2001.pdf [Instrumentation and Measurement]
7-4.3.2-1993.pdf [Nuclear Engineering]
11-1980.pdf **archived** [Electric Machinery]
11-2000.pdf [Electric Machinery] [Vehicular Technology]
18-1992.pdf **archived** [Power Transmission and Distribution]
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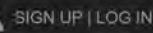
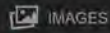
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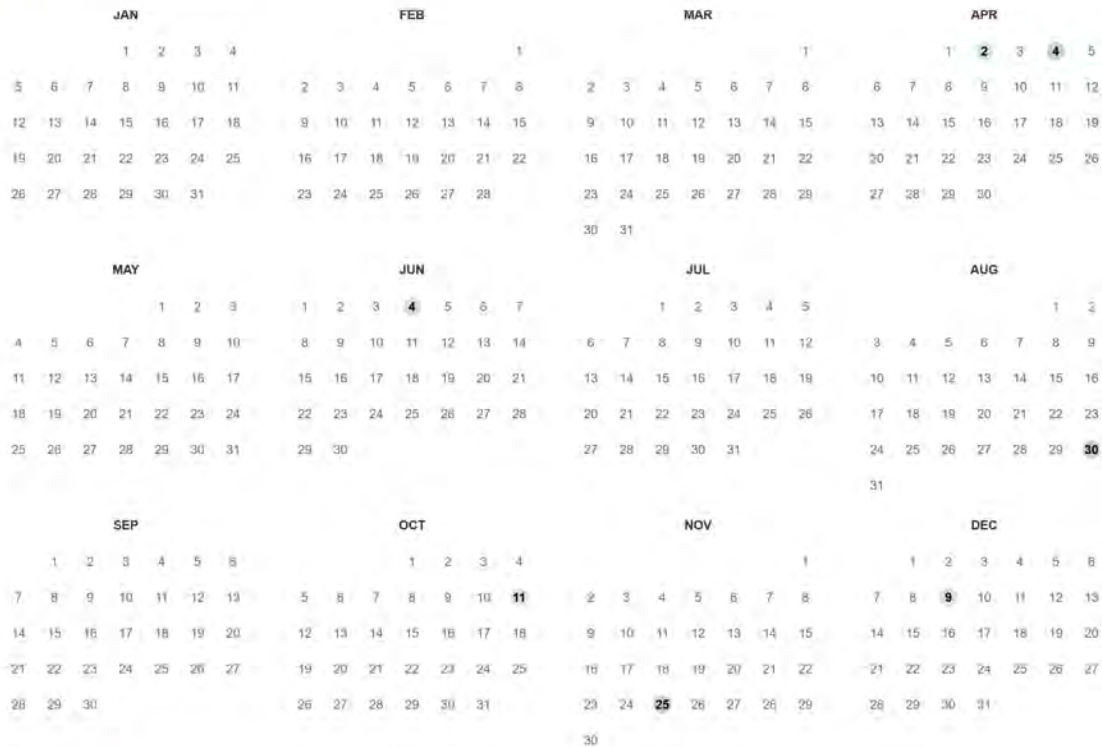
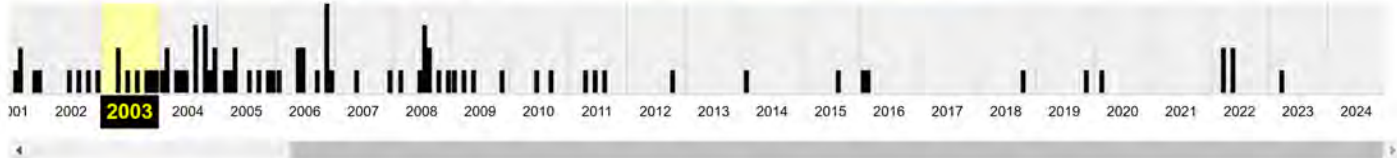
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Overview & Architecture

[IEEE 802-2001](#), IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture

[IEEE Std 802a-2003](#) IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture Amendment 1: Ethernets for Prototype and Vendor-Specific Protocol Development

LAN/MAN Bridging & Management (802.1)

[IEEE 802.1F-1993](#), IEEE Standard for Local and Metropolitan Area Networks: Common Definitions and Procedures for IEEE 802 Management Information

[IEEE 802.1H, 1997 Edition \(R2001\) \(ISO/IEC TR11802-5:1997\)](#), IEEE Technical Report and Guidelines--Part 5: Media Access Control (MAC) Bridging of Ethernet V2.0 in Local Area Networks

[IEEE 802.1B, 1995 Edition \(ISO/IEC 15802-2:1995\)](#), IEEE Standard for Information technology--Telecommunications and information exchange between systems--IEEE standard for local and metropolitan area networks--Common specifications--Part 2: LAN/MAN Management

[IEEE 802.1D, 1998 Edition \(ISO/IEC 15802-3:1998\)](#), IEEE Standard for Information technology--Telecommunications and information exchange between systems--IEEE standard for local and metropolitan area networks--Common specifications--Media access control (MAC) Bridges

[IEEE P802.1D/D3 Unapproved Draft Standard for Local and Metropolitan Area Networks: Media Access Control \(MAC\) Bridges](#)

[IEEE 802.1t-2001](#), Amendment to IEEE Std 802.1D, 1998 Edition IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Common specifications--Part 3: Media Access Control (MAC) Bridges: Technical and Editorial Corrections

[IEEE 802.1w-2001](#), IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Common specifications Part 3: Media Access Control (MAC) Bridges--Amendment 2--Rapid Reconfiguration [Amendment to IEEE Std 802.1D, 1998 Edition (ISO/IEC 15802-3:1998) and IEEE Std 802.1t-2001]

[IEEE 802.1E, 1994 Edition \(ISO/IEC 15802-4:1994\)](#), IEEE Standard for Information technology--Telecommunications and information exchange between systems--IEEE standard for local and metropolitan area networks--Common specifications--Part 4: System Load Protocol

[IEEE 802.1G, 1998 Edition \(ISO/IEC15802-5:1998\)](#), Information technology--Telecommunications and information exchange between systems--IEEE standard for local and metropolitan area networks--Common specifications--Part 5: Remote Media Access Control (MAC) bridging

[IEEE 802.1Q, 2003 Edition](#), IEEE Standards for Local and metropolitan area networks--Virtual Bridged Local Area Networks

[IEEE 802.1X-2001](#) IEEE Standards for Local and Metropolitan Area Networks: Port-Based Network Access Control

Logical Link Control (802.2)

[IEEE 802.2-1998](#), (ISO/IEC 8802-2:1998) IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements--Part 2: Logical Link Control

CSMA/CD Access Method (802.3)

[IEEE 802.3-2002](#) 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

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[IEEE 802.3ae-2002](#) IEEE Standard for Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications-Media Access Control (MAC) Parameters, Physical Layer and Management Parameters for 10 Gb/s Operation

[IEEE 802.3af-2003](#) (Includes portions of IEEE 802.3ae) 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 Data Terminal Equipment (DTE) Power via Media Dependent Interface (MDI)

[IEEE P802.3ah/D2.0 Unapproved Draft Amendment to Carrier Sense Multiple Access with Collision Detection \(CSMA/CD\) access method and physical layer specifications --Media Access Control Parameters, Physical Layers and Management Parameters for subscriber access networks](#)

[IEEE 802.3aj-2003](#) 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: Maintenance 7 **NEW**

[IEEE P802.3ak/D4.2 Unapproved Draft IEEE Amendment to IEEE 802.3-2002: Physical Layer and Management Parameters for 10Gb/s Operation, Type 10GBASE-CX4 -- Changes to IEEE Std 802.3-2002 as Amended by IEEE Std 802.3ae-2002](#)

Conformance Test Methodology for IEEE 802.3

[IEEE 1802.3-2001](#) IEEE Conformance Test Methodology for IEEE Standards for Local and Metropolitan Area Networks-Specific Requirements-Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications (Includes 1802.3d)

Token Ring Access Method (802.5)

[IEEE 802.5, 1998 Edition](#) (ISO/IEC 8802-5:1998) IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements--Part 5: Token Ring Access Method and Physical Layer Specification

[IEEE 802.5r and IEEE 802.5j, 1998 Edition \(ISO/IEC 8802-5:1998/Amd.1\)](#), IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific Requirements--Part 5 Token ring access method and physical layer specifications--Amendment 1: Dedicated Token Ring Operation and Fibre Optic Media

[IEEE 802.5t-2000](#), IEEE Standard for Information technology-Telecommunications and information exchange between systems-Local and metropolitan area networks-Specific requirements-Amendment to Part 5: Token Access Method and Physical Layer Specifications

[IEEE Std 802.5v-2001](#), IEEE Standard for Information technology---Telecommunications and information exchange between systems---Local and metropolitan area networks---Specific requirements---Part 5: Token Ring access method and Physical Layer specifications---Amendment 5: Gigabit Token Ring operation

[IEEE Std 802.5w-2000](#) (Corrigendum to IEEE Std 802-5:1998 including (ISO/IEC 8802-5:1998/Amd.1:1998) Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Part 5: Token ring access method and physical layer specifications--Corrigendum

LAN/MAN Security (802.10)

[IEEE 802.10-1998](#), IEEE Standard for Local and Metropolitan Area Networks: Interoperable LAN/MAN Security (SILS)

[IEEE 802.10a-1999](#), Supplement to 802.10-1998, Standard for Interoperable LAN/MAN Security (SILS) - Security Architecture Framework

[IEEE 802.10c-1998](#), Supplement to 802.10-1998, Key management (Clause 3)

Wireless LANs (802.11)

[IEEE Std 802.11, 1999 Edition](#) (R2003) (ISO/IEC 8802-11: 1999) IEEE Standard for Information Technology - Telecommunications and Information Exchange between Systems - Local and Metropolitan Area Network - Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications

Download the following:
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[IEEE 802.11a-1999](#) (R2003) (ISO/IEC 8802-11:1999/Amd 1:2000(E)), 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 1: High-speed Physical Layer in the 5 GHz band ([An errata is available](#))

[IEEE 802.11b-1999](#) (R2003) Supplement to 802.11-1999, Wireless LAN MAC and PHY specifications: Higher speed Physical Layer (PHY) extension in the 2.4 GHz band

[802.11b-1999/Cor1-2001](#), (R2003) IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements--Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications--Amendment 2: Higher-speed Physical Layer (PHY) extension in the 2.4 GHz band--Corrigendum 1

[IEEE 802.11d-2001](#), (R2003) Amendment to IEEE 802.11-1999, (ISO/IEC 8802-11) 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: Specification for Operation in Additional Regulatory Domains

[IEEE 802.11F-2003](#) IEEE Recommended Practice for Multi-Vendor Access Point Interoperability via an Inter-Access Point Protocol Across Distribution Systems Supporting IEEE 802.11 Operation

[IEEE 802.11g-2003](#) IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements--Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications--Amendment 4: Further Higher-Speed Physical Layer Extension in the 2.4 GHz Band

[IEEE P802.11h](#) Approved Draft Supplement to Standard for Telecommunications and Information Exchange Between Systems--LAN/MAN Specific Requirements--Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Spectrum and Transmit Power Management Extensions in the 5GHz band in Europe

[IEEE P802.11i/D3.0](#) Unapproved Draft Supplement to Standard for Telecommunications and Information Exchange Between Systems--LAN/MAN Specific Requirements--Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Specification for Enhanced Security

Demand Priority Access Method (802.12)

[IEEE 802.12, 1998 Edition \(ISO/IEC 8802-12:1998\)](#), IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area network - Specific requirements - Part 12: Demand-priority access method, physical layer and repeater specifications for 100 Mb/s Operation ([An errata is available](#))

Wireless Personal Area Networks

[IEEE 802.15.1\(tm\)-2002](#), IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements Part 15.1: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Wireless Personal Area Networks (WPANs(TM))

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[IEEE 802.15.2-2003](#) IEEE Recommended Practice for Telecommunications and Information exchange between systems -- Local and metropolitan area networks Specific Requirements - Part 15.2: Coexistence of Wireless Personal Area Networks with Other Wireless Devices Operating in Unlicensed Frequency Bands

[IEEE 802.15.3-2003](#) IEEE Standard for Information technology--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)

[IEEE 802.15.4-2003](#) IEEE 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 (LR-WPANs) [PDF](#)

Broadband Wireless Metropolitan Area Networks

[IEEE 802.16-2001](#), IEEE Standard for Local and Metropolitan Area Networks--Part 16: Air Interface for Fixed Broadband Wireless Access Systems

[IEEE 802.16a-2003](#) IEEE Standard for Local and metropolitan area networks Part 16: Air Interface for Fixed Broadband Wireless Access Systems--Amendment 2: Medium Access Control Modifications and Additional Physical Layer Specifications for 2-11 GHz

[IEEE 802.16c-2002](#) IEEE Standard for Local and metropolitan area networks Part 16: Air Interface for Fixed Broadband Wireless Access Systems--Amendment 1: Detailed System Profiles for 10-66 GHz

[IEEE Std 802.16.2-2001](#) IEEE Recommended Practice for Local and metropolitan area networks -- Coexistence of Fixed Broadband Wireless Access Systems ([An Interpretation is available](#))

[IEEE P802.16.2a/D6](#), Unapproved Draft Amendment to IEEE Recommended Practice for Local and metropolitan area networks -- Coexistence of Fixed Broadband Wireless Access Systems

Conformance Test Methodology for IEEE 802.16

[IEEE 802.16/Conformance 01/-2003](#) (*Designation changed from IEEE 1802.16.1*) IEEE Standard for Conformance to IEEE 802.16 Part 1: Protocol Implementation Conformance Statement (PICS) Proforma for 10-66 GHz WirelessMAN-SC Air Interface

[IEEE P802.16/Conformance 02/D3](#) (*Designation changed from IEEE 1802.16.2*) Unapproved Draft Standard for Conformance to IEEE Standard 802.16 -- Part 2: Test Suite Structure and Test Purposes for 10-66 GHz WirelessMan--SC(tm) Air Interface

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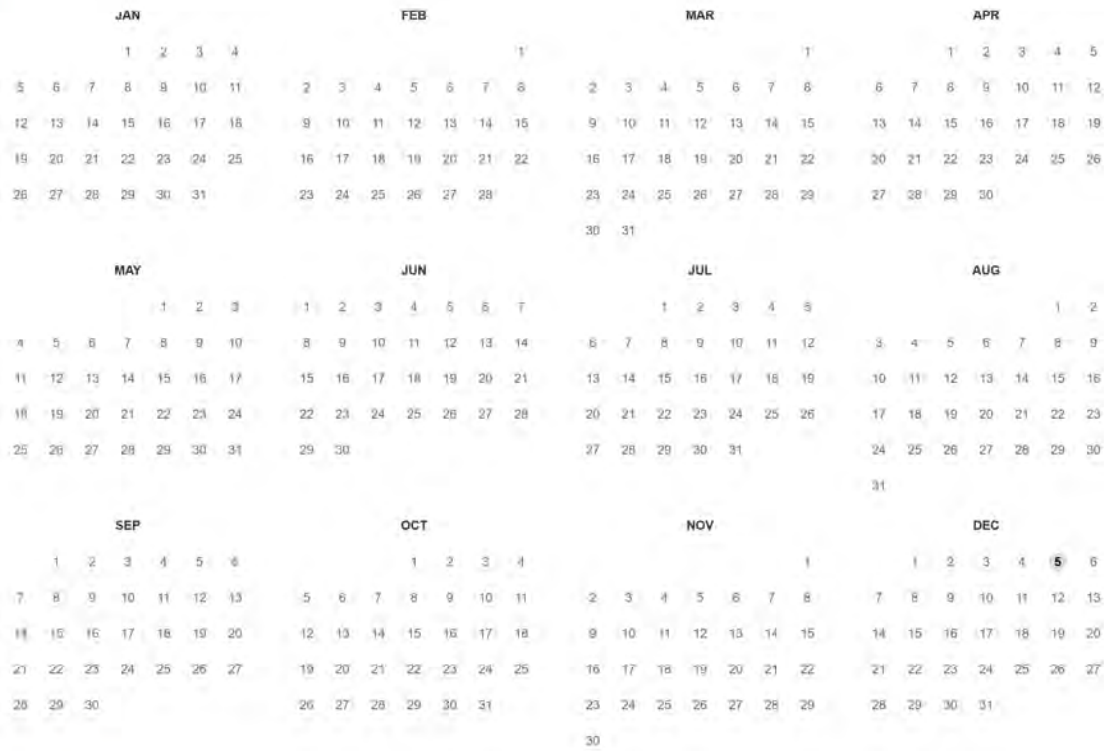
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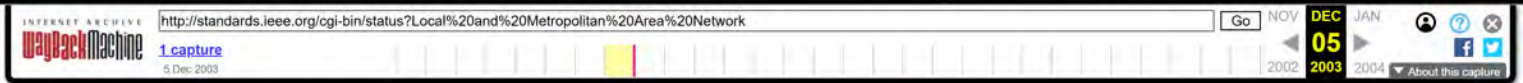
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Here are the results of your search through the IEEE Standards Status Report for **Local and Metropolitan Area Network**:

Title: **Local and Metropolitan Area Network** Standards

Status: Approved Publication of IEEE

Publication type: Electronic Product

History: (Ref. Std.: 802)

Keywords:

Designation: 802-1990

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks**: IEEE Standard: Overview and Architecture

Status: Superseded **Formerly 802.1A. Superseded by 802-2001.

History: PAR APP: May 31, 1990, BD APP: May 31, 1990, ANSI APP: Nov 20, 1990

Abstract: This document provides an overview to the family of IEEE 802 Standards, defines compliance with the family of IEEE 802 Standards, describes the relationship of the IEEE 802 Standards to the Open Systems Interconnections Basic Reference Model [ISO 7498:1984] and explains the relationship of these standards to the higher layer protocols, and provides a standard for identification of public, private, and standard protocols.

Keywords: LAN, overview, architecture, interconnection, component, Metropolitan area networks, Local area networks

Designation: 802-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for LAN/MAN (Local Area Network/Metropolitan Area Network): Overview and Architecture

Status: Approved Publication of IEEE **Supersedes 802-1990.

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 26, 1997, BD APP: Jun 14, 2001

Project scope: An overview and the architecture of the IEEE 802 suite of standards.

Project purpose: Revision of existing IEEE 802-1990 standard to reflect the current IEEE 802 architecture and its suite of standards.

Keywords:

Designation: 802.1

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Local Area Networks: Architecture & Overview

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE. **Redesignated 802-1990

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinsky@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 28, 1986

Keywords: local, architecture, overview, lan, networks

Designation: 802.1B-1992

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 1998

Title: **Local and Metropolitan Area Network**: LAN/MAN Management

Status: Changed Designation **Available in ISO/IEC 15802-2.

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinsky@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 12, 1985, BD APP: Sep 17, 1992, ANSI APP: Feb 23, 1993

Abstract: Services and protocol elements that permit the exchange of management information between stations attached to IEEE 802 **local and metropolitan area networks** are defined. The standard includes the specification of managed objects that permit the operation of the protocol elements to be remotely managed.

Keywords: local area network, management, Metropolitan area networks

Designation: P802.1D

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for **Local and Metropolitan Area Networks**: Media Access Control (MAC) Bridges

Status: Revision Project

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: Revision of the standard to: Change the title of the standard to its original form, prior to the publication of the 1998 edition as an ISO/IEC standard; incorporate technical and editorial corrections, including those currently documented under P802.1y; incorporate existing published amendments (802.1t, 802.1w); remove the

Spanning Tree protocol defined in Clause 8 and attendant textual corrections.

Project purpose: Maintenance and removal of material that is now redundant.

Keywords:

Designation: 802.1D-1990

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Standard for [Local and Metropolitan Area Networks](#): Media Access Control (MAC) Bridges

Status: Superseded **Available in ISO/IEC 10038. Superseded by 802.1D-1998.

History: PAR APP: May 31, 1990, BD APP: May 31, 1990, ANSI APP: Oct 18, 1990

Abstract: An architecture for the interconnection of IEEE 802 Local Area Networks (LANs) below the level of the MAC Service, which is transparent to logical link control (LLC) and higher layer protocols, is defined. Transparent Bridging between Fibre Distributed Data Interface (FDDI) LANs and between FDDI LANs and IEEE 802 LANs is included. The operation and management of the connecting Bridges is specified. A Spanning Tree Algorithm and Protocol ensures a loop-free topology and provides redundancy. The Bridging method is not particular to any MAC Type; criteria for additional MAC-specific Bridging methods are defined. Source-Routing Transparent (SRT) Bridges are defined in an annex, and the protocols for the operation of source routing in an SRT Bridge are specified.

Keywords: LAN, MAC, sublayer, interconnection, bridging

Designation: 802.1D-1998

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: IEEE Standard for Local Area Network MAC (Media Access Control) Bridges

Status: Approved Publication of IEEE **Revision of 802.1D-1990 edition (aka ISO/IEC 10038). 802.1D incorporates P802.1p and P802.12e. It also incorporates and supersedes published standards 802.1j and 802.6k.

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinskyw@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 5, 1991, BD APP: Jun 30, 1998, ANSI APP: Feb 4, 1999

Project scope: IEEE Std 802.1D specifies the operation of MAC Bridges, which interconnect IEEE 802 Standard Local Area Networks (LANs).

Project purpose: To implement correction, of both editorial and minor technical nature, to IEEE Std 802.1D.

Keywords: LAN, media access control bridges, MAC Bridge management

Designation: 802.1E-1990

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Reaffirmation status and year: 1998

Title: Standard for Local Area Network: System Load Protocol

Status: Changed Designation **Available in ISO/IEC 15802-4. Draft 7, dated 25 Mar 90, was approved.

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinskyw@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: May 31, 1990, BD APP: May 31, 1990, ANSI APP: Oct 12, 1990

Abstract: Services and protocol elements that permit the downloading of memory images to data processing equipment attached to IEEE 802 [Local and Metropolitan Area Networks](#) are defined. The protocol makes use of the group addressing capabilities inherent in LAN/MAN technologies to permit simultaneous loading of the same memory image to multiple destination systems. The standard includes the specification of managed objects that permit the operation of the load protocol to be remotely managed.

Keywords: LAN, load, protocol, local, networks

Designation: 802.1F-1993

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Reaffirmation status and year: 1998

Title: IEEE Standards for [Local and Metropolitan Area Networks](#): Common Definitions and Procedures for IEEE 802 Management Information

Status: Approved Publication of IEEE

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinskyw@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 5, 1991, BD APP: Nov 8, 1993, ANSI APP: Apr 13, 1994

Abstract: Management information and procedures applicable across the entire family of IEEE 802 LAN/MAN standards within the architectural framework for LAN/MAN Management specified in IEEE Std 802-1990 are identified. Common management information, such as attributes to represent MAC address and managed objects to represent configurable gauges, are specified. The need of developers of LAN/MAN management specifications for common procedures to develop, describe, and register management information is addressed.

Keywords: LAN, MAN, management, Metropolitan area networks, Local area networks

Designation: 802.1G

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Standard for Information Technology - Telecommunications and information exchange between systems - [Local and metropolitan area networks](#) - Common specifications - Part 5: Remote Media

Status: Changed Designation **See 15802-5:1998

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinskyw@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

Keywords:

Designation: 802.1H-1995

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Reaffirmation status and year: 2001

Title: [Local and Metropolitan Area Networks](#): IEEE Recommended Practice for Media Access Control (MAC) Bridging of Ethernet Version 2.0 in 802 Local Area Networks

Status: Changed Designation **This is now available as ISO/IEC Technical Report 11802-5: 1997.

Technical Contact: Michael J Seaman, Phone:415-722-6843, Email:mick_seaman@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 19, 1992, BD APP: Jun 14, 1995, ANSI APP: Jan 2, 1996

Abstract: Extensions to the behavior of ISO/IEC 10038 (IEEE 802.1D) media access control (MAC) Bridges, in order to facilitate interoperability in bridged local area networks (LANs) comprising CSMA/CD networks interconnected with other types of LAN using MAC Bridges, where the CSMA/CD networks contain a mixture of ISO/IEC 8802-3 and Ethernet V2.0 end stations, are specified. Additionally, guidelines are provided for the development of nonstandard 802 protocols, with particular emphasis on conversion of existing Ethernet protocols and the behavior to be expected from a Bridge, for the purpose of avoiding future incompatibilities.

Keywords: carrier sense, multiple access, CSMA/CD, data processing, ethernet, fibre distributed data interface, FDDI, information exchange, LAN protocol, LAN, MAN, MAC bridges, interconnection, network interconnect, translation table, selective translation table

Designation: 802.1i-1992

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Standard for [Local and Metropolitan Area Network](#) MAC Bridges - Fibre Distributed Data Interface (FDDI) Supplement

Status: Superseded **Available in ISO/IEC 10038. Supplement to 802.1D-1990. Superseded by 802.1D-1998.

History: PAR APP: May 31, 1990, BD APP: Mar 19, 1992, ANSI APP: Oct 12, 1992

Abstract: This standard is a supplement to IEEE Std 802.1D-1990. The scope and field of application of IEEE Std 802.1D-1990 are extended to transparent bridging between Fibre Distributed Data Interface (FDDI) local area networks (LANs) and between FDDI LANs and IEEE 802 LANs.

Keywords: FDDI

Designation: 802.1j-1996

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Supplement to Information technology-Telecommunications and information exchange between systems- Local area networks-Media access control (MAC) bridges: Managed objects for MAC bridges

Status: Superseded **Supplement to IEEE Std 802.1D-1990 [ISO/IEC 10038-1993]. On 6/98 Rev agenda to be incorporated into 802.1D Superseded by 802.1D-1998

History: PAR APP: Dec 5, 1991, BD APP: Oct 17, 1996, ANSI APP: Mar 12, 1997

Project scope: The encoding in ISO GDMO* format of the managed objects and operations specified for MAC Bridges in IEEE Std 802.1D *Guidelines Document for Managed Objects

Project purpose: To facilitate management of IEEE Std 802.1D MAC Bridges using OSI Management Protocols.

Abstract: Managed object classes and their components that permit remote management of ISO/IEC 10038-conformant MAC bridges by means of suitable management protocols, including the services and protocols defined in ISO/IEC 15802-2: 1995, LAN/MAN Management; and those defined in ISO/IEC 9595: 1991, CMIS; and ISO/IEC 9596-1: 1991, CMIP; are defined. The managed object definitions are documented in the notation defined in ISO/IEC 10165- 4: 1992, GDMO.

Keywords: 802.1D, MAC, data processing, layer managed objects, layer management, LAN, local area networks, managed objects, metropolitan area networks, MAN, network interconnection

Designation: 802.1k-1993

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Reaffirmation status and year: 1998

Title: [Local and Metropolitan Area Networks](#): Supplement to LAN/MAN Management: Discovery and Dynamic Control of Event Forwarding (Clause 11)

Status: Changed Designation **Available in ISO/IEC 15802-2. Supplement to IEEE Std 802.1B-1992.

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinsky@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 3, 1992, BD APP: Jun 17, 1993, ANSI APP: Jan 4, 1994

Abstract: Services and protocol elements that permit the exchange of management information between stations attached to IEEE 802 [local and metropolitan area networks](#) are defined. The standard includes the specification of managed objects that permit the operation of the protocol elements to be remotely managed.

Keywords: LAN, Management, MAN, dynamic control

Designation: 802.1m-1993

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Reaffirmation status and year: 1998

Title: Standard for System Load Protocol Supplement: Managed Object Definitions and Protocol Implementation Conformance Statement (PICS) Proforma

Status: Changed Designation **Available in ISO/IEC 15802-4. Supplement to 802.1E.

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinsky@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 18, 1992, BD APP: Sep 29, 1993, ANSI APP: Feb 24, 1994

Abstract: Defines managed object classes for the System Load Protocol, compatible with the IEEE 802.1B and ISO/IEC CMIP protocols and defines a PICS Proforma for the System Load Protocol. These items are specified in the form of changes to the base text of IEEE Std 802.1E-1990.

Keywords:

Designation: 802.1p

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Standard for [Local and Metropolitan Area Networks](#)-Supplement to Media Access Control (MAC) Bridges: Traffic Class Expediting and Dynamic Multicast Filtering

Status: Superseded **On 6/98 RevCom approved incorporation into 802.1D

History: PAR APP: Sep 21, 1995

Project scope: Specifications of mechanisms in MAC bridges to expedite delivery of time critical traffic and to limit the extent of high bandwidth multicast traffic within a Bridged Local Area Network. Specification of mechanisms to classify traffic as supporting time critical services or requiring multicast filtering on the basis of MAC frame information. Specification of optional protocol mechanism in MAC bridges to support dynamic registration for time critical delivery or filtering services by end stations. Specification of optional protocols between MAC Bridges to convey registration information in a Bridged Local Area Network.

Project purpose: To improve support of time critical and multicast intensive applications, including "multi-media" interactive applications, across bridged LANs. To reduce the degree to which the level of multicast traffic and the loading levels selected for timely information delivery limit the number of attached stations and the throughput of

Bridged Local Area Networks. To facilitate Bridged Local Area Network support of the "hierarchical multicast" capabilities developed for internets, in a way that is compatible with their emerging network layer protocols.

Keywords: local area networks, media access control bridges, traffic class expediting, multicast address filtering, MAC Bridge management, traffic class, 802

Designation: P802.1Q

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standards for Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks

Status: Revision Project

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Aug 14, 2003

Project scope: This standard specifies a general method for the operation of MAC Bridges that support the construction of Virtual LANs.

Project purpose: The standard provides common interoperable solutions to the establishment of Virtual LAN Bridged infrastructures. Revision is needed in order to deal with editorial and technical corrections, to remove obsolete material, and also to reflect changes necessary as a result of enhancements to IEEE Std 802.1D - Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Bridges, upon which IEEE Std 802.1Q depends.

Keywords:

Designation: 802.1Q-1998

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 2003

Title: IEEE Standards for Local and Metropolitan Area Networks: Virtual Bridged Local Area Networks

Status: Approved Publication of IEEE

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinskyw@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 19, 1996, BD APP: Dec 8, 1998, ANSI APP: May 12, 1999

Project scope: To develop an architecture and bridge (1) protocols for the logical partitioning of a Bridged Local Area Network (1-2-3) that provides separate instances of the MAC service (4) to administratively defined groups of users, independent of physical location. The architecture and protocols will be compatible and interoperable with existing Bridged Local Area Network equipment and will support a range of implementations.

Project purpose: This standard will provide an architecture, protocols, and mappings for bridges to provide that interoperability and consistent management.

Keywords: local area networks, media access control bridges, virtual LAN, MAC Bridge management

Designation: 802.1Q,2003 Edition-2003

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standards for Local and Metropolitan Area Networks: Virtual Bridged Local Area Networks

Status: Changed Designation **Number changed to P802.12e at 9/19/96 StdsBd mtg.

Publication type: Special Publication

Technical Contact: Patricia Thaler, Phone:916-788-5662, Email:pat_thaler@agilent.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 21, 1996

Project scope: To add a subclause under 2.5 of 802.1D (Support of the Internal Sublayer Service by Specific MAC Procedures) to cover bridge operation with IEEE 802.12 MACs.

Project purpose: To provide the required 802.12 specific information to the 802.1D standard.

Keywords:

Designation: 802.1r

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to ISO/IEC 15802-3 (802.1D): Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Common specifications - Part 3: Media Access Control (MAC) Bridges - GARP Proprietary Attribute Registration Protocol (GPRP)

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: William P Lidinsky, Phone:(630) 840-8067, Email:lidinskyw@acm.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 8, 1998

Project scope: Definition of a new GARP Application, making use of and extending the existing specification of GARP contained in 802.1D, that will allow vendor-defined attribute values to be registered and distributed among GARP-aware Bridges in a Bridged LAN.

Project purpose: This supplement to Std 802.1D defines an additional GARP Application aimed at allowing vendor-specific attribute values to be distributed via GARP in a standard and interoperable manner, and allowing vendor-specific attribute values that may have a wider application within other vendor's equipment to be made available for more general use.

Keywords:

Designation: 802.1s-2002

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 2003

Title: IEEE Standards for Local and Metropolitan Area Networks - Amendment to 802.1Q Virtual Bridged Local Area Networks: Multiple Spanning Trees

Status: Approved Publication of IEEE

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 16, 1998, BD APP: Dec 11, 2002, ANSI APP: Mar 31, 2003

Project scope: To develop an architecture and protocols for the use of multiple instances of the Spanning Tree Protocol (-1-) within a network employing VLANs (-2-). The architecture and protocols will be compatible and interoperable with existing Virtual Bridged Local Area Network equipment and will support a range of implementations.

Project purpose: 802.1Q Virtual LANs provides the equivalent of separate LANs over a single bridged LAN, using a single instance of the Spanning Tree Protocol. Despite multiple independent implementations employing multiple instances of the Spanning Tree Protocol, there is currently no interoperability between different vendors, nor a coherent management framework for different techniques. This standard will provide an architecture, protocols, and mappings for bridges to provide that interoperability and consistent management.

Keywords:

Designation: 802.1t-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Information technology - Telecommunications and information exchange between systems - **Local and metropolitan area networks** - Common specifications - Part 3: Media Access Control (MAC) Bridges - Amendment 1: Technical and Editorial Corrections

Status: Approved Publication of IEEE

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 16, 1998, BD APP: Mar 17, 2001

Project scope: Maintenance - Technical and editorial corrections to the 802-1D- 1998 standard.

Project purpose: Maintenance - Technical and editorial corrections to the 802- 1D-1998 standard.

Keywords:

Designation: 802.1u-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 2003

Title: IEEE Standard for Virtual Bridged Local Area Networks - Corrigendum 1: Technical and Editorial Corrections

Status: Approved Publication of IEEE

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 18, 1999, BD APP: Mar 17, 2001, ANSI APP: Aug 2, 2001

Project scope: Maintenance - anticipated technical and editorial corrections to the 802.1Q-1998 standard.

Project purpose: Anticipated technical and editorial corrections to the 802.1Q standard.

Keywords:

Designation: 802.1v-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 2003

Title: IEEE Standards for **Local and Metropolitan Area Networks**: Virtual Bridged Local Area Networks: VLAN Classification by Protocol and Port: Amendment to 802.1Q

Status: Approved Publication of IEEE

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 26, 1999, BD APP: Mar 17, 2001, ANSI APP: Aug 2, 2001

Project scope: IEEE 802.1Q specifies a single PVID variable (Port VLAN Identifier) for each port of a switch. The configurable value of this single PVID variable specifies the VLAN into which frames untagged at ingress to the port are to be classified. The project will develop a supplement to 802.1Q to specify optional additional classification rules per port based on the protocol (as designated in the frame by 802 family portocols identifiers) in the received untagged frame. The project will consider compatibility and interoperability with existing 802.1Q bridges.

Project purpose: Classifying multiple protocols into a single VLAN often imposes VLAN boundaries that are inappropriate for some of the protocols, requiring th presence of a non-standard entity to relay between VLANs the frames bearing the protocols for which the VLAN boundaries are inappropriate. The non-standard relay makes the boundaries of the VLANs transparent to the relayed protocols, depriving those protocols of the benefits of the VLANs. The proposed supplement will benefit users of multi- protocol LANs by permitting them to specify VLAN structures suitable for each protocol present in a LAN, and removing the need for a non-standard relay function between VLANs.

Keywords:

Designation: 802.1w-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Information Technology -Telecommunications and Information Exchange Between Systems - **Local and Metropolitan Area Networks** - Common Specifications - Part 3: Media Access Control (MAC) Bridges: Amendment 2 - Rapid Reconfiguration

Status: Approved Publication of IEEE

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 26, 1999, BD APP: Jun 14, 2001, ANSI APP: Oct 25, 2001

Project scope: Specificatoin of enhancements to the auto-configuring mechanisms and management controls in 802.1D-1998 that constrain user data frames to all or part of a loop free topology. Where redundant alternate bridges and/or connecting LANs are available, these enhancements will provide faster reconfiguration and restoration of the MAC service if LAN component failure occurs.

Project purpose: LAN based applications, including new voice and multi-media solutions, are increasingly mission critical and require much improved network availability and scalability. An availability strategy that includes redundant bridges and LAN media, together with rapid failure detection and reconfiguration, allows the use of currently available cost effective LAN components. Techniques that are broadly compatible with 802.1D-1998, but not interoperable, are now emerging from multiple vendors. The proposed project will provide users with interoperable solutions.

Keywords:

Designation: P802.1X

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for **Local and Metropolitan Area Networks** - Port-Based Network Access Control

Status: Revision Project

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please

contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Aug 14, 2003

Project scope: The scope of this project is the use of the physical access characteristics of IEEE 802 LANs in order to provide a means of authenticating and authorizing devices attached to a LAN port. The reason for revising the standard is to reflect editorial and technical corrections, and to better facilitate its use in 802.11 Wireless LANs.

Project purpose: The standard provides common interoperable solutions using standards based authentication and authorization infrastructures already supporting schemes such as dial up access. Revision is needed in order to deal with editorial and technical corrections, and also to reflect changes necessary in the light of deployment in 802.11-based infrastructures.

Keywords:

Designation: 802.1X-2001

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Port Based Network Access Control

Status: Approved Publication of IEEE

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 30, 2000, BD APP: Jun 14, 2001, ANSI APP: Oct 25, 2001

Project scope: Specification of: (a) mechanisms to allow network access decisions, made using existing standard higher layer authentication and authorization protocols, to be enforced at individual ports of a networked system; (b) encoding of those protocols over 802 LANs where no suitable encoding is yet defined. The project will not define or require systems that are enforcing network access decisions to: (c) process or interpret authentication information; (d) modify user data frames to secure conversations; (e) filter user data frames based on layer 2 or higher layer addressing or protocol information. The access control mechanism will be usable on LAN ports of all types of systems attached to a LAN, including bridges, routers, servers and other end stations.

Project purpose: There is no standard mechanism that allows a network administrator to control access to and from a LAN segment based on the authenticated state of a port user. Simple network connectivity affords anonymous access to enterprise data and the global Internet. As 802 LANs are deployed in more accessible areas, there is an increasing need to authenticate and authorize basic network access. The proposed project will provide common interoperable solutions using standards based authentication and authorization infrastructures already supporting schemes such as dial up access.

Keywords:

Designation: 802.1y

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks - Media Access Control (MAC) Bridges - Amendment 3: Technical and Editorial Corrections

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 27, 2001

Project scope: Maintenance: Technical and editorial corrections to the 802.1D:1998 MAC Bridge standard and its amendments (802.1t, 802.1w).

Project purpose: Maintenance: Technical and editorial corrections to the 802.1D:1998 MAC Bridge standard and its amendments (802.1t, 802.1w).

Keywords:

Designation: 802.1z

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks - Amendment 4: Technical and Editorial Corrections

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 27, 2001

Project scope: Maintenance: Technical and editorial corrections tot he 802.1Q:1998 Virtual Bridged LAN standard and its amendments (802.1u, 802.1v).

Project purpose: Maintenance: Technical and editorial corrections to the 802.1Q:1998 Virtual Bridged LAN standard and its amendments (802.1u, 802.1v).

Keywords:

Designation: 802.1aa

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks - Port Based Network Access Control - Amendment 1: Technical and Editorial Corrections

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 27, 2001

Project scope: Maintenance: Technical and editorial corrections to the 802.1X:2001 Port based Network Access Control standard.

Project purpose: Maintenance: Technical and editorial corrections to the 802.1X:2001 Port based Network Access Control standard.

Keywords:

Designation: P802.1AB

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Local and Metropolitan Area Networks: Station and Media Access Control Connectivity Discovery

Status: New Standard Project

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 12, 2002

Project scope: To define a protocol and management elements, suitable for advertising information to stations attached to the same LAN/MAN, for the purpose of populating physical topology and device discovery management information databases. The protocol will facilitate the identification of stations connected by IEEE 802 LANs/MANs, their points of interconnection and their access points for management protocols.

Project purpose: An IETF standard MIB (RFC 2922) as well as a number of vendor specific MIBs have been created to describe a network's physical topology and associated devices connected to that topology, however, there is no standard protocol for populating this MIB or communicating this information among stations on the LAN/MAN. This standard will specify the necessary protocol and management elements.

Keywords:

Designation: P802.1AC

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Media Access Control (MAC) Service Definition

Status: New Standard Project

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 12, 2002

Project scope: To define the Medium Access Control Service found in **Local and Metropolitan Area Networks**, and the Internal Sublayer Service and Extended Internal Sublayer Service provided within MAC Bridges, in abstract terms of: a) their semantics, primitive actions and events; and b) the parameters of, interrelationship between, and valid sequences of, these actions and events.

Project purpose: The MAC service was originally defined within an ISO/IEC standard (ISO/IEC 15802-1), and the Internal Sublayer Services are defined within IEEE 802.1D and IEEE 802.1Q. The purpose of this standard is to revise the documentation of these existing services within a single, common service definition standard. It is not the purpose of this project to make technical changes to these services.

Keywords:

Designation: 802.1ad

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

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

Status: Amendment

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: The scope of this standard is to develop an architecture and bridge (-1-) protocols, compatible and interoperable with existing Bridged Local Area Network protocols and equipment, to: (a) provide separate instances of the MAC service (-3-) to multiple independent users of a Bridged Local Area Network (-1-, -2-) in a manner that does not require cooperation among the users, and requires a minimum of cooperation between the users and the provider of the MAC service, and to define basic management of users' MAC services. References: -1- IEEE Std. 802.1D, -2- IEEE Std. 802.1Q, -3- IEEE Std. 802, -4- IEEE P802.1S.

Project purpose: This standard will enable a Service Provider to offer the equivalent of separate LAN Segments, Bridged or Virtual Bridged LANs, to a number of users, over the Provider's bridged network. This Standard will enable the use of the architecture and protocols of IEEE Std 802.1Q, and provide for interoperability and consistent management.

Keywords:

Designation: P802.1AE

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

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

Status: New Standard Project

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 11, 2003

Project scope: The scope of this project is to specify provision of connectionless user data confidentiality, frame data integrity, and data origin authenticity by media access independent protocols and entities that operate transparently to MAC Clients**. Key management and the establishment of secure associations is outside the scope but will be referenced by this project. **As specified in IEEE Standards 802, 802.2, 802.1D, 802.1Q, and 802.1X.

Project purpose: This standard will facilitate secure communication over publicly accessible LAN/MAN media for which security has not already been defined, and allow the use of IEEE Std 802.1X, already widespread and supported by multiple vendors, in additional applications.

Keywords:

Designation: 802.2-1989

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 1997

Title: IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - **Local and Metropolitan Area Networks** - Specific Requirements - Part 2: Logical Link Control

Status: Changed Designation **Available in ISO/IEC 8802-2.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 28, 1985, BD APP: Aug 17, 1989, ANSI APP: Jan 12, 1990

Abstract: This standard is part of a family of local area network (LAN) standards dealing with the physical and data link layers as defined by the ISO Open Systems Interconnection Reference Model. It describes the functions, features, protocol, and services of the logical link control (LLC) sublayer, which constitutes the top sublayer in the data link layer of the ISO 8802 Local Area Network Protocol. The services required of, or by, the LLC sublayer at the logical interfaces with the network layer, the MAC sublayer, and the LLC sublayer management function are specified. The protocol data unit (PDU) structure for data communication systems is defined using bit-oriented procedures, as are two types of operation for data communication between service access points. In one type of operation, PDUs are exchanged between LLCs without the need for the establishment of a data link connection. In the other, a data link connection is established between two LLCs prior to any exchange of information-bearing PDUs.

Keywords: logical, link, control, local, area, Protocols, Local area networks

Designation: 802.2a-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 1997

Title: Standard for Flow Control Techniques for Bridged Local Area Networks

Status: Changed Designation **Available in ISO/IEC 8802-2.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 21, 1991, BD APP: Dec 2, 1993, ANSI APP: Jun 3, 1994

Abstract: Provide updates to the existing 802.2 Standard.

Keywords:

Designation: 802.2b-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 1997

Title: Standard for Acknowledged Connectionless-Mode Service and Protocol (Type 3 Operation)

Status: Changed Designation **Available in ISO/IEC 8802-2.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 21, 1991, BD APP: Dec 2, 1993, ANSI APP: Jun 3, 1994

Abstract: Abstract not available. See ISO/IEC 8802-2.

Keywords:

Designation: 802.2c-1997

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Part 2: Logical link control-Supplement 3: Conformance requirements

Status: Approved Publication of IEEE **Draft is sold as ISO/IEC 8802-2:1994/Amd. 3.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 26, 1997, BD APP: Sep 16, 1997, ANSI APP: Apr 15, 1998

Project scope: Provides a means, for the implementor of the standard, to indicate the options supported and the choices made in the implementation of the standard, so that an appropriate set of tests can be employed by testing centers in the conformance testing process.

Project purpose: Provide the required Portocol Implementation Conformance Statement(PICS) Proforma for LLC Type 1 Operation, LLC Type 2 Operation and LLC Type 3 Operation.

Keywords:

Designation: 802.2d-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 1997

Title: Supplement to 802.2, Information Processing Systems - Local Area Networks - Part 2: Logical Link Control

Status: Changed Designation **Available in ISO/IEC 8802-2. Supplement to 802.2.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 26, 1991, BD APP: Dec 2, 1993, ANSI APP: Jun 3, 1994

Abstract: Abstract not available. See ISO/IEC 8802-2.

Keywords:

Designation: 802.2e-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 1997

Title: Supplement to 802.2, Information Processing Systems - Local Area Networks - Part 2: Logical Link Control - Bit Referencing

Status: Changed Designation **Available in ISO/IEC 8802-2.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 26, 1991, BD APP: Dec 2, 1993, ANSI APP: Jun 3, 1994

Abstract: Abstract not available. See ISO/IEC 8802-2.

Keywords:

Designation: 802.2f-1997

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Managed objects definition for logical link control (LLC)

Status: Approved Publication of IEEE

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 26, 1997, BD APP: Sep 16, 1997, ANSI APP: Apr 15, 1998

Project scope: Define LLC Management Objects for Type 1, Type 2, and Type 3 Operations, including their attributes, actions, and event notifications.

Project purpose: Provide updates to the existing IEEE 802.2 Standard to reflect the management aspect of the LLC Types of Operations.

Keywords:

Designation: 802.2g

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement to 802.2, Information Processing Systems - Local Area Networks: Logical Link Control (LLC) Type 4 High Speed, High Performance Operation

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 26, 1991

Project scope: For use in emerging high performance LANs and MANs.

Project purpose: To provide an LLC protocol, for use in bridged and single segment LANs and MANs, that supports high-speed implementations, efficient high performance operations, error detection across bridged LANs/MANs, and the ability for multiple connections between the same pair of LSAPs. This protocol would be capable of coexisting with LLC Type 1, 2 and 3 operations. Protocol features used to accomplish support of high speed implementations might include features such as fixed header sizes, limited options, and the decoupling of the transmitter and receiver functions. Protocol features used to accomplish support of efficient, high performance operations, might include features such as rate control, lightweight connection control, selective retransmission, multi-peer connections, and stream-oriented service.

Keywords:

Designation: 802.2h-1997

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Optional toleration of duplicate information transfer format protocol data units (IPDUs)

Status: Approved Publication of IEEE **Supplement to 802.2.

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 26, 1997, BD APP: Sep 16, 1997, ANSI APP: Apr 15, 1998

Project scope: Provide a procedural option in Type 2 operation that will allow a receiver to tolerate the receipt of an already correctly received I PDU by discarding it instead of initiating a Frame Reject (FRMR) exception condition that would require the reset of the logical link control procedure.

Project purpose: Improve the overall throughput capability in those situations where the receiver is capable of making an acceptable judgement regarding the acceptableness of the I PDUs received, even when some of those frames are duplicates of frames already properly and correctly received.

Keywords:

Designation: 802.3-1985

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Local Area Networks: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) - (ETHERNET)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: BD APP: Jun 23, 1983, ANSI APP: Dec 21, 1984

Abstract: This **Local and Metropolitan Area Network** standard specifies the media access control characteristics for the Carrier Sense Multiple Access with Collision Detection (CSMA/CD) access method. It also specifies the media, Medium Attachment Unit (MAU) and physical layer repeater unit for 10 Mb/s baseband and broadband systems and it provides a 1 Mb/s baseband implementation. Specifications for MAU types 10BASE5, 10BASE2, FOIRL (fiber optic inter-repeater link), 10BROAD36, 1BASE5, and 10BASE-T are included. System considerations for multisegment 10 Mb/s baseband networks are provided. Layer and sublayer interface specifications are aligned to the ISO Open Systems Interconnection Basic Reference Model and 8802 models. The 8802-3 internal model is defined and used.

Keywords: LAN, CSMA/CD, ethernet, local, networks

Designation: 802.3

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement for 802.3 - (First Maintenance Ballot)

Status: Superseded

History: PAR APP: Mar 21, 1991

Keywords:

Designation: 802.3

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications, Information technology-Telecommunications and information exchange between systems-**Local and metropolitan area networks**-Specific requirements-

Status: Superseded **Incorporating ANSI/IEEE Std 802.3, 1996 Edition, IEEE 802.3r-1996, 802.3u- 1995, 802.3x&y-1997;, 802.3z-1998, and 802.3aa-1998. Superseded by 802.3- 2002 (802.3ag).

Keywords:

Designation: 802.3-2002

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: 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 - Maintenance Revision #6

Status: Approved Publication of IEEE **Full revision PAR had been numbered as P802.3ag. However, this standard is 802.3-2002. It supersedes all previous 802.3 base documents and amendments through 802.3ad.

Publication type: Special Publication

Technical Contact: Geoffrey O Thompson, Phone:408-495-1339, Email:thompson@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 21, 2000, BD APP: Jan 14, 2002, ANSI APP: May 13, 2002

Project scope: Maintenance changes and current 802.3 Standard

Project purpose: Define parameters for Carrier Sense Multiple Access with Collision Detection (CSMA/CD) access method and physical layer specifications. Add accumulated maintenance changes and provide general review of current 802.3 Standard (1998 Edition and 802.3ab, 802.3ac 802.3ad)

Keywords:

Designation: 802.3-2002-2002 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: 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 Status: Approved Publication of IEEE **This standards supersedes 802.3ag History: BD APP: Jan 14, 2002 Keywords:
Designation: 802.3a-1992 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: Section 10, Medium Attachment Unit and Baseband Medium Specification, Type 10BASE2 Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag). History: PAR APP: Mar 21, 1985, BD APP: Oct 20, 1988 Abstract: Abstract not available. See ISO/IEC 8802-3. Keywords: local, area, networks, CSMA/CD, sec 10
Designation: 802.3b-1985 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: Supplement to 802.3: Broadband Medium Attachment Unit and Broadband Medium Specifications, Type 10BROAD36 (Section 11) Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag). History: BD APP: Sep 19, 1985, ANSI APP: Feb 28, 1986 Abstract: Abstract not available. See ISO/IEC 8802-3. Keywords: Section 11, local, area, networks, LAN
Designation: 802.3c-1985 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: Supplement to 802.3 - Repeater Unit for 10 Mb/s Baseband Networks (Sections 9.1 - 9.8) Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag). History: BD APP: Dec 12, 1985, ANSI APP: Jun 4, 1986 Abstract: Abstract not available. See ISO/IEC 8802-3. Keywords: repeater, unit, section 12, LAN
Designation: 802.3d-1987 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: Supplement to 802.3 - Medium Attachment Unit and Baseband Medium Specification for a Vendor Independent Fiber Optic Inter Repeater Link (Section 9.9) Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag). History: PAR APP: Mar 28, 1986, BD APP: Dec 10, 1987, ANSI APP: Feb 9, 1989 Abstract: Abstract not available. See ISO/IEC 8802-3. Keywords: fiber optic, repeater, link, local, area
Designation: 802.3e-1987 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: Supplement to 802.3 - Physical Signaling, Medium Attachment, and Baseband Medium Specifications, Type 1BASE5 STARLAN (Section 12) Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag). History: BD APP: Jun 11, 1987, ANSI APP: Dec 15, 1989 Abstract: Abstract not available. See ISO/IEC 8802-3. Keywords: physical, signal, medium, attachment, baseband
Designation: 802.3h-1990 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: Supplement to 802.3 - Layer Management (Section 5) Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag). History: PAR APP: Jun 9, 1988, BD APP: Sep 28, 1990, ANSI APP: Mar 11, 1991 Abstract: This Local Area Network (LAN) standard defines the Layer Management specification for networks based on the CSMA/CD access method. It provides the formal description of the relationship between the CSMA/CD Layer Entities and the Layer Management facilities. Keywords: LAN, layer, management, local, networks
Designation: 802.3i-1990 Sponsor: Computer Society/Local and Metropolitan Area Networks Title: Supplement to 802.3 - System Considerations for Multisegment 10 M/S Baseband Networks (Section 13) and Twisted-Pair Medium Attachmen Unit and Baseband Med Spec, Type 10BASE-T (Section 14) Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Jun 9, 1988, BD APP: Sep 28, 1990, ANSI APP: Mar 8, 1991

Abstract: This Local Area Network standard specifies the Type 10BASE-T Medium Attachment Unit (MAU) and one specific unshielded twisted-pair medium for use with the MAU. This MAU is specified for use in a 10 Mb/s baseband CSMA/CD LAN. Guidelines for its application in a repeated multisegment heterogeneous CSMA/CD network are included.

Keywords: LAN, medium, twisted pair, baseband, 10baset

Designation: 802.3j-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to 802.3 - Fiber Optic Active and Passive Star-Based Segments, Type 10BASE-F (Sections 15-18)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Feb 2, 1989, BD APP: Sep 15, 1993, ANSI APP: Mar 15, 1994

Abstract: This supplement to ISO/IEC 8802-3:1992 defines conformance requirements for fiber optic active and passive star-based segments, type 10BASE-F implementations for local and metropolitan area networks.

Keywords:

Designation: 802.3k-1992

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to 802.3 - Layer Management for 10 Mb/s Baseband Repeaters (Section 19)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Mar 19, 1992, BD APP: Sep 17, 1992, ANSI APP: Mar 8, 1993

Abstract: This supplement to ISO/IEC 8802-3:1992 defines a set of mechanisms that enable management of ISO/IEC 8802-3 10 Mb/s baseband repeater units. The managed objects are defined in accordance with IEEE 802.1 and ISO/IEC standards for network management.

Keywords: carrier sense multiple access, CSMA/CD, LAN, collision, detection, layer, management, local, area, networks, hub, repeater

Designation: 802.3l-1992

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to 802.3 - Type 10BASE-T Medium Attachment Unit (MAU) Protocol Implementation Conformance Statement (PICS) Proforma (Section 14.10)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 26, 1991, BD APP: Sep 17, 1992, ANSI APP: Feb 23, 1993

Abstract: This supplement to ISO/IEC 8802-3:1992 defines conformance requirements for Type 10BASE-T Medium Attachment Unit (MAU) implementations for local and metropolitan area networks.

Keywords: local, area, networks, metropolitan, carrier sense multiple access, CSMA/CD, collision, detection, MAU

Designation: 802.3m-1995

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to 802.3 - (Second Maintenance Ballot)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 26, 1991, BD APP: Sep 21, 1995, ANSI APP: Aug 8, 1996

Abstract: Abstract not available. See ISO/IEC 8802-3.

Keywords:

Designation: 802.3n-1995

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to 802.3 - (Third Maintenance Ballot)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 26, 1991, BD APP: Sep 21, 1995, ANSI APP: Apr 8, 1996

Abstract: Abstract not available. See ISO/IEC 8802-3.

Keywords:

Designation: 802.3p-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to 802.3 - Layer Management for 10 Mb/s Baseband Medium Attachment Units (MAUs) (Section 20) Published with 802.3q-1993.

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Mar 19, 1992, BD APP: Jun 17, 1993, ANSI APP: Jan 4, 1994

Abstract: Abstract not available. See ISO/IEC 8802-3.

Keywords:

Designation: 802.3q-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to 802.3 - Guidelines for the Development of Managed Objects (GDMO) (ISO 10164-4) Format for Layer Managed Objects (Clause 5)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Mar 19, 1992, BD APP: Jun 17, 1993, ANSI APP: Jan 4, 1994

Abstract: Abstract not available. See ISO/IEC 8802-3.

Keywords: carrier sense multiple access, collision, detection, CSMA/CD, LAN, DTES, layer management, objects, managed, objects, medium, attachment, units, MAU

Designation: 802.3r-1996

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Type 10BASE5 Medium Attachment Unit (MAU) Protocol Implementation Conformance Statement (PICS) Proforma (Subclause 8.8)

Status: Superseded **Supplement to ISO/IEC 8802-3:1996 [ANSI/IEEE Std 802.3, 1996 Edition]. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 15, 1993, BD APP: Jul 29, 1996, ANSI APP: Jan 6, 1997

Abstract: A Protocol Implementation Conformance Statement (PICS) proforma for Type 10BASE5 Medium Attachment Unit (MAU) (clause 8) is provided. The PICS proforma is used to evaluate the conformance of a particular implementation of the standard.

Keywords: dynamic conformance testing, medium attachment unit, MAU, PICS proforma, protocol implementation conformance, static conformance review, Type 10BASE5

Designation: 802.3s-1995

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement to 802.3 - (Fourth Maintenance Ballot)

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 15, 1993, BD APP: Sep 21, 1995, ANSI APP: Apr 8, 1996

Abstract: Abstract not available. See ISO/IEC 8802-3.

Keywords:

Designation: 802.3t-1995

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Informative Annex for Support of 120 Ohm Cables in 10BASE-T Simplex Link Segment

Status: Superseded **Available in ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 15, 1993, BD APP: Jun 14, 1995, ANSI APP: Jan 12, 1996

Abstract: Abstract not available. See ISO/IEC 8802-3.

Keywords:

Designation: 802.3u-1995

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks**-Supplement - Media Access Control (MAC) Parameters, Physical Layer, Medium Attachment Units and Repeater for 100Mb/s Operation, Type 100BASE-T (Clauses 21-30)

Status: Superseded **Supplement to IEEE Std 802-3. Superseded by 802.3aa-1998.

History: PAR APP: Sep 15, 1993, BD APP: Jun 14, 1995, ANSI APP: Apr 4, 1996

Project scope: 1. The CSMA/CD access method of IEEE 802.3 will be retained without change. Therefore, the only change to Clause 4 Media access Control and Clause 6 PLS Service Specifications will be to add a subclause 4.4.2.3 containing the parameterized values for 100 Mb/s operation of the MAC. Management definitions will be provided that build upon the existing set with minimal changes. 2. The link segment physical layer specification and the multiport repeater specification will be optimized for operation over 100 meter TP links supporting one or more of the horizontal wiring schemes specified in EIA/TIA-568:1991 and TSB-36. The architecture will be sufficiently open that other physical later specifications may be added as future projects. A media independent interface (MII) will be defined which will allow operation of multiple physical later implementations under the MAC. 3. It is recognized that there may be some minor editorial changes required for editorial alignment. For example: "The PLS is found in chapter7" would require correction.1

Project purpose: This standard will provide a higher speed capability for 802.3 LANs at 100 Mb/s, made possible by recent developments in high speed signaling, particularly on unshielded twisted pair and advances in silicon technology. It will afford significant performance improvements with minimal vendor and customer investments by leveraging the infrastructure of 802.3 research, development and market deployment. The design focus for Higher Speed CSMA/CD is better performance for existing applications that are characterized by bursty traffic. This standard is also expected to support emerging applications in the market.

Abstract: The ISO/IEC CSMA/CD Media Access Control (MAC) is coupled with a family of new Physical Layer specifications to achieve 100 Mb/s operation. Known collectively as 100BASE-T, this family of Physical Layer specifications includes 100BASE-T4, which uses four pairs of ISO/IEC 11801: 1995 Category 3, 4, or 5 balanced cable; 100BASE-TX, which uses two pairs of Category 5 balanced cable or 150 ohm shielded balanced cable; and 100BASE-FX, which uses two multi-mode fibers. The two 100BASE-X specifications (100BASE-TX and 100BASE-FX) reused portions of the 100 Mb/s physical signaling specifications originally developed for Fibre Distributed Data Interface (FDDI).

Keywords: fast ethernet, 100BASE-FX, 100BASE-T, 100BASE-T4, 100BASE-TX, 100BASE-X, Auto-Negotiation, management, MII, repeater

Designation: 802.3v-1995

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement to 802.3 - Informative Annex for Support of 150 Ohm Cables in 10BASE-T Link Segment

Status: Superseded **Available as ISO/IEC 8802-3. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 22, 1994, BD APP: Dec 12, 1995, ANSI APP: Jul 16, 1996

Abstract: Abstract not available. See ISO/IEC 8802-3.

Keywords:

Designation: 802.3w

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement to 802.3 - Standard for Enhanced Media Access Control Algorithm

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Geoffrey O Thompson, Phone:408-495-1339, Email:thompson@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 14, 1995

Project scope: To develop a normative supplement to the IEEE 802.3 standard. This supplement will specify an optional enhancement to the MAC algorithm that improves performance, and is fully compatible and interoperable with the existing MAC.

Project purpose: The supplement will provide a formal state machine specification of the enhancement to the MAC algorithm, with appropriate descriptive text.

Keywords:

Designation: 802.3x-1997

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standards for **Local and Metropolitan Area Networks**: Specification for 802.3 Full Duplex Operation

Status: Superseded **Published with IEEE Std 802.3y-1997. Supplement to ISO/IEC 8802-3: 1996 [ANSI/IEEE Std 802.3, 1996 Edition]. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Jun 14, 1995, BD APP: Mar 20, 1997, ANSI APP: Sep 5, 1997

Project scope: To define the specification for bi-directional, simultaneous transmission and reception of IEEE 802.3 frames over media capable of supporting simultaneous bi-directional signaling (twisted pair and/or fiber). Flow control mechanisms will be addressed as relevant.

Project purpose: This standard will provide a higher performance option to the existing standard that allows performance to be optimized for IEEE 802.3 LANs (currently 10 and 100 Mb/s). This performance enhancement is made possible by the separate transmit and receive channels of twisted pair and/or fiber technologies. This standard will allow significant performance improvement and will provide a basis for interoperation of products referred to as 802.3 Full Duplex.

Abstract: Necessary changes and additions are made to provide for an additional, full duplex mode of operation on a speed-independent basis. Changes are made to the MAC and selected Physical Layer implementations (10BASE-T, 10BASE-FL, 100BASE-T) to support full duplex. A mechanism for pause-based flow control is also added.

Keywords: 100BASE-T2, Category 3, flow control, full duplex, MAC Control, management, Media Independent Interface, MII, pause, repeater

Designation: 802.3y-1997

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standards for **Local and Metropolitan Area Networks**: Physical Layer Specification for 100 Mb/s Operation on Two Pairs of Category 3 or Better Balanced Twisted Pair Cable (100BASE-T2)

Status: Superseded **Published with IEEE Std 802.3x-1997. Supplement to ISO/IEC 8802-3: 1996 [ANSI/IEEE Std 802.3, 1996 Edition]. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Jun 14, 1995, BD APP: Mar 20, 1997, ANSI APP: Sep 5, 1997

Project scope: A physical layer will be defined for 100BASE-T networks operating over cabling plants where two pairs of ISO/IEC 11801 Category 3 or better balanced twisted pair cabling are available. The standard will additionally be compatible with all other currently planned work.

Project purpose: This standard will allow 100 Mb/s operation on the majority of balanced cable (e.g. twisted pair) plants in use today, including virtually all of the cabling specified in the 10BASE-T standard. It will increase the availability of the 100 Mb/s speed to 802.3 LANs where only two pairs of Category 3 or better balanced cabling are available. This is a significant share of the current 10BASE-T user base.

Abstract: Changes and additions to the 100BASE-T portion of IEEE Std 802.3 are provided to specify an additional 100 Mb/s transceiver type 100BASE-T, which can support full duplex operation over two pairs of Category 3 or better cabling.

Keywords: 100BASE-T2, Category 3, flow control, full duplex, MAC Control, management, Media Independent Interface, MII, pause, repeater

Designation: 802.3z-1998

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Media Access Control Parameters, Physical Layers, Repeater and Management Parameters for 1,000 Mb/s Operation, Supplement to Information Technology - **Local and Metropolitan Area Networks** - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications -

Status: Superseded **Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Jun 20, 1996, BD APP: Jun 25, 1998

Project scope: Define Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Media Access Control (MAC) parameters and minimal augmentation of its operation, physical layer characteristics, repeater functions and management parameters for transfer of 802.3 and Ethernet format frames at 1,000 Mb/s.

Project purpose: The purpose of this project is to extend the 802.3 protocol to an operating speed of 1,000 Mb/s in order to provide a significant increase in bandwidth while maintaining maximum compatibility with the installed base of CSMA/CD nodes, previous investment in research and development, and principles of network operation and management.

Keywords:

Designation: 802.3aa-1998

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Maintenance Revision #5 (100 BASE-T), Standard for Information Technology - **Local and Metropolitan Area Networks** - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Maintenance Revision #5 (100 BASE-T)

Status: Superseded **Supersedes 802.3u-1995. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Jun 26, 1997, BD APP: Jun 25, 1998

Project scope: Limited to updating 802.3u to correct possible inaccuracies.

Project purpose: To correct and update Std. 802.3u using a group of revisions known as Group #1.

Keywords:

Designation: 802.3ab-1999

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Information Technology - Telecommunications and information exchange between systems - **Local and Metropolitan Area Networks** - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Physical Layer Parameters and Specifications for 1000 Mb/s Operation over 4 pair of Category 5 Balanced Copper Cabling, Type 1000BASE-T

Status: Superseded **Incorporated in 802.3,2000 Edition. The front matter of this standard includes a dedication to the memory of Valerie Zelenty. Superseded by 802.3- 2002 (802.3ag).

History: PAR APP: Mar 20, 1997, BD APP: Jun 26, 1999, ANSI APP: Jan 20, 2000

Project scope: Define physical layer characteristics and specifications for 1000 Mb/s operation on 4 pair of 100 ohm Category 5 balanced copper cabling as defined by EIA/TIA-568-A, Annex E or its equivalent as built from material specified by ISO/IEC 11801:1995.

Project purpose: The purpose of this project is to extend the 802.3 protocol to provide 1000 Mb/s operation over installed Category 5 generic facilities balanced copper cabling.

Keywords:

Designation: 802.3ac-1998

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: 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) frame extensions for Virtual Bridged Local Area Networks (VLAN) tagging on 802.3 networks

Status: Superseded **Incorporated in IEEE Std 802.3, 2000 Edition. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Sep 16, 1997, BD APP: Sep 16, 1998

Project scope: Specifications of 802.3 frame when carrying Virtual Bridged Local Area network (VLAN) tag information. Necessary adjustments to 802.3 Media Access Control (MAC) parameters e.g. maxFrameSize to accommodate Virtual Bridged Local Area Network tagged frames. Necessary adjustments to IEEE Std 802.3 clause 30 management attribute definitions to accommodate Virtual Bridged Local Area Network tagged frames.

Project purpose: To adjust the 802.3 frame format to align IEEE Std 802.3 with IEEE 802.1Q.

Keywords:

Designation: 802.3ad-2000

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Information Technology - Local and Metropolitan Area Networks - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications-Aggregation of Multiple Link Segments

Status: Superseded **Incorporated in IEEE Std 802.3, 2000 Edition. Superseded by 802.3-2002 (802.3ag).

History: PAR APP: Jun 25, 1998, BD APP: Mar 30, 2000, ANSI APP: Oct 30, 2000

Project scope: Specify a DTE to DTE logical link which consists of n parallel instances of an 802.3 point-to-point link segment. The logical link will support existing 802.3 MAC Clients. Define the necessary management objects and protocols to support link aggregation, including identification, addition and deletion of link segments to and from the logical link.

Project purpose: To increase link availability and bandwidth between DETs by specifying the necessary mechanisms for parallel link segment aggregation.

Keywords:

Designation: 802.3ae-2002

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Information Technology - Local & Metropolitan Area Networks - Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications - Media Access Control (MAC) Parameters, Physical Layer, and Management Parameters for 10 Gb/s Operation

Status: Approved Publication of IEEE

Technical Contact: Geoffrey O Thompson, Phone:408-495-1339, Email:thompson@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jan 30, 2000, BD APP: Jun 13, 2002, ANSI APP: Dec 17, 2002

Project scope: Define 802.3 Media Access Control (MAC) parameters and minimal augmentation of its operation, physical layer characteristics and management parameters for transfer of LLC and Ethernet format frames at 10 Gb/s using full duplex operation as defined in the 802.3 standard. In addition to the traditional LAN space, add parameters and mechanisms that enable deployment of Ethernet over the Wide Area Network operating at a data rate compatible with OC-192c and SDH VC-4-64c payload rate.

Project purpose: The purpose of this project is to extend the 802.3 protocol to an operating speed of 10 Gb/s and to expand the Ethernet application space to include Wide Area Network links in order to provide a significant increase in bandwidth while maintaining maximum compatibility with the installed base of 802.3 interfaces, previous investment in research and development, and principles of network operation and management.

Keywords:

Designation: 802.3af-2003

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: 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 - Data Terminal Equipment (DTE) Power Via Media Dependent Interface (MDI)

Status: Approved Publication of IEEE

Publication type: Special Publication

Technical Contact: Geoffrey O Thompson, Phone:408-495-1339, Email:thompson@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jan 30, 2000, BD APP: Jun 12, 2003, ANSI APP: Sep 22, 2003

Project scope: Define methodology for the provision of power via balanced cabling to connected Data Terminal Equipment with 802.3 interfaces. The amount of power will be limited by cabling physics and regulatory considerations. Compatibility with existing equipment will be considered.

Project purpose: To provide power for a new class of devices with 802.3 interfaces enabled by progress in silicon technology. These devices are characterized by low power requirements and LAN connectivity.

Keywords:

Designation: 802.3ah

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: 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 - Media Access Control Parameters, Physical Layers and Management Parameters for subscriber access networks

Status: Amendment

Publication type: Special Publication

Technical Contact: Howard M Frazier, Phone:925-461-9709, Email:millardo@dominetsystems.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 27, 2001

Project scope: Define 802.3 Media Access Control (MAC) parameters and minimal augmentation of the MAC operation, physical layer specifications, and management parameters for the transfer of 802.3 format frames in subscriber access networks at operating speeds within the scope of the current IEEE Std 802.3 and approved new projects.

Project purpose: To expand the application of Ethernet to include subscriber access networks in order to provide a significant increase in performance while minimizing equipment, operation, and maintenance costs.

Keywords:

Designation: 802.3aj

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: 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 Maintenance Revision #7

Status: Superseded

History: PAR APP: Jun 13, 2002

Project scope: Maintenance changes.

Project purpose: Add accumulated maintenance changes.

Keywords:

Designation: 802.3aj-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: 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 - Maintenance 7

Status: Approved Publication of IEEE

Technical Contact: Robert M Grow, Phone:858-391-4622, Email:bob.grow@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 13, 2002, BD APP: Sep 11, 2003

Project scope: IEEE Std 802.3, which addresses the CSMA/CD access method and physical layer specifications will be enhanced through necessary amendments and corrigenda.

Project purpose: IEEE Std 802.3 will be kept current and reflective of current implementation and application requirements, in accordance with the IEEE 802.3 Working Group maintenance process, defined at <http://www.ieee802.org/3/maint/index.htm>.

Keywords:

Designation: 802.3ak

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Information Technology - Telecommunications and Information Exchange Between Systems - **Local and Metropolitan Area Networks** - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications Amendment: Physical Layer and Management Parameters for 10 Gb/s Operation, Type 10GBASE-CX4

Status: Amendment

Technical Contact: Robert M Grow, Phone:858-391-4622, Email:bob.grow@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 20, 2003

Project scope: The scope of this project is to specify additions to and appropriate modifications of IEEE Std 802.3 as amended by IEEE Std 802.3ae- 2002 (and any other approved amendment or corrigendum) to add a copper Physical Medium Dependent (PMD) option for 10 Gb/s operation, building upon the existing 10GBASE-X Physical Coding Sublayer (PCS) and 10 Gigabit Attachment Unit Interface (XAUI) specifications.

Project purpose: The purpose of this project is to provide a lower-cost option for interconnection of closely located equipment (within ~15m of cable), typically within a stack or between equipment racks within a room.

Keywords:

Designation: 802.4-1990

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 1995

Title: Standard for Token-Passing Bus Access Method and Physical Layer Specifications

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Available in ISO/IEC 8802-4.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 28, 1986, BD APP: Feb 27, 1990, ANSI APP: Jul 19, 1990

Abstract: This local area network (LAN) standard deals with all elements of the token-passing bus access method and its associated physical signaling and media technologies. To facilitate interconnection of stations by way of a LAN using the token-passing bus access method, this standard specifies the characteristics of the transmission medium; the signaling method used; the frame formats transmitted; the actions of a station upon receipt of a frame; the services provided at the conceptual interface between the Medium Access Control (MAC) sublayer and the Logical Link Control (LLC) sublayer; and the actions, entities and values used by management. There are four medium characteristics and signaling methods: 5 and 10 Mb/s phase-coherent FSK; 1, 5, and 10 Mb/s broadband; 10 and 20 Mb/s fiberoptic; and 1 Mb/s phase- continuous FSK.

Keywords: LAN, token-passing, bus, Protocols, Local area networks

Designation: 802.4a-1986

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Local Area Network: Fiber Optic Token Bus

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Available in ISO/IEC 8802-4.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 28, 1986, BD APP: Mar 13, 1986

Abstract: Add additional physical layer and media specifications utilizing fiber optic media to IEEE Std 802.4.

Keywords: fiber, optic, token, bus

Designation: 802.4b-1992

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Local Area and Metropolitan Area Networks: 802.4 Supplement: Enhancements for Physical Layer Diversity (Redundant Media Control Unit)

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Available in ISO/IEC 8802-4.

side the U.S. call 303-792-2181. **Supplement to 802.4-1990.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 10, 1987, BD APP: Sep 28, 1992, ANSI APP: Feb 23, 1993

Abstract: This supplement to ISO/IEC 8802-4:1990[ANSI/IEEE 802.4-1990] provides a recommendation for employing diversity in the Physical Layer of token- passing bus systems conforming to ISO/IEC 8802-4:1990 for **local and metropolitan area networks**.

Keywords: physical, local, area, metropolitan, diversity, redundant, media, control, token-passing, bus, access, method

Designation: 802.4C

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Thru air media supplement to 802.4-1985

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 28, 1987

Keywords: lan, air, media, local, networks

Designation: 802.4D

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Broadband Media Conformance Test Supplement to 802.4-1985

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 28, 1987

Keywords: lan, broadband, media, conformance, test

Designation: 802.4E

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: MAC Conformance Test Supplement to 802.4-1985

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 28, 1987

Keywords: lan, MAC, conformance, test, networks

Designation: 802.4F

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Phase Coherent FSK Conformance Test Supplement to 802.4-1985

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 28, 1987

Keywords: lan, phase, coherent, FSK, conformance

Designation: 802.4G

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Fiber Optic Media Conformance Test Supplement to 802.4-1985

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 28, 1987

Keywords: fiber, optic, media, conformance, lan

Designation: 802.4h-1997

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard **Local and Metropolitan Area Networks**-Alternative Use of BNC Connectors and Manchester-Encoded Signaling Methods for Single-Channel Bus Physical Layer Entities

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Supplement to ISO/IEC 8802-4:1990.

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 19, 1996, BD APP: Jun 26, 1997, ANSI APP: Apr 24, 1998

Project scope: To allow the alternative use of BNC-connectors and Manchester Encoded Signaling methods for Single Channel Bus Physical Layer Entities.

Project purpose: The changes will allow alternative specifications requested by users of the standard and are designed to enhance ease of installation, reliability and maintainability.

Abstract: This supplement to ISO/IEC 8802-4:1990 [ANSI/IEEE Std 802.4-1990] provides the functional, electrical, and mechanical characteristics of single-channel differential and Manchester-data-encoded bus Physical Layer Entities (PLEs).

Keywords: BNC connectors, differential Manchester encoding, eye pattern, local area network, MAC-Symbol encoding, Manchester-encoded signaling, Physical Layer Entity, single-channel bus, token-passing bus access method

Designation: 802.5-1989

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: IEEE Standard for Local Area Networks: Token Ring Access Method and Physical Layer Specifications

Status: Superseded **Available in ISO/IEC 8802-5.

History: BD APP: Jun 2, 1989, ANSI APP: Jan 25, 1990

Keywords:

Designation: 802.5-1985

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Local Area Networks: Token Ring Bus Access Method and Physical Layer Specification

Status: Superseded

History: PAR APP: Mar 28, 1986

Keywords: lan, token-ring, physical, layer, bus

Designation: 802.5-1997

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - [Local and Metropolitan Area Networks](#) - Specific Requirements - Part 5: Token Ring Access Method and Physical Layer Specifications

Status: Approved Publication of IEEE

History: PAR APP: Sep 19, 1996, BD APP: Sep 16, 1997

Project scope: This project will consider updates, corrections to errors and improved clarification to the Std 802.5-1995.

Project purpose: During development of P802.5r, a number of areas in Std 802.5- 1995 were found in need of revision.

Keywords:

Designation: 802.5

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Standard for Information Technology - Telecommunications and information exchange between systems - [Local and metropolitan area networks](#) - Part 5: Token ring access method and physical layer specifications

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert D Love, Phone:919-848-6773, Email:rdlove@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 8, 1998

Project scope: To create a single ISO/IEC Token Ring standard, by performing a technical merge and clarification of ISO/IEC 8802-5:1998 and its amendments. The scope does not include the development of new technical capabilities, but does provide for clarification and correction of existing functions and features.

Project purpose: To provide a single cohesive document describing the various capabilities and options for Token Ring as defined within the family of IEEE 802.5 standards. Various sections of the standard were written at different times, based on slightly different models. Therefore, the revision is required to rewrite the standard bringing all sections together under the same global view.

Keywords:

Designation: 802.5a

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: LAN: Station Management Supplement to 802.5-1985

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE. **This supplement is section 6 of 8802-5:1992.

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

Keywords: LAN, station, management, local, area

Designation: 802.5b-1991

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: IEEE Standards for [Local and Metropolitan Area Networks](#): Recommended Practice for Use of Unshielded Twisted Pair Cable (UTP) for Token Ring Data Transmission at 4 Mbit/s

Status: Superseded **Available in ISO/IEC 8802-5.

History: PAR APP: Mar 28, 1986, BD APP: Jun 26, 1991

Abstract: Abstract not available. See ISO/IEC 8802-5.

Keywords: token, ring, configuration, lan, local

Designation: 802.5b-1991

Sponsor: Computer Society/[Local and Metropolitan Area Networks](#)

Title: Recommended Practice for Use of Unshielded Twisted Pair Cable (UTP) for Token Ring Data Transmission at 4 Mbit/s - 1993 Edition

Status: Superseded **Available in ISO/IEC 8802-5. Was ISO/IEC TR 10738.

History: ANSI APP: Dec 12, 1991

Abstract: Abstract not available. See ISO/IEC 8802-5.

Designation: 802.5c-1991

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 1997

Title: IEEE Standards for Local and Metropolitan Area Networks: Supplement to Token Ring Access Method and Physical Layer Specifications: Recommended Practice for Dual Ring Operation with Wrapback Reconfiguration

Status: Superseded **Supplement to IEEE 802.5-1989.

History: PAR APP: Mar 28, 1986, BD APP: Mar 21, 1991, ANSI APP: Oct 3, 1991

Abstract: Extensions to the IEEE 802.5 Token-Passing Ring standard are defined. These extensions implement a Dual Ring local area network (LAN) topology that provides full interoperability between stations conforming to IEEE Std 802.5, including coexistence on the same ring, and recovery from all single media failures with full capability restored. The Dual Ring Topology and operation described are intended for applications that require very high availability and recovery from media and station failures.

Keywords: token, ring, configuration, LAN, local

Designation: 802.5d-1992

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Interconnected Token Ring LANs

Status: Superseded **Available in ISO/IEC 8802-5.

History: PAR APP: Mar 28, 1986, BD APP: Mar 19, 1992, ANSI APP: Sep 22, 1992

Abstract: Abstract not available. See ISO/IEC 8802-5.

Keywords: interconnected, token ring, LAN, local

Designation: 802.5e

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Token Ring Station Management Entity Specifications

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE. **Supplement to 802.5

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 28, 1987

Keywords: lan, token ring, station, management, entity

Designation: 802.5f

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: 16 Mbit /s Token Ring Operations

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE. **Supplement to 802.5

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 28, 1987

Keywords: lan, token ring, 16 mbit/s, local, networks

Designation: 802.5g-1992

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Local Area Networks: Token Ring Access Method and Physical Layer Specifications-Conformance Testing

Status: Superseded **Available in ISO/IEC 8802-5. Supplement to 802.5 (Appendix C for 802.5A)

History: PAR APP: Mar 28, 1987, BD APP: Mar 19, 1992, ANSI APP: Sep 22, 1992

Project scope: and Purpose- Provide a set of specifications as the basis for Conformance (to the Standard) testing of IEEE 802.5.

Abstract: Abstract not available. See ISO/IEC 8802-5.

Keywords: LAN, conformance, testing, local, networks

Designation: 802.5h

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Operation of Logical Link Control III on Token Rings

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE. **Supplement to 802.5

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 28, 1987

Keywords: lan, token ring, logical, link, control

Designation: 802.5i

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Token Ring - Early Token Release

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 28, 1987

Keywords: lan, token ring, early, release, networks

Designation: 802.5j-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Trial Use Standard for Information Processing Systems-Local Area Networks-Part 5: Token Ring Access Method and Physical Layer Spec.-Fiber Optic Media Station Attachment

Status: Superseded **Available as ISO/IEC TR 11802-4.

Publication type: Trial-Use

History: PAR APP: Sep 17, 1992, BD APP: Dec 2, 1993

Abstract: The functional, electrical, optical, and mechanical characteristics of a fibre optic interface for connecting a 4- or 16-Mbit/s token ring station to the trunk coupling unit of a token ring are specified. This Technical Report is based upon a fibre optic transmitter, a channel of multimode graded-index fibres, and a direct-detection photodiode receiver; and includes signaling provisions for bypass of the station from the ring and self-test capabilities.

Keywords: Trunk coupling unit, Token ring, Optical transmitter (OTX), Optical receiver (ORX), Local area network (LAN), Fibre optic station attachment, Fibre optic medium interface (FOMI), Fibre optic interface (FOI)

Designation: 802.5j-1997

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Token ring access method and physical layer specifications Fibre Optic Media

Status: Approved Publication of IEEE **Will be published with IEEE Std 802.5r-1996 as 8802-5 : 1998 Amd 1. Supersedes 802.5j-1993.

Technical Contact: Robert D Love, Phone:919-848-6773, Email:rdlove@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 19, 1996, BD APP: Sep 16, 1997, ANSI APP: Apr 15, 1998

Project scope: To upgrade from Trial Use to Full Use, the standard which adds to the token ring standard the means for fiber optic media station attachment to the token ring network. This effort will consider comments from users of the trial use standard to include specifications for both fiber for the lobe and trunk in the supplement.

Project purpose: This project will update the existing Token Ring Trial Use Fiber Standard to Full Use Supplement to 802.5-1995. The current trial use Fiber standard is being used by a number of companies and significant interest is present to spend the effort to make a full use supplemental standard to 802.5.

Keywords:

Designation: 802.5k

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Token Ring Media Specification

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Aug 28, 1987

Keywords: lan, token ring, media, local, networks

Designation: 802.5l

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Maintenance of Token Ring Standard

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 1, 1989

Keywords:

Designation: 802.5m-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard Token Ring LAN Access Method: Specification and PICS Proforma for Source Routing Transparent Bridge Operation (SRT)

Status: Superseded **Available in ISO/IEC 10038. This work will be incorporated into 802.1D.

History: PAR APP: Mar 21, 1991, BD APP: Mar 18, 1993, ANSI APP: Aug 30, 1993

Abstract: Abstract not available. See ISO/IEC 8802-5.

Keywords:

Designation: 802.5n

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Operation of 4 and 16 M/bits Token Ring Local Area Networks on Unshielded Twisted Pair (UTP) Media

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 21, 1991

Project scope: Extend the IEEE 802.5-1989 Standard to include operation of Token Ring at 4 and 16 Mbit/s over UTP media. Maintain interoperability with stations that comply to that specification when they are attached to UTP>

Project purpose: To specify the operation of Token Ring over UTP media. The objectives of this specification are to achieve the following: 1. Ensure compatability with existing shielded twisted pair (STP) station attachment implementations. 2. Allow interoperability of UTP and STP on the same ring. 3. Maintain compatability with the Recommended Practice for use of UTP for Token Ring Data Transmission at 4 Mbit/s (802.5B) where advantageous. 4. Support of lobes consistent with TR 41.8.1 recommendations both at 4 and 16 Mbit/s for the set of active and/or passive TCU devices. 5. Support at least 72 lobe-attached stations. 6. All valid UTP cabling and TCU configurations will allow attachment of any UTP station at any Token Ring UTP interface.

Keywords:

Designation: 802.5p-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Information Processing Systems-Local Area Networks-Part 2: Logical Link Control-Annex X: End system Route Determination

Status: Changed Designation **Available in ISO/IEC 8802-2. Revision and redesignation of 802.2-1989. Incorporated into 802.2, 1994 edition.

Technical Contact: Robert Donnan, Phone:919 728 6177, Email:donnan@coastalnet.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 18, 1992, BD APP: Sep 15, 1993, ANSI APP: Feb 24, 1994

Abstract: Abstract not available. See ISO/IEC 8802-5.

Keywords:

Designation: 802.5q

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Information processing systems-Local Area Networks-Part 5: Token Ring Access Method and Physical Layer Specification-Media Access Control Revision

Status: Superseded **802.5q was incorrectly numbered as if it were a supplement, but in fact, it is a revision of 802.5.

History: PAR APP: Dec 3, 1992

Project scope: Revise the existing media access control(MAC) sections of the token ring standard to provide improved clarity and specificity. In addition the joining ring and beacon test capabilities shall be included and the 16-bit addressing removed from the standard. This change will align the standard with current implementations.

Project purpose: In the process of the development of conformance test documents it has become apparent that greater clarity and specificity in the standard is required for the writing of test specifications for the token ring. In addition certain improvements which have been implemented in token ring have been demonstrated as being most desirable for enhanced operation and therefore should be included.

Keywords:

Designation: 802.5r-1997

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Token ring access method and physical layer specifications Dedicated Token Ring Operation

Status: Approved Publication of IEEE **Will be published with IEEE Std 802.5j-1996 as 8802-5 : 1998 Amd 1.

History: PAR APP: Sep 19, 1996, BD APP: Sep 16, 1997

Project scope: Define dedicated attachment of existing token ring stations. In addition, expand the station's capability to simultaneously transmit and receive independent data streams for all frames. Define station concentrator functions in sufficient detail to produce an interface between station and concentrator that assures interworking.

Project purpose: As presently defined, each token ring station shares the ring's total available bandwidth. This dedicated attachment extension to 802.5-1995 will provide a significant increase in available bandwidth to each station. Additionally, it will decouple the operating speed of the concentrator from its attaching stations.

Keywords:

Designation: 802.5t-2000

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Information Technology - Telecommunications and information exchange between systems - **Local and Metropolitan Area Networks** - Part 5: Token Ring access method and physical layer specifications 100 Mbit/s Dedicated Token Ring Operation

Status: Approved Publication of IEEE

Technical Contact: Robert D Love, Phone:919-848-6773, Email:rdlove@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 9, 1997, BD APP: Jan 13, 2000, ANSI APP: Apr 25, 2000

Project scope: Generate a standard for 100 Mbit/s 802.5 Token Ring LANs based on the present 802.5 Token Ring MAC. It will support 2-pair Category 5 (100 ohm) and STP (150 ohm) cabling as specified in IS-11801 (and EIA/TIA 568A). The standard will consist of specifications for both stations and ports. MAC frame format will be based on that defined for IEEE 802.5, modified only to meet the specifications for the Tc PHY. The frame format between MAC and LLC is being preserved

Project purpose: To provide a cost effective solution for current IEEE 802.5 Token Ring users by specifically developing a standard for a High Speed Token Ring LAN based on the present IEEE 802.5 MAC, for incorporation into present 802.5 Token Ring environments with minimal increase in LAN complexity.

Keywords:

Designation: 802.5u

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Information Technology - Telecommunications and information exchange between systems - **Local and Metropolitan area networks** Part 5: Token Ring access method and physical layer specifications Optical fiber Physical Layer Specification for 100 Mbit/s Token Ring operation

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

History: PAR APP: Dec 9, 1997

Project scope: Provide the appropriate extensions to the standard for 100 Mbit/s 802.5 Token now being written to include support for multi-mode Optical Fibre as specified in IS-11801 (and EIA/TIA 568A). The standard will consist of specifications for both stations and ports. MAC frame format will be based on that defined for IEEE 802.5, modified only to meet the specifications for the Fx, Fibre PHY. The frame format between MAC and LLC is being preserved).

Project purpose: To provide a cost effective fibre optic solution for current IEEE 802.5 Token Ring users by specifically developing a standard for a High Speed Token Ring LAN based on the present IEEE 802.5 MAC for incorporation into present 802.5 Token Ring environments with minimal increase in LAN complexity.

Keywords:

Designation: 802.5v-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Information Technology - Telecommunications and information exchange between systems - **Local and metropolitan area networks** - Part 5: Token Ring access method and physical layer specifications Gigabit Token Ring Operation

Status: Approved Publication of IEEE

History: PAR APP: Dec 9, 1997, BD APP: May 4, 2001, ANSI APP: Sep 10, 2001

Project scope: Define IEEE 802.5 Token Ring (MAC) parameters and minimal augmentation of its operation, physical layer characteristics, and management parameters for transfer of 802.5 format frames at 1,000 Mb/s or faster. The standard will consist of specifications for both stations and ports. MAC frame format will be based on that defined for IEEE 802.5. The frame format between MAC and LLC is being preserved

Project purpose: To extend the IEEE 802.5 protocol to an operating speed of 1,000 Mbit/s or faster, to provide a significant increase in bandwidth while maintaining maximum compatibility with the installed base of Token Ring nodes, previous investment in research and development, and principles of network operation and management.

Keywords:

Designation: 802.5w-2000

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Corrigenda to Standard for Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Part 5: Token Ring access method and physical layer specifications

Status: Approved Publication of IEEE

Technical Contact: Robert D Love, Phone:919-848-6773, Email:rdlove@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 16, 1998, BD APP: Mar 30, 2000, ANSI APP: Oct 30, 2000

Project scope: Correct errors in 802.5-1998 and its amendments.

Project purpose: Correct errors in 802.5-1998 and its amendments.

Keywords:

Designation: 802.5x

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Virtual Bridged Local Area Networks: Source Routing - Supplement to IEEE Std 802.1Q

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert D Love, Phone:919-848-6773, Email:rdlove@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 18, 1999

Project scope: Extend 802.1Q to specify support for the source route bridging method.

Project purpose: To enable source routing users to take advantage of virtual bridged LANs, while retaining the capabilities of source routing.

Keywords:

Designation: 802.5z

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to - Information Technology Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 5: Token Ring Access Method and Physical Layer Specifications - Aggregation of Multiple Link Segments

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert D Love, Phone:919-848-6773, Email:rdlove@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 16, 1999

Project scope: Specify a DTE to DTE logical link which consists of n parallel instances of an 802.5 point-to-point link segment. The logical link will support existing 802.5 MAC Clients.

Project purpose: To increase link availability and bandwidth between DTEs by specifying the necessary mechanisms for parallel link segment aggregation.

Keywords:

Designation: 802.6-1990

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 1997

Title: Local and Metropolitan Area Networks: Distributed Queue Dual Bus (DQDB) Subnetwork of a Metropolitan Area Network (MAN)

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Available in ISO/IEC 8802-6. Draft 15, dated 1 Oct 90, was approved.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Nov 28, 1987, BD APP: Dec 6, 1990, ANSI APP: May 30, 1991

Project scope: The Standard will define a Dual Bus subnetwork incorporating a shared Medium physical layer of two unidirectional buses, a non-isochronous media access control sublayer based on Distributed Queueing and an isochronous media access control sublayer based on centralized time slot allocation. The standard will allow for bridges to interconnect two or more Dual Bus subnetworks to form a Metropolitan Area Network (MAN). The Dual Bus subnetwork and MAN shall be capable both of operating in the public telecommunications network environment and of incorporation in the public network structure, and shall meet the operations, administration, maintenance and performance requirements of this environment for criteria such as reliability, availability and security. The Dual Bus subnetworks and MAN shall operate at selected rates exceeding 1 Mbps and consistent with public network rates. The Dual Bus subnetworks and MAN shall be capable of operating over areas in excess of 50 kilometers in diameter. The performance and efficiency shall be essentially independent of subnetwork size and rate.

Project purpose: The purpose of the standard is to enable public network providers to offer Metropolitan Area Network service. The services to be provided include telephony, high speed and high quality isochronous service, ISDN access and high speed and high quality packet service such as LAN interconnection, host interconnection, and workstation connection across a metropolitan area. The standard will use the installed and planned base of public digital transmission equipment. This will include media such as optical fibre accessed through standard physical interfaces including CCITT G.703.

Abstract: This standard is part of a family of standards for local area networks (LANs) and metropolitan area networks (MANs) that deal with the Physical and Data Link Layers as defined by the ISO Open Systems Interconnection Reference Model. It defines a high-speed shared medium access protocol for use over a dual, counterflowing, unidirectional bus subnetwork. The Physical Layer and Distributed Queue Dual Bus (DQDB) Layer are required to support a Logical Link Control (LLC) Sublayer by means of a connectionless Medium Access Control (MAC) Sublayer service in a manner consistent with other IEEE 802 networks. Additional DQDB Layer functions are specified as a framework for other services. These additional functions will support Isochronous Service Users and Connection-Oriented Data Service users, but their implementation is not required for conformance.

Keywords: LAN, metro, area, networks

Designation: 802.6a

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Multiple Port Bridging for Metropolitan Area Networks

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 9, 1988

Keywords: lan, multiple, port, bridging, metropolitan

Designation: 802.6b

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Premises Extension of DS3-Based 802.6 MAN

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990

Project scope: The standard will define a Physical Layer Convergence Procedure (PLCP) which will allow the Distributed Queue Dual Bus (DQDB) Layer protocol as defined by 802.6 to be mapped into a premises extension of 802.6 subnetworks based upon the DS3 PLCP. Media and connectors will be included. Commonality with other premises extensions will be an objective. Equivalent international rates may also be addressed.

Project purpose: The purpose of this standard is to enable a Metropolitan Area Network service to be provided over premises extensions to public or private DS3 based transmission systems. The interface to the public network is the electrical DSX3; an economical extension for premises use is needed.

Keywords:

Designation: 802.6c-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks: Supplement to 802.6: Physical Layer Convergence Procedure (PLCP) for DS1-Based Systems (Clause 12)

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Out side the U.S. call 303-792-2181. **Sold together with 802.6h-1993.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990, BD APP: Jul 12, 1993, ANSI APP: Mar 15, 1994

Abstract: A Physical Layer Convergence Procedure (PLCP) in which the Distributed Queue Dual Bus (DQDB) Layer is mapped into a public network standard DS1 transmission system is provided. The relationship of DS1 to the PLCP and the DS1 PLCP frame format are covered.

Keywords:

Designation: 802.6d-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 1997

Title: Standard for SONET (SDH) Based Physical Layer Convergence Procedures for 802.6 MAN

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Out side the U.S. call 303-792-2181. **Available in ISO/IEC 8802-6.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990, BD APP: Jul 12, 1993, ANSI APP: Mar 15, 1994

Abstract: Abstract not available. See ISO/IEC 8802-6.

Keywords:

Designation: 802.6e

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Eraser Node for DQDB Metropolitan Area Network

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990

Project scope: The standard will define the operations of an eraser node for the 802.6 Distributed Queue Dual Bus. Actions to be taken by the eraser node in making slots available for reuse will be specified, based on the use of the PSR (Previous Slot Received) bit in the header. Existing nodes will continue to run normally.

Project purpose: Additions of slot recycling to the 802.6 standard family will permit total throughput to be raised substantially. In case of random traffic the improvement approaches a factor to two as eraser nodes are added; if there are localized communities of interest on the network, the improvement will be greater still.

Keywords:

Designation: 802.6f-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 1997

Title: IEEE Info technology-Telecomm and information exchange between systems- Local and metropolitan area networks-Specific requirements-Part 6: Distributed Queue Dual Bus

(DQDB) access method and physical layer specifications

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Available in ISO/IEC 8802-6.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990, BD APP: Jul 12, 1993, ANSI APP: Mar 15, 1994

Abstract: Abstract not available. See ISO/IEC 8802-6.

Keywords:

Designation: 802.6g

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Layer Management for the 802.6 Metropolitan Area Network

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990

Project scope: This standard will provide layer management facilities for the 802.6 MAC and Physical layer. The base 802.6 standard will be covered and additional physical layer convergence procedures may also be included. It will include appropriate GDMO as described in IS 10165-4.

Project purpose: To provide for control of DQDB network, including the settings of optional parameters, the collection of statistics, and fault recovery actions. The requirements of P802.1B (Overview, Interworking, and Network Management) and P802.1F (Guidelines for the Development of Layer Management Standards), where applicable, will be followed.

Keywords:

Designation: 802.6h-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks:** Supplement to 802.6: Isochronous Service on a Distributed Queue Dual Bus (DQDB) Subnetwork of a Metropolitan Area Network (MAN)

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Sold together 802.6c-1993.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990, BD APP: Sep 15, 1993, ANSI APP: Feb 24, 1994

Abstract: Enhancements to the Distributed Queue Dual Bus (DQDB) subnetwork of a MAN standard are defined that support applications requiring periodic, recurring bandwidth. The use of Pre-Arbitrated functions to support a variety of isochronous service rates is addressed, although the use of Queued Arbitrated functions will be standardized at a future date. Procedures for establishing, maintaining, and releasing an isochronous connection are not addressed.

Keywords:

Designation: 802.6i

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Remote LAN Bridging Using the 802.6 MAN

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990

Keywords:

Designation: 802.6j-1995

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 1997

Title: **Local and Metropolitan Area Networks:** Supplement to 802.6: Connection- Oriented Service on a Distributed Queue Dual Bus (DQDB) Subnetwork of a Metropolitan Area Network (MAN)

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 6, 1990, BD APP: Mar 16, 1995, ANSI APP: Aug 24, 1995

Abstract: Enhanced Queued Arbitrated (QA) Functions, which can support applications requiring bandwidth guarantees and delay limits on a DQDB subnetwork, are specified. Connection-Oriented Convergence Functions (COCFs) using the enhanced QA Functions, which are necessary to support connection-oriented service, are also specified

Keywords: COCF, Distributed Queue, DQDB, Queued Arbitrated, QA, Variable Bit Rate, VBR, connection-oriented service, Guaranteed Bandwidth (GBW)

Designation: 802.6k-1992

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standards for **Local and Metropolitan Area Networks:** Supplement to Media Access Control (MAC) Bridges IEEE Standard 802.6 Distributed Queue Dual Bus (DQDB) Subnetwork of a MAN

Status: Superseded **Superseded by 802.1D-1998

History: BD APP: Dec 3, 1992, ANSI APP: Jun 9, 1993

Abstract: This supplement to IEEE Std 802.1 specifies modifications and additions to IEEE 802.1d to extend its scope and field of application to transparent bridging between 802.6 Subnetworks of Metropolitan Area Networks and between 802.6 and FDDI and IEEE 802 Local Area Networks.

Keywords: distributed, queue, dual , bus, media, access, control, bridges, local, networks, metropolitan

Designation: 802.61

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Point-to-Point Interface for IEEE 802.6 Subnetwork of a Metropolitan Area Network

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 17, 1992

Project scope: This document provides specifications for a point-to-point extension to the 802.6 MAN, supporting the same services that are supported on a multipoint 802.6 network.

Project purpose: This standard will enable users to have a lower cost connection of a single terminal to a metropolitan area network.

Keywords:

Designation: 802.6m

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for a Subnetwork of a Metropolitan Area Network

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: James F Mollenauer, Phone:(617) 244-0077, Email:jmollenauer@technicalstrategy.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 17, 1992

Project scope: Revisions and corrections to the 802.6 Standard document and removal of 16 bit address option.

Project purpose: To provide clarifications, corrections, and revisions and to support additional services whose characterization has evolved since the drafting of the standard.

Keywords:

Designation: 802.7-1989

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 1997

Title: Local Area Networks: IEEE Recommended Practice: Broadband Local Area Networks

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181.

Technical Contact: Robert Russell, Phone:706-645-3925, Email:rrussell@knology.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: BD APP: Oct 19, 1989, ANSI APP: Mar 9, 1990

Abstract: This standard specifies the design, installation, and test parameters for broadband cable medium. The medium supports the communication of IEEE 802.3b, IEEE 802.4, video, and narrowband radio frequency (RF) modem devices. The broadband bus topology consists of amplifiers, coaxial cable, and directional couplers that create a full duplex directional medium. Inbound signals flow from user outlet transmitters to a central headend location. The headend processes the signals and then transmits the signals via an outbound path to all user outlets. The medium utilizes frequency division multiplexing (FDN), which supports the simultaneous coexistence of services. Each service is assigned a unique inbound and outbound channel frequency.

Keywords: LAN, Local area networks, Broadband communication

Designation: 802.8

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Recommended Practice for Fiber Optic **Local and Metropolitan Area Networks**

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: J. Paul Benson, Jr, Phone:770 798 2883, Email:jpbenson@lucent.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 20, 1997

Project scope: This project will provide a common set of recommendations to physically configure, loss budget, and test fiber optic implementations of IEEE 802 **local and metropolitan area networks**. It applies to IEEE 802 implementations that incorporate led optical sources. Physical configurations will be related to standardized cable distribution systems. The loss budget design process will apply to all approved 802 multimode fiber PMD sublayers. Test methods will ensure compliance to 802 fiber optic path loss requirements and check installation integrity.

Project purpose: To provide users and implementors of 802 **local and metropolitan area networks** with a common set of practices for multimode fiber optic media.

Keywords:

Designation: 802.9-1994

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks:** IEEE Standard for Integrated Services (IS) LAN Interface at the Medium Access Control (MAC) and Physical (PHY) Layers

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181.

Technical Contact: Dhadesugoor R Vaman, Phone:936-857-3923, Email:vaman@sbcglobal.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 17, 1992, BD APP: Sep 22, 1994, ANSI APP: Mar 15, 1995

Abstract: A unified access method that offers integrated services (IS) to the desktop for a variety of publicly and privately administered backbone networks (e.g., ANSI FDDI, IEEE 802.x, and ISDN) is defined. In addition, the interface at the MAC sublayer and the PHY Layer is specified.

Keywords: LAN, IVD, voice, interface, access unit (AU), data link layer, hybrid multiplexer, HMUX, integrated services, digital network, (ISDN), terminal equipment, (ISTE), local area network, logical link control, managed object, management info base, medium access control, sublayer, metropolitan area network, physical (PHY) layer, physical signaling, private switching network, protocol data unit, service access point, time division multiplexer (TDM, protocol data unit (PDU), private switching network, physical medium dependent, metropolitan area network (MAN, medium access control (MAC) su, management information base (M, layer management entity, integrated services terminal e, integrated services digital ne, hybrid multiplexer (HMUX), Local area network (LAN)

Designation: 802.9

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Local and Metropolitan Area Networks - Integrated Services LAN Interface at the MAC and PHY Layers

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Dhadesugoor R Vaman, Phone:936-857-3923, Email:yaman@sbcglobal.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 19, 1996

Project scope: Modify the Clause 1 of IEEE Std 802.9-1994 to reflect the addition of technologies developed as supplements. Specifically, label the three basic ISLAN technologies that have been standardized.

Project purpose: Improve the overall readability in order to understand the distinction in the IEEE Std. 802.9-1994 (ISLAN-T and ISLAN 20-T) and IEEE 802.9a (ISLAN 16-T) supplemental standard 1995, and other subsequent supplemental standards.

Abstract: A unified access method that offers integrated services (IS) to the desktop for a variety of publicly and privately administered backbone networks (e.g., ANSI FDDI, IEEE 802.x, and ISDN) is defined. In addition, the interface at the MAC sublayer and the PHY Layer is specified.

Keywords:

Designation: 802.9a-1995

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks: 802.9 Supplement: IEEE Standard Specification of ISLAN 16-T (Supplement to 802.9-1994.)

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181.

Technical Contact: Sanjay Popli, Phone:708-517-5572, Email:popli@berlioz.nsc.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 15, 1993, BD APP: Oct 16, 1995, ANSI APP: Apr 8, 1996

Abstract: The architecture, frame structure, service specifications, Physical (PHY) Layer, management, and signalling of the ISLAN16-T interface are defined. The relationship of the ISLAN16-T network to the ISO/IEC 8802-3 network is also defined.

Keywords: 10 base T, CSMA, data link layer, GDMO, hybrid multiplexer, HMUX, integrated services, ISDN, isochronous services, LAN, terminal adapter, UTP, wide area network, WAN, signaling, premise based, ISLAN

Designation: 802.9b

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement for Functional Specification for AU to AU Interworking IEEE- 802.9

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: George Fargo, Phone:972-855-8768, Email:gfargo@intecom.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 15, 1993

Project scope: This standard will specify procedures for P, C, B and D channel services for interworking between IEEE 802.9 Access Units. This standard will specify the Access Unit Architectural Model and Recommended procedures to enable the provisioning to support P, C, B and D Channel Services for interworking across an Access Unit which serves one 802.9 subnetwork, for the purpose of connecting to integrated services workstations connected to another 802.9 subnetwork, served by the latter IEEE 802.9 Access Unit. As part of this work topic, the minimum/optical MIB elements for the Access Unit required to effect AU to AU interworking will be specified. With the access unit's dual role as both an agent to a LAN manager and an agent to the WAN manager, the necessary procedures to coordinate the AU will also be specified in the course of this work.

Project purpose: Since the application users will find it necessary to construct a network consisting of multiple IEEE 802.9 subnetworks (each consisting of an access unit with its subtending integrated services workstations), it is important that an architectural model and a common set of procedures be defined to facilitate open systems interworking rather than allow proprietary (incompatible) hub designs to evolve.

Keywords: AU to AU

Designation: 802.9c-1995

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks: 802.9 Supplement: IEEE Standard Managed Object Conformance Statement (MOCS) Proforma

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181.

Technical Contact: Dhadesugoor R Vaman, Phone:936-857-3923, Email:yaman@sbcglobal.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 17, 1994, BD APP: Dec 12, 1995, ANSI APP: Aug 14, 1996

Abstract: The Managed Object Conformance Statement (MOCS) proforma for IEEE Std 802.9-1994 is provided. The MOCS specified in this supplement pertains to ISLAN4-T, which uses 4.096Mbit/s Physical Layer transport and ISLAN20-T, which uses 20.48 Mbit/s Physical Layer transport. Standardization of ISLAN16-T (IEEE Std 802.9a-1995) and ISLANAU-AU, which specifies the AU-to- AU interworking (IEEEP802.9b) is in progress at this time; therefore, the specification of MOCS for ISLAN16-T and ISLANAU-AU is not included in this supplement.

Keywords: hybrid multiplexer, HMUX, implementation under test, integrated service, IUT, IS, ISDN, LAN, MAN, system parameters, system under test, SUT, physical signalling (PS) sublayer, protocol data units, protocol capabilities, physical medium dependent (PMD)

Designation: 802.9d-1995

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks: 802.9 Supplement: IEEE Standard Protocol Implementation Conformance Statement (PICS) Proforma

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **Supplement to 802.9-1994.

Technical Contact: Dhadesugoor R Vaman, Phone:936-857-3923, Email:yaman@sbcglobal.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 17, 1994, BD APP: Nov 9, 1995, ANSI APP: Apr 8, 1996

Abstract: The Protocol Implementation Conformance Statement (PICS) proforma for IEEE Std 802.9-1994 is provided. It does not include the Managed Objects Conformance Statement, which is contained in a separate supplement.

Keywords: hybrid multiplexer, HMUX sublayer, implementation, IUT, integrated services, digital network, ISDN, LAN, MAC, PMD, physical medium, physical signalling, PS, protocol capability, protocol data units, PICS, conformance, proforma, system parameters, system under test, SUT

Designation: 802.9e

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Supplement to IEEE 802.9: Integrated Services (IS) LAN Interface at the Medium Access Control (MAC) and Physical (PHY) Layers: Asynchronous Transfer Mode (ATM) Cell Bearer Mode

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Dhadesugoor R Vaman, Phone: 936-857-3923, Email: vaman@sbcglobal.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 21, 1995

Project scope: Generate a standard which allows for a mode supporting the transport of ATM cells in the isochronous information stream of an IEEE 802.9 interface.

Project purpose: This standard will facilitate the use of the IEEE 802.9 ISLAN as a medium for the delivery of ATM structured information to the desktop.

Keywords:

Designation: 802.9f

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Local and Metropolitan Area Networks-Supplement to Integrated Services (IS) LAN Interface at the Medium Access Control (MAC) and Physical (PHY) Layers: Remote Terminal Line Power for Integrated Services Terminal Equipment (ISTE)

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Dhadesugoor R Vaman, Phone: 936-857-3923, Email: vaman@sbcglobal.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 21, 1995

Project scope: Generate a standard which will allow power to be provided to IEEE 802.9 OSTEs for basic communications services over the same twisted pair cabling that provides the physical layer connectivity for the IEEE 802.9 ISTE.

Project purpose: This standard will facilitate the utilization of the IEEE ISLAN Standard ISTE in creating an integrated desktop environment in which the ISTE functions as a primary means of communications for voice as well as video and packetized data. This standard will allow a means of providing power to the ISTE in the event of a general power failure so that the ISTE may still be used for emergency functions as a minimum.

Keywords:

Designation: 802.10-1992

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks: Interoperable LAN/MAN Security (SILS) Currently Contains Secure Data Exchange (SDE) (Clause 2)

Status: Superseded **Contains: IEEE Std 802.10b-1992, Secure Data Exchange (SDE) (Clause 2)

History: PAR APP: May 31, 1990, BD APP: Sep 17, 1992, ANSI APP: Mar 22, 1993

Abstract: A security protocol that can be used to protect IEEE 802 Local Area Networks (LANs) and Metropolitan Area Networks (MANs) is described. This Open Systems Interconnection (OSI) Layer 2 security protocol can be used to provide the security services of confidentiality and connectionless integrity. In conjunction with key management or system management, the security services of data origin authentication and access control may also be provided.

Keywords: decipherment, encipherment, security, LAN MAN, security association, interoperable, secure data exchange, Metropolitan area networks, Local area networks

Designation: 802.10-1998

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Interoperable LAN/MAN Security (SILS)

Status: Approved Publication of IEEE

Technical Contact: Kenneth G Alonge, Phone: 703-750-4000 X122, Email: alonge_ken@geologics.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 19, 1996, BD APP: Sep 16, 1998

Project scope: To refine the Security Assoc. Identifier (SAID) field of the current Standard to support Multicast Key Center (MKC) identification. Neither the SDE PDU format, nor the elements of procedure are changed by this refinement. Additionally, this revision will incorporate supplements 802.10e, 802.10f, 802.10g, and 802.10h.

Project purpose: To allow independent Multicast Key Centers to assign unique SAID's. The current Standard only permits a global MKC, or necessitates out-of-band coordination among all MKC's to prevent re-use of the same SAID - both alternatives create an intractable implementation problem.

Keywords:

Designation: 802.10a-1999

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Interoperable LAN/MAN Security (SILS): The Model (Clause 1)

Status: Approved Publication of IEEE

Technical Contact: Kenneth G Alonge, Phone: 703-750-4000 X122, Email: alonge_ken@geologics.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 16, 1998, BD APP: Mar 22, 1999, ANSI APP: Jul 21, 1999

Project scope: The SILS model describes the architectural framework that 802.10 is using to provide security in IEEE 802 LANs and MANs and delineates the scope of each of the other two standards and relationships between them. The two protocol standards described in the Model are Secure Data Exchange (SDE) and Key Management (KMP). The model also describes how SDE and KMP work in end stations and bridges, as well as how they are used to protect management traffic.

Project purpose: The Model addresses issues that apply to all of SILS. It enables implementers and users of SILS to understand how the SILS protocols operate together and how each protocol individually operates in an OSI environment, as well as an IEEE 802 environment. The Model also describes implementations of SILS protocols in end stations, as well as transparent implementations in IEEE 802 bridges.

Keywords: Interoperable LAN

Designation: 802.10b-1992

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks:** Interoperable LAN/MAN Security (SILS) - Part B: Secure Data Exchange (SDE) (Clause 2)

Status: Superseded **Superseded by 802.10-1998

History: PAR APP: Mar 11, 1990, BD APP: Sep 17, 1992, ANSI APP: Mar 22, 1993

Abstract: A security protocol that can be used to protect IEEE 802 Local Area Networks (LANs) and Metropolitan Area Networks (MANs) is described. This Open Systems Interconnection (OSI) Layer 2 security protocol can be used to provide the security services of confidentiality and connectionless integrity. In conjunction with key management or system management, the security services of data origin authentication and access control may also be provided.

Keywords: decipherment, encipherment, LAN, security, MAN, secure data exchange

Designation: 802.10c-1998

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standards for **Local and Metropolitan Area Networks:** Supplement to Standard for Interoperable LAN/MAN Security (SILS)-Key Management (Clause 3)

Status: Approved Publication of IEEE

Technical Contact: Kim Kirkpatrick, Phone:818-355-7637 **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: May 31, 1990, BD APP: Jan 21, 1998

Project scope: To define a standard for services, protocols, data formats, and interfaces that will allow secure IEEE 802 LAN products to interoperate. IEEE 802.10 has specified three areas for standardization: Secure Data Exchange, Key Management, and Security Management, and the objects necessary to manage each protocol. The goals of each of these areas of SILS are to be as independent as possible of any particular encryption algorithm, such as DES or RSA, and of the transmission media. The work in each area is based on the OSI Seven Layer model (IS 7498) and on the OSI Security Architecture (IS 7498/2). The Key Management Standard specifies a Layer 7 protocol that will provide secure automated management of the cryptographic keys to be used by the Secure Data Exchange at Layer 2 or by Security Management at Layer 7. The standard will draw on work already done for Key Management by other standards groups. The ANSI X9.E9 group has written a Key Management standard for use by the Banking Community. ECMA TC32/TG9 has proposed a framework for secure applications, and the Secure Data Network System (SDNS) project has developed a key management standard for use with public key algorithms. The 802.10 Key Management standard will consider each of these standards to determine if the standard or some form of the standard is appropriate for use with LANs. The appendices to the SILS Key Management standard will provide explanatory information for the standard. The Rationale for Security Services Appendix will explain why the services that Key Management provides are appropriate for the management of cryptographic keys on LANs and how those services address the threats posed to the security of automated key distribution on LANs. The Examples of Algorithms Appendix will give an example of the use of Key Management with particular algorithms. The Philosophy of Key Management Appendix will provide guidelines on the manual aspects of key management such as the secure distribution of Initialization Keys.

Project purpose: The purpose is threefold. First, the standard must specify the minimally acceptable security services to be supported primarily by encryption for IEEE 802 LANs. Second, the standard must define logical and physical mechanisms for achieving these services; this includes the managed objects required to support the processing to provide the services. Finally and most important, the standard must maximize interoperability of products in an open systems interconnection architecture.

Keywords:

Designation: 802.10d

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Interoperable LAN Security (SILS) Part D - Security Management

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Kenneth G Alonge, Phone:703-750-4000 X122, Email:alonge_ken@geologics.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: May 31, 1990

Project scope: To define a standard for services, protocols, data formats, and interfaces that will allow secure IEEE 802 LAN products to interoperate. IEEE 802.10 has specified three areas for standardization: Secure Data Exchange, Key Management, and Security Management, and the objects necessary to manage each protocol. The goals of each of these areas of SILS are to be as independent as possible of any particular encryption algorithm, such as DES or RSA, and of the transmission media. The work in each area is based on the OSI Seven Layer model (IS 7498) and on the OSI Security Architecture (IS 7498/2). The Security Management Standard will specify a Layer 7 set of services, and if necessary a protocol, that will provide secure management of the objects associated with the Secure Data Exchange protocol, the Key Management protocol, and the Security Management protocol. The standard will use any work in progress on Security Management. If, at any time, a Security Management standard is developed by ISO, that standard will be closely evaluated for use on LANs and comments will be submitted to change the ISO standard rather than continuing the definition of security management within 802.10. The approaches to be evaluated by 802.10 for security management are the use of ISO, CMIP, Common Management Information Protocol (DIS 9596/2), and the use of IEEE 802.1, Systems Management. The use of the Secure Data Exchange to provide confidentiality and integrity for CMIP or 802.1 will be explored. Also, 802.10 will investigate the definition of a separate protocol that does not depend on the security services of the Secure Data Exchange, but provides all the security services required for secure management at Layer 7. The goals of the 802.10 Security Management definition are to assure first that 802.10 objects can be managed securely and second that the security management protocol could be used by other protocols to manage their objects securely.

Project purpose: The purpose is threefold. First, the standard must specify the minimally acceptable security services to be supported primarily by encryption for IEEE 802 LANs. Second, the standard must define logical and physical mechanisms for achieving these services; this includes the managed objects required to support the processing to provide the services. Finally and most important, the standard must maximize interoperability of products in an open systems interconnection architecture. Modern LANs provide users connectivity to network resources. Distributed applications and shared resources allow users easy access to the network data. The intended result is that data is readily available to all users. However, as use of LAN resources increases in commercial and military environments, the data security threat increases. Manufacturing design data, financial analysis data, and health data cannot be protected from modification, disclosure, or unauthorized access without LAN security. The communication required between these systems cannot be achieved without interoperability of the security mechanisms protecting these systems. To assure secure interoperability, the SILS Security Management standard must consider the issues of cryptography and of IEEE 802 LAN compatibility. The cryptography issue is to define Security Management to be as independent of any particular algorithm as possible. The issue of IEEE 802 LAN compatibility is that the security mechanisms of Security Management should not require changes to the existing IEEE 802 LAN standards. This should not become an issue as Security Management could be defined either as a Layer 7 set of service or as a Layer 7 protocol or could use the existing 802.1 System Management protocol, so it would not affect the existing 802 protocol.

Keywords:

Designation: 802.10e-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement to IEEE Std 802.10b: Secure Data Exchange (SDE) Sublayer Management (Subclause 2.8)

Status: Superseded **Superseded by 802.10-1998

History: PAR APP: Jun 18, 1992, BD APP: Dec 2, 1993, ANSI APP: Jun 20, 1994

Abstract: A method to allow Ethernet V2.0 Media Access Control (MAC) Protocol Data Units (PDUs) to be protected with the Secure Data Exchange (SDE) protocol is provided.

Keywords: decipherment, encipherment, LAN, security, MAN, secure data exchange, security association

Designation: 802.10f-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Local and Metropolitan Area Networks-IEEE Standards: Recommended Practice for SDE on Ethernet V2.0 in IEEE 802 LANs (Annex 2H)

Status: Superseded **Superseded by 802.10-1998

History: PAR APP: Sep 17, 1992, BD APP: Dec 2, 1993, ANSI APP: Jun 3, 1994

Abstract: A set of managed object classes to be used in the management of the Secure Data Exchange (SDE) sublayer and its protocol exchanges is specified.

Keywords: managed objects, secure data exchange, information

Designation: 802.10g-1995

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks: 802.10 Supplement: IEEE Standard Secure Data Exchange (SDE) - Security Label (Annexes 2I, 2J, and 2K)

Status: Superseded **Superseded by 802.10-1998

History: PAR APP: Sep 15, 1993, BD APP: Sep 21, 1995, ANSI APP: Apr 8, 1996

Abstract: A security label option that can be used to implement rule-based access controls for the protection of IEEE 802 local area networks (LANs) and metropolitan area networks (MANs) is defined. Information carried by security labels can be used to control access, specify protective measures, and identify handling restrictions required by a communications security policy. This standard specifies the syntax for the label and basic processing rules. Other information, such as label semantics and additional processing requirements unique to a security policy, can be specified via registration.

Keywords: access control, local area network, metropolitan area network, security-data exchange, security labels

Designation: 802.10h-1997

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard Secure Data Exchange (SDE) - Protocol Implementation Conformance Statement (PICS) Proforma (Annex 2L)

Status: Superseded **Superseded by 802.10-1998

History: PAR APP: Mar 17, 1994, BD APP: Mar 20, 1997, ANSI APP: Aug 20, 1997

Project scope: This document will provide the PICS Proforma for the Secure Data Exchange Protocol.

Project purpose: This document defines the minimum conformance requirements for the Secure Data Exchange Protocol. The Supplement will be used by vendors to test for conformance.

Abstract: The secure data exchange (SDE) protocol implementation conformance statement (PICS) proforma is provided. The SDE PICS proforma defines the information to be supplied by protocol implementors claiming conformance with IEEE Std 802.10, Clause 2, Secure Data Exchange (SDE).

Keywords: proforma, protocol implementation, conformance statement, secure data exchange, security association, security protocol, security services

Designation: 802.11-1997

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications

Status: Superseded

History: PAR APP: Mar 21, 1991, BD APP: Jun 26, 1997

Project scope: To develop a Medium Access Control (MAC) and Physical Layer (PHY) specification for wireless connectivity for fixed, portable and moving stations within a local area.

Project purpose: To provide wireless connectivity to automatic machinery, equipment or stations that require rapid deployment, which may be portable, or hand-held or which may be mounted on moving vehicles within a local area. To offer a standard for use by regulatory bodies to standardize access to one or more radio frequency bands for the purpose of local area communication.

Abstract: The medium access control and physical characteristics for wireless local area networks are specified in this standard, part of a series of standards for local and metropolitan area networks. The medium access control unit in this standard is designed to support physical layer units as they may be adopted dependent on the availability of spectrum. This standard contains three physical layer units: two radio units, both operating in the 2400-2500 MHz band, and one baseband infrared unit. One radio unit employs the frequency-hopping spread spectrum technique, and the other employs the direct sequence spread spectrum technique.

Keywords: infrared, LAN, local area network, wireless, radio frequency, ad hoc network

Designation: 802.11-1999

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 2003

Title: 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

Status: Approved Publication of IEEE **802.11, 2003 Edition

Publication type: Special Publication

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 9, 1997, BD APP: Mar 18, 1999, ANSI APP: Jul 15, 1999

Project scope: To rectify a number of errors in the current standard and to accommodate input from the JTC1 review to result in a single JTC1/IEEE standard.

Project purpose: To correct errors found in reviewing interpretation requests to the current standard and from JTC1 review.

Keywords:

Designation: 802.11a-1999

Sponsor: Computer Society/Local and Metropolitan Area Networks

Reaffirmation status and year: 2003

Title: IEEE Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 11: Wireless Medium Access Control (MAC) and physical layer (PHY) specifications: High Speed Physical Layer in the 5 GHz band

Status: Approved Publication of IEEE

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 16, 1997, BD APP: Sep 16, 1999, ANSI APP: Feb 11, 2000

Project scope: To develop a Higher Speed PHY for use in fixed, moving or portable Wireless Local Area Networks. The PHY will be used in conjunction with the 802.11 Medium Access Control (MAC). The 802.11 MAC will be reviewed to assure its capability to operate at the speeds targeted.

Project purpose: To create a higher speed wireless access technology suitable for data, voice and image information services.

Keywords:

Designation: 802.11b-1999

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 2003

Title: IEEE 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: Higher Speed Physical Layer (PHY) Extension in the 2.4 GHz band

Status: Approved Publication of IEEE

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 9, 1997, BD APP: Sep 16, 1999, ANSI APP: Feb 11, 2000

Project scope: The project will evaluate the possibility of taking advantage of the provisions for rate expansion that are in place on the current standard PHYs. The 802.11 MAC defines a mechanism for operation of stations supporting different data rates in the same area. The current 802.11 standard already defines the basic rates of 1Mbit/s and 2 Mbit/s for both Frequency Hopping (FH) and Direct Sequence (DS) PHYs. The two rates are supported by having same header for both rates with length and rate information passed in the header at the lowest ("basic") rate; then the body of the packet is transmitted at the rate chosen and with the corresponding modulation method. The header structure of the two PHYs already supports passing rate information up to 4.5 Mbit/s (in 0.5 Mbit/s increments) for FH and up to 25.5 Mbit/s (in 0.1 Mbit/s increments) for DS. The proposed PAR targets further developing the provisions for enhanced data rate capability of 802.11 networks. The 802.11 MAC incorporates already the interpretation of this information and the computation of expected packet duration even if the specific station does not support the rate at which the packet was sent. The 802.11 MAC is compatible and will accommodate the higher PHY rates.

Project purpose: To extend the performance and the range of applications of the 802.11 compatible networks in the 2.4 GHz band by increasing the data rate achievable by such devices. This technology will be beneficial for improved access to fixed network LAN and internetwork infrastructure (including access to other wireless LANs) via a network of access points, as well as creation of high performance ad-hoc networks. The purpose of 802.11a is also for higher data rates, however, that project is for operation in the 5 GHz band, whereas this project is for operation in the 2.4 GHz band.

Keywords:

Designation: 802.11b-Cor 1-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 2003

Title: Corrigenda to IEEE 802.11b-1999, 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: Higher Speed Physical Layer (PHY) Extension in the 2.4 GHz Band

Status: Approved Publication of IEEE

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jan 30, 2000, BD APP: Oct 10, 2001, ANSI APP: Jan 30, 2002

Project scope: The scope of this project is to correct deficiencies in the MIB definition of 802.11b.

Project purpose: As the MIB is currently defined in 802.11b, it is not possible to compile an interoperable MIB. This project will correct the deficiencies in the MIB.

Keywords:

Designation: 802.11c-1998

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Information Technology - Telecommunications and information exchange between systems - Local area networks - Media access control (MAC) bridges - Supplement for support by IEEE 802.11

Status: Approved Publication of IEEE

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 9, 1997, BD APP: Sep 16, 1998

Project scope: To add a subclause under 2.5 Support of the Internal Sublayer Service by specific MAC Procedures to cover bridge operation with IEEE 802.11 MACs. This supplement to IS 10038 (802.1D) will be developed by the 802.11 Working Group in cooperation with the 802.1 Working Group.

Project purpose: To provide the required 802.11 specific information to the IS 10038 (802.1D) standard.

Keywords:

Designation: 802.11d-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 2003

Title: IEEE Standard for Information technology-- Telecommunications and information exchange between systems -- **Local and metropolitan area networks**-- Specific Requirements - Part 11: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications Amendment 3: Specification for operation in additional regulatory domains

Status: Approved Publication of IEEE

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jun 26, 1999, BD APP: Jun 14, 2001, ANSI APP: Oct 25, 2001

Project scope: This supplement will define the physical layer requirements (channelization, hopping patterns, new values for current MIB attributes, and other requirements to extend the operation of 802.11 WLANs to new regulatory domains (countries).

Project purpose: The current 802.11 standard defines operation in only a few regulatory domains (countries). This supplement will add the requirements and definitions necessary to allow 802.11 WLAN equipment to operate in markets not served by the current standard.

Keywords:

Designation: 802.11e

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Amendment to 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: Medium Access Method (MAC) Quality of Service Enhancements

Status: Revision of Amendment

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 30, 2000

Project scope: Enhance the 802.11 Medium Access Control (MAC) to improve and manage Quality of Service, and provide classes of service. Consider efficiency enhancements in the areas of the Distributed Coordination Function (DCF) and Point Coordination Function (PCF).

Project purpose: To enhance the current 802.11 MAC to expand support for LAN applications with Quality of Service requirements. Provide improvements in the capabilities and efficiency of the protocol. These enhancements, in combination with recent improvements in PHY capabilities from 802.11a and 802.11b, will increase overall system performance, and expand the application space for 802.11. Example applications include transport of voice, audio and video over 802.11 wireless networks, video conferencing, and media stream distribution.

Keywords:

Designation: 802.11e

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement to 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: Medium Access Method (MAC) Enhancements

Status: Superseded

History: PAR APP: Mar 30, 2000

Project scope: Enhance the 802.11 Medium Access Control (MAC) to improve and manage Quality of Service, provide classes of service, and enhanced security and authentication mechanisms. Consider efficiency enhancements in the areas of the Distributed Coordination Function (DCF) and Point Coordination Function (PCF).

Project purpose: To enhance the current 802.11 MAC to expand support for LAN applications with Quality of Service requirements. Provide improvements in security, and in the capabilities and efficiency of the protocol. These enhancements, in combination with recent improvements in PHY capabilities from 802.11a and 802.11b, will increase overall system performance, and expand the application space for 802.11. Example applications include transport of voice, audio and video over 802.11 wireless networks, video conferencing, media stream distribution, enhanced security applications, and mobile and nomadic access applications.

Keywords:

Designation: 802.11F-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Trial-Use Recommended Practice for Multi-Vendor Access Point Interoperability Via an Inter-Access Point Protocol Across Distribution Systems Supporting IEEE 802.11 Operation

Status: Approved Publication of IEEE

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 30, 2000, BD APP: Jun 12, 2003

Project scope: To develop recommended practices for an Inter-Access Point Protocol (IAPP) which provides the necessary capabilities to achieve multi-vendor Access Point interoperability across a Distribution System supporting IEEE P802.11 Wireless LAN Links. This IAPP will be developed for the following environment(s): (1) A Distribution System consisting of IEEE 802 LAN components supporting an IETF IP environment. (2) Others as deemed appropriate. This Recommended Practice Document shall support the IEEE P802.11 standard revision(s).

Project purpose: IEEE P802.11 specifies the MAC and PHY layers of a Wireless LAN system and includes the basic architecture of such systems, including the concepts of Access Points and Distribution Systems. Implementation of these concepts were purposely not defined by P802.11 because there are many ways to create a Wireless LAN system. Additionally many of the possible implementation approaches involve concepts from higher network layers. While this leaves great flexibility in Distributions System and Access Point functional design, the associated cost is that physical Access Point devices from different vendors are unlikely to inter-operate across a Distribution System due to the different approaches taken to Distribution System design. As P802.11 based systems have grown in popularity, this limitation has become an impediment to WLAN market growth. At the same time it has become clear that there are a small number of Distribution System environments that comprise the bulk of the commercial WLAN system installations. This project proposes to specify the necessary information that needs to be exchanged between Access Points to support the P802.11 DS functions. The information exchanges required will be specified for, one or more distribution Systems; in a manner sufficient to enable the implementation of Distribution Systems containing Access Points from different vendors which adhere to the recommended practices.

Keywords:

Designation: 802.11g-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - **Local and Metropolitan Area Networks** - Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Further Higher Data Rate Extension in the 2.4 GHz Band

Status: Approved Publication of IEEE

Publication type: Special Publication

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 21, 2000, BD APP: Jun 12, 2003, ANSI APP: Oct 20, 2003

Project scope: To develop a higher speed(s) PHY extension to 802.11b.

Project purpose: To develop a new PHY extension to enhance the performance and the possible applications of the 802.11b compatible networks by increasing the data rate achievable by such devices. This technology will be beneficial for improved access to fixed network LAN and inter-network infrastructure (including access to other wireless LANs) via a network of access points, as well as creation of higher performance ad hoc networks.

Keywords:

Designation: 802.11h-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE 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 - Spectrum and Transmit Power Management Extensions in the 5 GHz Band in Europe

Status: Approved Publication of IEEE

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 7, 2000, BD APP: Sep 11, 2003

Project scope: Enhance the 802.11 Medium Access Control (MAC) standard and 802.11a High Speed Physical Layer (PHY) in the 5GHz Band supplement to the standard; to add indoor and outdoor channel selection for 5GHz license exempt bands in Europe; and to enhance channel energy measurement and reporting mechanisms to improve spectrum and transmit power management (per CEPT and subsequent EU committee or body ruling incorporating CEPT Recommendation ERC 99/23).

Project purpose: To enhance the current 802.11 MAC and 802.11a PHY with network management and control extensions for spectrum and transmit power management in 5GHz license exempt bands, enabling regulatory acceptance of 802.11 5GHz products. Provide improvements in channel energy measurement and reporting, channel coverage in many regulatory domains, and provide Dynamic Channel Selection and Transmit Power Control mechanisms.

Keywords:

Designation: 802.11i

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Amendment to 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: Medium Access Method (MAC) Security Enhancements

Status: Amendment

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: May 30, 2001

Project scope: Enhance the 802.11 Medium Access Control (MAC) to enhance security and authentication mechanisms.

Project purpose: To enhance the current 802.11 MAC to provide improvements in security.

Keywords:

Designation: 802.11j

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: 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: 4.9 GHz - 5 GHz Operation in Japan

Status: Amendment

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: The scope of the project is to enhance the 802.11 standard and amendments, to add channel selection for 4.9 GHz and 5 GHz in Japan to additionally conform to the Japanese rules for radio operation.

Project purpose: The purpose of the proposed project is to obtain Japanese regulatory approval by enhancing the current 802.11 MAC and 802.11a PHY to additionally operate in newly available Japanese 4.9 GHz and 5 GHz bands.

Keywords:

Designation: 802.11k

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: 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: Radio Resource Measurement of Wireless LANs

Status: Amendment

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: This project will define Radio Resource Measurement enhancements to provide interfaces to higher layers for radio and network measurements.

Project purpose: The original standard has a basic set of radio resource measurements for internal use only. These measurements and others are required to provide services; such as roaming, coexistence, and others; to external entities. It is necessary to provide these measurements and other information in order to manage these services from an external source.

Keywords:

Designation: 802.11n

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: 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: Enhancements for Higher Throughput

Status: Amendment

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 11, 2003

Project scope: The scope of this project is to define an amendment that shall define standardized modifications to both the 802.11 physical layers (PHY) and the 802.11 Medium Access Control Layer (MAC) so that modes of operation can be enabled that are capable of much higher throughputs, with a maximum throughput of at least 100Mbps, as measured at the MAC data service access point (SAP).

Project purpose: The purpose of the project is to improve the 802.11 wireless local area network (LAN) user experience by providing significantly higher throughput for current applications and to enable new applications and market segments.

Keywords:

Designation: 802.11ma

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: 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 - Amendment x : Technical corrections and clarifications

Status: Amendment

Technical Contact: Stuart J Kerry, Phone:408-348-3171, Email:stuart@ok-brit.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE

Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 20, 2003

Project scope: The scope of this project is limited to maintenance changes (editorial and technical corrections) to 802.11-1999, 2003 edition (incorporating 802.11a-1999, 802.11b-1999, 802.11b-1999 corrigendum 1-2001, and 802.11d-2001).

Project purpose: The purpose of this project is to incorporate accumulated maintenance changes (editorial and technical corrections) into 802.11-1999, 2003 edition (incorporating 802.11a-1999, 802.11b-1999, 802.11b-1999 corrigendum 1-2001, and 802.11d-2001).

Keywords:

Designation: 802.12-1995

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Std 802.12-1990, IEEE Standards for Local and Metropolitan Networks: Demand Priority Access Method, Physical Layer and Repeater Specification

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **administratively withdrawn on 15-Jan-2001.

Technical Contact: Patricia Thaler, Phone:916-788-5662, Email:pat_thaler@agilent.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Sep 15, 1993, BD APP: Jun 14, 1995, ANSI APP: Mar 14, 1996

Abstract: The media access control characteristics for the Demand Priority access method are specified. The layer management, physical layers, and media that support this access method are also specified. Layer and sublayer interface specifications are aligned to the ISO Open Systems Interconnection Basic Reference Model and ISO/IEC 8802 models. Specifications for 100 Mb/s operation over 100 = balanced cable (twisted-pair) category 3 through 5, 150 = shielded balanced cable, and fibre optic media are included.

Keywords: balanced cable, data processing, LAN, MAN, twisted pair, star topology, models, repeater, 100 Mb/s operation, media access control, local area network, fibre optic, demand-priority access method, Network interconnection, Mode of data transmission

Designation: 802.12a

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Information Technology - **Local and Metropolitan Area Networks** - Part 12: Demand-Priority Access Method, Physical Layer and Repeater Specifications: Supplement for Operation at Greater than 100 Mb/s

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Patricia Thaler, Phone:916-788-5662, Email:pat_thaler@agilent.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 10, 1996

Project scope: Specify physical layers for operation at speeds higher than 100 Mbps. Define MAC and RMAC parameter values for such operation. Define an optional burst mode capability which allows an end node to send multiple packets per grant up to a defined time limit. Define any needed network management extensions for higher speed and burst mode operation. The speed will not exceed 4 Gb/s.

Project purpose: To provide a higher speed backbone for 100 Mbps and slower networks and to provide a higher speed LAN to support end node performance increases.

Keywords:

Designation: 802.12b

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Information Technology-Telecommunications and information exchange between systems-**Local and Metropolitan area networks**-LAN/MAN - Type specific requirements-Supplement to Part 12: Demand-Priority Access Method, Physical Layer and Repeater Specification: Two-Pair Balanced Cable Physical Medium Dependent (2-TP PMD), Medium Dependent Interface (MDI), and Link Specifications for 100 Mb/s Operation

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Patricia Thaler, Phone:916-788-5662, Email:pat_thaler@agilent.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 21, 1996

Project scope: To define a PMD, MDI, and link specifications for 100 Mb/s operation over 2-pairs of a category 5 cable.

Project purpose: To provide a 2-pair category 5 physical layer supporting the Demand Priority MAC and Media Independent Interface (MDI).

Keywords:

Designation: 802.12c-1998

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Supplement to Information Technology-**Local and metropolitan area networks**-Specific requirements-Part 12: Demand-priority access method, physical layer and repeater specifications: Full-Duplex Operation

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **administratively withdrawn on 15-Jan-2001.

Technical Contact: Patricia Thaler, Phone:916-788-5662, Email:pat_thaler@agilent.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 10, 1996, BD APP: Mar 25, 1998

Project scope: To enhance the Demand Priority MAC to provide full duplex operation when connecting two nodes (the term nodes includes bridges/switches). Define an optional burst mode capability which allows an end node to send multiple packets per grant up to a defined time limit. This will include definition of configuration field bits in the training packet to indicate availability of full duplex mode and burst mode and definition of related network management objects. Full duplex mode will be compatible with the existing and future simplex physical layers.

Project purpose: To support full duplex data transmission between switches, between an end node and a switch, and between a pair of end nodes. Full duplex data transmission provides for more efficient operation, especially in cases where the data exchange is symmetrical. Also, to support burst mode which improves efficiency for half duplex operation.

Keywords:

Designation: 802.12d-1997

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan area networks**-Demand Priority Access Method, Physical Layer and Repeater Specifications: Redundant Links

Status: Withdrawn Standard. No longer endorsed by the IEEE. Available for purchase as archive document from Global Engineering, Phone: 1-800-854-7179, Fax: 303-397-2740. Outside the U.S. call 303-792-2181. **administratively withdrawn on 15-Jan-2001.

side the U.S. call 303-792-2181. **Supplement to IEEE Std 802.12-1995. administratively withdrawn on 15-Jan- 2001.

Technical Contact: Patricia Thaler, Phone:916-788-5662, Email:pat_thaler@agilent.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 21, 1996, BD APP: Mar 20, 1997, ANSI APP: Aug 20, 1997

Project scope: Provide a supplement to the 802.12 standard that defines the implementation and use of redundant repeater uplinks for fault recovery. This will include definition of network management objects related to controlling redundant links, topology rules for redundant links, and standby operation mode including the procedure for transition from standby to active link operation. The provision of a redundant uplink will be optional. Implementation and use of redundant links for end nodes may also be defined. This work will be applicable independent of data rate.

Project purpose: To enhance usability of 802.12 Demand Priority LANs in situations that require high reliability.

Abstract: Revisions to the IEEE 802.12 Demand Priority Access Method allowing optional implementation of redundant links to facilitate automatic recovery of network connectivity in case of link or repeater failure anywhere in the network path are specified. Rules for connecting redundant links within a network are defined.

Keywords: demand priority access method, fault tolerance, network interconnection, media access control, local area network, LAN, MAN, redundant link, repeater

Designation: 802.12e

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Information Technology - Local and Metropolitan Area Networks - Part 1D Telecommunications and information exchange between systems - Local area networks - Media access control (MAC) bridges - Supplement for support by IEEE 802.12

Status: Superseded **Formerly P802.1q.

History: PAR APP: Sep 19, 1996

Project scope: To add a subclause under 2.5 Support of the Internal Sublayer Service by Specific MAC Procedures to cover bridge operation with IEEE 802.12 MACs. This supplement to 802.1D will be developed by the 802.12 WG in cooperation with the 802.1 WG. Therefore, the project has an 802.12 number.

Project purpose: To provide the required 802.12 specific information to the 802.1D standard.

Keywords:

Designation: 802.14

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for Local and Metropolitan Networks: Broadband Cable Access Method and Physical Layer Specification

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert Russell, Phone:706-645-3925, Email:rrussell@knology.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 8, 1998

Project scope: To provide for digital communication services over a branching bus system constructed from fiber and/or coaxial cable, as used in the cable TV distribution networks. The traffic types will be constant bit rate(CBR), variable bit rate(VBR); connection-oriented(CO) and connectionless(CL) data. Sources both in the headend and within the network will be provided for; transmission may be one-to-one, one-to-many, many-to-one, and many-to-many. By specifying a MAC and PHY(s), the standard will be architecturally consistent with 802 compatibles LANs. Compatibility with emerging technologies such as video compression and ATM will also be maintained insofar as consistent with efficiency and good economics. Coexistence with existing analog video transmission and with forthcoming digitally-encoded television signals will be maintained. It is expected that the standard will allow for flexibility in the assignment of frequencies for transmission to and from the headend. Both symmetric and asymmetric data flows will be provided for, with data rates consistent with the capabilities of the media; distances to approximately 160 kilometers round trip will be accommodate.

Project purpose: The standard will provide a protocol to support expanded communication services over existing and evolving cable TV distribution networks. The need for such a standard, as evidenced by the 5 criteria, is discussed in the appended material.

Keywords:

Designation: 802.14a

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Standard for a High Capacity PHYsical Layer for IEEE 802.14 Upstream

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Robert B Russell, Phone:706-645-3925, Email:chairman@walkingdog.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 19, 1998

Project scope: TransportConsider all known High Capacity Physical candidates for possible adaptation to IEEE 802.14 upstream transport. Develop a single HC PHY via following criteria. Technical feasibility, improved channel availability under actual operating conditions, expansion of operational envelope under which channel availability goals are met, price/performance trade analysis, ease of implementation, potential for enhancement of service provider's revenue generation and lower operating costs, minimal impact upon existing 802.14 standard.

Project purpose: Perform analyses and write technical reports in support of HC PHY. Develop draft for HC PHY characterized by providing a higher degree of flexibility in the choices available for modulation and coding. The HC PHY should provide HFC system designers with an enhanced toolbox which can be used to cope optimally with upstream channel characteristics, reduce transmission overhead, and thus maximize throughput in upstream direction. The HC PHY should provide the following enhancements. provide modulation and coding options for maximization of delivered capacity, achieve higher robustness against narrowband interference and burst noise, maximization of channel utilization, minimize latency.

Keywords:

Designation: 802.15.1-2002

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN - Specific Requirements - Part 15: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Wireless Personal Area Networks (WPANs)

Status: Approved Publication of IEEE

Technical Contact: Frank Heile, Phone:408-984-2805 X.2219 **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 18, 1999, BD APP: Apr 15, 2002, ANSI APP: Jul 26, 2002

Project scope: To define PHY and MAC specifications for wireless connectivity with fixed, portable and moving devices within or entering a Personal Operating Space (POS).

Project purpose: To provide a standard for low complexity, low power consumption wireless connectivity to support interoperability among devices within or entering the POS. This includes devices that are carried, worn, or located near the body. The proposed project will address Quality of Service to support a variety of traffic classes.

Keywords:

Designation: P802.15.1-REV1A**Sponsor:** Computer Society/Local and Metropolitan Area Networks**Title:** Standard for Telecommunications and Information Exchange Between Systems -LAN/MAN Specific Requirements - Part 15.1a: Wireless Medium Access Control (MAC) and Physical Layer (PHY) specifications for Wireless Personal Area Networks (WPAN)**Status:** Revision Project**Technical Contact:** Robert F Heile, Phone:508-222-1393, Email:bheile@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org**History:** PAR APP: Sep 11, 2003**Project scope:** The scope of this project is limited to incorporating the changes between 802-15-1-2002 (Bluetooth specification 1.1) and Bluetooth Specification 1.2 into 802-15-1-2002. The scope of the original project was: To define PHY and MAC specifications for wireless connectivity with fixed, portable and moving devices within or entering a Personal Operating Space (POS). A goal of the WPAN Group will be to achieve a level of interoperability which could allow the transfer of data between a WPAN device and an 802.11 device. A Personal Operating Space (POS) is the space about a person or object that typically extends up to 10 meters in all directions and envelops the person whether stationary or in motion. The proposed WPAN Standard will be developed to ensure coexistence with all 802.11 Networks.**Project purpose:** The purpose of this project is to incorporate editorial changes, the errata from 802-15-1-2002 (Bluetooth spec 1.1), the functional changes between 802-15-1-2002 (Bluetooth1.1) and Bluetooth specification 1.2 into 802-15-1-2002. Specifically these include: Format (new volume structure, cleaner formatting); Fixes (Errata from the SIG and IEEE applied, Language cleanup (nomenclature + IEEE)); Features (Architectural Overview, Faster Connections, Adaptive Frequency Hopping for improved coexistence, Extended SCO, Scatternet / Scattermode / Absence Masks, Anonymity Mode, L2CAP Flow & Error Control, LMP Improvements / HCI Improvements); Full Backward Compatibility with 802-15-1-2002 (Bluetooth Specification 1.1)**Keywords:**

Designation: 802.15.2-2003**Sponsor:** Computer Society/Local and Metropolitan Area Networks**Title:** IEEE Recommended Practice for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 15.2: Coexistence of Wireless Personal Area Networks with Other Wireless Devices Operating in Unlicensed Frequency Bands**Status:** Approved Publication of IEEE**Technical Contact:** Robert F Heile, Phone:508-222-1393, Email:bheile@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org**History:** PAR APP: Jan 30, 2000, BD APP: Jun 12, 2003, ANSI APP: Oct 15, 2003**Project scope:** To develop a Recommended Practice for an IEEE 802.15 Wireless Personal Area network that coexists with other selected wireless devices operating in unlicensed frequency bands. To suggest modifications to other IEEE 802.15 standard(s) to enhance coexistence with other selected wireless devices operating in unlicensed frequency bands. To suggest recommended practices for IEEE 802.11 devices to facilitate coexistence with IEEE 802.15 devices operating in unlicensed frequency bands.**Project purpose:** Usage models exist that presume coexistence of IEEE 802.15 devices with other wireless devices operating in unlicensed frequency bands. The purpose of this project is to facilitate coexistence of IEEE 802.15 WPAN devices with selected other wireless devices operating in unlicensed frequency bands. The intended users of this recommended practice include IEEE 802 Wireless LAN developers as well as designers and consumers of wireless products being developed to operate in unlicensed frequency bands.**Keywords:**

Designation: 802.15.2**Sponsor:** Computer Society/Local and Metropolitan Area Networks**Title:** Recommended Practice for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 15: Recommended Practice for Wireless Personal Area Networks Operating in Unlicensed Frequency Bands**Status:** Superseded**History:** PAR APP: Jan 30, 2000**Project scope:** To develop a recommended practice for an IEEE 802.15 Wireless Personal Area Network that coexist s with other selected wireless devices operating in unlicensed frequency bands. To suggest modifications to other IEEE 802.15 standard(s) to enhance coexistence with other selected wireless devices operating in unlicensed frequency bands. To suggest recommended practices for IEEE 802.11 devices to facilitate coexistence with IEEE 802.15 devices oeprating in unlicensed frequency bands.**Project purpose:** Usage models exist that presume coexistence of IEEE 802.15 devices with other wireless devices oeprating in unlicensed frequency bands. The purpose of this project is to facilitate coexistence of IEEE 802.15 WPAN devices with selected other wireless devices operating in unlicensed frequency bands. The intended users of this recommended practice include IEEE 802 Wireless LAN developers as well as designers and consumers of wireless products being developed to operate in unlicensed frequency bands.**Keywords:**

Designation: 802.15.3a**Sponsor:** Computer Society/Local and Metropolitan Area Networks**Title:** Amendment to Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Higher Speed Physical Layer Extension for the High Rate Wireless Personal Area Networks (WPAN)**Status:** Amendment**Technical Contact:** Robert F Heile, Phone:508-222-1393, Email:bheile@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org**History:** PAR APP: Dec 11, 2002**Project scope:** This project will define an alternative PHY clause for a higher data rate amendment to standard 802.15.3.**Project purpose:** The intent of this project is to provide a standard for a low complexity, low cost, low power consumption alternate PHY for 802.15.3 (comparable to the goals for 802.15.3). The data rate will be high enough, 110 Mb/s or more (see 18a), to satisfy an evolutionary set of consumer multi-media industry needs for WPAN communications. The project will address the requirements to support multimedia data types in multiple compliant co- located systems and also coexistence (18b).**Keywords:**

Designation: 802.15.3-2003**Sponsor:** Computer Society/Local and Metropolitan Area Networks**Title:** IEEE Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 15.3: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for High Rate Wireless Personal Area Networks (WPAN)**Status:** Approved Publication of IEEE**Technical Contact:** Robert F Heile, Phone:508-222-1393, Email:bheile@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org**History:** PAR APP: Mar 30, 2000, BD APP: Jun 12, 2003, ANSI APP: Oct 20, 2003**Project scope:** This project will define the PHY and MAC specifications for high data rate wireless connectivity with fixed, portable and moving devices within or entering a

Personal Operating Space (POS). A goal of the WPAN-HR (High Rate) Task Group will be to achieve a level of interoperability or coexistence with other 802.15 Task Groups. It is also the intent of this project to work toward a level of coexistence with other wireless devices in conjunction with Coexistence Task Groups such as 802.15.2.

Project purpose: To provide a standard for low complexity, low cost, low power consumption (comparable to the goals of 802.15.1) and high data rate wireless connectivity among devices within or entering the Personal Operating Space (POS). The data rate will be high enough, 20 Mbps or more, to satisfy a set of consumer multimedia industry needs for WPAN communications. The project will also address the Quality of Service capabilities required to support multimedia data types.

Keywords:

Designation: 802.15.4

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: STANDARD FOR Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 15: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Low Rate Wireless Personal Area Networks (WPAN)

Status: Superseded

History: PAR APP: Dec 7, 2000

Project scope: This project will define the PHY and MAC specifications for low data rate wireless connectivity with fixed, portable and moving devices with no battery or very limited battery consumption requirements typically operating in the Personal Operating Space (POS) of 10 meters (See 16a). It is foreseen that depending on the application that a longer range at a lower data rate may be an acceptable trade-off (See 16b). It is the intent of this project to work toward a level of coexistence with other wireless devices in conjunction with Coexistence Task Groups, such as 802.15.2 and 802.11/ETSI-BRAN/MMAC 5GSG.

Project purpose: To provide a standard for ultra low complexity, ultra low cost, ultra low power consumption and low data rate wireless connectivity among inexpensive devices. The raw data rate will be high enough (maximum of 200kbs) to satisfy a set of simple needs such as interactive toys, but scaleable down to the needs of sensor and automation needs (10kbs or below) for wireless communications. The project may also address the location tracking capabilities required to support uses of smart tags and badges.

Keywords:

Designation: 802.15.4-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 15: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Low Rate Wireless Personal Area Networks (WPAN)

Status: Approved Publication of IEEE

Technical Contact: Robert F Heile, Phone:508-222-1393, Email:bheile@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 7, 2000, BD APP: May 12, 2003

Project scope: This project will define the PHY and MAC specifications for low data rate wireless connectivity with fixed, portable and moving devices with no battery or very limited battery consumption requirements typically operating in the Personal Operating Space (POS) of 10 meters (See 16a). It is foreseen that depending on the application that a longer range at a lower data rate may be an acceptable trade-off (See 16b). It is the intent of this project to work toward a level of coexistence with other wireless devices in conjunction with Coexistence Task Groups, such as 802.15.2.and 802.11/ETSI- BRAN/MMAC 5GSG.

Project purpose: To provide a standard for ultra low complexity, ultra low cost, ultra low power consumption and low data rate wireless connectivity among inexpensive devices. The raw data rate will be high enough (maximum of 250kbs) to satisfy a set of simple needs such as interactive toys, but scaleable down to the needs of sensor and automation needs (20kbs or below) for wireless communications.

Keywords:

Designation: 802.16-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

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

Status: Approved Publication of IEEE

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jan 30, 2000, BD APP: Dec 6, 2001, ANSI APP: May 24, 2002

Project scope: This standard specifies the physical layer and media access control layer of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems. The specification enables transport of data, video, and voice services. It applies to systems operating in the vicinity of 30 GHz but is broadly applicable to systems operating between 10 and 66 GHz.

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective, and interoperable multivendor broadband wireless access products. To facilitate competition in broadband access by providing alternatives to wireline broadband access. To facilitate coexistence studies, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum.

Keywords:

Designation: P802.16/Conformance03-200x

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Conformance to IEEE Standard 802.16 - Part 3: Radio Conformance Tests (RCT) for 10-66 GHz WirelessMAN-SC™ Air Interface

Status: New Standard Project

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 20, 2003

Project scope: This standard represents the Radio Conformance Test (RCT) specification for base stations and subscriber stations based upon the WirelessMAN-SC (TM) (10-66 GHz) air interface specified in IEEE Standard 802.16.

Project purpose: These radio conformance test specifications form the basis of conformance and interoperability testing at the radio interface.

Keywords:

Designation: 802.16

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Air Interface for Fixed Broadband Wireless Access Systems

Status: Changed Designation **Changed Designation to P802.16.1

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 18, 1999

Project scope: This standard specifies the physical layer and media access control layer of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems. The specification enables transport of data, video, and voice services. It applies to systems operating in the vicinity of 30 GHz but is broadly applicable to systems operating between 10 and 66 GHz.

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective, and interoperable multivendor broadband wireless access products. To facilitate competition in broadband access by providing alternatives to wireline broadband access. To facilitate coexistence studies, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum.

Keywords:

Designation: 802.16

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Air Interface for Fixed Broadband Wireless Access Systems

Status: Superseded

History: PAR APP: Mar 18, 1999

Project scope: This standard specifies the physical layer and media access control layer of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems. The specification enables transport of data, video, and voice services. It applies to systems operating in the vicinity of 30 GHz but is broadly applicable to systems operating between 10 and 66 GHz.

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective, and interoperable multivendor broadband wireless access products. To facilitate competition in broadband access by providing alternatives to wireline broadband access. To facilitate coexistence studies, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum.

Keywords:

Designation: P802.16/Conformance02

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Conformance to IEEE Standard 802.16 - Part 2: Test Suite Structure and Test Purposes (TSS&TP;) for 10-66 GHz WirelessMAN-SC Air Interface

Status: New Standard Project

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: This standard represents the Test Suite Structure and Test Purposes (TSS&TP;), per ISO/IEC Standards 9646-1, and 9646-2 (1995) and ITU-T Standards X.290 and X.291, for conformance specification of base stations and subscriber stations based upon the WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16.

Project purpose: This document describes the structure of the suite of tests and the test purposes for WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16. It therefore provides the second of three specifications (per ISO/IEC 9646-1 and 9646-2) required to support conformance and interoperability testing of devices built to the specifications in IEEE 802.16.

Keywords:

Designation: 802.16.1b

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Air Interface for Fixed Broadband Wireless Access Systems including License-Exempt Frequencies

Status: Changed Designation **Changed designation to P802.16b

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 7, 2000

Project scope: This standard specifies the medium access control layer and physical layers of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems. The specification enables transport of data, video, and voice services. Physical layers are specified for both licensed and license-exempt bands. This Amendment expands the scope of the original project by extending it to license-exempt bands (thereby defining the Wireless High-Speed Unlicensed Metropolitan Area Network [WirelessHUMANM] Standard). It specifies the physical layer and medium access control layer of the air interface of interoperable fixed broadband wireless metropolitan area network systems, including point-to- multipoint. The standard enables access to data, video, and voice services with quality of service in unlicensed (i.e., license-exempt) bands designated for public network access. It will focus on the 5-6 GHz range and may be applied to unlicensed bands between 2 and 11 GHz. It will address strategies for coexistence with other unlicensed applications. The project will utilize or modify applicable elements from the following: · MAC: IEEE 802.16 · PHY: IEEE 802.11a; ETSI BRAN HIPERLAN/2

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective, and interoperable multivendor broadband wireless access products. To facilitate competition in broadband access by providing alternatives to wireline broadband access. To facilitate coexistence studies, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum. This Amendment enhances the original project by extending it to license-exempt bands. It will identify techniques to tolerate interference in the unlicensed bands and facilitate strategies for coexistence with other unlicensed band systems such as 802.11 and 802.15. It will encourage consistent worldwide spectrum allocation and accelerate the commercialization of unlicensed broadband wireless access spectrum. Utilization of unlicensed frequencies will address a market that includes residences, small office-home office (SOHO), telecommuters, and small and medium enterprises (SME).

Keywords:

Designation: 802.16.1

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Air Interface for Fixed Broadband Wireless Access Systems

Status: Changed Designation **Changed designation to 802.16

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jan 30, 2000

Project scope: This standard specifies the physical layer and media access control layer of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems. The specification enables transport of data, video, and voice services. It applies to systems operating in the vicinity of 30 GHz but is broadly applicable to systems operating between 10 and 66 GHz.

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective, and interoperable multivendor broadband wireless access products. To facilitate competition in broadband access by providing alternatives to wireline broadband access. To facilitate coexistence studies, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum.

Keywords:

Designation: 802.16.2a

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks** - Amendment to Recommended Practice for Coexistence of Fixed Broadband Wireless Access Systems

Status: Superseded

History: PAR APP: Aug 17, 2001

Project scope: This project will develop extensions and modifications to IEEE 802.16.2-2001 addressing two distinct topics. The first topic is the coexistence between multipoint systems and point-to-point systems in the frequency range 10-66 GHz, with a focus on the range 23.5 to 43.5 GHz. Two types of point-to-point systems will be considered: those used by fixed BWA operators and those used as individually assigned links, commonly licensed on a "first-come, first-served" basis. The second topic is coexistence among fixed BWA systems operating in licensed bands within the frequency range 2- 11 GHz. Clarifications and updates to the existing standard will also be considered.

Project purpose: The purpose of this Amendment is to provide additional coexistence guidelines to license holders, service providers, deployment groups, and system integrators, covering coexistence with point-to-point systems (primarily from 23.5 - 43.5 GHz) and coexistence among licensed fixed BWA systems operating in the 2-11 GHz frequency range. The equipment parameter values contained within this amended practice will benefit license holders, equipment and component vendors, and industry associations by facilitating the deployment and operation of fixed BWA systems while minimizing the need for case-by-case coordination. A further purpose is to encourage voluntary procedures that facilitate a simpler licensing process for systems operating below 11 GHz, particularly in the 2.5 GHz MMDS/ITFS bands in the USA.

Keywords:

Designation: 802.16.2a

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks** - Amendment to Recommended Practice for Coexistence of Fixed Broadband Wireless Access Systems

Status: Superseded

History: PAR APP: Aug 17, 2001

Project scope: This project specifies extensions and modifications to IEEE Standard 802.16.2-2001 addressing two distinct topics. The first is coexistence between multipoint systems and point-to-point systems in the frequency range 10-66 GHz, with a focus on the range 23.5 to 43.5 GHz. The second topic is coexistence among fixed BWA systems operating in licensed bands within the frequency range 2-11 GHz. Clarifications and updates to the existing standard will also be considered.

Project purpose: The purpose of this Amendment is to provide coexistence guidelines to license holders, service providers, deployment groups, and system integrators, covering coexistence with point-to-point systems (primarily from 23.5-43.5 GHz) and coexistence among licensed fixed BWA systems operating in the 2-11 GHz frequency range. The specifications will facilitate the deployment and operation of fixed BWA systems while minimizing the need for case-by-case coordination.

Keywords:

Designation: 802.16.2a

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks** - Amendment to Recommended Practice for Coexistence of Fixed Broadband Wireless Access Systems

Status: Superseded

History: PAR APP: Aug 17, 2001

Project scope: This project specifies extensions and modifications to IEEE Standard 802.16.2-2001 addressing two distinct topics. The first is coexistence between multipoint systems and point-to-point systems in the frequency range 10-66 GHz, with a focus on the range 23.5 to 43.5 GHz. The second topic is coexistence among fixed BWA systems operating in licensed bands within the frequency range 2-11 GHz. Clarifications and updates to the existing standard will also be considered.

Project purpose: The purpose of this Amendment is to provide coexistence guidelines to license holders, service providers, deployment groups, and system integrators, covering coexistence with point-to-point systems (primarily from 23.5-43.5 GHz) and coexistence among licensed fixed BWA systems operating in the 2-11 GHz frequency range. The specifications will facilitate the deployment and operation of fixed BWA systems while minimizing the need for case-by-case coordination.

Keywords:

Designation: 802.16.2

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Coexistence of Broadband Wireless Access Systems

Status: Superseded

History: PAR APP: Sep 16, 1999

Project scope: This project covers development of a Recommended practice for the design and coordinated deployment of broadband wireless access (BWA) systems to minimize interference so as to maximize system performance and/or service quality. This practice will provide for coexistence using frequency and spatial separation and will cover three areas. First, it will recommend limits of in-band and out-of-band emissions from BWA transmitters through parameters including radiated power, spectral masks and antenna patterns. Second, it will recommend receiver tolerance parameters, including noise floor degradation and blocking performance, for interference received from other BWA systems as well as from other terrestrial and satellite systems. Third, it will provide coordination parameters, including band plans, separation distances, and power flux density limits, to enable successful deployment of BWA systems with tolerable interference. The scope includes interference between systems deployed across geographic boundaries in the same frequency band and systems deployed in the same geographic area in different frequency bands (including different systems, deployed by a single license-holder in sub-bands of the licensees authorized bandwidth). The scope does not cover coexistence issues due to intra-system frequency re-use within the operator's licensed band, and it does not consider the impact of interference created by BWA systems on non-BWA terrestrial and satellite systems.

Project purpose: The purpose of this recommended practice is to provide coexistence guidelines to license holders, service providers, deployment groups, and system integrators. The equipment parameters contained within this practice will benefit equipment and component vendors and industry associations by providing design targets. The benefits of this practice will include: Coexistence of different systems with higher assurance that system performance objectives will be met; Minimal need for case-by-case interference studies and coordination between operators to resolve interference issues; Preservation of a favorable electromagnetic environment for deployment and operation of BWA systems, including future systems compliant to the 802.16 interoperability standard; Optimization of coverage and spectrum utilization; Cost-effective system deployment.

Keywords:

Designation: 802.16.2-REVA

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Recommended Practice for **Local and Metropolitan Area Networks** - Coexistence of Fixed Broadband Wireless Access Systems

Status: Modified Revision Project

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Aug 17, 2001

Project scope: This project revises IEEE Std 802.16.2-2001. In particular, it specifies extensions and modifications addressing two distinct topics. The first is coexistence between multipoint systems and point-to-point systems in the frequency range 10-66 GHz. The second is coexistence among fixed broadband wireless access systems operating in licensed bands within the frequency range 2-11 GHz. Updates to the existing content will also be considered.

Project purpose: The purpose of this Revision is to provide additional coexistence guidelines to license holders, service providers, deployment groups, and system integrators. The specifications will facilitate the deployment and operation of fixed broadband wireless access systems while minimizing the need for case-by-case coordination.

Keywords:

Designation: 802.16.3

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Air Interface for Fixed Broadband Wireless Access Systems in Licensed Bands from 2 to 11 GHz

Status: Changed Designation **Changed designation to P802.16a

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 30, 2000

Project scope: This standard specifies the physical layer and media access control layer of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems (e.g., those supporting data rates of DS1/E1 or greater). The specification enables access to data, video, and voice services with a specified quality of service in licensed bands designated for public network access. It applies to systems operating between 2 and 11 GHz.

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective, and interoperable multi-vendor broadband wireless access products. To facilitate competition in broadband access by providing wireless alternatives to wireline broadband access. To facilitate coexistence studies, encourage worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum. Utilization of frequencies from 2 to 11 GHz will address a market that includes residences, Small Office/Home Office (SOHO), telecommuters, and Small and Medium Enterprises (SME).

Keywords:

Designation: 802.16a

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks** - Amendment to Standard Air Interface for Fixed Broadband Wireless Access Systems - Media Access Control Modifications and Additional Physical Layer for 2-11 GHz

Status: Superseded

History: PAR APP: Jan 30, 2000

Project scope: This standard specifies the physical layer and media access control layer of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems (e.g., those supporting data rates of DS1/E1 or greater). The specification enables access to data, video, and voice services with a specified quality of service in licensed bands designated for public network access. It applies to systems operating between 2 and 11 GHz.

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective and interoperable multi-vendor broadband wireless access products. To facilitate competition in broadband access by providing wireless alternatives to wireline broadband access. To facilitate coexistence studies, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum. Utilization of frequencies from 2 to 11 GHz will address a market that includes residences, Small Office-Home Office (SOHO), telecommuters and Small and Medium Enterprises (SME).

Keywords:

Designation: 802.16a-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Amendment to IEEE Standard for **Local and Metropolitan Area Networks** - Part 16: Air Interface for Fixed Broadband Wireless Access Systems - Medium Access Control Modifications and Additional Physical Layer Specifications for 2-11 GHz

Status: Approved Publication of IEEE

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 30, 2000, BD APP: Jan 29, 2003, ANSI APP: May 27, 2003

Project scope: This standard specifies the physical layer and medium access control layer of the air interface of interoperable fixed point-to- multipoint (and, in license-exempt bands, optional mesh topology) broadband wireless access systems (e.g., those supporting data rates of DS1/E1 or greater). The specification enables access to data, video, and voice services with a specified quality of service in licensed bands designated for public network access and license-exempt bands. It applies to systems operating between 2 and 11 GHz, where such services are permitted. This Amendment expands the scope of the IEEE Standard 802.16 by extending it to bands between 2-11 GHz, whereas the scope of the original project was limited to 10-66 GHz.

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective and interoperable multi-vendor broadband wireless access products. To facilitate competition in broadband access by providing wireless alternatives to wireline broadband access. To facilitate coexistence studies, provide mechanisms for coexistence with other license-exempt band systems such as 802.11 and 802.15, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum. Utilization of frequencies from 2 to 11 GHz will address a market that includes residences, Small Office-Home Office (SOHO), telecommuters and Small and Medium Enterprises (SME).

Keywords:

Designation: 802.16b

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks** - Amendment to Standard Air Interface for Fixed Broadband Wireless Access Systems - Media Access Control Modifications and Additional Physical Layer for License-Exempt Frequencies

Status: Withdrawn PAR. Standards project no longer endorsed by the IEEE.

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 7, 2000

Project scope: This standard specifies the medium access control layer and physical layers of the air interface of interoperable fixed point-to- multipoint broadband wireless access systems. The specification enables transport of data, video, and voice services. Physical layers are specified for both licensed and license-exempt bands. This Amendment expands the scope of the original project by extending it to license-exempt bands (thereby defining the Wireless High-Speed Unlicensed Metropolitan Area Network [WirelessHUMAN™] Standard). It specifies the physical layer and medium access control layer of the air interface of interoperable fixed broadband wireless metropolitan area network systems, including point-to-multipoint. The standard enables access to data, video, and voice services with quality of service in unlicensed (i.e., license-exempt) bands designated for public network access. It will focus on the 5-6 GHz range and may be applied to unlicensed bands between 2 and 11 GHz. It will address strategies for coexistence with other unlicensed applications. The project will utilize or modify applicable elements from the following: · MAC: IEEE 802.16 · PHY: IEEE 802.11a; ETSI BRAN HIPERLAN/2

Project purpose: To enable rapid worldwide deployment of innovative, cost- effective, and interoperable multivendor broadband wireless access products. To facilitate competition in broadband access by providing alternatives to wireline broadband access. To facilitate coexistence studies, encourage consistent worldwide allocation, and accelerate the commercialization of broadband wireless access spectrum. This Amendment enhances the original project by extending it to license-exempt bands. It will identify techniques to tolerate interference in the unlicensed bands and facilitate strategies for coexistence with other unlicensed band systems such as 802.11 and 802.15. It will encourage consistent worldwide spectrum allocation and accelerate the commercialization of unlicensed broadband wireless access spectrum. Utilization of unlicensed frequencies will address a market that includes residences, small office-home office (SOHO), telecommuters, and small and medium enterprises (SME).

Keywords:

Designation: 802.16c-2002

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: IEEE Standard for Local and Metropolitan Area Networks - Part 16: Air Interface for Fixed Broadband Wireless Access Systems - Amendment 1: Detailed System Profiles for 10-66 GHz

Status: Approved Publication of IEEE

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: May 9, 2002, BD APP: Dec 11, 2002, ANSI APP: Apr 18, 2003

Project scope: s Amendment updates and expands Clause 12 of IEEE Std

Designation: 802.16d

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Amendment to IEEE Standard for Local and metropolitan area networks - Part 16: Air Interface for Fixed Broadband Wireless Access Systems - Detailed System Profiles for 2-11 GHz

Status: Superseded

History: PAR APP: Dec 11, 2002

Project scope: This Amendment updates and expands Clause 12 of IEEE Std 802.16, which concerns system profiles that list sets of features and functions to be used in typical implementation cases. Errors and inconsistencies in IEEE Std 802.16 will also be corrected. The scope is limited to 2-11 GHz.

Project purpose: This standard aids the deployment of interoperable systems by defining and naming a set of system profiles to which manufacturers can test compliance. It also corrects errors and inconsistencies.

Keywords:

Designation: 802.16e

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Amendment to 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

Status: Amendment

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: This document provides enhancements to IEEE Std 802.16/802.16a to support subscriber stations moving at vehicular speeds and thereby specifies a system for combined fixed and mobile broadband wireless access. Functions to support higher layer handoff between base stations or sectors are specified. Operation is limited to licensed bands suitable for mobility between 2 and 6 GHz. Fixed 802.16a subscriber capabilities shall not be compromised (See Item #18).

Project purpose: This standard will increase the market for broadband wireless access solutions by taking advantage of the inherent mobility of wireless media. It will fill the gap between very high data rate wireless local area networks and very high mobility cellular systems. It will support fixed and mobile services for both enterprise and consumer markets.

Keywords:

Designation: 802.16-REVd

Sponsor: Computer Society/Local and Metropolitan Area Networks

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

Status: Modified Revision Project

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: This revised standard specifies the air interface, including the medium access control layer and multiple physical layer specifications, of fixed broadband wireless access systems supporting multiple services. It consolidates IEEE Standards 802.16, 802.16a, and 802.16c, retaining all modes and major features without adding modes. Content is added or revised to improve performance, ease deployment, or replace incorrect, ambiguous, or incomplete material, including system profiles.

Project purpose: This standard enables rapid worldwide deployment of innovative, cost-effective, and interoperable multivendor broadband wireless access products, facilitates competition in broadband access by providing alternatives to wireline broadband access, encourages consistent worldwide spectrum allocations, and accelerates the commercialization of broadband wireless access systems.

Keywords:

Designation: P802.17

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks -Specific requirements -Resilient Packet Ring Access Method & Physical Layer Specifications

Status: New Standard Project

Technical Contact: Michael Takefman, Phone:613-271-3399, Email:tak@cisco.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 7, 2000

Project scope: Define a Resilient Packet Ring Access Protocol for use in Local, Metropolitan, and Wide Area Networks, along with appropriate Physical Layer specifications for transfer of data packets at rates scalable to multiple gigabits per second.

Project purpose: The standard will define a very high-speed network protocol that is optimized for packet transmission in resilient ring topologies. Current standards are either optimized for TDM transport, or optimized for mesh topologies. There is no high-speed (greater than 1 billion bits per second) networking standard in existence, which is optimized for packet transmission in ring topologies.

Keywords:

Designation: 802.17a

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Information Technology - Telecommunications and Information Exchange Between Systems - **Local and Metropolitan Area Networks** - Common Specifications - Part 3: Media Access Control (MAC) Bridges

Status: Amendment

Technical Contact: Michael Takefman, Phone:613-271-3399, Email:tak@cisco.com **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: Amend 802.1D:1998 to support Bridging of 802.17 MACs. This involves: Adding one subclause to clause 6 of 802.1D describing the service interface mapping between the Internal Sublayer Service and the 802.17 MAC service; Minor changes elsewhere in the document as needed to accommodate support of the additional MAC, including priority mapping in Clause 7 and the PICS Proforma in Annex A.

Project purpose: The purpose is to amend the 802.1D transparent bridge standard recognition of the 802.17 Media Access Control (MAC).

Keywords:

Designation: P802.20

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks** - Standard Air Interface for Mobile Broadband Wireless Access Systems Supporting Vehicular Mobility - Physical and Media Access Control Layer Specification

Status: New Standard Project

Technical Contact: Gary S Robinson, Phone:617-300-7242, Email:g.robinson@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: Specification of physical and medium access control layers of an air interface for interoperable mobile broadband wireless access systems, operating in licensed bands below 3.5 GHz, optimized for IP-data transport, with peak data rates per user in excess of 1 Mbps. It supports various vehicular mobility classes up to 250 Km/h in a MAN environment and targets spectral efficiencies, sustained user data rates and numbers of active users that are all significantly higher than achieved by existing mobile systems. (See also Item 18)

Project purpose: The purpose of this project is to enable worldwide deployment of cost effective, spectrum efficient, ubiquitous, always-on and interoperable multi-vendor mobile broadband wireless access networks. It will provide an efficient packet based air interface optimized for IP. The standard will address end user markets that include access to Internet, intranet, and enterprise applications by mobile users as well as access to infotainment services.

Keywords:

Designation: 802a-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE **Local and Metropolitan Area Networks** - Overview and Architecture - Amendment 1: Ethertypes for prototype and vendor-specific protocol development

Status: Approved Publication of IEEE

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Feb 14, 2002, BD APP: Jun 12, 2003, ANSI APP: Sep 22, 2003

Project scope: Provision of a small number of Ethernet type values for prototype and experimental use. Provision of a mechanism for vendor assignment of protocol identifiers for use with proprietary protocols.

Project purpose: The existing Ethernet Type number space is a finite resource. In order to develop protocols that will use an Ethernet Type value as a protocol identifier, it is necessary for vendors to apply for type values from this limited number space, both for development purposes and for assignment to the final protocol. This can lead to wastage of the number space for no useful purpose. This amendment to IEEE Standard 802 will allow prototype and experimental protocols to be developed without consuming type values, and will also provide a means whereby protocol developers can assign permanent protocol identifier values without consuming type values.

Keywords:

Designation: 802b

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks** - Overview and Architecture - Amendment 2: Registration of Object Identifiers

Status: Amendment

Technical Contact: Tony A Jeffree, Phone:011+44-161-973-4278, Email:tony@jeffree.co.uk **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Feb 13, 2003

Project scope: The scope of this amendment is to define an Object Identifier hierarchy used within IEEE 802 for uniform allocation of Object Identifiers used in 802 standards.

Project purpose: The purpose of this amendment is to establish a consistent practice within IEEE 802 for the development and allocation of object identifiers. Consistency of Object Identifier allocation will facilitate implementation and operation of IEEE 802 compliant equipment.

Keywords:

Designation: 1802.3-1991

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks**: Conformance Test Methodology- CSMA/CD Access Method and Physical Layer Specifications - Currently Contains Attachment Unit Interface (AUI) Cable (Section 4)

Status: Superseded **IEEE Supplement to IEEE Std 802-1990: Methodology and Implementation for AUI Cable Conformance Testing. Superseded by 1802.3-2001.

History: PAR APP: Mar 21, 1991, BD APP: Mar 21, 1991, ANSI APP: Aug 9, 1991 (Ref. Std.: 802.3g)

Abstract: Methods for conformance testing to satisfy requirements arising from the ISO/IEC 8802-3 [ANSI/IEEE Std 802.3] standard are defined. The conformance test suite is intended to detect incorrect implementations of the ISO/IEC 8802-3 [ANSI/IEEE Std 802.3] standard. It is comprised of two categories of test groups. The first category relates to basic interconnection testing and the second to capability and behavior testing. The test setups, adapters, and instruments used are described.

Keywords: LAN, local, networks, AUI, compliance, MAC, MAU, PICS, PIXIT, PLS, Conformance testing

Designation: 1802.3-2001

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Conformance Test Methodology for IEEE Standards for **Local and Metropolitan Area Networks** - Specific Requirements - Part 3: Carrier Sense Multiple Access With Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications

Status: Approved Publication of IEEE **Supersedes 1802.3-1991 and 1802.3d-1993.

Technical Contact: Geoffrey O Thompson, Phone:408-495-1339, Email:thompson@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Jan 30, 2000, BD APP: Oct 10, 2001, ANSI APP: Jan 30, 2002

Project scope: Editorial merge of existing material.

Project purpose: To editorially merge the front matter from 1802.3 with the technical matter from 1802.3d (10BASE-T Conformance Test) whilst removing obsolete material (AUI Cable Conformance Test).

Keywords:

Designation: 1802.3d-1993

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: **Local and Metropolitan Area Networks:** Conformance Test Methodology- CSMA/CD Access Method and Physical Layer Specifications-Type 10BASE-T Medium Attachment Unit (MAU) (Section 6)

Status: Superseded **Supplement to IEEE Std 1802.3-1991. Superseded by 1802.3-2001.

History: PAR APP: Sep 26, 1991, BD APP: Sep 15, 1993, ANSI APP: Feb 24, 1994

Abstract: Methods for conformance testing to satisfy requirements arising from the ISO/IEC 8802-3 [ANSI/IEEE Std 802.3] standard are defined. The conformance test suite is intended to detect incorrect implementations of the ISO/IEC 8802-3 standard, clause 14. It comprises two categories of test groups. The first category relates to basic interconnection testing and the second to capability and behavior testing. The test setups, adapters, and instruments used are described.

Keywords: Unshielded twisted pair (UTP), Medium attachment unit (MAU), Local area networks, Conformance testing, Compliance, Abstract test suite, 10BASE- T

Designation: 802.16/Conformance01-2003

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: IEEE Standard for Conformance to IEEE Standard 802.16 - Part 1: Protocol Implementation Conformance Statement (PICS) Proforma for 10-66 GHz WirelessMAN-SC Air Interface

Status: Approved Publication of IEEE **Should be changed to 802.16/Conformance01. Had originally been P1802.16.1.

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Aug 15, 2002, BD APP: Jun 12, 2003, ANSI APP: Sep 24, 2003

Project scope: This standard represents the Protocol Implementation Conformance Statement (PICS) Proforma, per ISO/IEC Standard 9646-7 (1995) and ITU-T X.296, for conformance specification of base stations and subscriber stations based upon the WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16.

Project purpose: This document describes the capabilities and options within the WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16. It is to be completed by the supplier of a product claiming to implement the protocol. It indicates which capabilities and options have been implemented and what limitations might prevent interworking. It allows a customer of the product to evaluate its conformance and to determine whether the product meets the customer's requirements.

Keywords:

Designation: 1802.16.2

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Conformance to IEEE Standard 802.16 - Part 2: Test Suite Structure and Test Purposes (TSS&TP;) for 10-66 GHz WirelessMAN-SC Air Interface

Status: Changed Designation

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 11, 2002

Project scope: This standard represents the Test Suite Structure and Test Purposes (TSS&TP;), per ISO/IEC Standards 9646-1, and 9646-2 (1995) and ITU-T Standards X.290 and X.291, for conformance specification of base stations and subscriber stations based upon the WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16.

Project purpose: This document describes the structure of the suite of tests and the test purposes for WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16. This document describes the structure of the suite of tests and the test purposes for WirelessMAN-SC (10-66 GHz) air interface specified in IEEE Std 802.16. It therefore provides the second of three specifications (per ISO/IEC 9646-1 and 9646-2) required to support conformance and interoperability testing of devices built to the specifications in IEEE 802.16.

Keywords:

Designation: 1802.16.3

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Standard for Conformance to IEEE Standard 802.16 - Part 3: Radio Conformance Tests (RCT) for 10-66 GHz WirelessMAN-SC™ Air Interface

Status: Changed Designation

Technical Contact: Roger B Marks, Phone:303-497-3037, Email:r.b.marks@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S. and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Mar 20, 2003

Project scope: This standard represents the Radio Conformance Test (RCT) specification for base stations and subscriber stations based upon the WirelessMAN-SC (TM) (10-66 GHz) air interface specified in IEEE Standard 802.16.

Project purpose: These radio conformance test specifications form the basis of conformance and interoperability testing at the radio interface.

Keywords:

Designation: 8802.2-1989

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Information processing systems - Local area networks - Part 2: Logical link control

Status: Superseded

History: PAR APP: Aug 17, 1989, BD APP: Aug 17, 1989

Keywords:

Designation: 8802-2-1994

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: ISO/IEC 8802-2:1994: Information Technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 2: Logical link control

Status: Approved Publication of IEEE **Incorporating IEEE Std 802.2-1989, 802.2a-1993, 802.2b-1993, 802.2d-1993, 802.2e-1993, and 802.5p-1993. IP

Technical Contact: David E Carlson, Phone:732-264-2581, Email:dcarlson@netlabs.net **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

Abstract: This standard is part of a family of local area network (LANs) and metropolitan area network (MANs) that deals with the physical and data link layers as defined by the ISO Open Systems Interconnection Reference Model. The functions, features, protocol, and services of the Logical Link Control (LLC) sublayer, which constitutes the top sublayer in the data link layer of the ISO/IEC 8802 Local Area Network Protocol, are described. The services required of, or by, the LLC sublayer at the logical interfaces with the network layer, the MAC sublayer, and the LLC sublayer management function are specified. The protocol data unit (PDU) structure for data communication systems is defined using bit-oriented procedures, as are three types of operation for data communication between service access points. In the first type of operation, PDUs are exchanged between LLCs without the need for the establishment of a data link connection. In the second type of operation, a data link connection is established between two LLCs prior to any exchange of information-bearing PDUs. In the third type of operation, PDUs are exchanged between LLCs without the need for the establishment of a data link connection, but stations are permitted to both send data and request the return of data simultaneously.

Keywords: Local area networks, protocols, logical link control, LAN

Designation: 8802-2-1998

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Logical link control (with Amendments 3, 6, and 7)

Status: Approved Publication of IEEE IP

Keywords:

Designation: 8802-2,Amd.3-1995

Title: ISO/IEC 8802-4, Amd 3 IEEE [P802.2C]Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 2: Logical link control AMENDMENT 3: Conformance requirements

Status: Approved Publication of IEEE **Amendment to 8802-2:1994 (Draft 802.2c) IP

Abstract: Conformance requirements for ISO/IEC 8802-2: 1994[ANSI/IEEE Std 802.2, 1994] are provided.

Keywords: logical link control, protocols, local area networks, LAN

Designation: 8802-3-1989

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Information Processing Systems - Local Area Networks - Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications

Status: Superseded **This publication is a revision of 802.3 (ISO apprvd 1988).

History: BD APP: Jun 9, 1988, ANSI APP: Jan 12, 1989

Keywords:

Designation: 8802-3-1990

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Information Processing System - Local Area Network - Part 3 : Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications

Status: Superseded **Approved by ISO/IEC/ANSI. Supersedes 8802-3 : 1989.

History: BD APP: Feb 15, 1990 (Ref. Std.: 802.3)

Keywords:

Designation: 8802-3-1992

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Information Processing System - Local Area Network - Part 3 : Carrier Sense Multiple Access with Collision Detection (CSMA/CD)

Status: Superseded

Publication type: Special Publication

Keywords: data, processing, information, interchange, local, area, networks, mode, data, transmission, network, interconnection, models

Designation: 8802-3-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: ISO/IEC 8802-3:1993: Information technology - Local and metropolitan area networks - Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications

Status: Superseded **Contains IEEE Std 802.3-1988, 802.3c-1985, 802.3d-1987, 802.3b-1985, 802.3i-1990 and corrections resulting from Maintenance Ballot #1. IP

Keywords:

Designation: 8802-3-1996

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: ISO/IEC 8802-3:1996: Information technology - Local and Metropolitan Area Networks - Part 3: Carrier Sense Multiple Access with Collision Detection(CSMA/CD) Access Method and Physical Layer Specifications

Status: Approved Publication of IEEE **Incorporates IEEE Std 802.3a-1988, 802.3b-1985, 802.3c-1985, 802.3d-1987, 802.3e-1987, 802.3h-1990, 802.3i-1990, 802.3j-1993, 802.3k-1992, 802.3l- 1992, 802.3m-1995, 802.3n-1995, 802.3p-1993, 802.3q-1993, 802.3s-1995, 802.3t-1995 and 802.3v-1995. IP

Abstract: This Local and Metropolitan Area Network standard, ISO/IEC 8802-3: 1996 [ANSI/IEEE Std 802.3, 1996 Edition], specifies the media access control characteristics for

the Carrier Sense Multiple Access with Collision Detection (CSMA/CD) access method. It also specifies the media, Medium Attachment Unit (MAU) and physical layer repeater unit for 10 Mb/s baseband and broadband systems, and it provides a 1Mb/s baseband implementation. Specifications for MAU types 10BASE5, 10BASE2, FOIRL (fiber optic inter-repeater link), 10BROAD36, 1BASE5, 10BASE-T, and 10BASE-F are included. System considerations for multisegment 10Mb/s baseband networks are provided. Layer and sublayer interface specifications are aligned to the ISO/IEC Open Systems Interconnection Basic Reference Model and 8802 models. The 8802-3 internal model is defined and used.

Keywords: attachment unit interface (AUI), data processing, ethernet, information interchange, local area networks, LAN, management, mode of data transmission, network interconnection, models, repeater

Designation: 8802-3:2000-2000

Title: ISO/IEC 8802-3:2000 (IEEE Std 802.3, 2000 Edition) Information Technology-**Local and Metropolitan Area Networks**-Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications

Status: Approved Publication of IEEE **This version is superseded by 802.3-2000

Publication type: Special Publication

Keywords:

Designation: 8802-4-1990

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Reaffirmation status and year: 1995

Title: ISO/IEC 8802-4:1990: Information processing systems - Local area networks - Part 4:Token-passing bus access method and physical layer specifications

Status: Approved Publication of IEEE **Revision of IEEE Std 802.4-1985. IP

Technical Contact: Paul S Eastman, Phone:602 861 3652, Email:p.eastman@computer.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: BD APP: Feb 27, 1990, ANSI APP: Jul 19, 1990 (Ref. Std.: 802.4)

Abstract: This standard is part of a family of local area network (LAN) and metropolitan area network (MAN) standards dealing with the physical and data link layers as defined by the International Organization for Standardization (ISO) Open Systems Interconnection Reference Model. The following are specified in this standard: the electrical and/or optical and physical characteristics of the transmission medium; the electrical or optical signaling method used; the frame formats transmitted; the actions of a station upon receipt of a frame; the services provided at the conceptual interface between the medium access control (MAC) sublayer and the Logical Link Control (LLC) sublayer above it; and the actions, entities, and values used to manage the MAC sublayer and physical layer entity.

Keywords: LAN

Designation: 8802-5-1992

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: ISO/IEC 8802-5:1992: Information technology- **Local and metropolitan area networks** - Part 5: Token ring access method and physical layer specifications

Status: Superseded **Revision of IEEE Std 802.5-1989. Revision to harmonize IEEE & ISO versions. IP

History: PAR APP: Mar 19, 1992, BD APP: Mar 19, 1992

Keywords: data, processing, interconnection, local, area, network, medium, access, control

Designation: 8802.5-1995

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: ISO/IEC 8802-5:1995 : Information Technology Processing Systems - Telecommunications and information exchange between systems - **Local and metropolitan area networks** - Specific requirements, Part 5:Token ring access method and physical Layer Specification

Status: Approved Publication of IEEE **Revision of 8802-5:1992 and incorporates TR 10738:1992. IP

Technical Contact: James T Carlo, Phone:214-693-1776, Email:j.carlo@ieee.org **For non-technical questions, including pricing, availability and ordering, please contact IEEE Customer Service at 1-800-678-IEEE (in U.S.and Canada); or 1-732-981-0060 (outside the U.S. and Canada); or send an email customer.service@ieee.org

History: PAR APP: Dec 3, 1992, BD APP: Jun 14, 1995, ANSI APP: Dec 1, 1995 (Ref. Std.: 802.5)

Abstract: This **Local and Metropolitan Area Network** standard, ISO/IEC 8802-5: 1995, is part of a family of local area network (LAN) standards dealing with the physical and data link layers as defined by the ISO Open System Interconnection Reference Model. Its purpose is to provide compatible interconnection of data processing equipment by means of a local area network using the token-passing ring access method. The frame format, including delimiters, addressing, and frame check sequence, are defined, as are medium access control (MAC) frames, timers, and priority stacks. The MAC protocol is defined. The finite-state machine and state tables are supplemented with a prose description of the algorithms. The physical layer (PHY) functions of symbol encoding and decoding, symbol time, and latency buffering are defined. The services provided by the MAC to the station management (SMT) and the services provided by the PHY to SMT and the MAC are described. These services are defined in terms of service primitives and associated parameters. The 4 and 16 Mb/s, shielded twisted pair attachment of the station to the medium, including the medium interface connector (MIC) are also defined. The applications environment for the LAN is intended to be commercial and light industrial. The use of token ring LANs in home and heavy industrial environments, while not precluded, has not been considered in the development of the standard. A Protocol Implementation Conformance Statement (PICS) proforma is provided as an annex to the standard.

Keywords:

Designation: 8802-5-1998

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: Information Technology-Telecommunications and information exchange between systems-**Local and metropolitan area networks**-Specific requirements-Part 5: Token ring access method and physical layer specifications

Status: Approved Publication of IEEE IP

Keywords:

Designation: 8802-5 Amd 1-1998

Title: ISO/IEC 8802-5:1998, Amd.1 (ANSI/IEEE Std 802.5 and 802.5j, 1998 Edition) Information Technology-Telecommunications and information exchange between systems-**Local and metropolitan area networks**-Specific requirements- Part 5: Token ring access method and physical layer specification-Amendment 1: Dedicated token ring operation and fiber optic media

Status: Approved Publication of IEEE IP

Keywords:

Designation: 8802-6-1994

Sponsor: Computer Society/**Local and Metropolitan Area Networks**

Title: ISO/IEC 8802-6:1994: Information technology- Telecommunications and information exchange between systems - **Local and metropolitan area networks** - Specific requirements -

Status: Approved Publication of IEEE **Incorporating IEEE Std 802.6-1990, 802.6d-1993 and 802.6f-1993. IP

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Abstract: This standard is part of a family of standards for local area networks (LANs) and metropolitan area networks (MANs) that deals with the Physical and Data Link Layers as defined by the International Organization for Standardization (ISO) Open Systems Interconnection Reference Model. A high-speed shared medium access protocol for use over a dual, counterflowing, unidirectional bus subnetwork is defined. The Physical Layer and Distributed Queue Dual Bus (DQDB) Layer are required to support a Logical Link Control (LLC) Sublayer by means of a connectionless Media Access Control (MAC) Sublayer service in a manner consistent with other IEEE 802 networks. Additional DQDB Layer functions are specified as a framework for other services. These additional functions will support Isochronous Service Users and Connection-Oriented Data Service Users, but their implementation is not required for conformance.

Keywords:

Designation: 8802-6

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Distributed Queue Dual Bus (DQDB) access method and physical layer specifications (with Amendments 1, 2, and 3)

Status: Approved Publication of IEEE IP

Keywords:

Designation: 8802-9-1996

Title: ISO/IEC 8802-9:1996 Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 9: Integrated Services (IS) LAN Interface at the Medium Access Control (MAC) and Physical (PHY) Layers

Status: Approved Publication of IEEE **This edition contains editorial changes to IEEE Std 802.9-1994, which occurred during ISO/IEC approval. IP

History: (Ref. Std.: 802.9)

Abstract: A unified access method that offers integrated services (IS) to the desktop for a variety of publicly and privately administered backbone networks (e.g., ANSI FDDI, IEEE 802.x and ISDN) is defined. In addition, the interface at the MAC sublayer and the PHY Layer is specified.

Keywords: access unit (AU), data link layer, hybrid multiplexer (HMUX), integrated services digital network, ISDN, integrated services terminal equipment, ISTE, layer management entity, LAN, logical link control, managed object, management information base (MIB), MAC, medium access control, MAN, physical medium dependent, physical signalling, private switching network, protocol data unit (PDU), service access point, time division multiplexer (TDM)

Designation: 8802-11-1999

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: ISO/IEC 8802-11: 1999 [IEEE Std 802.11-1999(R2003)] 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 ,

Status: Approved Publication of IEEE

Publication type: Special Publication

History: (Ref. Std.: 802.11)

Keywords:

Designation: 8802-11/Amd 1-2000

Title: ISO/IEC 8802-11:1999/Amd 1: 2000 (E), Information Technology-Telecommunications and Information Exchange Between Systems-Local and Metropolitan Area Networks-Part II: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications-Amendment 1: High-Speed Physical Layer in the 5 GHz Band

Status: Approved Publication of IEEE

Publication type: Special Publication

Keywords:

Designation: 8802-12-1998

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Part 12: Demand-priority access method, physical layer and repeater specifications, ISO/IEC 8802-12: 1998, Information technology-Telecommunications and information exchange between systems-Local and metropolitan area networks -Specific requirements-

Status: Approved Publication of IEEE IP

Keywords:

Designation: 10738-1993

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: ISO/IEC TR 10738:1993 [ANSI/IEEE Std 802.5b-1993 Edition] Information technology - Local and Metropolitan area networks - Token ring access method and physical layer specifications - Recommended practice for use of unshielded twisted pair cable (UTP) for token ring data transmission at 4 Mbit/s

Status: Superseded **Available in ISO/IEC 8802-5.

Abstract: The recommended practice for using unshielded twisted pair cables (UTP) for transmitting data at 4 Mb/s is described. Signal characteristics, unshielded twisted pair transmission characteristics, medium interface connection, cable routing, bit error rate, safety, and reliability are covered.

Keywords: token ring access method, token ring data transmission, token ring networks, unshielded twisted pair cable

Designation: 11802-5-1997

Title: ISO/IEC 11802-5 [ANSI/IEEE Std 802.1H, 1997 Edition], Information technology-Telecommunications and information exchange between systems-Local and metropolitan area networks-Technical reports and guidelines-Part 5: Media Access Control (MAC) Bridging of Ethernet V2.0 in Local Area Networks

Status: Approved Publication of IEEE

Publication type: Special Publication

History: (Ref. Std.: 802.1H)

Abstract: Extensions to the behavior of ISO/IEC 10038 (IEEE 802.1D) media access control (MAC) Bridges, in order to facilitate interoperability in bridged local area networks (LANs) comprising CSMA/CD networks interconnected with other types of LAN using MAC Bridges, where the CSMA/CD networks contain a mixture of ISO/IEC 8802-3 and Ethernet V2.0

end stations are specified. Additionally, guidelines are provided for the development of nonstandard 802 protocols, with particular emphasis on conversion of existing Ethernet protocols and the behavior to be expected from a Bridge, for the purpose of avoiding future incompatibilities

Keywords: carrier sense multiple access, CSMA/CD, collection detection, data processing, ethernet, FDDI, fibre distributed data interface, information interchange, LAN protocols, LAN, local area networks, media access control bridges, MAC, network interconnection, selective translation, selective translation table

Designation: 15802-2-1995

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: ISO/IEC 15802-2:1995: Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Common specifications - Part 2: LAN/MAN management

Status: Approved Publication of IEEE **Incorporates IEEE Std 802.1B-1992 and 802.1k-1993. ANSI/IEEE Std 802.1B, 1995 Edition IP

Abstract: Services and protocol elements that permit the exchange of management information between stations attached to ISO/IEC standard local and metropolitan area networks are defined. The standard includes the specification of managed objects that permit the operation of the protocol elements to be remotely managed. In addition, an architecture for station discovery and the dynamic control of event forwarding is defined. Services and protocols that support station discovery and the dynamic control of event forwarding are defined.

Keywords: event forwarding, local area networks, management, metropolitan area networks, LAN, MAN

Designation: 15802-3-1998

Title: [ANSI/IEEE Std 802.1D, 1998 Edition] Information Technology-Telecommunications and information exchange between systems-Local and metropolitan area networks-Common specifications-Media access control (MAC) bridges

Status: Approved Publication of IEEE

Keywords:

Designation: 15802-4-1994

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: ISO/IEC 15802-4:1994: Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Common specifications - Part 4: System load protocol

Status: Approved Publication of IEEE **Incorporates IEEE Std 802.1E-1990 and 802.1m-1993. IP

Abstract: Services and protocol elements that permit the downloading of memory images to data processing equipment attached to IEEE 802 Local and Metropolitan Area Networks are defined. The protocol makes use of the group addressing capabilities inherent in LAN/MAN technologies to permit simultaneous loading of the same memory image to multiple destination systems. The standard includes the specification of managed objects that permit the operation of the load protocol to be remotely managed.

Keywords: local area networks, management, metropolitan area networks, system load protocol, LAN, MAN

Designation: 15802-5-1998

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: (ANSI/IEEE std 802.1G, 1998 Edition) Information technology-Telecommunications and information exchanges between systems-Local and Metropolitan area networks-Common specifications-Part 5: Remote Media Access Control (MAC) Bridging

Status: Approved Publication of IEEE

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History: PAR APP: Sep 19, 1996, BD APP: Oct 9, 1996, ANSI APP: Mar 12, 1997

Project scope: Specification of the requirements placed on MAC (Medium Access Control) Bridges which interconnect Local Area Networks using other transmission media or services.

Project purpose: 1-Ensure compatibilities of operation with Bridges which connect Local Area Networks directly. 2-Specify the constraints on the variation of the quality of the MAC Service offered to communication end service. 3-Consider management aspects of the Bridges within the framework by OSI Mgmt.

Keywords: MAC, Sublayer, Interconnection, geographically, LAN

Designation: 802.16.2-2001

Sponsor: Computer Society/Local and Metropolitan Area Networks

Title: Local and Metropolitan Area Networks - IEEE Recommended Practice for Coexistence of Fixed Broadband Wireless Access Systems

Status: Approved Publication of IEEE

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History: PAR APP: Sep 16, 1999, BD APP: Jul 6, 2001, ANSI APP: Nov 1, 2001

Project scope: This project covers development of a Recommended Practice for the design and coordinated deployment of fixed broadband wireless access (BWA)systems operating from 10-66 GHz (with a focus on 23.5-43.5 GHz)in order to minimize interference so as to maximize system performance and/or service quality. This practice will provide for coexistence using frequency and spatial separation and will cover three areas. First,it will recommend limits of in-band and out-of-band emissions from BWA transmitters through parameters including radiated power,spectral masks and antenna patterns. Second,it will recommend receiver tolerance parameters, including noise floor degradation performance, for interference received from other BWA systems. Third,it will provide coordination parameters,including separation distances,and power flux density limits,to enable successful deployment of BWA systems with tolerable interference. The scope includes interference between systems deployed across geographic boundaries in the same frequency band and systems deployed in the same geographic area in different frequency bands (including different systems deployed by a single license-holder in sub-bands of the licensees authorized bandwidth). The scope does not cover coexistence issues due to intrasystem frequency re-use within the operator 's licensed band,and it does not consider the impact of interference created by BWA systems on non-BWA terrestrial and satellite systems.

Project purpose: The purpose of this recommended practice is to provide coexistence guidelines to license holders,service providers,deployment groups,and system integrators.The equipment parameters contained within this practice will benefit equipment and component vendors and industry associations by providing design targets. The benefits of this practice will include: · Coexistence of different systems with higher assurance that system performance objectives will be met. · Minimal need for case-by-case interference studies and coordination between operators to resolve interference issues. · Preservation of a favorable electromagnetic environment for deployment and operation of BWA systems, including future systems compliant to IEEE 802.16 interoperability standards. · Improved spectrum utilization. · Cost-effective system deployment.

Keywords:

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