

**IEEE P802.11
Wireless LANs**

New PAR proposals by other WGs

Date: February 6, 1996

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Abstract

This paper provides the new PAR proposals expected to be moved at the March 1996 Executive Committee meeting of LMSC.

Please write to the chair if you believe that 802.11 should oppose, providing the arguments.

IEEE P802.11 proposals

To ExCom

From Ken Alonge, 802.10

Attached below is a proposed PAR for revision of IEEE Standard 802.10-1992. This PAR is intended to support the establishment of Security Association Identifiers (SAIDs) by Multicast Key Distribution Centers, which under the current Standard is an intractable problem. The figure contained in the PAR will not copy into e-mail, but I don't believe it is an important item for you to base your decision on. If anyone feels that they need to see the figure, I'll be glad to e-mail it as a postscript attachment or FAX it to you, otherwise I will wait until the March plenary to distribute copies of the PAR that contain the figure.

Approval of this PAR will come up for vote at the Thursday night Exec.

Please send any questions to me and/or Russ Housley at the e-mail addresses below:

Ken: alonge_ken@po.gis.prc.com

Russ: housley@spyrus.com

Thanks - Ken

Proposed PAR Follows

1. SPONSOR DATE OF REQUEST -- 14 March 1996
2. ASSIGNED PROJECT NUMBER -- 802.10
3. PAR APPROVAL DATE --
4. Project Title, Copyright Agreement, and Working Group Chair

Revised Standard for Interoperable LAN Security (SILS) Part B - Secure Data Exchange (802.10b)

-- COPYRIGHT AGREEMENT for IEEE Standards --

I hereby acknowledge my appointment as Official Reporter to the IEEE 802.10 Committee to write/revise a Standards Publication (entitled or to be entitled) Standard for Interoperable LAN Security (SILS) Part B - Secure Data Exchange (IEEE 802.10b)

In consideration of my appointment and the publication of the Standards Publication identifying me, at my option, as an Official Reporter, I agree to avoid *knowingly* incorporating any copyrighted or proprietary material of another without such other's consent and acknowledge that the Standards Publication shall constitute a "work made for hire" as defined by the Copyright Act, and, that as to any work not so defined, I agree and do hereby transfer any right or interest I may have in the copyright to said Standards Publication to IEEE.

Name Kenneth G. Alonge _____
(signature of chair of working group)

Title Chair, IEEE Project 802.10 Working Group

Date March 14, 1996

5. DESCRIBE THIS PROJECT

5a. Will this PAR modify an existing PAR? YES

5b. Title: Revision of Standard IEEE Std 802.10-1992.

5c. Is this document intended for trial use or full use? FULL USE

6. SCOPE OF PROPOSED PROJECT -- To refine the Security Association 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.

7. PURPOSE OF PROPOSED PROJECT -- To allow independent Multicast Key Centers to assign unique SAIDs (See figure below). The current Standard only permits a global MKC, or necessitates out-of-band coordination among all MKCs to prevent re-use of the same SAID -- both alternatives create an intractable implementation problem.

8. SPONSOR -- LMSC

9a. PATENTED, COPYRIGHTED, or TRADEMARKED MATERIAL/STANDARD(S) WITH SIMILAR SCOPE(S) -- NONE

9b. OTHER STANDARDS WITH A SIMILAR SCOPE -- NONE

9c. IS THIS STANDARD INTENDED TO FORM THE BASIS OF AN INTERNATIONAL STANDARD?
-- NO

9d. HEALTH, SAFETY, AND ENVIRONMENTAL ISSUES -- NONE

10a MANDATORY COORDINATION --

SCC10 (Dictionary) - Circulation of Drafts

SCC14 (IEEE Staff Editorial Review)- Circulation of Drafts

10b. PROPOSED COORDINATION --

X3S3 - Circulation of Drafts

IEEE 802.1 - Circulation of Drafts

ISO-IEC/JTC1/SC21 - Circulation of Drafts

ISO-IEC/JTC1/SC6 (WG1 & WG3) - Circulation of Drafts

ECMA TC32/TG9 - Circulation of Drafts

ISO-IEC/JTC1/SC27 - Circulation of Drafts

10c. ADDITIONAL COORDINATION REQUESTED BY OTHERS -- None

11. SUBMITTED BY --

Name Donald C. Loughry Telephone 408-447-2454
Company Hewlett-Packard Co Fax 408-447-2247
Address 19420 Holmstead Rd. M/S 43UC Telex
City Cupertino CA Zip 95014
E Mail loughry@cup.hp.com

Name D. C. Loughry _____
(signature of submitter)

Title Chair, LMSC

Date March 1996

IEEE P802.3 proposals

To: Members of the 802 Exec
From: Geoff Thompson, Chair 802.3
Howard Frazier, Chair 802.3 HSSG
Date: February 3, 1996
Subject: Draft PAR and Supporting Material for 1,000 Mb/s 802.3

Colleagues-

At the Montreal meeting of 802.3 the Working Group charged its new Higher Speed Study Group (HSSG) to generate a draft PAR and supporting material. This was for 30 day advance circulation to the 802 Executive and for consideration by 802.3 and subsequently by the 802 Executive at the March meeting in La Jolla.

The HSSG met in Milpitas, California on January 11 & 12, 1996. There were both technical presentations and a session to draft objectives, 5 Criteria and a proposed PAR. The meeting was very well attended with a peak attendance of over 150 people.

The technical presentations included material from a number of Fibre Channel component manufacturers who expressed support for the technical concept of using FC-0 and FC-1 specifications at somewhat increased speed. There were also presentations as to the parameters for CSMA/CD might be modified for operating at this speed. The project material as developed will be reviewed and presented for approval by 802.3 during the March meeting.

The output of the interim meeting is attached below for your preview. Formal review will take place according to the 802 Operating Rules at the March Plenary. We look forward to meeting with you at that time.

If you have any questions or comments either of us would be happy to receive them before the March meeting.

Geoff Thompson <thompson@baynetworks.com> +1 408 764 1339
Howard Frazier <howard.frazier@eng.sun.com> +1 415 786 6617

=====
Material that follows: PAR, 5 Criteria
=====

Gigabit Ethernet Project Authorization Request (PAR)
- A recommendation to the IEEE 802.3 WG

PAR Digest

Attached is the information to be inserted into a PAR form for the 802.3 project on 1,000 Mb/s operation.

Redundant and unused boilerplate has been deleted to improve clarity in this e-mail distribution. The formal submission in March at the Plenary will be done on the official form.

=====

1. Sponsor Date of Request [March 14, 1996]
2. Assigned Project Number [expected to be P802.3z]
3. PAR Approval Date (leave blank) []
4. Project Title and Working Group Chair
[X] Standard for (Document stressing the verb "SHALL.")

TITLE

Supplement to:
 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 Parameters, Physical Layers, Repeater and
 Management Parameters for 1,000 Mb/s Operation

Working Group Chair

Name [Geoffrey O. Thompson]
 Date [January 19, 1996]
 Title [Chair. IEEE 802.3 Working Group]
 Company [Bay Networks]
 Address [P.O. Box 8185]
 City [Santa Clara]
 State [CA]
 Zip [95052-8185]
 IEEE Member Number [02646453]
 Telephone [+1 408 764 1339]
 Fax [+1 408 988 5525]
 E-Mail [thompson@baynetworks.com]

5. Describe this project:
 Supplement to IEEE Std 802.3: 1993
 Full Use (5-year life cycle)
6. Scope of Proposed Project (What is being done including the technical boundaries of the project?)

Define Media Access Control (MAC) parameters and operation, physical layer characteristics, repeater functions and management parameters for transfer of 802.3 and Ethernet format frames at 1,000 Mb/s. Provide for both full and half duplex operation at 1,000 Mb/s based on approved 802.3 projects and the 802.3 standard.

7. Purpose of Proposed Project (Why is it being done, including the intended user(s) and benefits to that user(s))

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 from the existing standard.

8. Sponsor (Give full name; spell out all Acronyms)

Society/Committee:

Computer Society

Local and Metropolitan Area Network Standards Committee
(LMSC)

9.

9a. Are you aware of any patent, copyright, or trademarks relevant to this project? (YES/explanation)

IBM has patents covering 8B/10B coding which is likely to be used in this standard. They have previously released them for the Fiber Channel standard. We believe that they will release them on a similar basis for this work.

Release statements are being solicited.

9b. Are you aware of any other standards or projects with a similar scope? (YES/explanation)

There is no other project that uses the 802.3 MAC at speeds above 100 Mb/s.

802.12 has a broad scope PAR for higher speeds up to 4 Gb/s which straddles the speed range of this proposal.

Fiber Channel has an issued standard at 850 Mb/s.

9c. Is this standard intended to form the basis of an international standard? (YES/explanation)

It is intended to submit this work to ISO through SC6 at the time it is submitted for Sponsor Ballot.

It would be an addendum to ISO/IEC 8802-3

9d. Is this project intended to focus on health, safety or environmental issues? (NO)

10a. Mandatory Coordination

SCC 10 (IEEE Dictionary) Circulation of Drafts

IEEE Staff Editorial Review Circulation of Drafts

SCC 14 (Quantities, Units, & Letter Symbols)

Circulation of Drafts

10b. IEEE Coordination requested by Sponsor:

ASC X3S3 (as US TAG for SC6) Circulation of Drafts

ASC X3T11 (Fibre Channel) Circulation of Drafts

ISO/IEC/JTC1 SC6/WG3 TAG Circulation of Drafts (via US TAG)

ISO/IEC/JTC1 SC25/WG3 TAG Circulation of Drafts (via US TAG)

11. Submitted by: (Sponsor Chair)

Name [Donald C. Loughry]

Title [Chair, LAN/MAN standards Committee (LMSC)]

Date []

Company [Hewlett-Packard]

Address [19420 Homestead Road M/S 43UC]

City [Cupertino]

State [CA]

Zip [95014]

IEEE Member Number [0825489]

Telephone [+1 408 447 2454]

Fax [+1 408 447 2247]

E-Mail [loughry@cup.hp.co]

===== end of PAR information =====

The preceding PAR was approved by the 802.3 HSSG on Friday
January 12th by a vote of 26-0-3.

Howard M. Frazier, Jr.
Chair, IEEE 802.3 HSSG

=====

Gigabit Ethernet Five Criteria
- A Recommendation to the 802.3 WG

=====

1. Broad Market Potential
- o Broad set (s) of applications
 - o Multiple vendors, multiple users
 - o Balance cost, LAN vs. attached stations
-

The fast growth of CPU speed is forcing the development of
new LANs with higher bandwidth.

The following applications and environments will benefit
from this capability:

- o Backbone, Server and Gateway connectivity
- o Higher Bandwidth for multimedia, distributed
processing, imaging, medical, CAD/CAM,
and pre-press applications
- o Aggregation of 100Mb/s switches
- o Upgrade for large installed base of 10/100 Ethernet

Multiple vendors and users have demonstrated interest by
attending the Gigabit Ethernet tutorial
(over 200 participants), attending the preliminary study
group meeting (over 120), and enrolling in the higher
speed E-Mail reflector (over 165).

XXX participants representing at least YY companies
indicate that they plan to participate in the
standardization of 1,000 Mb/s 802.3.
[Note, XXX and YY will be replaced with numerical values
based on a survey to be taken at the March, 1996
Plenary meeting of 802]

This level of commitment indicates that a standard will be
supported by a large group of vendors. This in turn will
ensure that there will be a wide variety of equipment to
support a multitude of applications.

Higher-speed 802.3 solutions which include scaled up
versions of existing 802.3 topologies, have balanced cost.

Prior experience with scaling 802.3 across the range of 1 to 100 Mb/s indicates that the cost balance between adapters, cabling, and hubs, remains roughly constant, provided that the operating speed can be achieved within the limits of current technology.

-
2. Compatibility with IEEE Standard 802.3
 - o Conformance with CSMA/CD MAC, PLS
 - o Conformance with 802.2
 - o Conformance with 802 FR

The proposed standard will conform to the CSMA/CD MAC, with currently authorized extensions, appropriately adapted for 1000 Mb/s operation.

In a fashion similar to the 100BASE-T standard, the current physical layers will be replaced with new Physical Layers (PHY) as appropriate for 1,000 Mb/s operation.

The proposed standard will conform to the 802.2 LLC interface.

The proposed standard will conform with the 802 Functional Requirements Document (with the possible exception of Hamming distance).

The CSMA/CD access method will not support a 2 km network diameter at this speed while maintaining the current values in the MAC parameter table. This portion of the application space will be addressed at 1,000 Mb/s with the full duplex operating mode of 802.3.

-
3. Distinct Identity
 - o Substantially different from other 802.3 specs/solutions
 - o Unique solution for problem (not two alternatives/problem)
 - o Easy for document reader to select relevant spec

The proposed standard is an upgrade for 802.3 users, based on the 802.3 CSMA/CD MAC, running at 1,000 Mb/s. Maximum compatibility with the installed base of 10/100 CSMA/CD is maintained by adapting the existing CSMA/CD MAC protocol for use at 1,000 Mb/s.

Established benefits of CSMA/CD and the 802.3 MAC include:

- o Optimistic transmit access method
- o High efficiency in full-duplex operating mode
- o Well-characterized and understood operating behavior
- o Broad base of expertise in suppliers and customers
- o Straightforward bridging between networks at

different data rates

The Management Information Base (MIB) for 1,000 Mb/s 802.3 will maintain consistency with the 802.3 MIB for 10/100 Mb/s operation. Therefore, network managers, installers, and administrators will see a consistent management model across all operating speeds.

The proposed standard will encompass one Physical Layer solution for each specific type of network media (e.g. single mode fiber, multi-mode fiber, coaxial cable, shielded twisted pair cable).

The proposed standard will be a supplement to the existing 802.3 standard, formatted as a collection of new clauses, making it easy for the reader to select the relevant specification.

4. Technical Feasibility

- o Demonstrated feasibility ; reports - - working models
- o Proven technology, reasonable testing
- o Confidence in reliability

Technical presentations given to 802.3 from multiple current vendors of Full Speed Fibre Channel components have demonstrated the feasibility of physical layer signaling at a rate of 1.06 Gb/s on both fiber optic and copper media.

Many of these vendors have expressed support for an increase in the signaling rate to 1.25 Gb/s, which would be required to support a MAC data rate of 1,000 Mb/s.

Technical presentations, given to 802.3, have demonstrated the feasibility of using the CSMA/CD MAC in useful network topologies at a rate of 1,000 Mb/s.

The principle of scaling the CSMA/CD MAC to higher speeds has been well established by previous work within 802.3. The 1,000 Mb/s work will build on this experience.

The principle of building bridging equipment which performs rate adaptation between 802.3 networks operating at different speeds has been amply demonstrated by the broad set of product offerings that bridge between 10 and 100 Mb/s.

5. Economic Feasibility

- o Cost factors known, reliable data
- o Reasonable cost for performance expected
- o Total Installation costs considered

Cost factors are derived from the current Full Speed Fibre Channel component supplier base.

A reasonable cost increase (3X of 100BASE-FX) with a ten-fold increase in available bandwidth in the full duplex operating mode will result in an improvement in the cost/performance ratio by a factor of 3.33 for multi-mode fiber applications.

The provision for a half duplex operating mode using the 802.3 CSMA/CD MAC will permit the construction of very inexpensive repeating hubs.

Customers will in many cases be able to re-use their existing fiber that has been installed in accordance with ISO/IEC 11801. Installation costs for new fiber runs based on established standards are well known and reasonable.

===== end of 5 CRITERIA information =====

The preceding 5 Criteria were approved by the 802.3 HSSG on Friday January 12th by a vote of 26-0-3.

Howard M. Frazier, Jr.
Chair, IEEE 802.3 HSSG

IEEE P802.9 proposals

To : IEEE 802.0 EXEC Committee
From : Dhadesugoor R. Vaman

Sub : IEEE 802.9 PARs
Date : January 30, 1996

Please find attached three PARs:

1. Revision PAR for baseline document IEEE Std 802.9 - 1994
2. MOCS for IEEE 802.9a
3. PICS for IEEE 802.9a

The IEEE 802.9 WG has approved the submission of these PARs for approval on March 14, 1996, Thursday Night IEEE 802.0 Exec. Meeting.

I will be presenting this on that night for approval.

Prior email submission is in accordance with the IEEE 802 LMSC operating rules.

Thank you and looking forward to seeing you in San Diego.

Please acknowledge the receipt of the attachments and difficulties of reading the attachments.

The attachments are prepared using Word Perfect 5.1, but are sent as Ascii files.

Regards

Dhadesugoor R. Vaman, Chair of IEEE 802.9 WG

--JPCTCHZBILPGLQGS-310E3489

Content-Type: Application/Octet-Stream; Name="ALLPARS.ASC"; Type="ASC"

To : IEEE 802.0 Exec Members
From : Dhadesugoor R. Vaman
Subject : Three Pars from IEEE 802.9 WG
1. Revision PAR for Baseline document (IEEE 802.9g)
2. MOCS for IEEE 802.9a (IEEE 802.9h)
3. PICS for IEEE 802.9a (IEEE 802.9i)

Date : January 30, 1996

Please find enclosed are three PARs mentioned above. These PARs were discussed at the IEEE 802.9 WG Interim Meeting in Saltlake City, January 23-24, 1996.

They have been approved by the WG. They will be further discussed at the Plenary Meeting in March. The WG has requested me to present these PARs for approval by the Exec.

Committee on March 14, 1996 Thursday night meeting.

If you did not receive the distribution of these PARs, please send an email and I will send the copies by other means. If you receive them, please acknowledge.

Thank you and looking forward to meeting you in March.

Sincerely,

Dhadesugoor R. Vaman
IEEE 802.9 WG Chair

IEEE Standards

Project Authorization Request (PAR)

1. Date of Request: March 14, 1996 (Thursday night at the plenary)
2. Assigned Project: IEEE 802.9g
3. PAR Approval Date: ---
4. Project Title, Copy Right Agreement and Working Group for this project

I will write/revise a Standards Publication with the following

Title (spell out
acronyms)

[YES] Standard for (Document stressing the verb "SHALL"), or
 [] Recommended Practice for (Document stressing the verb
"SHOULD") or
 [] Guide for (Document stressing the verb "MAY")

Standard for Local and Metropolitan Area Networks - Integrated
Services LAN

Interface at the MAC and PHY Layers (IEEE Std 802.9 - 1994)

I hereby acknowledge my appointment as Official Reporter/W.G.
Chair to the IEEE
P802.9 ISLAN.

In consideration of my appointment and the publication of the
Standards Publication

identifying me, at my option, as an Official Reporter, I agree
to avoid knowingly
incorporating in the Standards Publication any copy righted or
proprietary material

of another without such other's consent and acknowledge that
the Standards

Publication shall constitute a "work made for hire" as defined
by the Copyright Act,

and, that as to any work not so defined. I agree to and do
hereby transfer or interest

I may have in the copyright to said Standards Publication to IEEE.

Name: Dhadesugoor R. Vaman Date: 1/22/96

Title: Director, Advanced Telecommunications Institute

Company: Stevens Institute of Technology

Address: Hoboken, NJ 07030

Tel: 201-216-5049

Fax: 201-216-5057

Email: dvaman@ati.stevens-tech.edu

IEEE Member No. 06799183

5. Describe This Project: (Choose ONE from each Group below)

- (a) [NO] Modification of an Existing PAR
- (b) [] New Standard
- [YES] Revision of an Existing Standard

- Supplement to an Existing Standard
(c) Full Use
 Trial Use

6. Scope of the Project: (What is being done, including the technical boundaries of the project)

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 (rates = 4 Mbit/s, 16 Mbit/s and 20 Mbit/s) that have been standardized.

4 Mbit/s = ISLAN4-T; 16 Mbit/s = ISLAN16-T; 20Mbit/s = ISLAN20-T.

In addition, use this PAR to maintain readability of the existing standard to reflect appropriately the supplemental standards.

7. Purpose of Proposed Project: (Why is it being done, including the intended user(s) and benefits to the users(s).)

Improve the overall readability in order to understand the distinctions in the IEEE Std 802.9 - 1994 and IEEE 802.9a supplemental standard 1995, and other subsequent supplemental standards.

When the original standard was developed, the W.G. did not foresee the integration of supplemental standards to the original (or baseline) standard.

8. Sponsor: (Give full name; spell out all acronyms.)

Society/Committee: Computer/Local Area Network-Metropolitan Area Network(LAN-MAN) Standards Committee.

9.

(a) Are you aware of any patents, copy rights, or trademarks relevant to this project?

[NO]

(b) Are you aware of any other standards or projects with a similar scope?

[NO]

(c) Is this standard intended to form the basis of an International Standard?

[YES]*

(d) Is this project intended to focus on health, safety, or environmental issue?

[NO]

* - This standard also needs to be presented to ISO standardization.

Thus may be an annex
to the ISO standard.

10. Proposed Coordination/Recommended Method of Coordination
(Coordination is accomplished by the following circulation of
drafts or liaison
membership or common membership.)

(a) Mandatory Coordination:
SCC 10 (IEEE Dictionary) and IEEE Staff Editorial Review
Circulation Drafts
SCC 14 (Quantities, Units, and letter symbols)
Circulation Drafts

(b) IEEE Coordination requested by Sponsor: (Use additional page
if necessary). If you
believe your project will require a Registration Authority,
please list IEEE RAC
(refer to Working Guide).

ASC X3S3 (as US TAG for SC6)
Circulation Draft
JTC1 SC6
Circulation Draft
If Coordination is not required, please attach an explanation

(c) Additional Coordination Requested by Others. (Leave blank.
This will be completed
by the Standards Staff).

11. Submitted by: (This must be Sponsor Chair or the Sponsor's
Liaison Representative
to the IEEE Standards Board)

Signature of Submitter: Donald Loughry

Name : Donald C. Loughry
Title : Chair of LAN-MAN Standards Committee
Date :
Company: Hewlett Packard Company
Address: 19420 Homestead Road, M/S 43UC
City : Cupertino
State : CA
Zip : 95014
IEEE Member No. 0825489
Tel. No. 408-447-2454
Fax. No. 408-447-2247
Email: loughry@cup.hp.com

IEEE Standards
Project Authorization Request (PAR)

1. Date of Request: March 14, 1996 (Thursday night at the plenary)
2. Assigned Project: IEEE 802.9h
3. PAR Approval Date: ---
4. Project Title, Copy Right Agreement and Working Group for this project

I will write/revise a Standards Publication with the following
Title (spell out
acronyms)

[YES] Standard for (Document stressing the verb "SHALL"), or
 [] Recommended Practice for (Document stressing the verb
"SHOULD") or
 [] Guide for (Document stressing the verb "MAY")

Standard for Local and Metropolitan Area Networks - IEEE
802.9c: Supplement to
IEEE 802.9 - IEEE 802.9 Managed Object Conformance Statement (MOCS)

I hereby acknowledge my appointment as Official Reporter/W.G.
Chair to the IEEE
P802.9 ISLAN WG.

In consideration of my appointment and the publication of the
Standards Publication
identifying me, at my option, as an Official Reporter, I agree
to avoid knowingly
incorporating in the Standards Publication any copy righted or
proprietary material
of another without such other's consent and acknowledge that
the Standards
Publication shall constitute a "work made for hire" as defined
by the Copyright Act,
and, that as to any work not so defined. I agree to and do
hereby transfer or interest
I may have in the copyright to said Standards Publication to IEEE.

Name: Dhadesugoor R. Vaman Date: 1/22/96

Title: Director, Advanced Telecommunications Institute
Company: Stevens Institute of Technology
Address: Hoboken, NJ 07030
Tel: 201-216-5049
Fax: 201-216-5057
Email: dvaman@ati.stevens-tech.edu
IEEE Member No. 06799183

5. Describe This Project: (Choose ONE from each Group below)
 - (a) [NO] Modification of an Existing PAR
 - (b) [] New Standard
 - [YES] Revision of an Existing Standard

- Supplement to an Existing Standard
 (c) [YES] Full Use
 Trial Use

6. Scope of the Project: (What is being done, including the technical boundaries of the project)

Specify the MOCS by including the Managed Objects that are applied to IEEE

802.9a [IEEE 802.9 Isochronous Service with CSMA/CD Service in the IEEE 802.9c:

IEEE 802.9 ISLAN MOCS (Specification of MOCS for ISLAN16-T)], into the IEEE

Std 802.9c - 1996.

Currently, the MOCS are applicable to (IEEE Std 802.9 - 1994) for 4 Mbit/s and 20

Mbit/s. It does not include MOCS for IEEE 802.9a.

7. Purpose of Proposed Project: (Why is it being done, including the intended user(s) and benefits to the users(s).)

It is intended to include the Managed Objects pertaining to IEEE 802.9a along with

the ones in the current standard IEEE 802.9c to complete the MOCS for the family of PHY Rates (ISLAN4-T, ISLAN16-T and ISLAN20-T).

8. Sponsor: (Give full name; spell out all acronyms.)

Society/Committee: Computer/Local Area Network-Metropolitan Area Network(LAN-MAN) Standards Committee.

9.

(a) Are you aware of any patents, copy rights, or trademarks relevant to this project?

[NO]

(b) Are you aware of any other standards or projects with a similar scope?

[NO]

(c) Is this standard intended to form the basis of an International Standard?

[YES]*

(d) Is this project intended to focus on health, safety, or environmental issue?

[NO]

* - This standard also needs to be presented to ISO standardization. Thus may be an annex to the ISO standard.

10. Proposed Coordination/Recommended Method of Coordination

(Coordination is accomplished by the following circulation of drafts or liaison membership or common membership.)

(a) Mandatory Coordination:

SCC 10 (IEEE Dictionary) and IEEE Staff Editorial Review

Circulation Drafts

SCC 14 (Quantities, Units, and letter symbols)

Circulation Drafts

(b) IEEE Coordination requested by Sponsor: (Use additional page if necessary). If you

believe your project will require a Registration Authority, please list IEEE RAC

(refer to Working Guide).

ASC X3S3 (as US TAG for SC6)

Circulation Draft

JTC1 SC6

Circulation Draft

If Coordination is not required, please attach an explanation

(c) Additional Coordination Requested by Others. (Leave blank.

This will be completed

by the Standards Staff).

11. Submitted by: (This must be Sponsor Chair or the Sponsor's Liaison Representative to the IEEE Standards Board)

Signature of Submitter: Donald Loughry

Name : Donald C. Loughry

Title : Chair of LAN-MAN Standards Committee

Date :

Company: Hewlett Packard Company

Address: 19420 Homestead Road, M/S 43UC

City : Cupertino

State : CA

Zip : 95014

IEEE Member No. 0825489

Tel. No. 408-447-2454

Fax. No. 408-447-2247

Email: loughry@cup.hp.com

IEEE Standards

Project Authorization Request (PAR)

1. Date of Request: March 14, 1996 (Thursday night at the plenary)
2. Assigned Project: IEEE 802.9i
3. PAR Approval Date: ---
4. Project Title, Copy Right Agreement and Working Group for this project

I will write/revise a Standards Publication with the following
Title (spell out
acronyms)

[YES] Standard for (Document stressing the verb "SHALL"), or
 [] Recommended Practice for (Document stressing the verb
"SHOULD") or
 [] Guide for (Document stressing the verb "MAY")

Standard for Local and Metropolitan Area Networks - IEEE Std
802.9d - 1996:

Supplement to IEEE 802.9 - IEEE 802.9 Protocol Implementation
Conformance
Statement (PICS)

I hereby acknowledge my appointment as Official Reporter/W.G.
Chair to the IEEE
P802.9 ISLAN WG.

In consideration of my appointment and the publication of the
Standards Publication

identifying me, at my option, as an Official Reporter, I agree
to avoid knowingly
incorporating in the Standards Publication any copy righted or
proprietary material
of another without such other's consent and acknowledge that
the Standards

Publication shall constitute a "work made for hire" as defined
by the Copyright Act,

and, that as to any work not so defined. I agree to and do
hereby transfer or interest

I may have in the copyright to said Standards Publication to IEEE.

Name: Dhadesugoor R. Vaman Date: 1/22/96

Title: Director, Advanced Telecommunications Institute

Company: Stevens Institute of Technology

Address: Hoboken, NJ 07030

Tel: 201-216-5049

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IEEE Member No. 06799183

5. Describe This Project: (Choose ONE from each Group below)

(a) [NO] Modification of an Existing PAR

- (b) New Standard
 [YES] Revision of an Existing Standard
 Supplement to an Existing Standard
- (c) [YES] Full Use
 Trial Use

6. Scope of the Project: (What is being done, including the technical boundaries of the project)

Specify the PICS by including the Managed Objects that are applied to IEEE 802.9a [IEEE 802.9 Isochronous Service with CSMA/CD Service], into the IEEE Std 802.9d - 1996.

Currently, the PICS are applicable to (IEEE Std 802.9 - 1994) for 4 Mbit/s and 20 Mbit/s. It does not include PICS for IEEE 802.9a.

7. Purpose of Proposed Project: (Why is it being done, including the intended user(s) and benefits to the users(s).)

It is intended to include the PICS pertaining to IEEE 802.9a along with the PICS in the current standard IEEE Std 802.9d - 1996 to complete the PICS for the family of PHY Rates (ISLAN4-T, ISLAN16-T and ISLAN20-T).

8. Sponsor: (Give full name; spell out all acronyms.)

Society/Committee: Computer/Local Area Network-Metropolitan Area Network(LAN-MAN) Standards Committee.

9.

- (a) Are you aware of any patents, copy rights, or trademarks relevant to this project?
[NO]
- (b) Are you aware of any other standards or projects with a similar scope?
[NO]
- (c) Is this standard intended to form the basis of an International Standard?
[YES]*
- (d) Is this project intended to focus on health, safety, or environmental issue?
[NO]

* - This standard also needs to be presented to ISO standardization. Thus may be an annex to the ISO standard.

10. Proposed Coordination/Recommended Method of Coordination

(Coordination is accomplished by the following circulation of drafts or liaison membership or common membership.)

(a) Mandatory Coordination:

SCC 10 (IEEE Dictionary) and IEEE Staff Editorial Review

Circulation Drafts

SCC 14 (Quantities, Units, and letter symbols)

Circulation Drafts

(b) IEEE Coordination requested by Sponsor: (Use additional page if necessary). If you

believe your project will require a Registration Authority, please list IEEE RAC

(refer to Working Guide).

ASC X3S3 (as US TAG for SC6)

Circulation Draft

JTC1 SC6

Circulation Draft

If Coordination is not required, please attach an explanation

(c) Additional Coordination Requested by Others. (Leave blank.

This will be completed

by the Standards Staff).

11. Submitted by: (This must be Sponsor Chair or the Sponsor's Liaison Representative to the IEEE Standards Board)

Signature of Submitter: Donald Loughry

Name : Donald C. Loughry

Title : Chair of LAN-MAN Standards Committee

Date :

Company: Hewlett Packard Company

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