

To: jcarlo@ti.com
From: Jodi Haasz <j.haasz@ieee.org>
Subject: P802.1x Port based Network Access Control; P802.11e 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; P802.11f Recommended Practices for Multi-Vendor Access Point Interoperability via Inter-Access Point Protocol across Distribution Systems supporting IEEE P802.11 operation; P802.15.3 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 High Rate Wireless Personal Area Networks (WPAN); P802.16.3 Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Air Interface for Fixed Broadband Wireless Access Systems Operating Below 11 GHz
Cc: lidinsky@hep.net, vichayes@lucent.com, bheile@bbn.com, r.b.marks@ieee.org
Bcc:
Attached: C:\My Documents\Desktop Items\Approved PARs .pdf\802-11e.pdf; C:\My Documents\Desktop Items\Approved PARs .pdf\802-1X.pdf; C:\My Documents\Desktop Items\Approved PARs .pdf\802-11f.pdf; C:\My Documents\Desktop Items\Approved PARs .pdf\802-15-3.pdf; C:\My Documents\Desktop Items\Approved PARs .pdf\802-16-3.pdf;

31 March 2000

Mr. Jim Carlo
Texas Instruments
9208 Heatherdale Drive
Dallas, TX 76243

Re: P802.1x Port based Network Access Control

P802.11e 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

P802.11f Recommended Practices for Multi-Vendor Access Point Interoperability via Inter-Access Point Protocol across Distribution Systems supporting IEEE P802.11 operation

P802.15.3 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 High Rate Wireless Personal Area Networks

(WPAN)

P802.16.3 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

Dear Dr. Carlo:

I am pleased to inform you that on 30 March 2000 the IEEE-SA Standards Board approved the above referenced projects with an expiration date of December 2004. Coordination has been added to P802.15.3 with the Bluetooth Special Interest Group by Circulation of Drafts and to P802.16.3 with SCC34 by Circulation of Drafts. A copy of the file is attached in .pdf format.

At the bottom of this e-mail, please find URLs which you may find useful in the development of your proposed standard and in submitting your final draft for approval. Written responses from all committees/organizations listed on the PAR as proposed coordination must be included with the final draft when it is submitted.

If coordination is effected by common membership, i.e., a person on the standard's developing committee who is also a member of the committee/organization specified on the PAR for coordination, there must be a document included with the final draft from that coordinating body which states that person is authorized to represent it. We strongly recommend that a copy of your draft be sent to this office for review prior to the final voting by the working group to allow for a quick review by the editorial staff before sponsor balloting.

If you should have any further questions or would like to receive this information in paper, please contact me at 732-562-6367 or by email at j.haasz@ieee.org

Sincerely,

Jodi Haasz
Administrator, Standards Process Support
NesCom Administrator

cc: W. Lidinsky
V. Hayes
B. Heile
R. Marks

PS - The information in the .pdf file is viewable in Adobe Reader, version 3.0 or higher. If you do not have this software, please go to <http://www.adobe.com/prodindex/acrobat/readstep.html#reader> to download the free version.

Standards Process-at-a-Glance
<http://standards.ieee.org/resources/glance.html> - A quick-reference site useful to any standards developer.

IEEE Standards Style Manual

<http://standards.ieee.org/guides/style/index.html> - Guidelines that establish style and format requirements for the preparation of proposed IEEE standards.

IEEE Standards Companion

<http://standards.ieee.org/guides/companion/index.html> - An overall view of the standards process; what to do, what to avoid, lessons learned, and sample forms.

Implement Plan for Metric Policy 9.20

<http://standards.ieee.org/announcements/metric.html> - Information on when, why and how the plan will be implemented and what exceptions exist.

Leading a Standards Development Group

<http://standards.ieee.org/faqs/ltpres.html#q1> - A free training session offered by staff to make the most of the standards process. After attending, you will have a great understanding of:

- the need for due process and consensus
- how to submit PARs and Drafts
- the "legal" aspects (copyrights, trademarks, patents)
- how staff can help you

Standards Coordinating Committee 10

<http://standards.ieee.org/faqs/SCC10.html> - An explanation of the importance of coordinating with the IEEE Dictionary (SCC10) as is mandated on the PAR form.

Balloting Information

http://standards.ieee.org/resources/glance_at_balloting.html

From: "Jim Carlo" <jcarlo@ti.com>
To: "Jodi Haasz" <j.haasz@ieee.org>
Cc: "Bob Heile" <bheile@bbn.com>, "Jim Carlo" <jcarlo@ti.com>
Subject: High Rate WPAN PAR P802.15.3
Date: Tue, 15 Feb 2000 09:43:33 -0600
X-Priority: 3 (Normal)
Importance: Normal

IEEE-SA Standards Board Project Authorization Request (PAR) (1999-Rev 1)

1. Sponsor Date of Request [March 10, 2000]
2. Assigned Project Number [P802.15.3]
3. PAR Approval DATE [30 March 2000] {IEEE Staff to fill in box}
{Copyright release must be received with appropriate signatures
by postal mail or FAX (1-732-562-1571)}
 PAR Signature Page on File {IEEE Staff to check Box}
4. Project Title and Working Group/Sponsor for this Project
Document type : {Place an X in only one option below}
 Standard for {Document stressing the verb "SHALL"}
 Recommended Practice for {Document stressing the verb "SHOULD"}
 Guide for {Documents in which good practices are suggested}

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 High Rate Wireless
Personal Area Networks (WPAN)]

Name of Working Group(WG) : [802.15]

Name of Official Reporter (usually the WG Chair) who MUST be an SA member as
well as an IEEE/Affiliate Member: [Robert F. Heile]

Title in WG: [Chair] IEEE/SA/Affiliate Member #
[01670801]
Company: [GTE Technology Organization] Telephone: [+1 781 466 2057]
Address: [40 Sylvan Road] FAX: [+1 781 466
2575]
City/State/Zip: [Waltham, MA 02451-1128] EMAIL: [bheile@bbn.com]

Name of WG Chair (if different than Reporter): []
IEEE/Affiliate Member # []{Required}
Company: [] Telephone: []
Address: [] FAX: []
City/State/Zip: [] EMAIL: []

Name of Sponsoring Society and Committee: [Computer Society/LMSC]
Name of Sponsoring Committee Chair: [Jim Carlo]
IEEE/SA/Affiliate Member # [05572953]
Company: [Texas Instruments] Telephone: [+1 214 693-1776]
Address: [9208 Heatherdale Drive] FAX: [+1 214 853 5274]
City/State/Zip: [Dallas TX 76243-6332] EMAIL: [jcarlo@ti.com]

5. Describe this Project by answering each of five questions below:

5a. Update an existing PAR? {Yes/No} [No]

If YES: Indicated PAR number/approval date []
If YES: Attach cover letter indicating changes/rationale for changes.
If YES: Is this project in ballot now? [] {Yes/No}

5b. Choose one from the following:

- b1 - New Standard
- b2 - Revision of existing standard {number and year} []
- b3 - Amendment (Supplement) to existing standard {number and year} []
- b4 - Corrigenda to existing standard {number and year} []

5c. Choose one from the following:

- c1 - Full Use (5-year life cycle)
- c2 - Trial Use (2-year cycle)

5d. Choose one from the following:

- d1 - Individual Sponsor Ballot Process
- d2 - Entity (not Individual) Sponsor Ballot Process

5e. Fill in Target Completion Date to IEEE RevCom [JulyNovember, 2001]

6. Scope of Proposed Project

[This project will define the PHY and MAC specifications for high data rate (see 13a) wireless connectivity with fixed, portable and moving devices within or entering a Personal Operating Space (POS) (See 13b). 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, ~~or an 802.11 device~~ (see 13c). 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.]

7. Purpose of Proposed Project:

[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 (see 13a), 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.]

8. Intellectual Property {Answer each of the questions below}

8a. Are you aware of any patents relevant to this project?

[Yes] {Yes, with detailed explanation below/ No}

[TBD by Study Group contributors after the recommendations are made. IEEE procedures and recommendations will be followed.]

8b. Are you aware of any copyrights relevant to this project?

[Yes] {Yes, with detailed explanation below/ No}

[~~The BlueToothtm SIG IEEE license Agreement to Publish Derivative Work, Dated 9Sept99. Note: IEEE Staff is in discussions with Bluetooth on license. Home Radio Frequency Multimedia Working Group, Bluetooth Special Interest Group.~~

These groups are not standards organizations but are Industry consortia that have similar charters. The Working Group has established liaisons with these

groups with respect to technical, marketing, and coexistence aspects for other projects, and plans to maintain those liaisons, as appropriate, for this project. As Industry Consortia, formal coordination in Item 12 may be inappropriate.]

8c. Are you aware of any trademarks relevant to this project?

[No] {Yes, with explanation below/ No}

[] }

8d. Are you aware of any registration of objects or numbers relevant to this project?

[No] {Yes, with explanation below/ No}

9. Are you aware of other standards or projects with a similar scope?

[Yes] {Yes, with explanation below/ No}

[IEEE 802.11 family, Infrared Data Association (IrDA), Home Radio Frequency Working Group, Bluetooth Special Interest Group, Wireless Application Protocol Forum, HIPERLAN/2 Global Forum.]

Except for IEEE's 802.11 and ETSI's HIPERLAN standards, these groups are not standards organizations but are Industry consortia that have similar charters. The Working Group intends to establish liaisons with these groups with respect to technical, marketing, and coexistence aspects, as appropriate. As Industry Consortia, formal coordination in Item 12 may be inappropriate. The WAP coordination will be monitored in conjunction with the desires of the Working Group, for appropriateness, as this industry forum may not be developing specifications in this area. HIPERLAN/2 will be considered in the Task Group evaluations as appropriate.]

10. International Harmonization

Is this standard planned for adoption by another international organization?

[??] {Yes/No/?? if you don't know at this time}

If Yes: Which International Organization []

If Yes: Include coordination in question 13 below

If No: Explanation []

11. Is this project intended to focus on health, safety or environmental issues?

[No] {Yes/No/?? if you don't know at this time}

If Yes: Explanation? []

12. Proposed Coordination/Recommended Method of Coordination

12a. Mandatory Coordination

SCC 10 (IEEE Dictionary) by DR

IEEE Staff Editorial Review by DR

SCC 14 (Quantities, Units and Letter symbols) by DR

12b. Coordination requested by Sponsor and Method:

[ETSI, HoD SMS] by [DR] {circulation of DRafts/LIaison memb/COmmon memb}

[Bluetooth Special Interest Group] by [DR] {circulation of DRafts/LIaison memb/COmmon memb}

[] by [] {circulation of DRafts/LIaison memb/COmmon memb}

[] by [] {circulation of DRafts/LIaison memb/COmmon memb}

{Choose DR or LI or CO for each coordination request}

12c. Coordination Requested by Others:

[] {added by staff}

13. Additional Explanation Notes: {Item Number and Explanation}

13a]

Based on the previous CFAs collected for 802.15 over the last two years, there remains a significant group of applications that could not be addressed by 802.15.1. High data rates are required for time dependant and large file transfer applications such as video or digital still imaging without sacrificing the requirements of low complexity, low cost, and low power consumption. Twenty Mbps is proposed to be the lowest rate for these types of data. The project developmentTask Group will evaluate this proposed data rate on the basis of the Call for Applications.

It is possible, for example, that several data rates could be supported for different consumer applications. Consequently the notions of cost, frequency band, performance, power and data rate scalability will be addressed.

13b]

A Personal Operating Space (POS) is a 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. ~~It may also include the space a person regularly controls as their own, regardless of their personal presence, such as a house. The notion includes personal control over devices and RF noise sources within this space, as well as the need for privacy.~~

POS use models permit more freedom over the design of the radio than in Medical or Enterprise LAN applications where the primary goal is link robustness at long range. In an area covered by a WLAN, it is expected that a robust link can be established anywhere within the coverage area without any special action on the part of the user. Link robustness is equally improtant for a WPAN but it is acceptable to take an action like moving closer to establish it. Consequently, WPAN standards are able to focus on other priorities, such as cost, size, power consumption and data rate.

13c]

It is not the intent of this projectTG to be an extension of 802.15.1, because the MAC needs are predicted to be different. It is, however, in the best interest of Users and the industry to strive for compatibility, or at least coexistence with other wireless systems, especially those in similar market spaces such as BlueToothtm. Compatibility and coexistence criteria will be included in the proposal evaluations.