

**IEEE P802.11  
Wireless LANs**

**Draft PAR for Wireless Personal Area Network (WPAN)**

**Date:** May 28, 1998

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**Abstract**

The Wireless Personal Area Network Study Group has prepared the following Project Authorization Request (PAR) for submission to our Sponsor the IEEE 802.11 WG and we look forward to your comments.

We have provided the following history and contact information to assist the PAR reader. Finally, we have also forwarded under separate cover our response to the Five Criteria as called out in the IEEE PAR Submission Process as well as three (3) Medium Access Control and Physical Layer Protocol WPAN Proposals for your consideration.

At the March 1998 Plenary Meeting of IEEE's 802 LMSC, 802.11 established a Study Group for Wireless Personal Area Networks to support Wearable Computers.

The officers of the Study Group (SG) are:

Function: Chairman 802.11 SG WPAN Name: Dick Braley Phone #: +1 901 375 6535 Fax #: +1 901 375 6757 E-mail: rcbraley@fedex.com	Function: Vice-Chair 802.11 SG WPAN Name: Bob Heile Phone #: +1 617 873 4835 Fax #: +1 617 873 5470 E-mail: bheile@bbn.com	Function: Secretary/Tech Editor 802.11 SG WPAN Name: Ian Gifford Phone #: +1 978 442 4650 Fax #: +1 978 442 4600 E-mail: giffordi@macom.com
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The objectives for the Study Group are:

- Review WPAN/WLAN Requirements
- Determine Need for Standard
- If warranted draft a PAR for submittal
- Seek appropriate Sponsorship within 802

Revision History:

Revision 0 January 15, 1998, the Wearables Ad Hoc Committee drafts the first version of the IEEE PAR  
Revision 1 April 9, 1998, SG at the Interim Meeting in Irvine, Discusses and hands off the PAR to Rich  
Revision 2 May 4, 1998, Major Edits by Rich converting the old PAR to the new PAR  
Revision 3 May 21, 1998, SG at the Interim Meeting in Irving, Minor Edits led by Rich  
Revision 4 May 27, 1998, Minor Edits by Rich  
Revision 5 May 28, 1998, Minor Edits by Rich  
Revision 6 May 28, 1998, Minor Edits by Ian

IEEE Standards Board Jan98 Project Authorization Request (PAR) Page1(Rev V9)

1. Sponsor Date of Request [ 6-4-98 ] 2. Assigned Project Number [ P ] 3. PAR Approval DATE

[ ] PAR Signature Page Received {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}

[X] Standard for {Document stressing the verb "SHALL"}

[ ] Recommended Practice for {Document stressing the verb "SHOULD"}

[ ] Guide for {Document stressing the verb "MAY"}

TITLE: [STANDARD FOR Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 11: Wireless Medium Access Control (MAC) and physical layer (PHY) specifications: Supplement for Wireless Personal Area Networks (WPAN)]

{Copyright release at the end of this form must be submitted with appropriate signatures by postal mail or FAX (1-732-562-1571)}

Name of Working Group(WG) : [WPAN Study Group (SG)]

Name of Official Reporter (usually the WG Chair): [Vic Hayes]
Title in WG: [802.11 Chair] IEEE/Affiliate Memb # [01550144]
Organization: [Lucent Technologies] Telephone: [+31 30 609 7528]
Address: [Zadelstede 1-10] FAX: [+31 30 609 7556]
City/State/Zip: [Nieuwegein, NL NL-3431JZ] EMAIL:[vichayes@lucent.com]

Name of WG Chair (if different than Reporter): [Vic Hayes]
Title in WG: [802.11 Chair] IEEE/Affiliate Memb # [01550144]
Organization: [Lucent Technologies] Telephone: [+31 30 609 7528]
Address: [Zadelstede 1-10] FAX: [+31 30 609 7556]
City/State/Zip: [Nieuwegein, NL NL-3431JZ] EMAIL: [vichayes@lucent.com]

Name of Sponsoring Society and Committee: [IEEE 802 LAN/MAN Standards Committee]

Name of Sponsor Committee Chair: [Jim Carlo]
Relationship to Sponsor: [IEEE 802 LMSC Sponsor Chair]
Organization: [Texas Instruments] Telephone: [+1-214-480-2524]
Address: [9208 Heatherdale Drive] FAX: [+1-214-480-2611]
City/State/Zip: [Dallas, TX 76243-6332] EMAIL: [jcarlo@ti.com]

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

5a. Update an existing PAR? {Yes/No} [ No ]
If Yes: Indicated PAR number/approval date [ ]
If YES: Attach letter indicating changes/rationale for changes.
If Yes: Is this PAR in ballot now? [ ] {Yes/No}

5b. Choose one from the following:
b1 -[ ] New Standard
b2 -[ ] Revision of existing standard {number and year} [ ]
b3 -[ X] Supplement to existing standard {number and year} [802.11 1997]

5c. Choose one from the following:
c1 -[ ] Full Use (5-year life cycle)
c2 -[ X] Trial Use (2-year cycle)

5d. Fill in Target Completion Date to IEEE RevCom [ March 2000 ]

6. Scope of Proposed Project
[To develop a Physical Layer (PHY) specification for wireless connectivity with fixed, portable and moving devices within or entering a Personal Operating Space (POS).

As a goal the PHY will be used in conjunction with the 802.11 Medium Access Control (MAC) Layer. The 802.11 MAC will be reviewed to determine its suitability to support the reduced speed, complexity, and power consumption

targeted by the project. If necessary a MAC will be developed to support WPAN requirements.]

7. Purpose of Proposed Project:

[To provide a supplemental standard for low complexity, low power consumption wireless connectivity to support interoperability among devices within or entering the POS. This includes devices (see 12c) that are carried, worn, or located near the body.]

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

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

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

[ ] {Explanation}

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

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

[ ] {Explanation}

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

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

[ ] {Explanation}

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

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

[Infrared Data Association (IrDA), Home Radio Frequency Working Group (HRFWG) Bluetooth Special Interest Group (SIG), Wireless Access Protocol (WAP) Forum]

10. International Harmonization

Is this standard planned for adoption by another international organization?

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

If Yes: Which International Organization [ISO/IEC JTC1/SC6]

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:

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

[ ] by [ ] {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}

Additional Explanation Notes: {Item Number and Explanation}

[ ] {If necessary, these can be continued on additional pages}

6 Scope:

A Personal Operating Space (POS) is the space about a person 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.

7 Purpose:

Examples of devices, which can be networked, include Computers, Personal Digital Assistants (PDAs)/Handheld Personal Computers (HPCs), printers, microphones, speakers, headsets, bar code readers, sensors, displays, pagers, and cellular & Personal Communications Service (PCS) phones.

PAR Copyright Release and Signature Page

Page 3

Rev(V9)

1. Sponsor Date of Request [ ] 2. Assigned Project Number [P ] Title [ ]

I hereby acknowledge my appointment as Official Reporter (usually the WG Chair) to the

[WPAN Study Group ] {Name of Working Group}

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 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 defined, I agree to and do hereby transfer any right or interest I may have in the copyright to said Standards Publication to IEEE.

Signature of Official Reporter \_\_\_\_\_ Date \_\_\_\_\_

Name of Official Reporter (usually the WG Chair): [Vic Hayes]

Title in WG: [802.11 Chair]

IEEE/Affiliate Memb # [01550144]

Organization: [Lucent Technologies]

Telephone: [+31 30 609 7528]

Address: [Zadelstede 1-10]

FAX: [+31 30 609 7556]

City/State/Zip: [Nieuwegein, NL NL-3431JZ]

EMAIL: [vichayes@lucent.com]

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

Signature of Submitter \_\_\_\_\_ Date \_\_\_\_\_

Name of Sponsor Committee Chair: [Jim Carlo]

Relationship to Sponsor: [IEEE 802 LMSC Sponsor Chair]

Organization: [Texas Instruments]

Telephone: [+1-214-480-2524]

Address: [9208 Heatherdale Drive]

FAX: [+1-214-480-2611]

City/State/Zip: [Dallas, TX 76243-6332]

EMAIL: [jcarlo@ti.com]

The submitter must be the sponsoring committee's liaison to the IEEE Standards Board or the chair of the sponsoring committee. The PAR will not be submitted to the Standards Board without the signature of the Official Reporter and the Sponsor Committee Chair. Once the PAR is completed, it shall be forwarded to the person designated by the sponsor as responsible for submitting it to the Standards Board New Standards Committee/NESCOM (normally the sponsoring committee's liaison to the IEEE Standards Board). Be certain to include all attachment sheets and supporting correspondence. The submitter will be notified in writing when the PAR is received and when the PAR will be considered for approval by the Standards Board. After the Standards Board meeting, the submitter and official reporter will be notified in writing of the action taken.

Signature by IEEE Officer: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_