

**IEEE P802.11
Wireless LANs
IAPP PAR**

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IEEE STANDARDS PAR FORM

- 1. **Sponsor Date of Request** _____
- 2. **Assigned Project Number (confer with staff)** _____
- 3. **PAR Approval Date (leave blank)** _____
- 4. **Project Title, Copyright Agreement and Working Group Chair for This Project**

I will write/revise a Standards Publication with the following TITLE (Spell out all acronyms)

Standard [for] (Document stressing the verb "SHALL."), or

Recommended Practice for (Document stressing the verb "SHOULD.") or

Guide for (Document stressing the verb "MAY.")

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

I hereby acknowledge my appointment as Official Reporter (usually the W.G. Chair) to the (Name of Working Group)

[Vic Hayes, Chair P802.11 802.11 Working Group for Wireless Local Area Networks]

In consideration of my appointment and the publication of the Standards Publication identifying PAR IAPP, as approved by 802.11 page 1 John Fakatselis, Chair Study Group, Intersil

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 _____

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5. Describe this project: (Choose ONE from each group below)

- a. Update an existing PAR
 Yes or No
 If YES, project number/approval date) _____

Is this in ballot now? Yes or No

- b. New Standard
 Yes or No
 Revision of an existing standard.
 Yes standard number/year _____ or No
 Supplement to an existing standard
 Yes standard number/year 802.11 (in approval)
 _____ or No

- c. Full Use (5-year life cycle)
 Trial Use (2-year life cycle)

- d. **Fill in target completion date for submittal to IEEE Standards Review Committee (RevCom).**

31 March 2001

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

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 Practices Document shall support the IEEE P802.11 standard revision(s) <fill in official title of docs>

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

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.

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

[Computer Society - LMSC]

**9(a.1) [NO] Are you aware of any patents relevant to this project?
(If YES, attach explanation, or No)**

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

Signature of Submitter _____

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

Five Criteria discussion:

1. Broad Market Potential

The market potential for this standards document is identically equal to the market size of IEEE P802.11 devices.

These recommended practices would be of potential benefit to all manufacturers and vendors of IEEE P802.11 equipment as it will expand the acceptance of WLAN system by freeing users of the need to purchase Access Points from a single vendor. This in turn should increase competition and lower the industry prices for Access Points.

2. Compatibility with IEEE 802 Standards

Because the document will be for recommended practices to support IEEE P802.11 wlan systems and the scope specifically calls out support for P802.11, the recommended practice will be compatible with IEEE 802 standards.

3. Distinct Identity

Each IEEE Project 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other 802 Projects:

The proposed Project is for a recommended practice which is not covered by other standards documents (either formal or industry).

b) One unique solution per problem (not two solutions to a problem):

The recommended practices will be unique because they will be tailored to specific Distribution System environments.

c) Easy for document reader to select the relevant specification:

Because of the mapping discussed in b) above, it should be very easy for a reader of the document to select the practice relevant to the Distribution System environment of interest.

4. Technical Feasibility

As there are already several working practices in use by different 802.11 equipment vendors, clearly the technical side of the work required is feasible.

5. Economic Feasibility

Again, since the several technical approaches to the recommended practices are already embodied in equipment that is selling in the market place, there are feasible approaches that the market will find economically feasible.