Draft PAR and 5 Criteria - Standard for Minimum Performance Characteristics of 802.20 Terminals and Base Stations

Date: February 12, 2008

This PAR was discussed by the 802.20 Working Group in the November 2007 Plenary. The Scope, Purpose, Need and key dates were reviewed and agreed by the Working Group at the January 2008 Interim session. The PAR and Five Criteria will be reviewed and voted on by the Working Group at the March 2008 Plenary.

Abstract

This document provides a proposed PAR and 5 Criteria for IEEE P802.20.3 The PAR form is copied from the IEEE web site official PAR submission form.

Draft PAR Confirmation Number: 229677533.16204

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Type of Project: PAR for a New Standard

1.1 Project Number: P802.20.3

1.2 Type of Document: Standard for

1.3 Life Cycle: Full

1.4 Is this project in ballot now? No

1.5 Is the balloting group aware of the PAR modification?

2.1 Title of Standard: Standard for Minimum Performance Characteristics of 802.20 Terminals and Base Stations

3.1 Name of Working Group: Mobile Broadband Wireless Access (MBWA) Working Group(C/LM/WG802.20)
Contact information for Working Group Chair
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3.2 Sponsoring Society and Committee:IEEE Computer Society/Local and Metropolitan Area Networks(C/LM)
Contact information for Sponsor Chair:
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Contact information for Standards Representative:

4.1 Type of Ballot: Individual

4.2 Expected Date of Submission for Initial Sponsor Ballot: 2009-07

4.3 Projected Completion Date for Submittal to RevCom: 2010-07

5.1 Approximate number of people expected to work on this project: 50

5.2 Scope of Proposed Standard: This standard details definitions, method of measurements and minimum performance characteristics for 802.20 MBWA terminals and base stations. The test methods are specified in this document; however, methods other than those specified may suffice for the same purpose.

5.3 Is the completion of this standard is dependent upon the completion of another standard: Yes
If yes, please explain: The standard will relate to the 802.20 standard(P802.20.1). Though work may begin under this PAR based on the 802.20 draft, the work cannot be completed until the 802.20 standard is complete. The 802.20 draft is currently in Sponsor Ballot and completion is expected in the near future.

5.4 Purpose of Proposed Standard: The purpose of this standard is to specify minimum performance characteristics for 802.20 implementations. Service providers deploying equipment meeting this specification can expect to meet a particular service level with user terminals that also comply with this specification.

5.5 Need for the Project: This standard is needed so that independent suppliers building 802.20 compliant equipment can provide systems that will meet minimum service levels.

5.6 Stakeholders for the Standard: 802.20 equipment suppliers and service providers utilizing the 802.20 standard are the principle stakeholders.

Intellectual Property
6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes
If yes, state date: 2008-03-17
If no, please explain:
6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No
If yes, please explain:
6.1.c. Is the Sponsor aware of possible registration activity related to this project? No
If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No
If yes, please explain:
and answer the following: Sponsor Organization:
Project/Standard Number:
Project/Standard Date: 0000-00-00
Project/Standard Title:

7.2 Future Adoptions
Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? Do not know at this time
If Yes, the following questions must be answered:
Technical Committee Name and Number:
Other Organization Contact Information:
Contact person:
Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No
If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

Five Criteria – P802.20.3

17.5.1 Broad Market Potential

A standards project authorized by IEEE 802 shall have a broad market potential. Specifically, it shall have the potential for:
a) Broad sets of applicability.

IEEE 802.20 standard is broadly applicable to many application environments.

b) Multiple vendors and numerous users.

This standard relates to the P802.20.1which is envisioned to have many different equipment supplier, users and service providers.

c) Balanced costs (LAN versus attached stations).

Since this standard will be based on P802.20.1, it does not change existing cost models for devices or infrastructure.

17.5.2 Compatibility

IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802.
Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

The proposed standard will be based on the approved version of IEEE P802.20.1. IEEE P802.20.1 conforms to the 802 Overview, the 802 Architecture, and the 802 Functional Requirements. IEEE P802.20.1 also supports 802.1D and 802.1Q.
IEEE P802.2.1 is in sponsor ballot.

17.5.3 Distinct Identity

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:
a) Substantially different from other IEEE 802 standards.

There is no existing 802 standard or approved project that address this scope or purpose as it specifically relates to P802.20.1.

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

This project is unique as it specifically relates to P802.20.1.

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

The proposed standard will provide pointers to the relevant parts of P802.20.1, as needed for ease of reading and use.

17.5.4 Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:
a) Demonstrated system feasibility.
b) Proven technology, reasonable testing.
c) Confidence in reliability.

Since this standard relates to the existing IEEE P802.20.1 standard, the feasibility of the baseline standard also applies to this standard. The existing IEEE standard serving as the baseline for this work constitutes a proven, reliable technology.
Development of definitions, method of measurements and minimum performance characteristics for terminals and base stations based on other wireless standards is a known and proven process. Such standards are regularly developed in other wireless standards organizations.

17.5.4.1 Coexistence of 802 wireless standards specifying devices for unlicensed operation
A working group proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable. The Working Group will create a CA document as part of the WG balloting process. If the Working Group elects not to create a CA document, it will explain to the EC the reason the CA document is not applicable.

This does apply as the new standard relates to P802.20.1 which does not support an unlicensed operation.

17.5.5 Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated) for its intended applications. At a minimum, the proposed project shall show:
a) Known cost factors, reliable data.

Cost factors are no different from those known cost factors of the P802.20.1 standard.

b) Reasonable cost for performance.

Cost for performance expected is no different from the cost for performance expected of the P802.20.1 standard. Standards of this type typically provide a good cost return for equipment suppliers versus having each service provider create their own definitions, method of measurements and minimum performance characteristics.
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c) Consideration of installation costs.

Installation costs are no different from those of the P802.20.1 standard