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| Project                      | <b>IEEE 802.16 Broadband Wireless Access Working Group</b><br>< <a href="http://ieee802.org/16">http://ieee802.org/16</a> >  |   |
| Title                        | <b>Proposed Editorial Update to 802.16j PAR Proposal</b>   |   |
| Date Submitted               | <b>2006-03-02</b>  |   |
| Source(s)                    | Roger B. Marks<br>Chair, IEEE 802.16 WG  | Voice: +1 303 497 7837<br><a href="mailto:r.b.marks@ieee.org">mailto:r.b.marks@ieee.org</a> |
| Re:                          | Draft P802.16j PAR and Five Criteria on Mobile Multihop Relay (IEEE 802.16mmr-06/002)  |   |
| Abstract                     | <p>At Session #41, the 802.16 Working Group's Study Group on Mobile Multihop Relay proposed a new P802.16j PAR &lt;<a href="http://ieee802.org/16/sg/mmr/docs/80216mmr-06_002.pdf">http://ieee802.org/16/sg/mmr/docs/80216mmr-06_002.pdf</a>&gt;. The WG Chair submitted this PAR to the IEEE 802 EC for review at the March 2006 802 Plenary.</p> <p>Later, the WG Chair submitted a version of the PAR by the deadline required for consideration at the next NesCom meeting of 29 March. This contribution represents that submittal. The version submitted is not identical to that submitted to the IEEE 802 EC, primarily because the nature of the PAR submittal form has changed.</p>  |   |
| Purpose                      | The contributor suggests that the WG take this document as the new baseline PAR for discussion.  |   |
| Notice                       | This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.   |   |
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| Patent Policy and Procedures | <p>The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) &lt;<a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a>&gt;, including the statement "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair &lt;<a href="mailto:r.b.marks@ieee.org">mailto:r.b.marks@ieee.org</a>&gt; as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site &lt;<a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a>&gt;.</p> |   |

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1. ASSIGNED PROJECT NUMBER: 802.16j

2. SPONSOR DATE OF REQUEST: 7-Feb-2006

3. TYPE OF DOCUMENT: Standard

4. TITLE OF DOCUMENT: Amendment to IEEE Standard for Local and Metropolitan Area Networks – Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems – Physical and Medium Access Control Layers for Mobile Multihop Relay

5. LIFE CYCLE: Full-Use

6. TYPE OF PROJECT: Amendment 802.16

Modified PAR?  
In Ballot? No

#### 7. WORKING GROUP INFORMATION

Name of Working Group: IEEE 802.16 Working Group on Broadband Wireless Access  
Approximate Number of Expected Working Group Members: 300

#### 8. CONTACT INFO FOR WORKING GROUP CHAIR

Name of Working Group Chair: Roger Marks  
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#### 10. CONTACT INFO OF SPONSOR

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#### CO-SPONSOR INFORMATION (THIS IS BEING SPONSORED BY TWO SPONSORS):

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11. TYPE OF SPONSOR BALLOT: Individual

Expected Date of Submission for Initial Sponsor Ballot: Mar-2007

**12. PROJECTED COMPLETION DATE FOR SUBMITTAL TO REVCOM:** Sep-2007

**13. SCOPE:** This document specifies OFDMA physical layer and medium access control layer enhancements to IEEE Std 802.16 for licensed bands to enable the operation of relay stations. Subscriber station specifications are not changed.

Completion of this document contingent upon another document? No

**14. PURPOSE:** This amendment provides specifications for mobile multihop relay features, functions and interoperable relay stations to enhance coverage, throughput and system capacity of 802.16 networks.

**15. REASON:** The multihop relay is a promising solution to expand coverage and to enhance throughput and system capacity for IEEE 802.16 systems. It is expected that the complexity of relay stations will be considerably less than the complexity of legacy IEEE 802.16 base stations. The gains in coverage and throughput can be leveraged to reduce total deployment cost for a given system performance requirement and thereby improve the economic viability of IEEE 802.16 systems. Relay functionality enables rapid deployment and reduces the cost of system operation. These advantages will expand the market opportunity for broadband wireless access. This project aims to enable exploitation of such advantages by adding appropriate relay functionality to IEEE Std 802.16 through the proposed amendment.

**16. INTELLECTUAL PROPERTY:**

IEEE-SA Policy on Intellectual Property Presented: Yes 9-Jan-2006

Copyrights: No

Trademarks: No

Registration of Object: No

**17. SIMILAR SCOPE:** No

**18. FUTURE ADOPTION:** Yes

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**19. Health, Safety or Environmental Issues:** No

Explanation:

**20. SPONSOR INFORMATION:**

a. Is the scope of this project within the approved scope/definition of the Sponsor's Charter?

Yes

Explanation:

b. Sponsor's procedures accepted by AudCom: Yes

**21. ADDITIONAL NOTES:** Item 13. The relay station is controlled by the base station.

**I acknowledge having read and understood the IEEE Code of Ethics I agree to conduct myself in a manner which adheres to the IEEE Code of Ethics when engaged in official IEEE business.**

**REVIEWED & SUBMIT**

The PAR Copyright Release and Signature Page must be submitted either by FAX to 732-875-0695 or as e-mail attachment in .pdf format to the NesCom Administrator before this PAR will be sent on for NesCom and Standards Board approval.