

[Email This Letter](#)

23 September 2004

Paul Nikolich
18 Bishops Lane
Lynnfield, MA 01940
paul.nikolich@att.net

Re: P802.22 - Information Technology -Telecommunications and information exchange between systems –
Wireless Regional Area Networks (WRAN) - Specific requirements - Part 22: Cognitive Wireless RAN
Medium Access Control (MAC) and Physical Layer (PHY) specifications: Policies and procedures for
operation in the TV Bands

Dear Paul:

I am pleased to inform you that on 23 September 2004 the IEEE-SA Standards Board approved the above
referenced project until 31 December 2008. A copy of the file can be found on our website at
<http://standards.ieee.org/board/nes/projects/802-22.pdf>.

Now that your project has been approved, please forward a roster of participants involved in the development of
this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of
the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards
projects"

For your convenience, an Excel spreadsheet for your use has been posted on our website at
<http://standards.ieee.org/guides/par/roster.xls>. Please forward this list to me via e-mail at j.haasz@ieee.org no
later than 21 December 2004.

Please visit our website, IEEE Standards Development Online
(<http://standards.ieee.org/resources/development/index.html>), for tools, forms and training to assist you in the
standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for
review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor
balloting begins.

If you should have any further questions, please contact me at 732-562-6367 or by email at j.haasz@ieee.org.

Sincerely,

Jodi Haasz
Program Manager
International Stds Programs and Governance
Standards Activities
Phone +1 732 562 6367
FAX +1 208 460 5300
Email: j.haasz@ieee.org

cc: carl.stevenson@ieee.org

PAR FORM

PAR Status: New PAR

PAR Approval Date: 2004-09-23

PAR Signature Page on File: Yes

1. Assigned Project Number: 802.22

2. Sponsor Date of Request: 2004-07-08

3. Type of Document: Standard for

4. Title of Document:

Draft: Information Technology -Telecommunications and information exchange between systems – Wireless Regional Area Networks (WRAN) - Specific requirements - Part 22: Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Policies and procedures for operation in the TV Bands

5. Life Cycle: Full-Use

6. Type of Project:

6a. Is this an update to an existing PAR? No

6b. The Project is a: New Standard

7. Working Group Information:

Name of Working Group: IEEE 802.22 Wireless Regional Area Networks (

Approximate Number of Expected Working Group Members:50

8. Contact information for Working Group Chair:

Name of Working Group Chair: Carl R. Stevenson

Telephone: 610-965-8799 **FAX:**

Email: carl.stevenson@ieee.org

9. Contact information for Co-Chair/Official Reporter, Project Editor or Document Custodian if different from the

Working Group Chair:

Name of Co-Chair/Official Reporter, Project Editor or Document Custodian:

Telephone: **FAX:**

Email:

10. Contact information for Sponsoring Society or Standards Coordinating Committee:

Name of Sponsoring Society and Committee: Computer Society Local and Metropolitan Area Networks

Name of Sponsoring Committee Chair: Paul Nikolich

Telephone: 857-205-0050 **FAX:** 781-334-2255

Email: paul.nikolich@att.net

Name of Liaison Rep. (if different from the Sponsor Chair):

Telephone: **FAX:**

Email:

Name of Co-Sponsoring Society and Committee:

Name of Co-Sponsoring Committee Chair:

Telephone: **FAX:**

Email:

Name of Liaison Rep. (if different from the Sponsor Chair):

Telephone: **FAX:**

Email:

11. The Type of ballot is: Individual Sponsor Ballot

Expected Date of Submission for Initial Sponsor Ballot: 2007-01-01

12. Fill in Projected Completion Date for Submittal to RevCom: 2007-06-01

Explanation for Modified PAR that completion date is being extended past the original four-year life of the PAR:

13. Scope of Proposed Project:

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of fixed point-to-multipoint wireless regional area networks operating in the VHF/UHF TV broadcast bands between 54 MHz and 862 MHz.

Is the completion of this document contingent upon the completion of another document? No

14. Purpose of Proposed Project:

This standard is intended to enable deployment of interoperable 802 multivendor wireless regional area network products, to facilitate competition in broadband access by providing alternatives to wireline broadband access and extending the deployability of such systems into diverse geographic areas, including sparsely populated rural areas, while preventing harmful interference to incumbent licensed services in the TV broadcast bands.

14a. Reason for the standardization project:

There is a large, untapped market for broadband wireless access in rural and other unserved/underserved areas where wired infrastructure cannot be economically deployed. Products based on this standard will be able to serve those markets and increase the efficiency of spectrum utilization in spectrum currently allocated to, but unused by, the TV broadcast service.

15. Intellectual Property:

Has the sponsor reviewed the IEEE patent policy with the working group? Yes

Is the sponsor aware of copyrights relevant to this project? No

Is the sponsor aware of trademarks relevant to this project? No

Is the sponsor aware of possible registration of objects or numbers due to this project? No

16. Are there other documents or projects with a similar scope? No

Similar Scope Project Information:

17. Is there potential for this document (in part or in whole) to be adopted by another national , regional or international organization? Do not know at this time

If yes, please answer the following questions:

Which International Organization/Committee?

**International Contact
Information?**

18. If the project will result in any health, safety, or environmental guidance that affects or applies to human health or safety, please explain in five sentences or less.

19. Additional Explanatory Notes: (Item Number and Explanation)

Item 4: "Wireless Regional Area Network" ("WRAN") - a network for operation over large, potentially sparsely populated areas (e.g. rural areas), taking advantage of the favorable propagation characteristics in the VHF and low UHF TV bands. The unique requirements of operating on a strict non-interference basis in spectrum assigned to, but unused by, the incumbent licensed services requires a new approach using purpose-designed cognitive radio techniques that

will permeate both the PHY and MAC layers. The IEEE 802.18 Study Group chartered to develop this PAR does not believe that any existing IEEE 802 PHY/MAC combination can meet these requirements without extensive modifications. The Study Group has therefore concluded that placing the project in a new Working Group is the most efficient approach.

The Working Group will maintain ongoing communications with the joint effort of the IEEE Communications and EMC Societies as it determines the technical definition of non-interference, harmful interference, their measurement and acceptable mitigation.