# IEEE P802.22 Wireless RANs

DRAFT 802.22 Proposed PAR on Enhanced Protection of Part 74 Devices				
		<b>Date:</b> 2005-10-14		
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# Abstract

This document contains a draft PAR for consideration by the IEEE 802 EC during the November 2005 IEEE 802 plenary.

**Notice:** This document has been prepared to assist IEEE 802.22. 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: The contributor is familiar with the IEEE 802 Patent Policy and Procedures

<<u>http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf</u>>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of 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 <<u>Carl R. Stevenson</u>> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.22 Working Group. If you have questions, contact the IEEE Patent Committee Administrator at <<u>patcom@ieee.org</u>>.

## **IEEE-SA STANDARDS BOARD**

## **PROJECT AUTHORIZATION REQUEST (PAR) FORM - 2005**

The submittal deadlines are available at <u>http://standards.ieee.org/board/nes/index.html</u>. (See NesCom Convention - Item #14)

#### Prior to submitting your PAR, please review the <u>NesCom Conventions</u>.

1. <u>ASSIGNED PROJECT NUMBER</u> P 802.22.1 (???) (Please leave blank if not available.) (<u>See NesCom Convention - Item #19</u>)

2. <u>SPONSOR DATE OF REQUEST</u> Day: Month: Nov Year: 2005

**3. <u><b>TYPE OF DOCUMENT**</u>(Please check one.)

**Standard for** {document stressing the verb "shall"}

- **Recommended Practice for** {document stressing the verb "should"}
- **Guide for** {document in which good practices are suggested, stressing the verb "may"}

#### 4. TITLE OF DOCUMENT

(See NesCom Conventions - <u>Item #5</u>, <u>Item #7</u>)

**Draft** Standard for methods to enhance the protection of low power licensed device operation in the TV Broadcast Bands from harmful interference from license-exempt devices operating in those bands.

## 5. LIFE CYCLE

**Full-Use** 

Trial-Use

### 6. <u>TYPE OF PROJECT</u>

New docur	nent		
Revision of approved in box	f an existing document (indicate number and year existing document was o the right):		
Amendmen Approved in box	It to an existing document (indicate number and year existing document was o the right):	(####-YYYY)	
Corrigendu was approved in	m to an existing document (indicate number and year existing document pox to the right):		
Modified F	AR (indicate PAR Number and Approval Date here: P Day: Day:	Month:	
Is this project in	ballot now? $\square$ Yes $\square$ No r modifying the PAR in Item #21.		

7. WORKING GROUP INFORMATION: Name of Working Group (WG) : IEEE P802.22 (TG1 ???)	
Approximate Number of Expected Working Group Members: 20+	
8. CONTACT INFORMATION FOR WORKING GROUP CH as an IEEE and/or Affiliate Member) (See NesCom Convention Item #3, Item #4)	AIR (must be an IEEE-SA member as well
Name of Working Group Chair: First Name: Carl Last Name: StevTelephone:610-841-6180FAX:484-214-0204E-mail:Carl.stevens	enson son@ieee.org
9. CONTACT INFORMATION FOR <u>CO-CHAIR/OFFICIAL</u> Custodian if different from the Working Group Chair (must be and/or Affiliate Member) (See NesCom Convention <u>Item #3</u> )	
Name of Co-Chair/Official Reporter (if different than Working Group Name: Telephone: FAX: E-mail:	O Chair): First Name: Last
10. CONTACT INFORMATION FOR SPONSORING SOCIE   COMMITTEE   (See NesCom Convention Item #1, Item #3)   Sponsoring Society and Committee: C/LM (Computer Society, Networks)   (Please choose the correct acronym for your Sponsor Society/Techr acronym list, please click here.)   Sponsor Committee Chair: First Name: Paul Last Name: Nikolich   Telephone: 978-749-9999   FAX: 781-334-2255	Local and Metropolitan Area nical Committee or SCC. <u>For an</u>
Standards Coordinator (Power Engineering Society Only):   Standards Coordinator: First Name:   Name:   Telephone:   FAX:	ast E-mail:
IF THIS PROJECT IS BEING SPONSORED BY TWO SPONS INFORMATION BELOW Sponsoring Society and Committee: (Please your Sponsor Society/Technical Committee or SCC. For an acronyr	e choose the correct acronym for
Sponsor Committee Chair: First Name:	Last E-mail:
Telephone: FAX:	

#### Standards Coordinator (Power Engineering Society Only):

Standards Coordinator: First Nam	e:	Last
Telephone:	FAX:	E- mail:

## 11. <u>SPONSOR BALLOTING INFORMATION</u> (Please choose one of the following):

Individual Balloting

Entity Balloting

Mixed Balloting (combination of Individual and Entity Balloting)

Expected Date of Submission for Initial Sponsor Ballot: Month: January Year: 2007

Please review the PAR form three months prior to submitting your draft for ballot to ensure that the title, scope, and purpose on the PAR form match the title, scope, and purpose of the draft. If they do not match, you will probably need to submit a modified PAR.

Additional communication and input from other organizations or other IEEE Standards Sponsors should be encouraged through participation in the working group or the invitation pool.

(See NesCom Conventions - Item #20)

**12.** <u>PROJECTED COMPLETION DATE FOR SUBMITTAL TO REVCOM</u>: Month: July Year: 2007 If this is a MODIFIED PAR and the completion date is being extended past the original four-year life of the PAR, please answer the following questions. <u>If this is not a modified PAR, please go to Question #13.</u> (See NesCom Conventions - <u>Item #18</u>)

a. Statement of why the extension is required:	
b. How many working group members are working on the project?	
c. How many times a year does the working group meet:	
1. In person?	
2. Via teleconference?	
d. How many times a year is a draft version circulated to the working group via electronic means?	
e. What percentage of the Draft is stable?	%
f. How many significant working revisions has the Draft been through?	

g. Balloting History - If the draft has gone to ballot, please provide a history of all IEEE Sponsor ballots under this project in the box to the right. Please include the:	
• Ballot Close Date (or scheduled Close Date)	
Ballot Draft Number	
• Ballot Results (% affirmative, % negative, % abstain)	
h. Is this the first request for an extension?	
If no, when was the previous extension approved?	(DD-MMM-YYYY)

## 13. <u>SCOPE OF PROPOSED PROJECT</u>

(See NesCom Conventions - <u>Item #6</u>, <u>Item #16</u>, <u>Item #17</u>)

Briefly detail the projected output including technical boundaries.

FOR MODIFIED PROJECTS/REVISION DOCUMENTS - Only detail the projected output including the scope of the project or last published document to be modified and any amendments and/or additions.

This project will create a standard which specifies methods to provide enhanced protection to protected devices such as those used in the production and transmission of broadcast programs (e.g. devices licensed as secondary under FCC Part 74 in the USA and equivalent devices in other regulatory domains) from harmful interference caused by licensed–exempt devices (such as, e.g. IEEE 802.22) that also are intended to operate in the TV Broadcast Bands.

Is the completion of this document contingent upon the completion of another document?

0	Yes (with detailed explanation below)	O	No	
				<u> </u>

#### 14. PURPOSE OF PROPOSED PROJECT

Briefly, clearly and concisely explain "why" the document is being created. (See NesCom Conventions - <u>Item #16</u>)

FOR MODIFIED PROJECTS/REVISION DOCUMENTS - Only include the purpose of the project or last published document and any amendments and/or additions.

This project is required to provide a standard and efficient method for license-exempt devices to provide enhanced protection to low-powered licensed devices that are entitled to protection from harmful interference, and that share the same spectrum. This standard may be applicable in global regulatory environments.

#### **15. <u>REASON FOR THE PROPOSED PROJECT:</u>**

Give the specific reason for the standardization project. Focus on explaining the problem being addressed, the

benefit to be provided and the stakeholders for the project.

The FCC has proposed to allow new license-exempt (LE) devices to operate within unused TV channels. Licensed incumbent devices such as wireless microphones are currently using this spectrum, and it is important to protect those devices from harmful interference to avoid disrupting these services. A standardized method of protection will enable continued interference-free operation of the licensed incumbent services and promote spectrum sharing with the LE devices, benefit both the incumbent licensees and equipment manufacturers.

16. INTELLECTUAL PROPERTY (Please answer each of the questions below)

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? <sup>C</sup> Yes <sup>C</sup> No

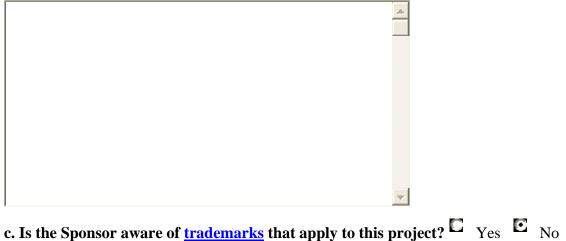
If yes, state date: Day: 23 Month:09 Year:2005

If no, please explain:

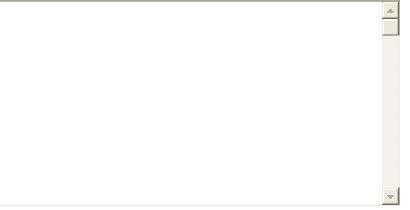


**b. Is the Sponsor aware of <u>copyright</u> permissions needed for this project?** <sup>C</sup> Yes 🖸 No

If yes, please explain:

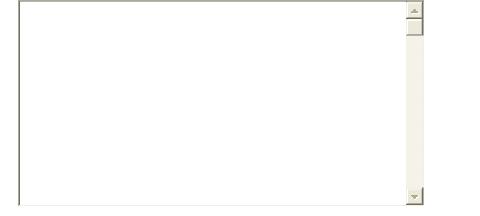


If yes, please explain:



d. Is the Sponsor aware of possible registration activity related to this project?  $\square$  Yes  $\square$  No

If yes, please explain:



17. ARE THERE OTHER DOCUMENTS OR PROJECTS WITH A SIMILAR SCOPE?

Yes (with detailed explanation below) No	
	-
	-
If Yes, please answer the following:	
Sponsor Organization:	
Project/Document Number:	
Project/Document Date: (DD-MMM-YYYY)	
Project/Document Title:	
	-
	-1
	-

## **18. <u>FUTURE ADOPTIONS</u>**

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, the following questions must be answered:
Technical Committee Name and Number: TC SC WG Other Organization Contact Information:
Contact Name - First Name:
Contact Telephone Number:
Contact FAX Number:
Contact Email address:

## 19. WILL THIS PROJECT RESULT IN ANY <u>HEALTH, SAFETY, OR ENVIRONMENTAL</u>

GUIDANCE THAT AFFECTS OR APPLIES TO HUMAN HEALTH OR SAFETY?	I Y	Yes 🖸	No
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If yes, please explain:



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

If no, please explain:

*
<u>▼</u>

b. Have the Sponsor's procedures been accepted by the IEEE-SA Standards Board Audit Committee? Yes No (See NesCom Convention Item #2)

#### 21. <u>ADDITIONAL EXPLANATORY NOTES</u> (Item Number and Explanation)

The protection mechanisms that can be provided within the IEEE 802.22 scope are not sufficient to provide complete protection to Part 74 devices. This work is intended to create a mechanism to provide more comprehensive protection for these devices.

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

Save This Form Review and Submit

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The <u>PAR Copyright Release and Signature Page</u> must be submitted by FAX to +1 732-875-0695 to the <u>NesCom Administrator</u> before this PAR will be forwarded to NesCom and the Standards Board for approval.

(See NesCom Conventions - <u>Item #8</u>, <u>Item #9</u>, <u>Item #10</u>)

Reset Form

**References:**