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**Type of Project:** Amendment to IEEE Standard 802.22-2011

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**1.1 Project Number:** P802.22b

**1.2 Type of Document:** Standard

**1.3 Life Cycle:** Full Use

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**2.1 Title:** Standard for 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. Amendment: Enhanced Broadband and Monitoring

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**3.1 Working Group:** Wireless Regional Area Networks Working Group (C/LM/WG802.22)

**Contact Information for Working Group Chair**

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**3.2 Sponsoring Society and Committee:** IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

**Contact Information for Sponsor Chair**

**Name:** Paul Nikolich

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**Contact Information for Standards Representative**

None

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**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 11/2013

**4.3 Projected Completion Date for Submittal to RevCom:** 08/2014

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 40

**5.2 Scope:** This standard specifies alternate PHY and necessary MAC amendments to IEEE std. 802.22-2011 for operation in VHF/UHF TV broadcast bands between 54 MHz and 862 MHz to support enhanced broadband services and monitoring applications. The standard supports aggregate data rates greater than the maximum data rate supported by the IEEE std. 802.22-2011. This standard defines new classes of 802.22 devices to address these applications and supports more than 512 devices. This standard also specifies techniques to enhance communications among the devices and makes necessary amendments to the cognitive, security & parameters and connection management clauses.

**5.3 Is the completion of this standard dependent upon the completion of another standard:**  
No

**5.4 Purpose:** This document will not include a purpose clause.

**5.5 Need for the Project:** There are various broadband services and monitoring applications in the context of wireless regional area networks where communications can be better served by introducing new classes of 802.22 devices with capabilities appropriate for such applications. In addition, extending regional area broadband services to applications such as real-time and near real-time monitoring, emergency broadband services, remote medical services etc, requires higher data rates and greater number of devices. Enhanced technologies become necessary to enable communications among devices to support those applications. None of the features mentioned above can be supported by the IEEE std. 802.22-2011 and hence, a new project is required for amendment.

**5.6 Stakeholders for the Standard:** The stakeholders include: Manufacturers and users of IEEE Std. 802.22-2011 devices and other operating entities to which the standard may need to interface.

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### **Intellectual Property**

**6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**6.1.b. Is the Sponsor aware of possible registration activity related to this project?:** No

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**7.1 Are there other standards or projects with a similar scope?:** No

### **7.2 Joint Development**

**Is it the intent to develop this document jointly with another organization?:** No

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**8.1 Additional Explanatory Notes (Item Number and Explanation):** This amendment supports mechanisms to enable coexistence with other 802 systems in the same band.