1 2

Un-approved DRAFT 12, January 2013

- 3
 - Contact:

4 Shuang Yu, Senior Manager, Solutions Marketing

5 +1 732 981 3424; shuang.yu@ieee.org 6

IEEE 802.22.2[™]-2012 STANDARD COMPLETED FOR INSTALLATION AND 7

8 DEPLOYMENT OF WIRELESS REGIONAL AREA NETWORKS IN TV 9 WHITESPACES

10

PISCATAWAY, N.J., USA, XX January 2013 – IEEE, the world's largest professional 11 12 organization advancing technology for humanity, today announced that the IEEE

13 802.22[™] Working Group (WG), recipient of the IEEE Standards Association (IEEE-SA)

14 Emerging Technology Award, has completed and published the IEEE 802.22.2™ Standard for installation and deployment of the IEEE 802.22-2011 Standard on Wireless 15

Regional Area Networks and the IEEE 802.22.1[™]-2010 Standard. 16

17

18 IEEE 802.22 systems will provide broadband access to wide regional areas globally and

- 19 bring reliable and secure high-speed communications to under-served and un-served
- 20 rural communities, which are estimated to include nearly half of the world's population.
- The IEEE 802.22-2011 is the first IEEE 802[®] standard for operation in the Television 21
- 22 (TV) Whitespaces, defined as the available or un-occupied TV channels. It is also the
- 23 first IEEE standard that focuses on broadband connectivity in rural areas where most
- 24 vacant TV channels can be found, thus helping to bridge the "digital divide."
- 25 WhiteSpace Alliance[™] has adopted the IEEE 802.22-2011[™] into its Wi-FAR[™] 26 specification.
- 27

28 This IEEE standard for Wireless Regional Area Networks (WRANs) takes advantage of

29 the favorable transmission characteristics of the VHF and UHF TV bands to provide

- 30 broadband wireless access over a large area up to 100 km from the transmitter. Each
- WRAN could deliver 22 Mbps to 29 Mbps, depending upon the country of deployment, 31
- 32 without interfering with reception of existing TV broadcast stations.
- 33
- 34 IEEE 802.22 incorporates advanced cognitive radio capabilities including dynamic
- 35 spectrum access, incumbent database access, accurate geolocation techniques,
- 36 spectrum sensing, regulatory domain dependent policies, spectrum etiquette, and -
- 37 coexistence for optimal use of the available spectrum.
- 38
- 39 The IEEE 802.22.2 Standard will help the deployment of 802.22 systems in a manner
- 40 that complies with the local regulatory requirements while ensuring that no interference is caused to TV Broadcast systems and licensed auxiliary services. 41
- 42 "Publication of the IEEE 802.22.2-2012 Standard will help installation and deployment of
- IEEE 802.22-2011 Standards based WRANs to bring cost-effective broadband access 43
- 44 to rural and remote communities all over the world," said Dr. Apurva N. Mody, Chairman
- 45 of the IEEE 802.22 Standards Working Group.

- 1 Additional information on the standard can be found at the IEEE-SA standards page. To
- 2 purchase IEEE 802.22.2., visit the <u>IEEE Standards Store</u>.
- 3
- 4 To learn more about IEEE-SA, visit us on Facebook at http://www.facebook.com/ieeesa,
- 5 follow us on Twitter at <u>http://www.twitter.com/ieeesa</u> or connect with us on the
- 6 Standards Insight Blog at <u>http://www.standardsinsight.com</u>.
- 7

8 About the IEEE Standards Association

- 9 The IEEE Standards Association, a globally recognized standards-setting body within
- 10 IEEE, develops consensus standards through an open process that engages industry
- and brings together a broad stakeholder community. IEEE standards set specifications
- 12 and best practices based on current scientific and technological knowledge. The IEEE-
- 13 SA has a portfolio of over 900 active standards and more than 500 standards
- 14 under development. For more information visit <u>http://standards.ieee.org/</u>.

1516 About IEEE

- 17 IEEE, a large, global technical professional organization, is dedicated to advancing
- 18 technology for the benefit of humanity. Through its highly cited publications,
- 19 conferences, technology standards, and professional and educational activities, IEEE is
- 20 the trusted voice on a wide variety of areas ranging from aerospace systems,
- 21 computers and telecommunications to biomedical engineering, electric power and
- 22 consumer electronics. Learn more at <u>http://www.ieee.org</u>.
- 23 24