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7 **IEEE 802.22.2™-2012 STANDARD COMPLETED FOR INSTALLATION AND**
8 **DEPLOYMENT OF WIRELESS REGIONAL AREA NETWORKS IN TV BAND WHITE**
9 **SPACES**

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11 **PISCATAWAY, N.J., USA, XX January 2013** – IEEE, the world's largest professional
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 Std. 802.22.2™ -
15 2012 Standard for installation and deployment of the IEEE Std. 802.22-2011 Standard
16 on-based Wireless Regional Area Networks (WRAN) in TV Band white spaces. and the
17 IEEE 802.22.1™-2010 Standard.

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

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29 This IEEE 802.22 standard for Wireless Regional Area Networks (WRANs) takes
30 advantage of the favorable transmission characteristics of the VHF and UHF TV bands
31 to provide broadband wireless access over a large area up to 100 km from the
32 transmitter. Each WRAN could deliver 22 Mbps to 29 Mbps typically over 10 km to 30
33 km radius, depending upon the country of deployment, without interfering with reception
34 of existing TV broadcast stations.

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36 IEEE Std. 802.22-2011 incorporates advanced cognitive radio capabilities including
37 dynamic spectrum access, incumbent database access and regulatory policies,
38 accurate geolocation techniques, spectrum sensing, regulatory domain dependent
39 policies, spectrum etiquette, and -coexistence for optimal use of the available spectrum.

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41 The IEEE Std. 802.22.2-2012 -Standard will help the deployment of 802.22 systems in a
42 manner that complies with the local regulatory requirements while ensuring that no
43 interference is caused to TV Broadcast systems and licensed auxiliary services.
44 “Publication of the IEEE 802.22.2-2012 Standard will help installation and deployment of
45 IEEE 802.22-2011 Standards based WRANs to bring cost-effective broadband access

1 to rural and remote communities all over the world,” said Dr. Apurva N. Mody, Chairman
2 of the IEEE 802.22 Standards Working Group.

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4 Additional information on the standard can be found at the IEEE-SA standards page. To
5 | purchase IEEE [Std. 802.22.2-2012-](#), visit the [IEEE Standards Store](#).

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7 To learn more about IEEE-SA, visit us on Facebook at <http://www.facebook.com/ieeesa>,
8 follow us on Twitter at <http://www.twitter.com/ieeesa> or connect with us on the
9 Standards Insight Blog at <http://www.standardsinsight.com>.

11 **About the IEEE Standards Association**

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

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19 [Deployment of technology defined by the IEEE 802 standard is already globally](#)
20 [pervasive, driven by the ever-growing needs of networks around the world. New](#)
21 [application areas are constantly being considered that might leverage the IEEE 802](#)
22 [family of standards in their networks. To better address the needs of all of these areas,](#)
23 [the IEEE 802 standard is constantly evolving and expanding. The success of the IEEE](#)
24 [802 standard—from its inception through today—has been its fair, open, and](#)
25 [transparent development process.](#)

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