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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 for installation and deployment of the IEEE Std. 802.22-2011 based Wireless
16 Regional Area Networks (WRAN) in TV Band white spaces. .
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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.
21 The IEEE Std. 802.22-2011 is the first IEEE 802® standard for operation in the
22 Television (TV) white spaces, defined as the available or un-occupied TV channels. It is
23 also the first IEEE standard that focuses on broadband connectivity in rural areas where
24 most vacant TV channels can be found, thus helping to bridge the “digital divide.” The
25 WhiteSpace Alliance™ has adopted the IEEE 802.22-2011™ into its Wi-FAR™
26 specification.
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28 This IEEE 802.22 standard for WRANs takes advantage of the favorable transmission
29 characteristics of the VHF and UHF TV bands to provide broadband wireless access
30 over a large area. Each WRAN delivers 22 Mbps to 29 Mbps typically over 10 km to 30
31 km radius, depending upon the country of deployment, without interfering with reception
32 of existing TV broadcast stations.
33

34 IEEE Std. 802.22-2011 incorporates advanced cognitive radio capabilities including
35 dynamic spectrum access, incumbent database access and regulatory policies,
36 accurate geolocation techniques, spectrum sensing, spectrum etiquette, and -
37 coexistence for optimal use of the available spectrum.
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39 The IEEE Std. 802.22.2-2012 will help the deployment of 802.22 systems in a manner
40 that complies with the local regulatory requirements while ensuring that no interference
41 is caused to TV Broadcast systems and licensed auxiliary services. “Publication of the
42 IEEE 802.22.2-2012 Standard will help installation and deployment of IEEE 802.22-
43 2011 Standards based WRANs to bring cost-effective broadband access to rural and
44 remote communities all over the world,” said Dr. Apurva N. Mody, Chairman of the IEEE
45 802.22 Standards Working Group.
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1 Additional information on the standard can be found at the IEEE-SA standards page. To
2 purchase IEEE Std. 802.22.2-2012, visit the [IEEE Standards Store](http://www.ieee.org/standards).

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

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
11 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 <http://standards.ieee.org/>.

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

25 **About IEEE**

26 IEEE, a large, global technical professional organization, is dedicated to advancing
27 technology for the benefit of humanity. Through its highly cited publications,
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29 the trusted voice on a wide variety of areas ranging from aerospace systems,
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