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7 **IEEE 802.22 WORKING GROUP FOR WIRELESS REGIONAL AREA NETWORKS IN**
8 **TV WHITESPACES WINS IEEE STANDARDS ASSOCIATION EMERGING**
9 **TECHNOLOGY AWARD**

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11 **PISCATAWAY, N.J., USA, 4th December 2011** – IEEE, the world's largest
12 professional association advancing technology for humanity, today announced that the
13 IEEE 802.22TM Working Group (WG) is the recipient of the 2011 IEEE Standards
14 Association (IEEE-SA) Emerging Technology Award. The award is presented to a
15 Working Group (WG) individual or a company that has advanced, initiated, or
16 progressed a new technology within the IEEE-SA open consensus process. Some of
17 the criteria for this award include:

- 18 • The IEEE-SA work product is the first, or one of few such activities for the
- 19 technology, industry, or market(s) for which it is targeted.
- 20 • The effort places IEEE in a leadership position.

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22 The IEEE 802.22 WG has published the IEEE 802.22TM-2011 and the IEEE 802.22.1TM-
23 2010 standards. IEEE 802.22 systems will provide broadband access to wide regional
24 areas around the world and bring reliable and secure high-speed communications to
25 under-served and un-served rural communities, which are estimated to include nearly
26 half of the world's population. The IEEE 802.22-2011 is the first IEEE 802[®] Standard for
27 operation in the Television (TV) Whitespaces; defined as the un-occupied TV channels.
28 It is also the first IEEE Standard that focuses on broadband connectivity in rural areas
29 where most vacant TV channels can be found, thus helping to bridge the "digital divide".

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

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

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42 Additional information on the standard can be found at the [IEEE 802.22 WG](#) page. To
43 purchase IEEE 802.22, visit the [IEEE Standards Store](#).

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2 follow us on Twitter at <http://www.twitter.com/ieeesa> or connect with us on the
3 Standards Insight Blog at <http://www.standardsinsight.com>.
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5 **About the IEEE Standards Association**

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

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15 technology for the benefit of humanity. Through its highly cited publications,
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18 computers and telecommunications to biomedical engineering, electric power and
19 consumer electronics. Learn more at <http://www.ieee.org>.
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