



IEEE Press Release

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7 **IEEE 802.22™-2011 STANDARD FOR WIRELESS REGIONAL AREA NETWORKS IN**
8 **TV WHITESPACES COMPLETED** 8

10 **PISCATAWAY, N.J., USA, 22 July 2011** – IEEE, the world's largest professional
11 association advancing technology for humanity, today announced that it has published
12 the IEEE 802.22™ standard. IEEE 802.22 systems will provide broadband access to
13 wide regional areas around the world and bring reliable and secure high-speed
14 communications to under-served and un-served communities.

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16 This new standard for Wireless Regional Area Networks (WRANs) takes advantage of
17 the favorable transmission characteristics of the VHF and UHF TV bands to provide
18 broadband wireless access over a large area up to 100 km from the transmitter. Each
19 WRAN will deliver up to 22 Mbps per channel without interfering with reception Of
20 existing TV broadcast stations, using the so-called white spaces between the occupied
21 TV channels. This technology is especially useful for serving less densely populated
22 areas, such as rural areas, and developing countries where most vacant TV channels
23 can be found. 23

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25 IEEE 802.22 incorporates advanced cognitive radio capabilities including dynamic
26 spectrum access, incumbent database access, accurate geolocation techniques,
27 spectrum sensing, regulatory domain dependent policies, spectrum etiquette, and
28 coexistence for optimal use of the available spectrum.

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31 The IEEE 802.22 Working Group started its work following the Notice of Inquiry issued
32 by the United States Federal Communications Commission on unlicensed operation in
33 the TV broadcast bands.

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

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39 follow us on Twitter at <http://www.twitter.com/ieeesa> or connect with us on the
40 Standards Insight Blog at <http://www.standardsinsight.com>.

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42 **About the IEEE Standards Association**

43 The IEEE Standards Association, a globally recognized standards-setting body within
44 IEEE, develops consensus standards through an open process that engages industry
45 and brings together a broad stakeholder community. IEEE standards set specifications
46 and best practices based on current scientific and technological knowledge. The IEEE-

1 SA has a portfolio of over 900 active standards and more than 500 standards
2 under development. For more information visit <http://standards.ieee.org/>.

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