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

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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.

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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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9 computers and telecommunications to biomedical engineering, electric power and  
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