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Contact: Shuang Yu, Marketing Manager +1 732 981 3424; shuang.yu@ieee.org

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

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

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

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

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

Additional information on the standard can be found at the <u>IEEE 802.22 WG</u> page. To purchase the standard, visit the <u>IEEE Standards Store</u>.

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