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7 **IEEE LAUNCHES 802.22.1™-2010 REVISION PROJECT ON ADVANCED**
8 **BEACONING TO ENABLE SPECTRUM SHARING AND FACILITATE OPENING UP**
9 **OF NEW 2 GHz – 4 GHz SPECTRUM FOR FIXED AND MOBILE WIRELESS**
10 **BROADBAND APPLICATIONS**

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12 **PISCATAWAY, N.J., USA, XX March 2013** – IEEE, the world's largest professional
13 organization advancing technology for humanity, today announced that it has authorized
14 the revision project to add advanced beaconing capabilities to the IEEE Std.
15 802.22.1™-2010 to enable spectrum sharing in 2 GHz to 4GHz band and facilitate
16 opening up of new spectrum to support a wide variety of wireless applications.
17

18 “Such a standardized advanced beacon is an innovative way to enable spectrum
19 sharing in many bands and for many innovative applications,” said Dr. Apurva N. Mody,
20 chairman of the IEEE 802.22™ Standards Working Group.
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22 This revision project was introduced to support the United States President’s Council of
23 Advisors on Science and Technology (PCAST) [report](#) promoting the sharing and more
24 efficient use of spectrum through new cognitive radio technologies and interference
25 mitigation techniques to make 500 megahertz of new spectrum available for fixed and
26 mobile wireless broadband.
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28 Currently, a database service approach has been proposed to communicate information
29 about, exclusion zones to protect U.S. Navy coastal operations and other Department of
30 Defense (DOD) test and training areas. Such an approach may deprive significant US
31 population from enjoying this newly available spectrum.
32

33 However, beaconing approaches, such as the one developed in IEEE Std. 802.22.1-
34 2010 originally designed for interference protection of licensed wireless microphones
35 may be used for these bands. Such an advanced beacon could be transmitted by the
36 primary users in these bands to enable semi real time and dynamic spectrum sharing
37 and make this spectrum available nationwide, and especially in the significantly
38 populated coastal areas.
39

40 The IEEE 802.22 Working Group (WG), recipient of the IEEE Standards Association
41 (IEEE-SA) Emerging Technology Award, has completed and published the IEEE Std.
42 802.22-2011™ on cognitive radio based Wireless Regional Area Networks that provides
43 broadband access to wide regional areas globally and bring reliable and secure high-
44 speed communications to under-served and un-served rural communities.
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1 The IEEE P802.22.1 Task Group calls for contribution from interested participants for
2 the development of this standard. Work on this project will begin following the March
3 2013 IEEE 802[®] plenary session in Orlando, Florida.

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5 Additional information on the standard can be found at the IEEE-SA standards page. To
6 purchase IEEE 802.22 Standards, visit the [IEEE Standards Store](http://standards.ieee.org).

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

11 12 **About the IEEE Standards Association**

13 The IEEE Standards Association, a globally recognized standards-setting body within
14 IEEE, develops consensus standards through an open process that engages industry
15 and brings together a broad stakeholder community. IEEE standards set specifications
16 and best practices based on current scientific and technological knowledge. The IEEE-
17 SA has a portfolio of over 900 active standards and more than 500 standards
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