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RADIO SPECTRUM AND TECHNICAL STANDARDS ADVISORY COMMITTEE

Developments in International/Regional Standards Organisations (June 2012 Issue)

Introduction

This paper informs members about the recent developments of telecommunications standards in international and regional organisations.

International Telecommunication Union (ITU)

New/Revised ITU-T Recommendations

2. Since the last reporting in March 2012, the Telecommunication Standardisation Bureau (TSB) of the ITU has issued two circulars announcing the approval of two new ITU-T Recommendations and the deletion of four ITU-T Recommendations. The list of these recommendations is given in Annex 1.

European Telecommunications Standards Institute (ETSI)

New/Revised European Telecommunications Standards

3. The ETSI has published 90 new / revised standards between March 2012 and May 2012. The lists of these ETSI standards are given in http://portal.etsi.org/Portal_Common/home.asp.

Institute of Electrical and Electronics Engineers (IEEE)

Body Area Networks

4. IEEE announced a new standard, IEEE 802.15.6™-2012, on Body Area Network (BAN) technologies. Body Area Network is for the interconnection of devices operating in or around the human body to serve a variety of applications

including medical applications, consumer electronics and personal entertainment. The standard will assist in the development of new opportunities for delivering better healthcare services as well as support other innovative uses of wearable computing devices.

5. IEEE 802.15.6-2012 specifies a short range, low power, and reliable wireless communication protocol for use in close proximity to, or inside, a human body. Data rates, up to 10 Mbps, are offered to serve a wide and evolutionary set of personal entertainment and healthcare services. The standard helps support the combination of security, reliability, quality of service, low power, data rate and interference protection needed to address the breadth of unique body area network applications not supplied by other wireless communications standards.

6. Examples of the applications served by the IEEE 802.15.6-2012 standard include routine diagnostic testing such as EEGs (electroencephalogram), ECGs (electrocardiogram) and monitoring of vital signals such as temperature, heart rate, oxygen, and blood pressure. It may also find use in automated drug delivery systems for treatment of such chronic conditions as diabetes, to interconnect a wearable or implanted glucose sensor with an insulin pump, in deep brain or cortical stimulators to address conditions such as Parkinson's, in retinal implants to give vision to the blind, or in sensors to aid in sport training.

Source:
http://standards.ieee.org/news/2012/ban.html

TV Whitespaces

7. IEEE announced that it approved the IEEE P802.22b™ Amendment Project for Enhanced Broadband Services and Monitoring Applications. With this new enhancement, the IEEE 802.22™ Working Group proposes to bring advanced wireless technologies and applications to rural and under-served areas around the world.

8. The IEEE 802.22 Working Group has established Task Group 'b' for executing the activities for this amendment Project Authorization Request (PAR). The new PAR aims to enhance the IEEE 802.22-2011 standard capabilities to accommodate a wide variety of applications using cognitive radio technology in Television White Spaces (TVWS). These applications include long range and regional area smart grid, critical infrastructure monitoring, triple play services like providing voice, video and data, backhaul for broadband access, offloading cellular telephony traffic, regional area public safety and homeland security networks, emergency broadband services, monitoring rain forests, monitoring livestock, and border protection etc.

9. IEEE P802.22b Task Group is making calls for contribution from interested participants for the development of this standard. The group began work on this project from the March IEEE 802 standards committee plenary session.

Source:
http://standards.ieee.org/news/2012/p802.22b.html

Wireless LAN

10. IEEE announced the publication of IEEE 802.11™-2012, which defines the technology for the world's premier wireless local area network (LAN) products.

11. The new IEEE 802.11-2012 revision has been expanded significantly by supporting devices and networks that are faster, more secure, while offering improved Quality of Service and, improved cellular network hand-off. IEEE 802.11 standards, often referred to as "Wi-Fi®," already underpin wireless networking applications around the world, such as wireless access to the Internet from offices, homes, airports, hotels, restaurants, trains and aircraft around the world. The standard's relevance continues to expand with the emergence of new applications, such as the smart grid, which augments the facility for electricity generation, distribution, delivery and consumption with a two-way, end-to-end network for communications and control.

12. IEEE 802.11 defines one MAC and several PHY specifications for wireless connectivity for fixed, portable and mobile stations. IEEE 802.11-2012 is the fourth revision of the standard to be released since its initial publication in 1997. In addition to incorporating various technical updates and enhancements, IEEE 802.11-2012 consolidates 10 amendments to the base standard that were approved since IEEE 802.11's last full revision, in 2007. IEEE 802.11n™, for example, defined MAC and PHY modifications to enable much higher throughputs, with a maximum of 600Mb/s; other amendments that have been incorporated into IEEE 802.11-2012 addressed direct-link setup, "fast roam," radio resource measurement, operation in the 3650-3700MHz band, vehicular environments, mesh networking, security, broadcast/multicast and unicast data delivery, interworking with external networks and network management.

Source:
http://standards.ieee.org/news/2012/802.11-2012.html

Office of the Communications Authority
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Annex 1 - New or Revised Recommendations Approved by ITU

As indicated in TSB Circular 268 of 08 Mar 2012, 2 new ITU-T Recommendations were approved by Study Group 17.

Item	Nature	Rec. No.	Title
1	Approved	X.1500.1	Procedures for the registration of arcs under the object identifier (OID) arc for cybersecurity information exchange
2	Approved	X.1524	Common weakness enumeration (CWE)

As indicated in TSB Circular 274 of 30 Mar 2012, 4 ITU-T Recommendations were deleted by Study Group 15.

Item	Nature	Rec. No.	Title
3	Deleted	L.15	Optical local distribution networks – Factors to be considered for their construction.
4	Deleted	L.42	Extending optical fibre solutions into the access network.
5	Deleted	L.52	Deployment of Passive Optical Networks (PON).
6	Deleted	L.65	Optical fibre distribution of access networks.