INTERNATIONAL STANDARD

ISO/IEC/ IEEE 8802-22

First edition
2015-05-01
AMENDMENT 1
2017-10

Information technology — Telecommunications and information exchange between systems — Local and metropolitan area networks — Specific requirements —

Part 22: Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Policies and Procedures for Operation in the TV Bands

AMENDMENT 1: Management and control plane interfaces and procedures and enhancement to the management information base (MIB)

Technologies de l'information — Télécommunications et échange d'information entre systèmes — Réseaux locaux et métropolitains — Exigences spécifiques —

Partie 22: Spécifications du contrôle d'accès du milieu sans fil cognitif (MAC) et de la couche physique (PHY) : Politiques et procédures pour le fonctionnement dans les bandes TV

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IEEE Standard for Information Technology—
Telecommunications and information exchange
between systems
Wireless Regional Area Networks (WRAN)—
Specific requirements

Part 22: Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Policies and Procedures for Operation in the TV Bands

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Amendment 1: Management and Control Plane Interfaces and Procedures and Enhancement to the Management Information Base (MIB)

Sponsor

LAN/MAN Standards Committee
of the
IEEE Computer Society

Approved 27 March 2014

IEEE-SA Standards Board

Abstract: This air interface, including the medium access control layer (MAC) and physical layer (PHY), of the fixed and portable point-to-multipoint wireless regional area networks (WRANs) operating in spectrum allocated to the Television Broadcasting Service in the frequency range of 54 MHz to 862 MHz is described in this amendment.

Keywords: broadband wireless access network, cognitive radio, fixed user terminals, IEEE 802.22a™, portable user terminals, radio spectrum sensing, regional area network, WRAN standards

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Chang-woo Pyo, *Vice Chair*

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Ranga Reddy, *Chair and Editor*

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Introduction

This introduction is not part of IEEE Std 802.22a-2014, IEEE Standard for Information Technology—Telecommunications and information exchange between systems—Wireless Regional Area Networks(WRAN)—Specific requirements—Part 22: Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: Policies and Procedures for Operation in the TV Bands—Amendment 1: Management and Control Plane Interfaces and Procedures and Enhancement to the Management Information Base (MIB).

This amendment to IEEE Std 802.22-2011 defines a new clause for Management and Control Plane interfaces and procedures for operation in very high frequency and ultra-high frequency (VHF/UHF) television (TV) broadcast bands between 54 MHz and 862 MHz. The Management Information Base (MIB) structure enhancement includes changes to comply with the ASN.1 format and support for the new clause. Modifications to the existing clause on primitives for cognitive radio capabilities (Clause 10) to align it with the content in the MIB clause (Clause 13) and the new clause (Clause 14) are also defined.

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