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IEEE Standard for Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation

IEEE Communications Society

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Dynamic Spectrum Access Networks Standards Committee

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USA

IEEE Std 1900.7™-2015

IEEE Standard for Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation

Sponsor

Dynamic Spectrum Access Networks Standards Committee
of the
IEEE Communications Society

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Abstract: A radio interface including medium access control sublayer and physical layer of white space dynamic spectrum access radio systems supporting fixed and mobile operation in white space frequency bands, while avoiding causing harmful interference to incumbent users in these frequency bands is specified in this standard.

Keywords: IEEE 1900.7™, medium access control sublayer, physical layer, radio interface, white space

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Introduction

This introduction is not part of IEEE Std 1900.7-2015, IEEE Standard for Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation.

This standard specifies a radio interface including medium access control sublayer and physical layer of white space dynamic spectrum access radio systems supporting fixed and mobile operation in white space frequency bands, while avoiding causing harmful interference to incumbent users in these frequency bands. This standard enables the development of cost-effective, multi-vendor white space dynamic spectrum access radio systems capable of interoperable operation in white space frequency bands on a non-interfering basis to incumbent users in these frequency bands.

Contents

IEEE Standard for Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation

1. Overview

1.1 Scope

This standard specifies a radio interface including medium access control (MAC) sublayer(s) and physical (PHY) layer(s) of white space dynamic spectrum access radio systems supporting fixed and mobile operation in white space frequency bands, while avoiding causing harmful interference to incumbent users in these frequency bands.

1.2 Purpose

This standard enables the development of cost-effective, multi-vendor white space dynamic spectrum access radio systems capable of interoperable operation in white space frequency bands on a non-interfering basis to incumbent users in these frequency bands. This standard facilitates a variety of applications, including the ones capable to support mobility, both low-power and high-power, short-, medium, and long-range.