**P1900.5**

**Type of Project:**Revision to IEEE Standard 1900.5-2011

**Project Request Type:** Initiation / Revision

**PAR Request Date:** 19 Dec 2023

**PAR Approval Date:** 21 Mar 2019

**PAR Expiration Date:** 31 Dec 2027

**PAR Status:** Active

**Root Project:** [**1900.5-2011**](https://development.standards.ieee.org/myproject-web/app#viewpar/4498/4498)

1.1**Project Number:** P1900.5  
1.2**Type of Document:** Standard  
1.3**Life Cycle:** Full Use

2.1**Project Title:** Standard for Requirements and System Architectures for Dynamic Spectrum Access Systems

**Change to Title:**~~IEEE~~ Standard for ~~Policy Language~~ Requirements and System Architectures for Dynamic Spectrum Access Systems

3.1**Working Group:** Policy Language and Architectures for Managing Cognitive Radio for Dynamic Spectrum Access Applications (COM/DySPAN-SC/DYSPAN-P1900.5)

3.1.1 **Contact Information for Working Group Chair:**

**Name:** John Stine

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**Name**: C Caicedo Bastidas

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3.2**Society and Committee:** IEEE Communications Society/ Dynamic Spectrum Access Networks Standards Committee (COM/DySPAN-SC)

3.2.1 **Contact Information for Standards Committee Chair:**

**Name:** Oliver Holland

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3.2.2**Contact Information for Standards Committee Vice Chair:**

None

3.2.3**Contact Information for Standards Representative:**

**Name:** H Stephen Berger

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4.1 **Type of Ballot:** Individual

4.2 **Expected Date of submission of draft to the IEEE SA for Initial Standards Association Ballot:** Apr 2020

4.3 **Projected Completion Date for Submittal to RevCom:** Oct 2027

5.1 **Approximate number of people expected to be actively involved in the development of this project :** 10

5.2 **Scope of proposed standard:**

This standard defines a vendor-independent set of architecture requirements, components and interfaces for managing the functionality and behavior of Dynamic Spectrum Access networks.

**Change to scope of proposed standard:**

This standard defines a vendor-independent set of ~~policy-based~~ architecture ~~control~~ requirements, ~~architectures~~ components and ~~corresponding policy language requirements~~ interfaces for managing the functionality and behavior of Dynamic Spectrum Access networks.

5.3**Is the completion of this standard dependent upon the completion of another standard?** No

5.4**Purpose:**

The purpose of this standard is to define requirements for interoperable, vendor-independent control of Dynamic Spectrum Access functionality and behavior in radio systems and wireless networks. This standard will also define the relationship of policy languages, architecture and interfaces to the needs of at least the following constituencies: the regulator, the operator, the user, and the network equipment manufacturer.

**Change to Purpose:**

The purpose of this standard is to define ~~policy language requirements and associated architecture~~ requirements for interoperable, vendor-independent control of Dynamic Spectrum Access functionality and behavior in radio systems and wireless networks. This standard will also define the relationship of policy languages ~~language~~, architecture and ~~architecture~~ interfaces to the needs of at least the following constituencies: the regulator, the operator, the user, and the network equipment manufacturer.

5.5**Need for the Project:**

Provide an update that includes improvements to keep pace with technical innovations in the field.

5.6**Stakeholders for the Standard:**

Stakeholders include wired and wireless devices end users, regulators, operators and network equipment manufacturers. The functionality targeted in this standard will lead to the efficient and effective exploitation of the radio ecosystem, for all stakeholders, in order to obtain required metrics (e.g., Quality of Service). This in turn will enable the development of anytime, anywhere, any-media access to resources and services, thus perpetuating the industry and its investments.

6.1 **Intellectual Property**

6.1.1 **Is the Standards Committee aware of any copyright permissions needed for this project?** No

6.1.2 **Is the Standards Committee aware of possible registration activity related to this project?** No

7.1 **Are there other standards or projects with a similar scope?** No

7.2 **Is it the intent to develop this document jointly with another organization?** No

8.1**Additional Explanatory Notes:**

In addition to the information provided in Section 5.5 describing the need for the project, there is renewed interest in updating this standard to address requirements and architecture based on the current and future need to address dynamic spectrum management and exploitation of Dynamic Spectrum Access to achieve efficient and effective spectrum sharing and to enable wireless cognitive networks as opposed to networks of cognitive radios addressed in the original standard. Governing the behavior of node-to-node links, which is the focus of the original standard, sub-optimizes network performance in all but the most trivial network topologies.