

# P802.1CF

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**Type of Project:** New IEEE Standard

**PAR Request Date:** 12-Dec-2013

**PAR Approval Date:** 27-Mar-2014

**PAR Expiration Date:** 31-Dec-2018

**Status:** PAR for a New IEEE Standard

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**1.1 Project Number:** P802.1CF

**1.2 Type of Document:** Recommended Practice

**1.3 Life Cycle:** Full Use

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**2.1 Title:** Recommended Practice for Network Reference Model and Functional Description of IEEE 802 Access Network

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**3.1 Working Group:** Higher Layer LAN Protocols Working Group (C/LM/WG802.1)

**Contact Information for Working Group Chair**

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**3.2 Sponsoring Society and Committee:** IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

**Contact Information for Sponsor Chair**

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**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 03/2016

**4.3 Projected Completion Date for Submittal to RevCom:** 02/2017

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 40

**5.2 Scope:** This Recommended Practice specifies an access network, which connects terminals to their access routers, utilizing technologies based on the family of IEEE 802 Standards by providing an access network reference model, including entities and reference points along with behavioural and functional descriptions of communications among those entities.

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

**5.4 Purpose:** Heterogeneous networks may include multiple network interfaces, multiple network access technologies, and multiple network subscriptions. In some cases such heterogeneous functionality must be supported in a single user terminal.

This Recommended Practice supports the design and deployment of access networks based on IEEE 802 technologies, guides the developers of extensions to the existing standards in support of a heterogeneous access network, and enables the use of IEEE 802 standards in new network deployments by specifying the functions of the IEEE 802 technologies when deployed in access networks.

**5.5 Need for the Project:** Modern heterogeneous networks, for applications such as Smart Grid, Home Automation, and Internet of Things, suffer from limitations in service control, security and provisioning.

This project will help to unify the support of different interfaces, enabling shared network control and use of software defined network (SDN) principles, thereby lowering the barriers to new network technologies, to new network operators, and to new service providers.

The project will generate a Recommended Practice to deploy IEEE 802 technologies in an access network enabling such heterogeneity.

**5.6 Stakeholders for the Standard:** IEEE 802 Working Groups, network operators, service providers, network equipment manufacturers, consumer electronic (CE) device manufacturers, and other standards developing organizations (SDOs).

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#### **Intellectual Property**

**6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**6.1.b. Is the Sponsor aware of possible registration activity related to this project?:** No

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

#### **7.2 Joint Development**

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

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**8.1 Additional Explanatory Notes (Item Number and Explanation):** #1.2: As Recommended Practices do not include mandatory statements, this document is not intended to serve as the basis of statements of conformance. However, the material provides a basis for the development of normative protocol standards that include mandatory statements and to which conformance can be stated. The sponsor may initiate the development of such protocol standards based on the underlying foundation established in this Recommended Practice.

#3.2, #5.6: Development of this Recommended Practice will recognize the essential stakeholder role of the IEEE 802 Working Groups in the results.

#5.2: In the scope of this project a router represents any Layer 3 forwarding entity including but not limited to IP technology.

The recommended practice shall comply with IEEE Std 802 (IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture), IEEE Std 802.1D (IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Bridges) and IEEE Std 802.1Q (IEEE Standard for Local and metropolitan area networks - Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks).