

P1934.1

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Type of Project: New IEEE Standard

PAR Request Date: 19-Sep-2018

PAR Approval Date: 05-Dec-2018

PAR Expiration Date: 31-Dec-2022

Status: PAR for a New IEEE Standard

1.1 Project Number: P1934.1

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Nomenclature and Taxonomy for Distributing Computing, Communications and Networking along the Things-to-Cloud Continuum

3.1 Working Group: Fog Computing and Networking Architecture Framework (COM/EdgeCloud-SC/FOG)

Contact Information for Working Group Chair

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3.2 Sponsoring Society and Committee: IEEE Communications Society/Edge, Fog, Cloud Communications with IOT and Big Data Standards Committee (COM/EdgeCloud-SC)

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None

4.1 Type of Ballot: Entity

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 03/2020

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 10/2020

5.1 Approximate number of entities expected to be actively involved in the development of this project: 20

5.2 Scope: The development of Edge/Fog Computing technologies and systems among the industrial consortia and the research communities has created a rich set of concepts and constructs. This document aims to collect the terminology developed in these communities and identify the relationships between their use in the communication technology (CT), information technology (IT) and operation technology (OT) applications along the Things-to-Cloud Continuum. This document also introduces a high-level taxonomy of these concepts and constructs.

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

5.4 Purpose: The primary goal of this document is to establish common, generic nomenclature and taxonomy for distributing computing, communication, networking, storage and control along the Things-to-Cloud Continuum for the use in the IEEE standards, recommended practice and guides. It may also be used to refer to common elements, structures and practices in different application verticals.

5.5 Need for the Project: The IT, CT and OT convergence will be accelerated with the use of a common set of terms and definitions to refer to the concepts and constructs developed in the Edge, Fog Computing and other related technologies. This effort will also promote the development and use of this nomenclature and taxonomy in multiple communities and thus serve as a catalyst in the next digital revolution.

5.6 Stakeholders for the Standard: Telecommunication, Semiconductor, Internet Service Providers, Wireless Network Providers, Cloud Computing Providers, Software Platform and Analytics Providers, Industrial Automation and Robotics, Intelligent Transportation, Intelligent Agriculture and Precision Farming, Smart Grids, Smart Environments, Surveillance, Multimedia and Entertainment, Consumer Electronics, Educational and Training, Biomedical and Healthcare, Hospitality, Enterprise and Retail, Government and Military

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

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

8.1 Additional Explanatory Notes: 6.1.a The COM/EdgeCloud-SC/Fog Working Group is aware of the potential needs for the standard document produced in this proposed project to cite the terms and definitions created by other standard development bodies and/or published in other documents. In most cases, making proper references to those terms will suffice to meet these needs. However, in the cases that it will be necessary to incorporate the text from the other documents in order to maintain the integrity of our own document, we will identify the sources of the text, follow the proper procedures to inform our sponsor and submit a modified PAR to NesCom.

7.2 There may be opportunities for the COM/EdgeCloud-SC/Fog Working Group to coordinate or collaborate with working group(s) within the other standard development organization(s) during the course of developing the standard document. When these specific opportunities are identified, we will again follow the proper procedures to inform our sponsor and, if necessary, submit a modified PAR to NesCom.