

P2557

Submitter Email: jeff.fedders@intel.com

Type of Project: New IEEE Standard

PAR Request Date: 11-Oct-2017

PAR Approval Date: 06-Dec-2017

PAR Expiration Date: 31-Dec-2021

Status: PAR for a New IEEE Standard

1.1 Project Number: P2557

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for Ambient Genetics Frameworks

3.1 Working Group: Constructs and Interoperability of Autonomous and Ambient AI Objects, Data Models, Algorithms, and Fuzzy Logic Systems (COM/EdgeCloud-SC/Ambient Genetics)

Contact Information for Working Group Chair

Name: Katalin Bartfai-Walcot

Email Address: katalin.kb.walcott@intel.com

Phone: 9166006458

Contact Information for Working Group Vice-Chair

None

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

Contact Information for Sponsor Chair

Name: Robert Fish

Email Address: rob.fish@ieee.org

Phone: 908 604 9565

Contact Information for Standards Representative

None

4.1 Type of Ballot: Entity

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 01/2019

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 10/2019

5.1 Approximate number of entities expected to be actively involved in the development of this project: 50

5.2 Scope: This standard defines and harmonizes the ambient/self-aware capabilities of systems, platforms and intelligent resources in order to define the interoperability specifications for cooperation, peer-to-peer and community behavior. It describes the genetic algorithms, smart data (pathotype, diversity), probabilistic and fuzzy logic systems, and information management, metaheuristic genetic algorithms for orchestration and homeostatic functions and services. It also includes the definition of ambient, self-aware resources, with genetic computing functions (programming and algorithmic) as well as the North/South and East/West service catalogues, interfaces, messaging standards in order to manage the transactional requirements of complex, fuzzy and dynamic systems with uncertain parameters.

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

5.4 Purpose: This standard fills a void for the definition, standard around a new type of self-aware, ambient resource utilizing the concepts of genetics, combined with service and transaction management systems for ad-hoc communities.

5.5 Need for the Project: This standard is needed to aid the understanding and define the common interoperability and data models for self-aware/ambient resources, systems and their job as individuals and members in ad-hoc communities.

5.6 Stakeholders for the Standard: Telecom, Consumer Electronics, Semiconductor, Automotive, Retail, Industrial Systems, Service Provider, Value Added Reseller

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: