P2796

Submitter Email: cuikai@smart-haier.com
Type of Project: New IEEE Standard
PAR Request Date: 26-Jul-2018
PAR Approval Date: 27-Sep-2018
PAR Expiration Date: 31-Dec-2022
Status: PAR for a New IEEE Standard
Project Record: P2796

1.1 Project Number: P2796
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for Framework for the Internet of Food (IoF)

3.1 Working Group: Internet of Food (C/SAB/IoF)
Contact Information for Working Group Chair
  Name: Kai Cui
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Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Computer Society/Standards Activities Board (C/SAB)
Contact Information for Sponsor Chair
  Name: p eastman
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Contact Information for Standards Representative
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4.1 Type of Ballot: Entity
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2021
4.3 Projected Completion Date for Submittal to RevCom
Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 10/2022

5.1 Approximate number of entities expected to be actively involved in the development of this project: 10
5.2 Scope: This standard provides an architectural framework for the Internet of Food (IoF) system applications. The framework addresses interoperability, scalability, and security requirements to ensure cross-domain interaction, aid system efficiency and functional compatibility.

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: This standard outlines a framework for technologies and the processes to implement the evolution of IoF leveraging sematic interoperability among various service domains.

5.5 Need for the Project: A confluence of the IoF technologies supports new economic models where food chains become more traceable, more transparent, and ultimately more trustworthy. Standardization of a common framework for IoF applications will accelerate the virtuous cycle of adoption and maturation of IoF technologies in the agri-food sector to guarantee safe and adequate food chains while contributing to a next huge innovation boost. Verticals and system integrators will then demonstrate the business case of innovative IoF solutions for a large number of application areas.

5.6 Stakeholders for the Standard: IoF solution providers and users, technology developers, networking equipment vendors, cooperatives, food processing enterprises, logistics providers, retailers and consumer organizations.

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?: Yes
If Yes please explain: There are projects related to new business model via distributed ledger technology (DLT) and digital labeling protocols to underpin the traceability of food and facilitate transparent data sharing and exchange. This proposal not only leverages existing applicable standards to develop data trust and interoperability for the food sector, but also provides a framework that outlines design and planning process, defines IoF system requirements, and addresses various domain applications from smart farming, smart agri-logistics to smart appliances and home intelligence. See 8.1 for more information on relevant research initiatives.

and answer the following
   Sponsor Organization: IEEE
   Project/Standard Number: P2418.3
   Project/Standard Date:
   Project/Standard Title: Standard for the Framework of Distributed Ledger Technology (DLT) Use in Agriculture
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: European Commission sponsors Internet of Food & Farm 2020 (IoF2020) program to explore the potential of IoT-technologies for the European food and farming industry and build a lasting innovation ecosystem that fosters the uptake of IoT technologies. Potential follow up and coordination with IoF2020 to leverage use cases and tests developed and harmonize the standardization initiatives to enable an integrated and agile scenario for end-to-end system solutions and service delivery from farm to consumers.
The Internet Society also has a Special Interest Group on Internet of Food.