

P802.21d

Submitter Email: sdas@appcomsci.com

Type of Project: Amendment to IEEE Standard 802.21-2008

PAR Request Date: 09-Feb-2012

PAR Approval Date: 29-Mar-2012

PAR Expiration Date: 31-Dec-2016

Status: PAR for an Amendment to an existing IEEE Standard

Root Project: 802.21-2008

1.1 Project Number: P802.21d

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: IEEE Standard for Local and metropolitan area networks -- Part 21: Media Independent Handover Services
Amendment: Multicast Group Management

3.1 Working Group: Media Independent Handoff Working Group (C/LM/WG802.21)

Contact Information for Working Group Chair

Name: Subir Das

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Contact Information for Working Group Vice-Chair

None

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

Contact Information for Sponsor Chair

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Contact Information for Standards Representative

None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 03/2014

4.3 Projected Completion Date for Submittal to RevCom: 10/2014

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

5.2 Scope: To add support in Media-Independent Handover (MIH) framework for management of multicast groups.

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 enable the handover for a group of users across the same or multiple access networks. Additionally, this standard will define mechanisms to secure multicast MIH protocol exchanges.

5.5 Need for the Project: There are several handover scenarios where a large group of terminals need to perform a handover as a group. An example scenario is Std. IEEE 802.15.4 mesh networks in which a group of mesh nodes requires handover from one segment of a network to another in the same or a different network for failover and restoration purposes. The failover can occur, for example, when a concentrator/gateway node loses its connectivity to its backbone network. In such a scenario, the mesh nodes under the concentrator/gateway node need to be handed over from one segment to another. Other examples are downlink-only technologies such as Digital Video Broadcasting (DVB) and Terrestrial Digital Multimedia Broadcasting (T-DMB) where a specific group of users need to be handed over from one network to another. This amendment is necessary in order to support such scenarios since the current standard only supports unicast commands which are inefficient when a group of users needs to be supported simultaneously.

5.6 Stakeholders for the Standard: Semiconductor manufacturers, network equipment manufacturers, mobile and wireless

device manufacturers and network operators.

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 (Item Number and Explanation): 5.5: IEEE 802.15.4: Standard for Local and Metropolitan Area Networks Part 15.4: Low Rate Wireless Personal Area Networks (LR-WPANs)