



P802.1AB

Type of Project: Revision to IEEE Standard 802.1AB-2016 Project Request Type: Initiation / Revision PAR Request Date: PAR Approval Date: PAR Expiration Date: PAR Status: Draft Root Project: 802.1AB-2016

1.1 Project Number: P802.1AB

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Project Title: Standard for Local and metropolitan area networks - Station and Media Access Control Connectivity Discovery

Change to Title: <u>IEEE</u> Standard for Local and metropolitan area networks - Station and Media Access Control Connectivity Discovery

3.1 Working Group: Higher Layer LAN Protocols Working Group(C/LAN/MAN/802.1 WG)

3.1.1 Contact Information for Working Group Chair: Name: Glenn Parsons

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- 3.1.2 Contact Information for Working Group Vice Chair: Name: Jessy Rouyer Email Address: jessy.rouyer@nokia.com
- 3.2 Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee(C/LAN/MAN)

3.2.1 Contact Information for Standards Committee Chair: Name: James Gilb

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- 3.2.2 Contact Information for Standards Committee Vice Chair: Name: David Halasz
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 3.2.3 Contact Information for Standards Representative:

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4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot: Jun 2026

4.3 Projected Completion Date for Submittal to RevCom: Feb 2027

5.1 Approximate number of people expected to be actively involved in the development of this project: 30

5.2 Scope of proposed standard: The scope of this standard is to define a protocol and management elements, suitable for advertising information to stations attached to the same IEEE 802 LAN, for the purpose of populating physical topology and device discovery management information databases. The protocol facilitates the identification of stations connected by IEEE 802 LANs/MANs, their points of interconnection, and access points for management protocols. This standard defines a protocol that a) Advertises connectivity and management information about the local station to adjacent stations on the same IEEE 802 LAN. b) Receives network management information from adjacent stations on the same IEEE 802 LAN. c) Operates with all IEEE 802 access protocols and network media. d) Establishes a network management information schema and object definitions that are suitable for storing connection information about adjacent stations. e) Provides compatibility with the IETF Physical Topology Management Information Base (MIB).

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network management information from adjacent stations on the same IEEE 802 LAN. c) Operates with all IEEE 802 access protocols and network media. d) Establishes a network management information schema and object definitions that are suitable for storing connection information about adjacent stations. e) Provides compatibility with the IETF PTOPO Physical MIB Topology (IETF Management RFC Information -2922 Base [B9] (MIB).

5.3 Is the completion of this standard contingent upon the completion of another standard? No

5.4 Purpose: This standard specifies the necessary protocol and management elements to

a) Facilitate multi-vendor inter-operability and the use of standard management tools to discover and make available physical topology information for network management.

b) Make it possible for network management to discover certain configuration inconsistencies or malfunctions that can result in impaired communication at higher layers.

c) Provide information to assist network management in making resource changes and/or reconfigurations that correct configuration inconsistencies or malfunctions identified in b) above.

d) Provide a MIB to describe a network's physical topology and associated systems within that topology.

e) Provide YANG configuration and operational models supporting Station and Media Access Control Connectivity Discovery.

Change to Purpose: An IETF MIB (IETF RFC 2922 [B9]) and a number of vendor specific MIBs have been created to describe a network's physical topology and associated systems within that topology. This standard specifies the necessary protocol and management elements to a) Facilitate multi-vendor inter-operability and the use of standard management tools to discover and make available physical topology information for network management.b) Make it possible for network management to discover certain configuration inconsistencies or malfunctions that can result in impaired communication at higher layers. c) Provide information to assist network management in making resource changes and/or re-configurations reconfigurations that correct configuration inconsistencies or malfunctions identified in b) above. <u>d)</u> Provide a MIB to describe a network's physical topology and associated systems within that topology. Provide YANG configuration and operational models supporting Station and Media Access Control Connectivity Discovery.

5.5 Need for the Project: This revision project is needed to incorporate approved amendments and corrigenda, to incorporate technical and editorial corrections to existing functionality, and to ensure that consistency is maintained in the consolidated text.

Change to Need for the Project: There is one published corrigendum to the <u>This</u> standard, <u>revision</u> and a second <u>project</u> is under development; it is desirable to revise the standard <u>needed</u> to incorporate <u>both corrigenda</u>. This revision is <u>approved</u> <u>being</u> <u>amendments</u> <u>performed</u> <u>and</u> <u>solely in order</u> <u>corrigenda</u>, to <u>merge</u> <u>incorporate</u> <u>the</u> <u>technical</u> <u>two</u> <u>and</u> <u>corrigenda</u> <u>editorial</u> <u>with</u> <u>corrections</u> <u>the</u> <u>to</u> <u>base</u> <u>existing</u> <u>document</u>; <u>functionality</u>, <u>the</u> <u>and</u> <u>project</u> <u>to</u> <u>will</u> <u>ensure</u> <u>not</u> <u>that</u> <u>include</u> <u>any</u> <u>consistency</u> <u>new</u> <u>is</u> <u>functionality</u> <u>maintained</u> in the <u>revised</u> <u>consolidated</u> <u>standard</u> <u>text</u>.

5.6 Stakeholders for the Standard: Developers and users of networking environments including integrated circuit developers, operating system software developers, bridge and end-node adaptor vendors, network operators and users.

Change to Stakeholders for the Standard: <u>This standard_Developers_will_and_be_users</u> of interest_ <u>networking_to_environments_all_including_current_integrated_802_LAN users_circuit_as_developers</u>, <u>well_operating_as_system_new_software_use_developers</u>, <u>cases_bridge_such_and_as_end-node</u> <u>-consumer_adaptor_electronics_vendors</u>, <u>telecom_network_and_data_operators_center_and_networking</u> <u>users</u>.

6.1 Intellectual Property

6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project? No

6.1.2 Is the Standards Committee 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 Is it the intent to develop this document jointly with another organization? No

8.1 Additional Explanatory Notes: #5.3: While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym its expansion 'Yet Another Next Generation' is not meaningful.