

**IEEE Standard for
Local and metropolitan area networks—**

**Part 20: Air Interface for Mobile
Broadband Wireless Access Systems
Supporting Vehicular Mobility—
Physical and Media Access Control Layer
Specification**

Amendment 1: Management Information
Base Enhancements and Corrigenda Items

IEEE Computer Society

Sponsored by the
LAN/MAN Standards Committee

IEEE
3 Park Avenue
New York, NY 10016-5997
USA

IEEE Std 802.20a™-2010

(Amendment to
IEEE Std 802.20™-2008)

9 December 2010

**IEEE Standard for
Local and metropolitan area networks—**

**Part 20: Air Interface for Mobile
Broadband Wireless Access Systems
Supporting Vehicular Mobility—
Physical and Media Access Control Layer
Specification**

**Amendment 1: Management Information
Base Enhancements and Corrigenda Items**

Sponsor

**LAN/MAN Standards Committee
of the
IEEE Computer Society**

Approved 8 December 2010

IEEE-SA Standards Board

Abstract: This amendment enhances IEEE 802.20 Management Information Base (MIB) clauses to include additional information and MIB documentation (i.e., a discussion of security impacts, and cross references to the text for appropriate parameters within the MIB, itself) to conform with the applicable parts of the IETF's 2008 guidelines for MIBs. The amendment also corrects any errors, inconsistencies, and ambiguities associated with the MIB clause of IEEE Std 802.20-2008.

Keywords: 802.20, Management Information Base, MIB

The Institute of Electrical and Electronics Engineers, Inc.
3 Park Avenue, New York, NY 10016-5997, USA

Copyright © 2010 by the Institute of Electrical and Electronics Engineers, Inc.
All rights reserved. Published 9 December 2010. Printed in the United States of America.

IEEE and 802 are registered trademarks in the U.S. Patent & Trademark Office, owned by the Institute of Electrical and Electronics Engineers, Incorporated.

PDF: ISBN 978-0-7381-6458-8 STD97017
Print: ISBN 978-0-7381-6459-5 STDPD97017

IEEE prohibits discrimination, harassment and bullying. For more information, visit <http://www.ieee.org/web/aboutus/whatis/policies/p9-26.html>. No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

IEEE Standards documents are developed within the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (IEEE-SA) Standards Board. The IEEE develops its standards through a consensus development process, approved by the American National Standards Institute, which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of the Institute and serve without compensation. While the IEEE administers the process and establishes rules to promote fairness in the consensus development process, the IEEE does not independently evaluate, test, or verify the accuracy of any of the information or the soundness of any judgments contained in its standards.

Use of an IEEE Standard is wholly voluntary. The IEEE disclaims liability for any personal injury, property or other damage, of any nature whatsoever, whether special, indirect, consequential, or compensatory, directly or indirectly resulting from the publication, use of, or reliance upon this, or any other IEEE Standard document.

The IEEE does not warrant or represent the accuracy or content of the material contained herein, and expressly disclaims any express or implied warranty, including any implied warranty of merchantability or fitness for a specific purpose, or that the use of the material contained herein is free from patent infringement. IEEE Standards documents are supplied “**AS IS.**”

The existence of an IEEE Standard does not imply that there are no other ways to produce, test, measure, purchase, market, or provide other goods and services related to the scope of the IEEE Standard. Furthermore, the viewpoint expressed at the time a standard is approved and issued is subject to change brought about through developments in the state of the art and comments received from users of the standard. Every IEEE Standard is subjected to review at least every five years for revision or reaffirmation, or every ten years for stabilization. When a document is more than five years old and has not been reaffirmed, or more than ten years old and has not been stabilized, it is reasonable to conclude that its contents, although still of some value, do not wholly reflect the present state of the art. Users are cautioned to check to determine that they have the latest edition of any IEEE Standard.

In publishing and making this document available, the IEEE is not suggesting or rendering professional or other services for, or on behalf of, any person or entity. Nor is the IEEE undertaking to perform any duty owed by any other person or entity to another. Any person utilizing this, and any other IEEE Standards document, should rely upon his or her independent judgment in the exercise of reasonable care in any given circumstances or, as appropriate, seek the advice of a competent professional in determining the appropriateness of a given IEEE standard.

Interpretations: Occasionally questions may arise regarding the meaning of portions of standards as they relate to specific applications. When the need for interpretations is brought to the attention of IEEE, the Institute will initiate action to prepare appropriate responses. Since IEEE Standards represent a consensus of concerned interests, it is important to ensure that any interpretation has also received the concurrence of a balance of interests. For this reason, IEEE and the members of its societies and Standards Coordinating Committees are not able to provide an instant response to interpretation requests except in those cases where the matter has previously received formal consideration. A statement, written or oral, that is not processed in accordance with the IEEE-SA Standards Board Operations Manual shall not be considered the official position of IEEE or any of its committees and shall not be considered to be, nor be relied upon as, a formal interpretation of the IEEE. At lectures, symposia, seminars, or educational courses, an individual presenting information on IEEE standards shall make it clear that his or her views should be considered the personal views of that individual rather than the formal position, explanation, or interpretation of the IEEE.

Comments for revision of IEEE Standards are welcome from any interested party, regardless of membership affiliation with IEEE. Suggestions for changes in documents should be in the form of a proposed change of text, together with appropriate supporting comments. Recommendations to change the status of a stabilized standard should include a rationale as to why a revision or withdrawal is required. Comments and recommendations on standards, and requests for interpretations should be addressed to:

Secretary, IEEE-SA Standards Board
445 Hoes Lane
Piscataway, NJ 08854
USA

Authorization to photocopy portions of any individual standard for internal or personal use is granted by The Institute of Electrical and Electronics Engineers, Inc., provided that the appropriate fee is paid to Copyright Clearance Center. To arrange for payment of licensing fee, please contact Copyright Clearance Center, Customer Service, 222 Rosewood Drive, Danvers, MA 01923 USA; +1 978 750 8400. Permission to photocopy portions of any individual standard for educational classroom use can also be obtained through the Copyright Clearance Center.

Introduction

This introduction is not part of IEEE Std 802.20a-2010, IEEE Standard for Local and metropolitan area networks—Air Interface for Mobile Broadband Wireless Access Systems Supporting Vehicular Mobility—Physical and Media Access Control Layer Specification—Amendment 1: Management Information Base Enhancements and Corrigenda Items.

This amendment enhances the IEEE 802.20 Management Information Base (MIB) clauses to include additional information and MIB documentation (i.e., a discussion of Security impacts, and cross references to the text for appropriate parameters within the MIB, itself) to conform with the applicable parts of the IETF's 2008 guidelines for MIBs. The amendment also corrects any errors, inconsistencies, and ambiguities associated with the MIB clause of IEEE Std 802.20-2008.

Notice to users

Laws and regulations

Users of these documents should consult all applicable laws and regulations. Compliance with the provisions of this standard does not imply compliance to any applicable regulatory requirements. Implementers of the standard are responsible for observing or referring to the applicable regulatory requirements. IEEE does not, by the publication of its standards, intend to urge action that is not in compliance with applicable laws, and these documents may not be construed as doing so.

Copyrights

This document is copyrighted by the IEEE. It is made available for a wide variety of both public and private uses. These include both use, by reference, in laws and regulations, and use in private self-regulation, standardization, and the promotion of engineering practices and methods. By making this document available for use and adoption by public authorities and private users, the IEEE does not waive any rights in copyright to this document.

Updating of IEEE documents

Users of IEEE standards should be aware that these documents may be superseded at any time by the issuance of new editions or may be amended from time to time through the issuance of amendments, corrigenda, or errata. An official IEEE document at any point in time consists of the current edition of the document together with any amendments, corrigenda, or errata then in effect. In order to determine whether a given document is the current edition and whether it has been amended through the issuance of amendments, corrigenda, or errata, visit the IEEE Standards Association web site at <http://ieeexplore.ieee.org/xpl/standards.jsp>, or contact the IEEE at the address listed previously.

For more information about the IEEE Standards Association or the IEEE standards development process, visit the IEEE-SA web site at <http://standards.ieee.org>.

Errata

Errata, if any, for this and all other standards can be accessed at the following URL: <http://standards.ieee.org/reading/ieee/updates/errata/index.html>. Users are encouraged to check this URL for errata periodically.

Interpretations

Current interpretations can be accessed at the following URL: <http://standards.ieee.org/reading/ieee/interp/index.html>.

Patents

Attention is called to the possibility that implementation of this amendment may require use of subject matter covered by patent rights. By publication of this amendment, no position is taken with respect to the existence or validity of any patent rights in connection therewith. A patent holder or patent applicant has filed a statement of assurance that it will grant licenses under these rights without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination to applicants desiring to obtain such licenses. Other Essential Patent Claims may exist for which a statement of assurance has not been received. The IEEE is not responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of Patents Claims, or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of this amendment are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is entirely their own responsibility. Further information may be obtained from the IEEE Standards Association.

Participants

At the time this amendment was submitted to the IEEE-SA Standards Board for approval, the Working Group had the following membership:

Mark Klerer, *Chair*
Radhakrishna Canchi, *Vice Chair*

Nancy Bravin
Kazuhiro Ishida

Francis O'Brien
James Ragsdale

Ajay Rajkumar
Jerry Upton

The following members of the individual balloting committee voted on this amendment. Balloters may have voted for approval, disapproval, or abstention.

Richard Alfvén
Butch Anton
Danilo Antonelli
William Byrd
Radhakrishna Canchi
Juan Carreon
Keith Chow
Charles Cook
Thomas Dineen
Sourav Dutta
C. Fitzgerald
Devon Gayle
Randall Groves
C. Guy
Robert F. Heile
Paul Isaacs
Akio Iso

Atsushi Ito
Raj Jain
Bobby Jose
Shinkyō Kaku
Masahiko Kaneko
Piotr Karocki
Stuart J. Kerry
Yongbum Kim
Mark Klerer
Gerald L. Kolbe
Thomas Kowalick
Jeremy Landt
William Lumpkins
G. Luri
Mark Maloney
Avygdor Moise
Michael S. Newman
Satoshi Oyama

Glenn Parsons
James Ragsdale
Robert Robinson
Benjamin Rolfe
Randall Safier
Bartien Sayogo
Gil Shultz
Kapil Sood
Amjad Soomro
Thomas Starai
Walter Struppler
Mark Sturza
James Tomcik
Mark-Rene Uchida
Prabodh Varshney
Joanne Wilson
Oren Yuen

When the IEEE-SA Standards Board approved this amendment on 8 December 2010, it had the following membership:

Robert M. Grow, *Chair*
Richard H. Hulett, *Vice Chair*
Steve M. Mills, *Past Chair*
Judith Gorman, *Secretary*

Karen Bartleson
Victor Berman
Ted Burse
Clint Chaplin
Andy Drozd
Alexander Gelman
Jim Hughes

Young Kyun Kim
Joseph L. Koepfinger*
John Kulick
David J. Law
Hung Ling
Oleg Logvinov
Ted Olsen

Ronald C. Petersen
Thomas Prevost
Jon Walter Rosdahl
Sam Sciacca
Mike Seavey
Curtis Siller
Don Wright

*Member Emeritus

Also included are the following nonvoting IEEE-SA Standards Board liaisons:

Satish Aggarwal, *NRC Representative*
Richard DeBlasio, *DOE Representative*
Michael Janezic, *NIST Representative*

Catherine Berger
IEEE Standards Project Editor

Michael Kipness
IEEE Standards Program Manager, Technical Program Development

Contents

17. MAC and PHY MIB.....	2
17.1 Overview	2
17.2 MIB structure.....	2
17.3 Security considerations	2
17.4 IANA considerations	3
17.5 Definition.....	3
31. 625k-MC OA & M Radio Network Quality Monitor and Control Enhancement	52
31.1 625k-MC Mode MIB.....	52