Date: 23 July 2009

To: Colin Langtry
Counsellor for ITU-R Study Group 5
International Telecommunication Union (ITU)
Radiocommunication Bureau (BR)
Place des Nations
CH-1211 Genève 20
Suisse

From: Michael Lynch, IEEE-SA Technical Liaison to ITU-R

Subject: Certification of references and transposition for M.1457 Rev 9, Section 5.6

In accordance with Document IMT/1(Rev.2), IEEE certifies that the IEEE standards to be incorporated by reference into Section 5.6.2 of ITU-R M.1457 Revision 9, as documented in the attached Annex 1, are consistent with the agreed Section 5.6.1, as detailed in the 16 June 2009 statement of Working Party 5D (5D/TEMP/216) entitled "Liaison Statement to IEEE and WiMAX Forum – Status of Revision 9 of Recommendation ITU-R M.1457," and with the GCS as previously submitted.

Regards,

/s/

Michael Lynch
IEEE-SA Technical Liaison to ITU-R

Encl: Annex 1

cc: Terry deCourcelle, IEEE-SA Administrative Liaison to ITU-R
Paul Nikolich, Chair, IEEE 802 LAN/MAN Standards Committee
Bruce D. Holloway, Secretary, WiMAX Forum

Annex 1

Final IEEE References: Section 5.6.2 of ITU-R M.1457 Revision 9

The final transposed IEEE references are designated in the tables inserted below into the text of Section 5.6.2 of ITU-R M.1457 Revision 9, as agreed by ITU-R WP 5D.

5.6.2 Detailed specification of the set of radio interface FDD/TDD components

5.6.2.1 TDD Component

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at http://ties.itu.int/u/itu-r/ede/rsg8/rwp8f/wp8f-tech/GCSrev7/5-6/. The following notes apply to the sections below, where indicated: (1) The relevant SDOs should make their reference material available from their website. (2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

Note by the Secretariat: In accordance with the established procedure for updating this Recommendation, the SDO's information regarding the development of standards transposed from the global core specifications will be submitted to ITU by 3 August 2009 and included in the sections below when the final text is sent out for approval.

The entries in the Tables in the elements of §5.6.2.1.x.2 that contain "Y" or interoperable options (IO-BF or IO-MIMO) are part of the detailed specifications for OFDMA TDD WMAN. The "N" entries in the Tables in the elements of §5.6.2.1.x.2 are for information only and are not included in the OFDMA TDD WMAN specification. The specifications for OFDMA TDD WMAN are provided in the elements of Section 5.6.2.1.x.1 that are specifically included in the corresponding elements of Section 5.6.2.1.x.2. Anything in Section 5.6.2.1.x.1 that is not mentioned in Section 5.6.2.1.x.2 is excluded.

5.6.2.1.1 Release 1

5.6.2.1.1.1 IEEE Std 802.16

IEEE Standard for Local and Metropolitan Area Networks – Air Interface for Broadband Wireless Access Systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

5.6.2.1.1.1.1 IEEE Std 802.16-2004

IEEE Standard for Local and metropolitan area networks – Part 16: Air Interface for Fixed Broadband Wireless Access Systems

This revised standard specifies the air interface, including the medium access control layer and multiple physical layer specifications, of fixed BWA systems supporting multiple services. It consolidates IEEE Std 802.16™, IEEE Std 802.16a™, and IEEE Std 802.16c™, retaining all modes and major features without adding modes. Content is added or revised to improve performance, ease deployment, or replace incorrect, ambiguous, or incomplete material, including system profiles."

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE Std 802.16-2004	Published; superseded by IEEE Std 802.16-2009	2004-10-01	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.1.1.2 IEEE Std 802.16e-2005 and Cor1

IEEE Standard for Local and metropolitan area networks – Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems – Amendment 2: Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands

This document provides enhancements to IEEE Std 802.16-2004 to support subscriber stations moving at vehicular speeds and thereby specifies a system for combined fixed and mobile broadband wireless access. Functions to support higher layer handover between base stations or sectors are specified. Operation is limited to licensed bands suitable for mobility below 6 GHz. Fixed IEEE 802.16 subscriber capabilities are not compromised. In addition to mobility enhancements, this document contains substantive corrections to IEEE 802.16-2004 regarding fixed operation

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE 802.16e-2005 and Cor1	Published; superseded by IEEE Std 802.16-2009	2006-02-28	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.1.1.3 IEEE Std 802.16f-2005

IEEE Standard for Local and metropolitan area networks – Part 16: Air Interface for Fixed Broadband Wireless Access Systems – Amendment 1: Management Information Base)

This document provides enhancements to IEEE Std 802.16-2004 to define a management information base (MIB) for the MAC and PHY and associated management procedures.

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE 802.16f-2005	Published; superseded by IEEE Std 802.16-2009	2005-12-01	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.1.2 WiMAX Forum® Mobile System Profile

The complete WiMAX Forum® Mobile System Profile, Release 1 is included in the following volume.

5.6.2.1.1.2.1 WiMAX Forum® Mobile System Profile Release 1 – IMT-2000 Edition

This provides the complete WiMAX Forum® Mobile System Profile, Release 1.

[Editorial Note: Table to be provided by the WiMAX Forum]

5.6.2.1.2 Release 1.5

5.6.2.1.2.1 IEEE Std 802.16

IEEE Standard for Local and Metropolitan Area Networks – Air Interface for Broadband Wireless Access Systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

5.6.2.1.2.1.1 IEEE P802.16Rev2

(Draft) Standard for Local and metropolitan area networks – Part 16: Air Interface for Broadband Wireless Access Systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE Std 802.16-2009	Published	2009-05-29	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.2.2 WiMAX Forum® Mobile System Profile

The complete WiMAX Forum® Mobile System Profile, Release 1.5 is included in the following volumes.

5.6.2.1.2.2.1 WiMAX Forum® Mobile System Profile Specification: Release 1.5 - Common Part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features common to both the TDD and FDD operational modes. It has the following table of contents:

1. Scope

   [Editorial Note: Table to be provided by the WiMAX Forum]

2. References

   [Editorial Note: Table to be provided by the WiMAX Forum]

3. Definitions

   [Editorial Note: Table to be provided by the WiMAX Forum]

4. PHY profile

   [Editorial Note: Table to be provided by the WiMAX Forum]

5. MAC profile

   [Editorial Note: Table to be provided by the WiMAX Forum]

6. Security

   [Editorial Note: Table to be provided by the WiMAX Forum]

7. Radio profile

   [Editorial Note: Table to be provided by the WiMAX Forum]

8. Power class profile

   [Editorial Note: Table to be provided by the WiMAX Forum]

5.6.2.1.2.2.2 WiMAX Forum® Mobile System Profile Specification: Release 1.5 – TDD Specific Part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features specific to the TDD operational mode. The content refers to the physical layer.

[Editorial Note: Table to be provided by the WiMAX Forum]

5.6.2.1.2.2.3 WiMAX Forum® Mobile Radio Specification

This specification describes the radio features of the WiMAX Forum® Mobile System Profile, Release 1.5.

[Editorial Note: Table to be provided by the WiMAX Forum]

5.6.2.2 FDD Component

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at http://ties.itu.int/u/itu-r/ede/rsg8/rwp8f/wp8f-tech/GCSrev7/5-6/. The following notes apply to the sections below, where indicated: (1) The relevant SDOs should make their reference material available from their website. (2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

Note by the Secretariat: In accordance with the established procedure for updating this Recommendation, the SDO's information regarding the development of standards transposed from the global core specifications will be submitted to ITU by 3 August 2009 and included in the sections below when the final text is sent out for approval.

The entries in the Tables in the elements of §5.6.2.2.x.2 that contain "Y" or interoperable options (IO-BF or IO-MIMO) are part of the detailed specifications for OFDMA TDD WMAN. The "N" entries in the Tables in the elements of §5.6.2.2.x.2 are for information only and are not included in the OFDMA TDD WMAN specification. The specifications for OFDMA TDD WMAN are provided in the elements of Section 5.6.2.2.x.1 that are specifically included in the corresponding elements of Section 5.6.2.2.x.2. Anything in Section 5.6.2.2.x.1 that is not mentioned in Section 5.6.2.2.x.2 is excluded.

5.6.2.2.1 Release 1

(This section is intentionally left blank)

5.6.2.2.2 Release 1.5

5.6.2.2.2.1 IEEE Std 802.16

IEEE Standard for Local and Metropolitan Area Networks – Air Interface for Broadband Wireless Access Systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

5.6.2.2.2.1.1 IEEE P802.16Rev2

(Draft) Standard for Local and metropolitan area networks – Part 16: Air Interface for Broadband Wireless Access Systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE Std 802.16-2009	Published	2009-05-29	http://standards.ieee.org/getieee802/802.16.html

5.6.2.2.2.2 WiMAX Forum® Mobile System Profile

The complete WiMAX Forum® Mobile System Profile, Release 1.5 is included in the following volumes.

5.6.2.2.2.2.1 WiMAX Forum® Mobile System Profile Specification: Release 1.5 – Common Part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features common to both the TDD and FDD operational modes. It has the following table of contents:

1. Scope

   [Editorial Note: table to be provided by the WiMAX Forum.]

2. References

   [Editorial Note: table to be provided by the WiMAX Forum.]

3. Definitions

   [Editorial Note: table to be provided by the WiMAX Forum.]

4. PHY profile

   [Editorial Note: table to be provided by the WiMAX Forum.]

5. MAC profile

   [Editorial Note: table to be provided by the WiMAX Forum.]

6. Security

   [Editorial Note: table to be provided by the WiMAX Forum.]

7. Radio profile

   [Editorial Note: table to be provided by the WiMAX Forum.]

8. Power class profile

[Editorial Note: table to be provided by the WiMAX Forum.]

5.6.2.2.2.2.2 WiMAX Forum® Mobile System Profile Specification: Release 1.5 – FDD Specific Part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features specific to the FDD operational mode. The content refers to the physical and the MAC layers.

[Editorial Note: table to be provided by the WiMAX Forum.]

5.6.2.2.2.2.3 WiMAX Forum® Mobile Radio Specification

This specification describes the radio features of the WiMAX Forum® Mobile System Profile, Release 1.5.

[Editorial Note: table to be provided by the WiMAX Forum.]

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