

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Report of the meeting of the ad hoc group on ITU-R liaisons during Session #36	
Date Submitted	2005-03-17	
Source(s)	José M. Costa (ITU-R Liaison Official) NORTEL P.O. Box C-3511 Ottawa, Ontario CANADA K1Y 4H7	Voice: +1 613 763-7574 Fax: +1 613 765-1225 costa@nortel.com
Re:	Preparation of liaison contributions to ITU-R.	
Abstract	<p>The activities of the ad hoc group cover four areas:</p> <ol style="list-style-type: none"> 1) ITU-R WP 8A on IEEE 802.16e in Mobile Service frequency bands. 2) ITU-R WP 9B on IEEE 802.16-2004 in Fixed Service frequency bands. 3) ITU-R JTG 6-8-9 on sharing with satellites in the band 2500-2690 MHz. 4) ITU-R WP 8F on services survey and sharing with IMT-2000 in the band 2500-2690 MHz. 	
Purpose	Approve the proposed actions to contribute to ITU-R	
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy and Procedures	<p>The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures <http://ieee802.org/16/ipr/patents/policy.html>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard." Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:chair@wirelessman.org> as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. The Chair will disclose this notification via the IEEE 802.16 web site <http://ieee802.org/16/ipr/patents/notices>.</p>	

Report of the meeting of the ad hoc group on ITU-R liaisons during Session #36

José Costa (ITU-R Liaison Official)

Introduction

At the opening plenary of Session #36, the ITU-R Liaison Official was asked to convene a group of interested participants and the following topics were addressed:

- 1) ITU-R WP 8A on IEEE 802.16e in Mobile Service frequency bands.
- 2) ITU-R WP 9B on IEEE 802.16-2004 in Fixed Service frequency bands.
- 3) ITU-R JTG 6-8-9 on sharing with satellites in the band 2500-2690 MHz.
- 4) ITU-R WP 8F on services survey and sharing with IMT-2000 in the band 2500-2690 MHz.

The ad hoc group met from 9:00 to 12:00 hours on Wednesday, 16 March 2005 and from 12:00 to 12:35 hours on Thursday, 17 March 2005.

Participants: Marianna Goldhammer, Roger Marks, Jim Carlo, Barry Lewis, Andy Sago, Rémi Chayer, Tadashi Shinohara, Terry de Courcelle, Dave Maez, Charles Rush, Chantal Davis, Chantal Gazaille, Ravi Ayyr, Margaret LaBrecque, Terri L. Brooks, Jiang Li, Reza Arefi, Herbert Ruck, Subramanian Vasudevan, and José Costa.

The report of the last meeting was noted: [IEEE L802.16-05/006](#).

Results

1. Consideration of proposed IEEE contribution to ITU-R on "Detailed specifications of the radio interfaces for mobile broadband wireless access (BWA) systems under 6 GHz"

Contribution [IEEE C802.16-05/001](#) from Session #35 was re-introduced and discussed. It proposes a draft IEEE contribution to ITU-R on "Detailed specifications of the radio interfaces for mobile broadband wireless access (BWA) systems under 6 GHz". It was noted that no comments had been received by the author. The proposed draft contribution was approved for submission to IEEE 802.16 with the addition of the second paragraph in Section 2 (Discussion) and an indication of the spectral efficiency of IEEE 802.16 systems in the description of IEEE 802.16e. See [IEEE L802.16-05/028r1](#).

Motion: "To approve IEEE L802.16-05/028r1 and authorize the WG Chair to submit it to the IEEE 802 Executive Committee for approval, with the intent to submit it to ITU-R as an IEEE contribution."
--

2. Activities in ITU-R WP 9B on IEEE 802.16-2004 in Fixed Service frequency bands

In fulfillment of the first action in: [IEEE L802.16-04/36r1](#), that is, Motion 10 on page 10 of [IEEE 802.16-04/76](#) “Minutes of IEEE 802.16 Session #34”, material was developed for to the ITU-R WP 9B correspondence group on BWA. A joint contribution from IEEE and ETSI was submitted to the correspondence group on 30 January 2005; see [IEEE L802.16-05/001r3](#) and [IEEE L802.16-05/007r1](#). The correspondence group has received further contributions and no additional information needs to be provided by IEEE at this time.

3. IEEE Contribution to ITU-R JTG 6-8-9: “Characteristics of IEEE 802.16 Systems in 2500-2690 MHz”

The results of the JTG 6-8-9 meeting were reported by the liaison official in [IEEE L802.16-05/013](#). IEEE 802.16 should develop an additional contribution by Session #38. It was noted that JTG 6-8-9 would prefer to receive the information on antenna elevation patterns in the form of equations rather than tables.

4. ITU-R WP 8F on services survey and sharing with IMT-2000 in the band 2500-2690 MHz

4.1 Services and Market Survey

It was noted that the IEEE contribution “IEEE response to ITU-R WP 8F Questionnaire on the Services and Market for the Future Development of IMT-2000 and Systems Beyond IMT-2000”: [IEEE L802.16-04/37r3](#) (requires [802.16 password](#); also available as [ITU-R Document 8F/356-E](#) with TIES password) was well received by WP 8F, but the USA expressed a reservation because no information on the method to derive the numbers in the table was provided (this is a U.S. position on any contribution providing services projections that include the USA).

It was also noted that WP 8F has received a number of contributions proposing sharing studies and one of them, [Doc. 8F/407](#) (with TIES password), makes reference to the IEEE contribution to JTG 6-8-9 “Characteristics of IEEE 802.16 Systems in 2500-2690 MHz”, which is referred to in Section 1 above.

4.2 Sharing Studies

The report in [IEEE L802.16-05/013](#) (Section 3) and reference document [IEEE L802.16-05/015](#) (requires [802.16 password](#)) were noted. The ad hoc group considered a contribution to the working group [IEEE C802.16-05/003](#) in the upload directory. This contribution proposes characteristics of IEEE 802.16 systems. It was noted that IEEE should provide consistent information to ITU-R and rationalize this information with that previously provided to JTG 6-8-9. This should be addressed at future meetings of IEEE 802.16 and the authors of [IEEE C802.16-05/003](#) indicated that they plan to provide an update of their contribution at a future meeting.