

From: "Resnick, Ronald J" <ronald.j.resnick@intel.com>
Subject: **WiMAX Forum position on backward compatibility and suggestion for consideration**
Date: March 13, 2007 10:56:41 AM EDT
To: "Roger B. Marks" <r.b.marks@ieee.org>

To Roger Marks, Chair, IEEE 802.16 Working Group (r.b.marks@ieee.org)

Dear Roger,

The WiMAX Forum[®] is pleased to see IEEE 802.16[™] Working Group has started the work on the IEEE 802.16m Advanced Air interface amendment project. The WiMAX Forum member companies have major investments and interest in IEEE 802.16 standards and are actively enabling the commercialization of the air interface technology through our end to end interoperability and network specifications related efforts.

In this context, the WiMAX Forum would like to hereby share with IEEE 802.16 WG members its views on some of the industry requirements and expectations we have for the IEEE 802.16m project. While we would like IEEE 802.16m to be a significantly advanced radio access technology, we would like that to be balanced by the need to provide continued support for what is being deployed presently.

Backward compatibility is the corner stone of our requirement ensuring that the current and future investment by operators and vendors in WiMAX technology is fully protected. As you know the WiMAX Forum has published the Mobile System Profiles Release 1.0 [ref] based on the IEEE 802.16 standards which is the reference for all WiMAX Forum's air link interoperability efforts. Therefore the backward compatibility for IEEE 802.16m amendment shall ensure that current WiMAX terminals and base stations, compliant with WiMAX Forum Mobile System Profile Release 1.0, can fully interoperate with IEEE802.16m base stations and terminals respectively. This interoperability needs to be feasible while supporting a mix of current WiMAX compliant terminals and future IEEE 802.16m based terminals in the same radio carrier, without negatively impacting the performance and functionalities currently offered by WiMAX .

In addition to sharing industry requirements on backward compatibility, the WiMAX Forum would like to encourage the IEEE 802.16 WG to develop the 802.16m standard with focus on the following high level key objectives:

- Lowering the complexity and minimizing the number of options
- Enhancing coverage and capacity to improve the cost efficiency of deployments
- Improving user experience, through lowering latency and increasing data rates, and maintaining it at higher mobility speeds.
- Improving and extending the deployment models from spectrum, seamless inter-working and other considerations.

As the WiMAX Forum is also collating opinions of several of the operators involved in WiMAX deployments in the Service Provider Working Group, we hope to share our views on the system and deployment requirements with IEEE 802.16 WG going forward.

Hoping that we can continue and expand the successful collaboration between the WiMAX Forum and IEEE 802.16 WG to meet the above goal,

Sincerely,

Ron Resnick
President, WiMAX Forum

[1] http://www.wimaxforum.org/technology/documents/WiMAX_Forum_Mobile_System_Profile_v1_2_2.pdf