Project	IEEE 802.16 Broadband Wireless Access Working Group http://ieee802.org/16 >
Title	Hardware ID and Software version to the REG-REQ message
Date Submitted	2004-08-18
Source(s)	Intel
	Ilia Bosis IliaBosis@Intel.com
	Yigal Eliaspur yigal.eliaspur@intel.com
	Voice: +972-547-884877
Re:	IEEE P802.16-REVe/D4
Abstract	Provide an option for the SS to report it's Hardware ID and software version in the course of network entry.
Purpose	May be used to lock out the SS types that are known to be troublesome.
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	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 .

Hardware ID and Software version to the REG-REQ message

Ilia Bosis Yigal Eliaspur

1. Motivation

Bugs are happened in the development process. As neither the vendor' testing, nor the certification tests are perfect, chances are, some of the bugs will spill into the production SS devices. Some of them may be harmful to the whole network operation. As the SS device may be owned by the user, not the carrier, no organizational measures may prevent that SS from entering into the network. If that happens there is need to either:

- (1) Lock out that SS to prevent harm to the network (and force the user to upgrade).
- (2) Work around the bug by, say limiting the range of standard' features that SS will use. In order to achieve that, the BS must know the exact type of the SS.

2. Details

The SS hardware ID and software version together with the Vendor ID are the information that unambiguously identifies the specific hardware/software combination that makes the SS device type. Proposed to add the hardware ID and software version to the Registration request (REG-REQ) message (6.3.2.3.7). Together with the Vendor ID, that is already there, they provide the BS all the needed information to make the decisions, outlined above.

The hardware ID and software version are TLV encoded in the format identical to the format found in the configuration file (11.2.2.2; 11.2.2.3).

3. Changes summary

[In P802.16e-D4, p.79, line 1, add following text, between BEGIN and END]:

BEGIN

6.3.2.3.7 Registration request (REG-REQ) message [Make the following change in]

[change the text in p.54, lines 30-38 as follows]: The REG-REQ may contain the following TLVs: IP Version (11.7.4)
SS Capabilities Encodings (11.7.8)
Vendor ID Encoding (11.1.5)
Hardware ID (11.1.xx)
Software version (11.1.xx)

Vendor-specific information (11.1.6) Convergence Sublayer Capabilities (11.7.7) ARQ Parameters (11.7.1)

11.2.2 Software upgrade descriptors

[Make the following change in]

[Move the sections 11.2.2.2 Hardware ID and the 11.2.2.3 Software version to the section 11.1 Common encoding as the 11.1.xx Hardware ID and the 11.1.xx Software version]

END