
Title: Hardware ID and Software version to the REG-REQ message

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Re: IEEE P802.16-REVe/D4

Abstract: Provide an option for the SS to report its 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.

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1. **Motivation**

Bugs are happened in the development process. As neither the vendor’s 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)
```

[End]
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