Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >			
Title	Authorization Policy Negotiation in the SS Basic Capability Negotiation Procedure			
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Submitted				
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Re:	This is a response to a Call for Comments IEEE 802.16e-03/23 on IEEE 802.16e-03/07r4			
Abstract	The document contains suggestions on the changes in IEEE 802.16e-03/07r4 that would support to negotiate authorization policy between the existing privacy and the open privacy.			
Purpose	The document is submitted for review by Handoff/Sleep-mode Ad Hoc Group and/or by 802.16 Working Group members			
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Patent Policy and Procedures				

Authorization Policy Negotiation Process in the SS Basic Capability Negotiation Procedure Seokheon Cho, Ae Soon Park, Sun Hwa Lim, Young Jin Kim, and Jee Hwan Ahn ETRI

Introduction

The authorization procedure specified by the IEEE 802.16 WirelessMAN Standard is generally executed before serving SS service. A SS can be sufficiently authorized through this procedure, but the authorized exchange scheme is valid only in the IEEE 802.16 Network. It is imperative for the IEEE 802.16 System to be backwardly compatible with the existing and prevailing Wireless LAN System and to be smoothly roamed with the heterogeneous network. The IEEE 802.16 has to provide the existing authorized procedure and new authorization protocol framework, to be satisfied with these additional conditions, especially in the authorization function side.

Therefore, we propose a scheme being capable to choose authorization policy among several authorization frameworks. A SS negotiates with BS on authorization scheme both in the SBC-REQ and SBC-RSP messages before the actual authorization procedure. For instance, a SS shall negotiate with BS on authorization policy between the existing essential privacy and the open privacy. The field to decide an authorization policy as a TLV should be included those messages. A SS notifies whole supportable authorization policy through the SBC-REQ message. Upon reception of this message, BS chooses only one authorization policy and sends SBC-RSP message containing decision matter back to the SS. According to this negotiation, both the SS and the BS use determined authorization policy. If the parameter is omitted in either SBC-REQ or SBC-RSP messages, both of them shall use the existing authorization policy. In this manner, the IEEE 802.16 authorization function can support more flexible authorization policy, by adding a new parameter in both SBC-REQ and SBC-RSP messages.

Proposed changes to IEEE 802.16-REVd/D1-2003

6.4.2.3.23 SS Basic Capability Request (SBC-REQ) message [Insert at the end of 6.4.2.3.23]

Authorization Policy Support (see 11.4.2.11)

6.4.2.3.24 SS Basic Capability Response (SBC-RSP) message [Insert at the end of the comment "Bandwidth Allocation Support (see 11.4.2.6)" of 6.4.2.3.24]

Authorization Policy Support (see 11.4.2.11)

11.4.2.11 Authorization Policy Support [*Add this section*]

This field indicates authorization policy that both SS and BS need to negotiate and synchronize. A bit value of 0 indicates "not supported" while 1 indicates "supported." If this field is omitted, then both SS and BS shall use the IEEE 802.16 essential privacy

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method as the authorization procedure.

Туре	Length	Value	Scope
5.22			SBC-REQ
	1	Bit# 0: IEEE 802.16 essential privacy	(see 6.4.2.3.23)
	1	Bit# 1-7: Reserved for open privacy. Set to 0	SBC-RSP
			(see 6.4.2.3.24)