Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> >				
Title	Reply Contribution for #115, #331, #332, #333, and #334				
Data	2006-09-21				
Submitted					
Source(s)	Seokheon Cho		Voice: +82-42-860-5524		
	Jaeseon Cha		Fax: +82-42-861-1966		
	Chulsik Yoon,	ETRI	<u>chosh@etri.re.kr</u>		
	Thomas Hallin Mark Cudak, Yerang Hur	Motorola Postdata			
	Lei Wang	NextWave			

161, Gajeong-dong, Yuseong-Gu, Daejeon, 305-350, Korea

Re:	IEEE Std 802.16e-2005			
Abstract	The contents of the PKM-related parameters in the REG-REQ/RSP messages			
Purpose	Adoption of proposed changes into IEEE Std 802.16e-2005			
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 < <u>http://ieee802.org/16/ipr/patents/policy.</u> 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 < <u>mailto:chiar@wirelessman.org</u> > 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 < <u>http://ieee802.org/16/ipr/patents/notices</u> >.			

Reply Contribution for #115, #331, #332, #333, and #334

Seokheon Cho, Jaeseon Cha, and Chulsik Yoon ETRI

> **Thomas Hallin and Mark Cudak** Motorola

Yerang Hur

Postdata

Lei Wang

NextWave

Introduction

There are commentaries about security-related parameters in REG-REQ/RSP messages. The those commentaries' CR numbers in the IEEE maintenance TG are #115, #331, #332, #333, and #334.

The solutions provided by those commentaries are conflict with each other; the solution of #115 is different from the solution of #331, #332, #333, and #334.

Hence, it is necessary to clarify this problem.

2006-09-21

Proposed changes

[Change section 6.3.2.3.23: as follows] 6.3.2.3.23 SS basic capability request (SBC-REQ) message

<< Change following parts >> << from >>

PKM flow control (see 11.7.8.6) Authorization policy support (see 11.8.4.2) Maximum number of supported security association (see 11.7.8.8)

<< to >>

Security Negotiation Parameters (see 11.8.4)

[Change section 6.3.2.3.24: as follows] 6.3.2.3.24 SS basic capability response (SBC-RSP) message

<< Change following parts >> << from >>

PKM flow control (see 11.8.4) Authorization policy support (see 11.8.5) Maximum number of supported security association (see 11.8.6)

<< to >>

Security Negotiation Parameters (see 11.8.4)

[Change section 11.7.8: as follows] 11.7.8 SS Capabilities encodings

Delete 11.7.8.3 MAC CRC support.

Change 11.7.8.6 to 11.8.4 and change its scope to SBC-REQ SBC-RSP.

Change 11.7.8.7 to 11.8.5, change its scope to SBC-REQ SBC-RSP and change the first paragraph asindicated:

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 security, constituting X.509 digital certificates and the RSA public key encryption algorithm, as authorization policy. If this field is present and equal to 0, PKM shall be considered disabled.

Change 11.7.8.8 to 11.8.6 and change its scope to SBC-REQ SBC-RSP

Delete 11.7.8.6

Delete 11.7.8.7

Delete 11.7.8.8

[Change section 11.8.4: as follows]

11.8.4 Security Negotiation Parameters

Sub-attribute	Contents
PKM Version Support	Version of privacy sublayer supported
Authorization Policy Support	Authorization policy to support
Message Authentication Code Mode	Message authentication code to support
PN Window Size	Size capability of the receiver PN window per SAID
PKM Flow Control	Maximum number of concurrent PKM transactions
Maximum Number of Supported Security Associations	Maximum number of supported SA

[Insert new subclauses in subcaluse 11.8.4 as follows:]

11.8.4.5 PKM Flow Control

This field specifies the maximum number of concurrent PKM transactions that may be outstanding.

<u>Type</u>	Length	<u>Value</u>
<u>25.5</u>	1	0 indicates no limit (default)
		1–255 indicate maximum concurrent transactions

11.8.4.6 Maximum number of supported security associations

This field specifies the maximum number of supported security association of the SS.

<u>Type</u>	Length	<u>Value</u>	
<u>25.6</u>	1	Maximum number of security association	
		supported by the SS (default = 1)	

[*Change section 12.1.1.1.4.7: as follows*] 12.1.1.4.7 REG-REQ

<< Delete text shown in strikethrough >>

- PKM Flow Control (default = no limit)