Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Proposal for Adding BS SecurityManagementFunction Attributes**
Date Submitted	**2006-03-01**
Source(s)	Zou Lan　　　　　　　　　　　　　　　Voice: +86-21-68644808-24657 Wu Jian Jun　　　　　　　　　　　　　Fax:　+86-21-50898375 　　　　　　　　　　　　　　　　　　Mailto: zlan@huawei.com Huawei Technologies. No.98,Lane91, Eshan Road, Pudong , Shanghai, China Pudong Lujiazui Software Park
Re:	Contribution to IEEE 802.16i
Abstract	This contribution proposed to add BS security management information model attributes.
Purpose	Adoption
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>.

Proposal for Adding BS SecurityManagementFunction Attributes

Huawei Technologies.

Introduction

With mobility feature is introduced into WiMAX system, PKMV2 mechanism is adopted in 16e. This contribution proposes to add BS security management related configuration attributes to the current standard.

Proposed Text

15.1.2.3.5 IOC SecurityManagmentFunction
15.1.2.3.5.1 Definition
This IOC represents a SecurityManagmentFunction object. It is derived from ManagedFunction.
15.1.2.3.5.2 Attributes

Attributes of `SecurityManagmentFunction`

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier

15.1.2.3.6 IOC PkmBase
15.1.2.3.6.1 Definition
This IOC represents a PkmBase object. It is derived from SecurityManagementFunction.
15.1.2.3.6.2 Attributes

Attributes of `PkmBase`

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
wmanIfBsPkmDefaultAuthLifetime	+	M	M	M
wmanIfBsPkmDefaultTekLifetime	+	M	M	M
wmanIfBsPkmDefaultSelfSigManufCertTrust	+	M	M	M
wmanIfBsPkmCheckCertValidityPeriods	+	M	M	M
wmanIfBsPkmAuthentInfos	+	M	M	-
wmanIfBsPkmAuthRequests	+	M	M	-
wmanIfBsPkmAuthReplies	+	M	M	-
wmanIfBsPkmAuthRejects	+	M	M	-
wmanIfBsPkmAuthInvalids	+	M	M	-
wmanIfBsPMKDefaultPreHandshakeLifetime	+	M	M	M
wmanIfBsPMKDefaultLifetime	+	M	M	M
wmanIfBsDefaultSAChallengeTimer	+	M	M	M
wmanIfBsDefaultSaChallengeMaxResends	+	M	M	M
wmanIfBsDefaultSATEKTimer	+	M	M	M
wmanIfBsDefaultSATEKRequestMaxResends	+	M	M	M

15.1.2.3.7 IOC PkmTek
15.1.2.3.7.1 Definition

This IOC represents a PkmTek object. It is derived from SecurityManagementFunction.

15.1.2.3.7.2 Attributes

Attributes of `PkmTek`

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
wmanIfBsPkmTekSAId	+	M	-	-
wmanIfBsPkmTekSAType	+	M	M	-
wmanIfBsPkmTekDataEncryptAlg	+	M	M	-
wmanIfBsPkmTekDataAuthentAlg	+	M	M	-
wmanIfBsPkmTekEncryptAlg	+	M	M	-
wmanIfBsPkmTekLifetime	+	M	M	-
wmanIfBsPkmTekKeySequenceNumber	+	M	M	-
wmanIfBsPkmTekExpiresOld	+	M	M	-
wmanIfBsPkmTekExpiresNew	+	M	M	-
wmanIfBsPkmTekReset	+	M	M	M
wmanIfBsPkmKeyRequests	+	M	M	-
wmanIfBsPkmKeyReplies	+	M	M	-
wmanIfBsPkmKeyRejects	+	M	M	-
wmanIfBsPkmTekInvalids	+	M	M	-
wmanIfBsPkmKeyRejectErrorCode	+	M	M	-
wmanIfBsPkmKeyRejectErrorString	+	M	M	-
wmanIfBsPkmTekInvalidErrorCode	+	M	M	-
wmanIfBsPkmTekInvalidErrorString	+	M	M	-
wmanIfBsPkmAssociatedGKEKSequenceNumber	+	M	M	-
wmanIfBsPkmSAServiceType	+	M	M	-

15.1.2.3.8 IOC MS/SSPkmAuth

15.1.2.3.8.1 Definition

This IOC represents a MS/SSPkmAuth object. It is derived from SecurityManagementFunction.

15.1.2.3.8.2 Attributes

Attributes of `MSPkmAuth`

Attribute name	Visibility	Support Qualifier	Read Qualifier	Write Qualifier
wmanIfBsSsPkmAuthMacAddress	-	M	-	-
wmanIfBsSsPkmAuthKeySequenceNumber	+	M	M	-
wmanIfBsSsPkmAuthExpiresOld	+	M	M	-
wmanIfBsSsPkmAuthExpiresNew	+	M	M	-
wmanIfBsSsPkmAuthLifetime	+	M	M	-
wmanIfBsSsPkmAuthReset	+	M	M	M
wmanIfBsSsPkmAuthInfos	+	M	M	-
wmanIfBsSsPkmAuthRequests	+	M	M	-
wmanIfBsSsPkmAuthReplies	+	M	M	-
wmanIfBsSsPkmAuthRejects	+	M	M	-
wmanIfBsSsPkmAuthInvalids	+	M	M	-
wmanIfBsSsPkmAuthRejectErrorCode	+	M	M	-
wmanIfBsSsPkmAuthRejectErrorString	+	M	M	-
wmanIfBsSsPkmAuthInvalidErrorCode	+	M	M	-
wmanIfBsSsPkmAuthInvalidErrorString	+	M	M	-
wmanIfBsSsPkmAuthPrimarySAId	+	M	M	-
wmanIfBsSsPkmAuthValidStatus	+	M	M	-
wmanIfBsMsCMACPacketNumbercounter	+	M	M	
wmanIfBsMsCMAC_PN_UL	+	M	M	

wmanIfBsMsCMAC_PN_DL	+	M	M	
wmanIfBsMsCMACValue	+	M	M	
wmanIfBsMsPkmAuthResultCode	+	M	M	
wmanIfBsMsPkmAKId	+	M	M	
wmanIfBsKeyPushMode	+	M	M	
wmanIfBsKeyPushCounter	+	M	M	