

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>Clarifications for Operational ranges of Privacy Configuration Settings in PKMv2</b>	
Data Submitted	<b>2007-01-18</b>	
Source(s)	Aeri Lim, <a href="#">Geunhwi Lim</a> Samsung Electronics Co.	Voice: +82-31-279-5694 Fax: +82-31-279-4609 <a href="mailto:aeri.lim@samsung.com">aeri.lim@samsung.com</a>
Re:	P80216/Cor2/D1	
Abstract	The document contains suggestions on the operational ranges of privacy configuration settings in PKMv2	
Purpose	Adoption of proposed changes into P80216/Cor2/D1	
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 < <a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a> >, 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 < <a href="mailto:chiar@wirelessman.org">mailto:chiar@wirelessman.org</a> > 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 < <a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a> >.	

## Clarifications for Operational ranges of Privacy Configuration Settings in PKMv2

### Introduction

CR #601 (C80216maint-06\_029.doc) is applied incorrectly to P80216/Cor2/D1.

C80216maint-06\_029.doc says that

- 1) delete Table 343 from 802.16e-2005
- 2) add the Table 343a included in the contribution

However, in P80216/Cor2/D1, a new Table 343a was appended to Table 343 without deleting Table 343.

"Table 343 - Operational ranges for privacy configuration settings" in 802.16-2004 is for PKMv1.

And the items in Table 343 in 802.16e-2005 is for PKMv2.

According to the "C80216maint-06\_029.doc", the items for PKMv2 are re-arranged to Table 343a.

Therefore, Table 343 into two tables 343 and 343a should be separated such that the first 9 items in the table go into Table 343 and the rest of the items go into Table 343a.

In addition, we need to fix the reference to table 343 in 802.16e-2005.

### Proposed changes to P80216/Cor2/D1

#### 10.2 PKM parameter values

[Change Table 343 as follows. The modification with blue color was not originally in IEEE 802.16e-2005, so instead of leaving it in the struck-out format it should be deleted completely from the Cor2 document (red items should be shown with strikethrough text).]

**Table 343—Operational ranges for privacy configuration settings for PKMv2**

System	Name	Description	Minimum value	Default value	Maximum value
SS	Authorize Reject Wait Timeout	Delay before resending Auth Request after receiving Auth Reject	5s	60s	15 min (900 s)
<del>MS, BS</del>	<del>PMK or PAK pre-handshake lifetime</del>	<del>The lifetime assigned to PMK when created</del>	<del>5 s</del>	<del>10 s</del>	<del>15 min (900 s)</del>
<del>BS</del>	<del>PMK lifetime</del>	<del>If MSK lifetime is unspecified (i.e., by AAA server). PMK lifetime shall be set to this value (in seconds)</del>	<del>1 h (3 600 s)</del>	<del>12 h (43 200 s)</del>	<del>24 h (86 400 s)</del>
<del>BS</del>	<del>SACHallengeTimer</del>	<del>Time prior to re-send of SA-TEK-Challenge (in seconds)</del>	<del>0.5 s</del>	<del>1.0 s</del>	<del>2.0 s</del>
<del>BS;</del>	<del>SaChallengeMaxResends</del>	<del>Maximum number of transmissions of SA-TEK-Challenge</del>	<del>1</del>	<del>3</del>	<del>3</del>
<del>MS</del>	<del>SATEKTimer</del>	<del>Time prior to re-send of SA-TEK-Request (in seconds)</del>	<del>0.1 s</del>	<del>0.3 s</del>	<del>1.0 s</del>
<del>MS</del>	<del>SATEKRequestMaxResends</del>	<del>Maximum number of transmissions of SA-TEK-Request</del>	<del>1</del>	<del>3</del>	<del>3</del>
<del>BS</del>	<del>PAK lifetime</del>	<del>Lifetime, in seconds, BS assigns to new PAK.</del>	<del>1 day (86 400 s)</del>	<del>7 days (604 800 s)</del>	<del>70 days (6 048 000 s)</del>
<del>BS</del>	<del>TEK Lifetime</del>	<del>Lifetime, in seconds, BS assigns to new TEK</del>	<del>30 min (1 800 s)</del>	<del>3 h (10 800 s)</del>	<del>12 h (43 200 s)</del>
<del>MS</del>	<del>Authorize Wait Timeout</del>	<del>Auth Req retransmission interval from Auth Wait state</del>	<del>2 s</del>	<del>10 s</del>	<del>30 s</del>
<del>MS</del>	<del>Reauthorize Wait Timeout</del>	<del>Auth Req retransmission interval from Reauth Wait state</del>	<del>2 s</del>	<del>10 s</del>	<del>30 s</del>
<del>MS</del>	<del>Authorization Grace Time</del>	<del>Time prior to Authorization expiration SS begins reauthorization</del>	<del>5 min (300 s)</del>	<del>10 min (600 s)</del>	<del>1 h (3 600 s)</del>
<del>MS</del>	<del>Operational Wait Timeout</del>	<del>Key Req retransmission interval from Op Wait state</del>	<del>1 s</del>	<del>1 s</del>	<del>10 s</del>
<del>MS</del>	<del>Rekey Wait Timeout</del>	<del>Key Req retransmission interval from Rekey Wait state</del>	<del>1 s</del>	<del>1 s</del>	<del>10 s</del>
<del>MS</del>	<del>TEK Grace Time</del>	<del>Time prior to TEK expiration MS begins rekeying</del>	<del>1 min (60 s)</del>	<del>5 min (300 s)</del>	<del>1 h (3 600 s)</del>
<del>MS</del>	<del>Authorize Reject Wait Timeout</del>	<del>Delay before resending Auth Request after receiving Auth Reject</del>	<del>10 s</del>	<del>60 s</del>	<del>10 min (600 s)</del>
<del>MS</del>	<del>PN grace value</del>	<del>The value of CMAC PN counter</del>	<del>0x7FFFFFF</del>	<del>0xFFFFFFFF F</del>	<del>0xFFFFFFFF</del>

		<del>that triggers reauthentication</del>	FF		
MS	Eap start timeout	Timer between resend of EAP start if reauthentication was not completed	10 s	10 s	60 s

**Insert Table 343a:****Table 343a-Operational ranges for privacy configuration settings for PKMv2**

<u>System</u>	<u>Name</u>	<u>Description</u>	<u>Minimum value</u>	<u>Default value</u>	<u>Maximum value</u>
MS, BS	PMK or PAK pre-handshake lifetime	The lifetime assigned to PMK when created	5 s	10 s	15 min (900 s)
BS	PMK lifetime	If MSK lifetime is unspecified (i.e., by AAA server). PMK lifetime shall be set to this value (in seconds)	1 h (3 600 s)	12 h (43 200 s)	24 h (86 400 s)
BS	SACHallengeTimer	Time prior to re-send of SA-TEK-Challenge (in seconds)	0.5 s	1.0 s	2.0 s
BS	SaChallengeMaxResends	Maximum number of transmissions of SA-TEK-Challenge	1	3	3
MS	SATEKTimer	Time prior to re-send of SA-TEK-Request (in seconds)	0.1 s	0.3 s	1.0 s
MS	SATEKRequestMaxResends	Maximum number of transmissions of SA-TEK-Request	1	3	3
BS	PAK lifetime	Lifetime, in seconds, BS assigns to new PAK.	1 day (86 400 s)	7 days (604 800 s)	70 days (6 048 000 s)
BS	TEK Lifetime	Lifetime, in seconds, BS assigns to new TEK	30 min (1 800 s)	3 h (10 800 s)	12 h (43 200 s)
MS	Authorize Wait Timeout	Auth Req retransmission interval from Auth Wait state	2 s	10 s	30 s
MS	Reauthorize Wait Timeout	Auth Req retransmission interval from Reauth Wait state	2 s	10 s	30 s
MS	Authorization Grace Time	Time prior to Authorization expiration SS begins reauthorization	5 min (300 s)	10 min (600 s)	1 h (3 600 s)
MS	Operational Wait Timeout	Key Req retransmission interval from Op Wait state	1 s	1 s	10 s
MS	Rekey Wait Timeout	Key Req retransmission interval from Rekey Wait state	1 s	1 s	10 s
MS	TEK Grace Time	Time prior to TEK expiration MS begins rekeying	1 min (60 s)	5 min (300 s)	1 h (3 600 s)
MS	Authorize Reject Wait Timeout	Delay before resending Auth Request after receiving Auth Reject	10 s	60 s	10 min (600 s)
MS	PN grace value	The value of CMAC PN counter	0x7FFFFFFF	0xFFFFFFFF F	0xFFFFFFFF
MS	Eap start timeout	Timer between resend of EAP start	10 s	10 s	60 s

	<del>if reauthentication was not completed</del>		
--	--	--	--

## Proposed changes to IEEE 802.16e-2005

*[Change the contents in 7.2.2.5.4 as indicated:]*

.

### 7.2.2.5.4 Parameters

All configuration parameter values take the default values from Table 343a or may be specified in Auth Reply message.

...

TEK Grace Time takes the default value from Table 343a or may be specified in a configuration setting within the Auth Reply message and is the same across all SAIDs (see 11.9.19.6).