

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Changes on 802.16e to support the flexible management of session information	
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Re:	This is a response to a Call for Comments IEEE 802.16e-04/xxx	
Abstract	This document describes the limitation of the current 802.16e standard to manage flexibly session information (e.g., security information, session information, etc). Briefly, the centralized management at BS may be precluded. Or, it is difficult to manage the session information in the central manner even if it may not be precluded. This document shows as well what changes on the current text are required to support the flexible management of session information. By this changes, the 802.16e standard can achieve the performance improvement during the active handoff and can allow no limitation of BS type from product perspective.	
Purpose	The document is submitted for review by 802.16e Working Group members.	
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1. Introduction

This document describes the limitation of the current 802.16e standard to manage flexibly session information (e.g., security information, session information, etc). Briefly, the centralized management at BS may be precluded. Or, it is difficult to manage the session information in the central manner even if it may not be precluded.

Merits introduced by the centralized session management are described as followings:

- Low latency Handoff: Since the session information is managed in the centralized manner, the delay required for re-initialization, re-association, re-authentication, and re-registration will not occurred when the SS moves across the boundary of APs controlled and managed by the centralized session information.
- Performance improvement: Since the SS does not need to re-initialization, re-association, re-authentication and re-registration always, the overhead of MAC signaling is reduced much.
- Controlled Privacy and Security framework: Since security parameters are managed in the centralized manner, it is easy to manage these security parameters under the operator's consistent policy.

This document shows as well what changes on the current text are required to support the flexible management of session information. By this changes, the 802.16e standard can achieve the performance improvement during the active handoff and can allow no limitation of BS type from product perspective.

Simple changes first occur on the following parts :

- Definition enhancements of 'Basic connection' and 'Primary connection'
- Connection Type changes of 'SBC-REQ/RSP', ARQ-Feedback/Discard/Reset'