| | |
|---|---|
| Project | **IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>** |
| Title | **Fix for Handover primitive** |
| Date Submitted | **2006-01-11** |
| Source(s) | ZTE corporation xu.ling@zte.com.cn<br>Xu Ling<br>Mary Chion |
| Re: | Contribution on comments to IEEE 802.16g-05/008r2 |
| Abstract | In this contribution, we propose to amendment the protocol through add the new section about Data Path description |
| 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 text 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. |

# Fix for Handover primitive

## 1. Introduction

The data lossless for non-realtime service is a requirement in IEEE802.16g.

Buffering and synchronization are common mechanisms to meet the data lossless requirement.

This contribution proposes to adopt the SN feedback mechanism which defined in IEEE802.16e/D12 to synchronize the data between serving BS and target BS during handover procedure.

And this contribution also proposes add a new primitive: HO completion to notify NCMS that the handover procedure has been completed.

## 2. Proposed Text Changes

*[Change HO primitive flow diagram between NCMS and target BS to the following]*

**14.5.9.7 Handover Control Protocol Procedures**

*[Modify table in section 14.5.9.7.3 as follows]*

| Event Type | Description |
|---|---|
| HO-Start | Indicating the MS is ready to handover from the current serving BS to the target BS |
| HO-Cancel | Indicating the current HO procedure is cancelled. |
| HO-Scan | Providing scanning result to NCMS |
| HO-CMPLT | Indicating MS network re-entry completion at the target BS |

*[Add a new section as follows]*

**14.5.9.7.3.4 C-HO-NOTFY(Event_Type==HO-CMPLT)**

**14.5.9.7.3.4.1 Function**

This primitive is used by Target BS to notify NCMS the handover process is completed.

**14.5.9.7.3.4.2 Semantics of the service primitive**

It delivers the following parameters.

**C-HO-NOTFY**
(
Message_id,
Event_Type(HO-CMPLT),
Object_id(NCMS),

Attribute _list:
Target BS ID
MS ID
Result Flag
List of Last received SDU SNs
)
**Target BS ID**
Base station unique identifier of the target BS
**MS ID**

48-bit unique identifier used by MS

**Result Flag**

**List of Last received SDU SNs**
**{**
**SFID**
**Last received SDU SN**
**}**

The sequence number of the last MAC SDU which the MS received before handover to the target BS. The connection associated with the SDU SN is identified by SFID when SDU SN feedback is enabled.

**14.5.9.7.3.4.3 When generated**

This primitive is generated by target 802.16 BS Entity when the MS completes network re-entry at the target BS. If SDU SN feedback is enabled, the target 802.16 BS Entity shall generates this primitive after it has received SN report header.

**14.5.9.7.3.4.4 Effect of receipt**

NCMS completes handover procedure.