

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>Localized MS Connection Management</b>	
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Re:	IEEE P802.16j/D1: IEEE 802.16j working group letter ballot #28	
Abstract	This contribution clarifies the definition and usage of localized CID for MS	
Purpose	To incorporate the proposed text into the P802.16j/D1 Baseline Document	
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# Localized MS Connection Management

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## 1. Introduction

Based on current baseline document, the connections of a MS can be managed either by MR-BS (end-to-end connection management) or by the access RS of the MS (localized connection management). For localized CID management, the connection between MR-BS and the RS is established as for a MS. The text regarding localized MS connection management currently is missing. In this contribution, the connection management of MS by an access RS is addressed.

## 2. Proposal

Localized CID management may be implemented in either a fixed RS or a mobile RS. However the main benefits are seen when it is implemented in a mobile RS.

Compared to centralized CID management, localized CID management brings the following benefits:

- With localized CID management, the MS initial ranging procedure can be speeded up since the delay caused by CID assignment by MR-BS and RNG-RSP message relaying
- A MR-BS doesn't need to manage the CID of MSs attached to a mobile RS and leave the CID management to be implemented by an individual RS which simplifies the entire system operation

### Connections of MSs served by a RS implementing localized CID management

At MS initial network entry, the CID of management connections of a MS are assigned locally by the RS implementing localized CID management and is informed to the MR-BS so that a MR-BS has the knowledge of the coupling between MAC address of the MS and its local basic/primary CID. The RS can use STA-INFO message to inform MR-BS the locally assigned basic CID and primary CID (referring to contribution "MS message relay by RS performing distributed security")

The CID of a transport connection of a MS is assigned by the RS at the establishment of a service flow of the MS and is informed to MR-BS so that a MR-BS has the knowledge of the coupling between a service flow and local CID assigned by the RS.

## 3. Proposed text change

*[Add the section 6.3.1.3.2 as followings]*

+++++ Start text +++++

### 6.3.1.3.2 local connection management for relaying

For a fixed relay station or a mobile relay station, CID can be locally assigned to an attached MS.

The connections between MR-BS and a RS are managed by MR-BS. The connections of MSs attached to a RS with localized MS connection management are managed by the RS and any locally assigned CID by such a RS shall be informed to the MR-BS.

6.3.1.3. 2.1 Connections of MSs served by a RS with localized MS CID management

At MS initial network entry, the CID of management connections of a MS are assigned locally by the RS implementing localized CID management and is informed to the MR-BS so that a MR-BS has the knowledge of the coupling between MAC address of the MS and its local basic/primary CID. The RS can uses SAT-INFO message or MS\_MSG\_Relay-REQ message to inform MR-BS the locally assigned basic CID and primary CID.

The CID of a transport connection of a MS is assigned by the RS at the establishment of a service flow of the MS and is informed to MR-BS so that a MR-BS has the knowledge of the coupling between a service flow and local CID assigned by the RS. The RS can uses MS\_MSG\_Relay-REQ message to inform MR-BS the locally assigned transport CID.

+++++ End text +++++