## Project

## Title
MS Handover Ranging with RS

## Date Submitted
2007-01-18

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## Re:
IEEE 802.16j-06/034: “Call for Technical Proposals regarding IEEE Project P802.16j”

## Abstract
This contribution proposes procedures for MS handover ranging with RS

## Purpose
Text proposal for 802.16j Baseline Document

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MS Handover Ranging with RS

Introduction

This contribution describes MS handover ranging with RS under centralized scheduling scheme. An RS that supports MS handover ranging shall take a process similar to that defined in C802.16j-07/056, MS initial ranging with transparent RS and C802.16j-07/055, MS initial ranging with non-transparent RS. In order to facilitate the incorporation of this proposal into IEEE 802.16j standard, specific changes to the baseline working document IEEE 802.16j-06/026r1 are listed below.

Text Proposal

6.3.10 Ranging
6.3.10.3 OFDMA based ranging
6.3.10.3.6 Relaying support for OFDMA based ranging
6.3.10.3.4.7 MS CDMA handover ranging and automatic adjustment with RS

An RS that supports MS handover ranging shall take a process similar to that defined in section xxx with the following modifications.

In CDMA handover ranging process, the CDMA handover ranging code is used instead of the initial ranging code. The code is selected from the handover-ranging domain as defined in 8.4.7.3.

Alternatively, the serving MR-BS may proactively notify the RS that an MS will handover to it by using RLY_MSHO-NTF message. In such case, the serving MR-BS should provide BW allocation for the MS by transmitting an RLY-BST to the RS. RLY_MSHO-NTF message is defined in xxx. Afterward, the RS should construct Fast_Ranging_IE and send to the MS for the MS to transmit an RNG-REQ message.

Table xxx – RLY_MSHO-NTF message format

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLY_MSHO-NTF_Message_Format()</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Message Type = xx</td>
<td>8 bits</td>
<td></td>
</tr>
<tr>
<td>Encoded Information</td>
<td>variable</td>
<td>TBD</td>
</tr>
<tr>
<td>}</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>