Ranging in MMR System

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Purpose:
To propose ranging scheme for MMR system

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Overview

• Assumptions
  – The RS has the ability to perform all functions of the MS like network entry, initialization, and so on.
  – All nodes in the cell are controlled by the MMR-BS.

• Key Concept
  – Some ranging codes indicate the number of codes the RS received.

• Characteristics
  – Fast, but code-wasted
  – Optional feature (because of wasting codes)
Simple Procedure

- When codes from n to (n+i) are allocated for relaying,

<table>
<thead>
<tr>
<th>Relayed-ringing code index</th>
<th>n</th>
<th>n+1</th>
<th>n+2</th>
<th>n+3</th>
<th>...</th>
<th>n+i</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of received codes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>...</td>
<td>i+1</td>
</tr>
</tbody>
</table>

- The detailed procedures are described in IEEE C802.16j-06/232
Notice

• My e-mail address(changkyoon.kim@samsung.com) has some problems, so anybody have a question use temporary address(knidus@empal.com), please.