Fast Bandwidth request scheme for Relay Station

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For discussion and approval of inclusion of the proposed text into the P802.16j baseline document.

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Introduction

• Two Fast BW request/grant schemes are proposed
  – Fast CDMA bandwidth request/grant
    • RS is assigned a specific CDMA code to request bandwidth at SBC phase. BS immediately allocates BW to the RS when it receives the RS specific CDMA code.
  – Continuous Bandwidth Allocation.
    • BS allocates UL BW on relay link without BW request after allocating UL BW on access link. BS also allocates DL BW in the same manner.

• Related sections in the standard:
  – 6.3.6.7.2 Centralized scheduling
Example of Fast BW request/grant sequence

A specific code assigned to RS during network entry phase

Continuous BW allocation

The MR-BS continuously allocates BW on RS access link and relay link without BW request form RS.
Advantages

• To reduce signaling messages and latency