Rate Based Bandwidth Request Mechanism

IEEE 802.16 Presentation Submission Template (Rev. 8.3)

Document Number:

IEEE S802.16j-06/147

Date Submitted:

2006-11-09

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Venue:

IEEE 802.16 Session #46, Dallas, USA

Base Document:

IEEE C802.16j-06/147 and URL http://ieee802.org/16/... C80216j-06_147.pdf>.

Purpose:

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

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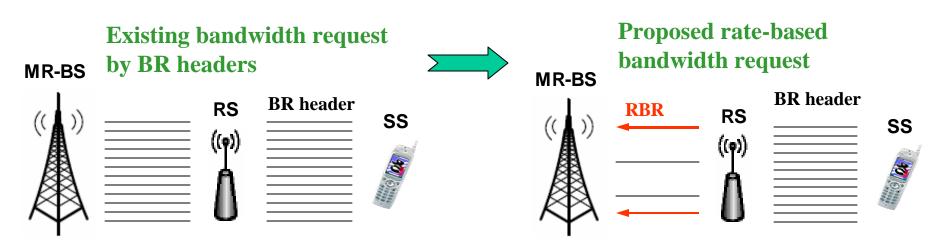
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Introduction

- Problems of existing bandwidth request (BR) mechanisms in MR networks
 - Heavy control overhead of BR headers over relay link in MR networks
 - Long latency as BR traverses multi-hops
- Solution: rate-based BR (**RBR**)
 - RS sends the average data rate to MR-BS
 - To reduce the number of BR headers sent over relay links



How to USE RBR?

- Using RBR message is to **reduce** but not to eliminate the number of BR headers sent on the relay links
- RS may send BR headers to ask MR-BS to grant more resource in addition to RBR
- Aggregation of connections is required for burst traffic to decrease the fluctuation of requested data rate
- RBR is good for near constant rate traffic (rtPS, nrtPR, ertPS)
- ➤ RBR works with proposals (e.g. C80216j-06/125,180,189,232) in a complementary manner
 - Those proposals do not intend to reduce the number of BR headers requesting for data packets on the relay links