

# Rate Based Bandwidth Request Mechanism

## IEEE 802.16 Presentation Submission Template (Rev. 8.3)

Document Number:

IEEE S802.16j-06/147r1

Date Submitted:

2006-11-14

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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](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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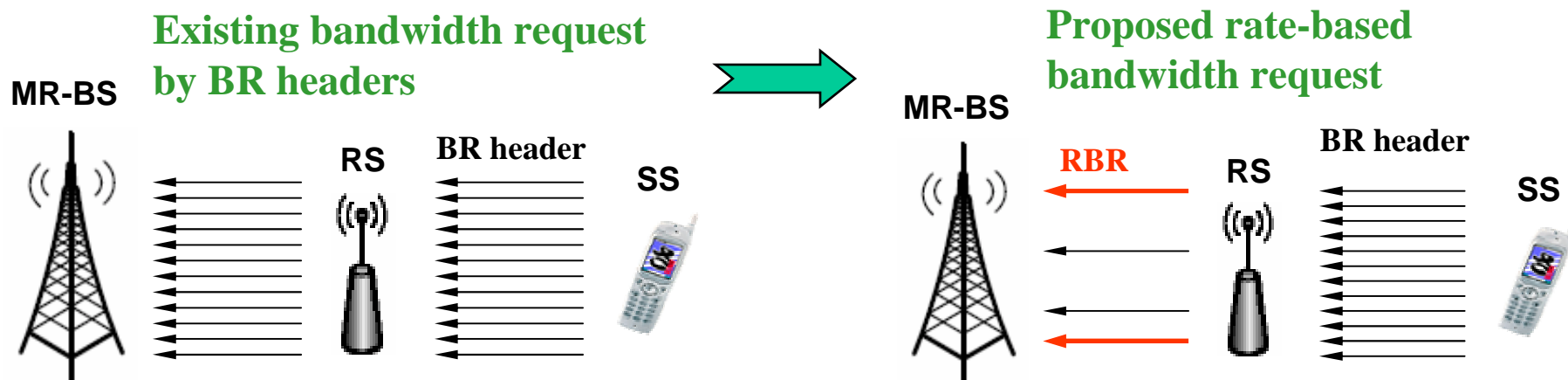
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# Introduction

- 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