

Rate Based Bandwidth Request Mechanism

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Source:

Wei-Peng Chen

Chenxi Zhu

Takeo Hamada

Jonathan Agre

Voice: +1 408 530 4622

Fax:

E-mail: wei-peng.chen@us.fujitsu.com

Fujitsu Laboratories of America

1240 E. Arques Avenue, M/S 345,

Sunnyvale, CA 95051, USA

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Purpose:

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

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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