Enabling MAC tunneling over HARQ in 802.16j

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Jeffrey Z. Tao, Koon Hoo Teo, Jinyun Zhang	Email: {tao, teo, jzhang}@merl.com
Mitsubishi Electric Research Lab	
Toshiyuki Kuze, Shigeru Uchida, Kentaro Sawa	Email: kuze.toshiyuki@ah.MitsubishiElectric.co.jp
Mitsubishi Electric Corp.	
Jerry Sydir, Kerstin Johnsson, Hyunjeong Lee	Email: jerry.sydir@intel.com
Intel Corporation	
Tzu-Ming Lin, Wern-Ho Sheen, Fang-Ching Ren,	Email: jsyang@itri.org.tw
Jen-Shun Yang, Chie Ming Chou, I-Kang Fu,	
Ching-Tarng Hsieh, Jui-Tang Wang	
Industrial Technology Research Institute (ITRI)/	
National Chiao Tung University (NCTU), Taiwan	
Yuan-Ying Hsu	Email: yyhsu@tarc-tw.research.telcordia.com
Telcordia Applied Research Center	
Okuda Masato	Email: okuda@jp.fujitsu.com
Fujitsu Laboratories LTD.	
Yuefeng Zhou	Email: yuefeng.zhou@uk.fujitsu.com
Fujitsu Laboratories of Europe Ltd	
Sungjin Lee, Hyunjeong Kang, Hyoungkyu Lim, Jungje Son	Email: steve.lee@samsung.com
Samsung Electronics	
Kenji Saito	Email: saito@kddilaps.jp
KDDI R&D Laboratories Inc.	
Yousuf Saifullah, Shashikant Maheshwari	Email: shashikant.maheshwai@nokia.com
Nokia	yousuf.saifullah@nokia.com

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Purpose:

Propose to adopt the mechanism described herein into IEEE 802.16j to enable MAC tunneling over HARQ.

Enabling MAC Tunneling over HARQ in 802.16j

Authors:

Jeffrey Z. Tao, Koon Hoo Teo, Jinyun Zhang
Mitsubishi Electric Research Lab
Toshiyuki Kuze, Shigeru Uchida, Kentaro Sawa
Mitsubishi Electric Corp.
Jerry Sydir, Kerstin Johnsson, Hyunjeong Lee
Intel Corporation
Tzu-Ming Lin, Wern-Ho Sheen, Fang-Ching Ren, Jen-Shun Yang, Chie Ming Chou, I-Kang Fu, Ching-Tarng Hsieh, Jui-Tang Wang
Industrial Technology Research Institute (ITRI)/National Chiao Tung University (NCTU), Taiwan
Yuan-Ying Hsu
Telcordia Applied Research Center
Okuda Masato
Fujitsu Laboratories LTD.
Yuefeng Zhou
Fujitsu Laboratories of Europe Ltd
Sungjin Lee, Hyunjeong Kang, Hyoungkyu Lim, Jungje Son
Samsung Electronics
Kenji Saito
KDDI R&D Laboratories Inc
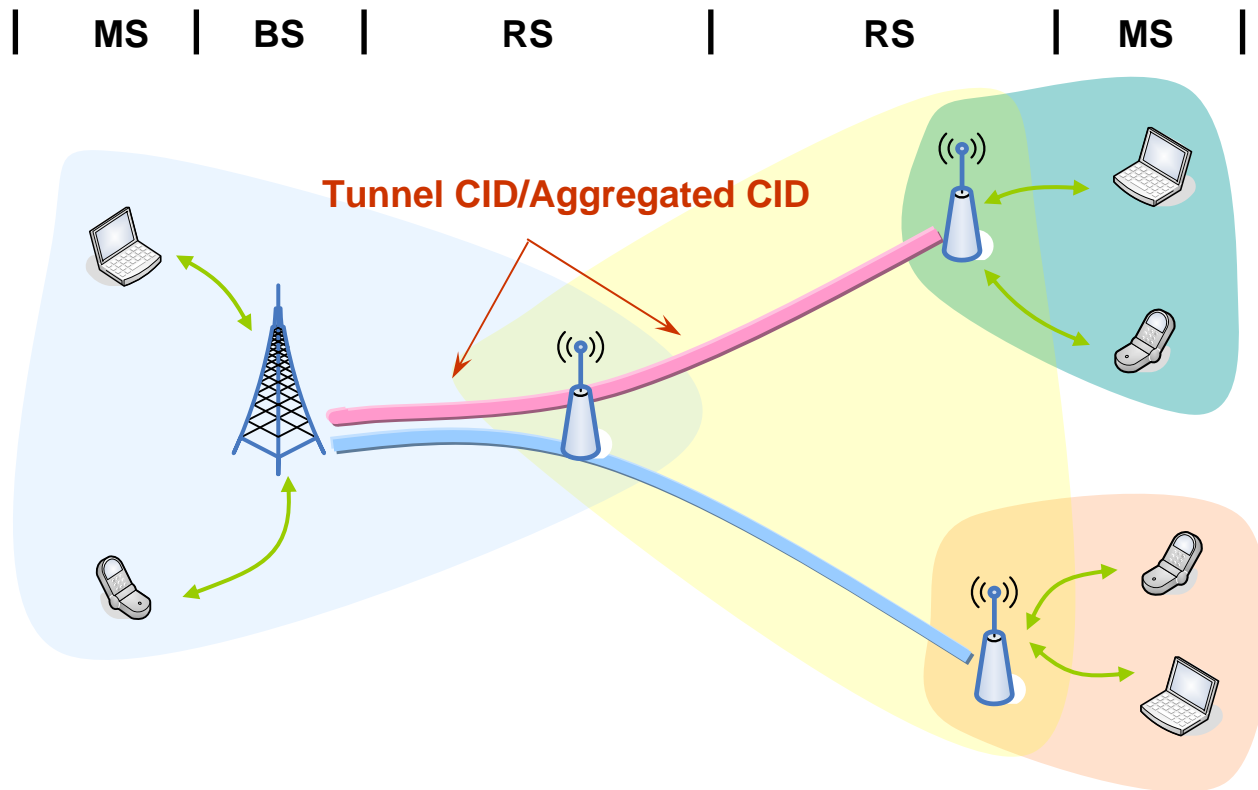*Yousuf Saifullah, Shashikant Maheshwari*
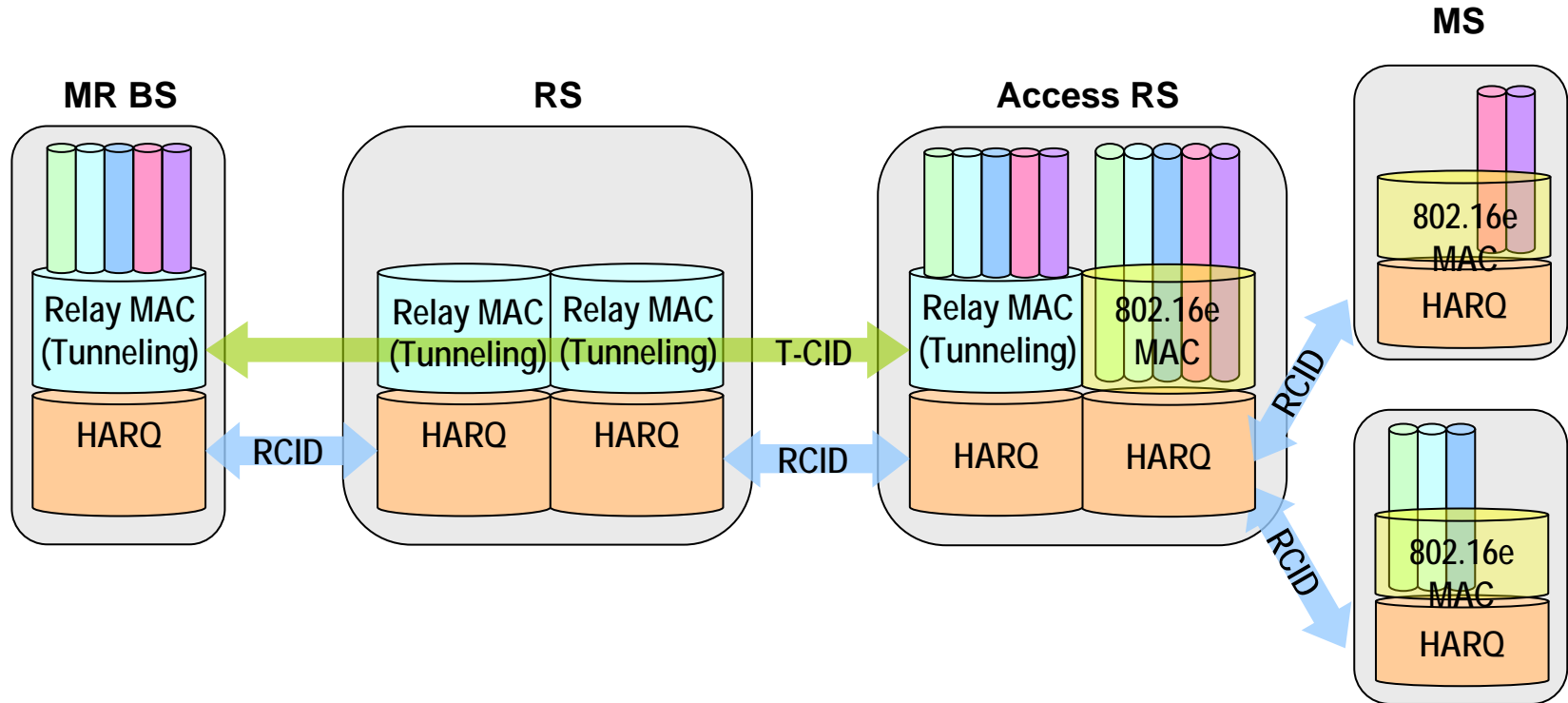**Nokia**

Enabling MAC Tunneling over HARQ

💡 **Key proposals**

- Use MAC tunnel CID (T-CID) in HARQ operation
- Use MAC tunnel header and PDU SN extended subheader to address the out-of-order delivery problem in HARQ.

| MS | BS | RS | RS | MS |

Tunnel CID/Aggregated CID

Enabling MAC Tunneling over HARQ

- Tunnel Connection is uniquely identified by a T-CID (Tunnel CID)

- *When handled by HARQ, the T-CID should be placed in the RCID_IE field for the corresponding HARQ sub-burst.*

Enabling MAC Tunneling over HARQ

- *Insert the PDU Sequence Number (SN) extended subheader after the tunnel header to address the out-of-order delivery in HARQ operation.*