PDU Handling for MAC management message

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Venue:

Re: MAC: Data Plane; in response to the TGm Call for Contributions and Comments 802.16m-08/033 for Session 57 Base Contribution:

N/A

Purpose:

To discuss and adopt the proposed text in the next revision of the 802.16m SDD

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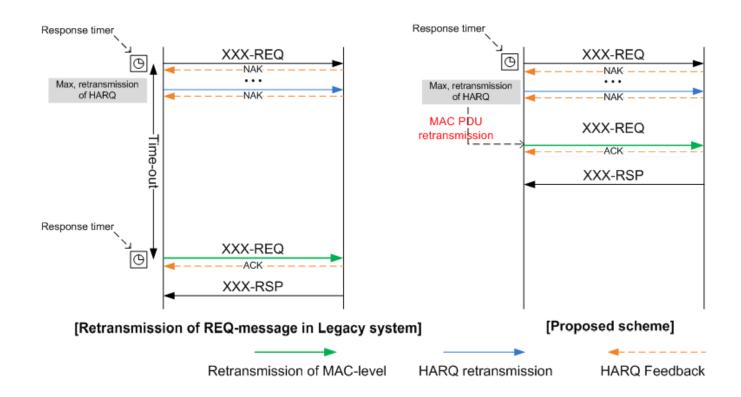
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Introduction

- Retransmission of MAC management messages
 - Large delay owing to the maximum response timer for a RSP-message.
 - Examples
 - ✓ DSA/DSC/DSD-REQ, RNG-REQ, SBC-REQ, etc.
- MAC management PDU handling over HARQ
 - To reduce the delay of retransmission, the cross-layer design to eliminate the unnecessary latency for waiting a response should be considered.

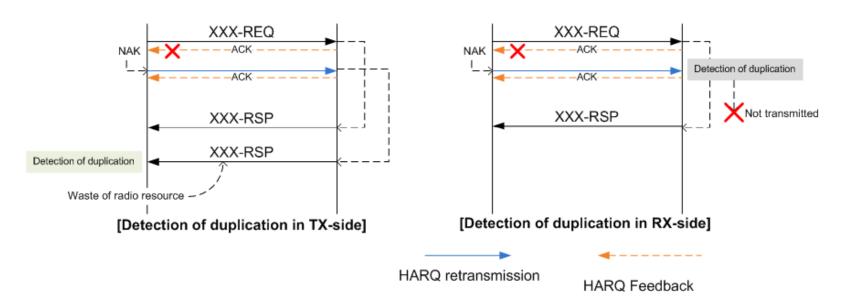
MAC Message Retransmission (1)

- Fast MAC PDU retransmission over HARQ
 - When HARQ-RX responds a NAK after maximum HARQ retransmission, the MAC management PDU will be retransmitted to the RX side without delay.



MAC Message Retransmission (2)

- Fast MAC PDU retransmission over HARQ
 - In case of ACK to NAK HARQ feedback error, RX side may receive the same messages.
 - Transaction ID (or transaction toggle bit) can be used to detect the duplication of these messages.



Proposed Text

[In 80216m-08_003r4, Section 10.2.3, add the following text]

10.x. MAC PDU Handling

10.x.xx MAC management message retransmission

As the MAC management PDU is sent over HARQ, the retransmission of MAC level can be triggered by HARQ feedback from RX-side. If the HARQ NAK persists, the MAC management message required a response can be retransmitted once and again within a waiting-time for a response message. A Message transaction ID (or transaction toggle bit) is used to detect the duplication of message against feedback error cases.