TEK Transfer in Relay Systems

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

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Introduction

- This contribution proposes MS TEK transfer to RS.
- Necessities of MS TEK at RS
 - Subheaders
 - Subheaders are encrypted as a part of MAC-PDU payload. So, RS cannot get subheader information (ex. Piggybacked BW request) without MS TEK.
 - Fragmentation/Packing
 - In distributed systems, fragment/pack PDUs at RS will improve bandwidth usage efficiency. In order to reconstruct PDUs at RS, RS need to decrypt/encrypt the PDUs with MS TEK.

Example of MS TEK transfer

