## **TEK Transfer in Relay Systems**

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

**Document Number:** 

IEEE S802.16j-07/149

Date Submitted:

2007-01-14

Source:

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Venue:

IEEE 802.16 Session #47, London, UK

Base Document:

IEEE C802.16j-07/149

Purpose:

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**

