Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Clarification of Tunnel Service Flow**
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Re:	IEEE 802.16j-06/027: "Call for Technical Proposals regarding IEEE Project P802.16j"
Abstract	This proposal clarifies the DSx messages used over relay links.
Purpose	Discuss and adopt proposed text.
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Clarification on Tunnel Service Flows

1. Introduction

There are some comments (comment #717 and #696) on how to management tunnel service flow in 80216-07_045. This contribution proposes text change to address these related comments.

2. Specific Text Change

6.3.14.10 Tunnel Service Flows

[Change the last sentence in the 1st paragraph in section 6.3.14.10 as following:]

The tunnel CID is assigned in the same way as CIDs are assigned to individual connections ~~service flows~~ using DSA procedures and is drawn from the same spaces as CIDs assigned to individual service flow, however, a specific range of CIDs is assigned to support tunnels. Individual connections for SSs that have the similar QoS requirement may be assigned to the same tunnel. The service flow parameter associated with a tunnel connection is determined by the MR-BS based on for example the QoS requirement of the individual connections traversing the tunnel.

[Remove the 2nd paragraph in section in section 6.3.14.10]

[Replace the 3rd paragraph in section 6.3.14.10 with following text:]

When a new connection for a SS is created using DSA procedure, use of a tunnel is optional. If use of a tunnel is specified, then the MR-BS determines whether the connection should traverse an existing tunnel between itself and the access RS of the SS. If the connection is to traverse the tunnel, the MR-BS determines whether the service flow parameters associated with the tunnel should be modified or not in order to satisfy the QoS requirement of the individual connection for the SS. If modification to the service flow parameter associated with the tunnel is required, the MR-BS performs one of the following procedures.

- If distributed scheduling is used and admission control decision is required from each RS on the path, the MR-BS sends a DSC-REQ with the modified service flow parameter of the tunnel to the RSs on the path to request admission control decision. The process follows the procedure defined in section 6.3.14.9.4.2.

- Otherwise, the MR-BS sends a DSC-REQ with modified service flow parameter of the tunnel directly to the access RS. The process follows the same DSC procedure defined for SS.

The service flow parameters associated with a tunnel is the same as defined in section 11.13, except that the UL Grant Scheduling Type (section 11.13.11) is used to define the scheduling type for both uplink and downlink. In addition, per-hop based service flow requirement (e.g., Maximum Latency for each RS on the path) may be included for delay sensitive traffic type uses UGS, rtPS or etrPS scheduling services.