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Re:	Sponsor re-circulation ballot	
Abstract		
Purpose	Adoption of proposed changes into P802.16-REVd/D4-2004	
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Clarifications on Convergence Sublayer Operation and Parameters

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1 CS Operation

The 802.16D text regarding the Convergence Sublayer is unclear on a few points. The following outlines a few details the CS operation (specific text changes follow afterward).

1. Section 5.2 mentions 2 CS Types: Packet and ATM. But in addition we need to specify subtypes of the packet CS (specifically: 802.3, IP), since:

   a. the CS needs to know where header fields are located (for classification)

   b. the client of the CS needs to know how to interpret the PDUs that it receives.

2. A CS whose subtype is 802.3 will classify and forward 802.3 frames (to/from the MAC CPS). 802.3 frames, in turn, can carry just about anything: 802.1D (ie. VLAN) tags; IPv4, IPv6 etc

   Similarly, a CS whose Type is IP can carry both IPv4 and IPv6.

   Both these CS scenarios are useful and expected.

3. Each MAC CPS Connection will always be associated with a single Convergence Sublayer entity at each end (ie. at BS and SS). Consequently a single Connection will carry PDUs of a single CS Type/subtype only. ATM cells and 802.3 frames (for example), will never travel on the same Connection.

4. Regardless of which CS type/subtype is associated with a connection, the classifiers that map to a connection can and must perform classification according to fields in the higher layer headers (eg. a classifier in an 802.3 CS can map "UDP port field of IPv4 packet without VLAN tag" and "UDP port field of IPv6 packet without VLAN tag" to the same connection).

1.1 Specific Text Changes

[Replace the last paragraph of 5.2 with the following text:]

An instance of the packet CS has one of two subtypes: 802.3 and IP. The CS subtype (11.13.21.1) identifies the format of the PDUs that are exchanged between the CS and the higher-layer application.

[section 11.13.21.1]

There should be only 3 values in the table:

Packet, 802.3
Packet, IP
ATM

The remainder of the values should be "reserved".

[section 11.13.21.2 CS Parameter encoding rules]

Change section title to "Classifier encoding rules"

Replace first paragraph with:

Each classifier contains a set of parameters that are encoded within a subindex under the "classifier_type" values listed below.

Change "cst" in table column heading to "classifier_type".

[general]

Change each instance of "802.1Q" in the entire 802.16D document to "802.1D"