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Title	Support for Robust Header Compression in 802.16 Convergence Sublayer
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Re:	Recirc 16a
Abstract	Mechanism to support Robust Header Compression in 802.16 Convergence Sublayer
Purpose	Acceptance into 802.16e text
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Support for Robust Header Compression in 802.16 Convergence Sublayer

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1 Overview

Support in the CS for the ROHC packet format in 802.16e/D5a has the following issues:

- No support for 0- and 1- byte ContextIds (cf. RFC 3059 section 5.1.3)
- No support for ROHC Feedback packets (cf. RFC 3059 section 5.2.2)
 - Permits classification of ROHC-compressed packets based on classifiers for IP and higher layers – which is impossible for the CS to do.

2 Changes to 802.16e D5a

[Change the table entries in section 11.13.19.1 as follows:]

10: Packet, ~~ROHC- or ECRTTP-compressed IPv4 with Header Compression~~

11: Packet, ~~ROHC- or ECRTTP-compressed over 802.3/Ethernet IPv6 with Header Compression~~

12: Packet, ~~IPv4 over with Header Compression~~

13: Packet, ~~IPv6 over 802.3/Ethernet with Header Compression~~

14: Packet, ~~IPv4 over 802.1Q VLAN with Header Compression~~

15: Packet, ~~IPv6 over 802.1Q VLAN with Header Compression~~

12~255: reserved

[Change the table in section 11.13.19.2 as follows:]

108 Packet, ~~ROHC- or ECRTTP-compressed IPv4 with Header Compression~~

109 Packet, ~~ROHC- or ECRTTP-compressed over 802.3/Ethernet IPv6 with Header Compression~~

110 Packet, ~~IPv4 over 802.3/Ethernet with Header Compression~~

111 Packet, ~~IPv6 over 802.3/Ethernet with Header Compression~~

112 Packet, ~~IPv4 over 802.1Q VLAN with Header Compression~~

113 Packet, ~~IPv4 over 802.1Q VLAN with Header Compression~~

[Modify section 11.13.19.3.4.18 as indicated:]

11.13.19.3.4.18 Session Large Context ID for ROHC- or ECRTTP-compressed packet or ROHC feedback packet ~~Header-compression protocol~~

The values of the field specify the ~~16-bit~~ context ID for ~~Header-compression protocol~~. ROHC- or ECRTTP-compressed packets. The CS will attempt to match the context ID with the payload packet's one-byte or two-byte embedded Context ID field according to the scheme described in RFC 3095 section 5.1.3

Type	Length	Value	
[145/146].cst.3.17	2	0-65535	Session Context ID

[Add section 11.13.19.3.4.19:]

11.13.19.3.4.19 Short Context ID for ROHC- or ECRTTP-compressed packet or ROHC feedback packet

The values of the field specify a short-format context ID for ROHC- or ECRTTP-compressed packets. The CS will attempt to match the context ID with the payload packet's zero- or one-byte prefix Context ID field according to the scheme described in RFC 3095 section 5.1.3.

Type	Length	Value	
[145/146].cst.3.18	1	0-15	Context ID