Project	IEEE 802.16 Broadband Wireless Access Working Group < <u>http://ieee802.org/16</u> > Harmonized Relay Frame Structure		
Title			
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Re:	TGm SDD CfC (IEEE 802.16m-08/052) – Section 14.4.4	
Abstract	This contribution proposes a harmonized relay frame structure which combines features of the option 1 and 2 frame structures.	
Purpose	For consideration and adoption into the 16m SDD document.	
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Harmonized Relay Frame Structure

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Text Proposal

[Modify the text in section 11.4.4 Relay Support in Frame Structure on page 67 as indicated below]

There are two options for the Relay frame structure. These are captured in Figure 33 and Figure 34. Further study is required to distill a single frame structure from among these two options. The Relay frame structure is illustrated in Figure 33.

[Modify figure 33 on page 68 as indicated below]



Option 1: Distinct DL/UL subframes (Uni-directional Zones) Can Tx/Rx to/from MS in Relay Zone

[Modify the caption of figure 33 on page 68 as indicated below]

Figure 33 Relay Frame structure option 1

[Modify the text in section 11.4.4 on pages 68 and 69 as indicated below]

- DL Access Zone: An integer multiple of subframes located in the 16m zone of the DL of the 16m BS frame or 16m RS frame, where a 16m BS or a 16m RS can transmit to the 16m MSs. SCH and BCH as well as unicast transmissions may be performed in this zone.
- DL Relay Zone: An integer multiple of subframes located in the 16m zone of the DL of the BS frame, where a 16m BS can transmit to the 16m RSs and the 16m MSs.
- <u>UL Access Zone: An integer multiple of subframes located in the 16m zone of the UL of the 16m BS frame, where a 16m BS can receive from the 16m MSs.</u>
- UL Relay Zone: An integer multiple of subframes located in the 16m zone of the UL of the 16m BS frame, where a 16m BS can receive from the 16m RSs and the 16m MSs.
- DL Transmit Zone: An integer multiple of subframes located in the 16m zone of the DL of the <u>16m BS frame or</u> 16m RS frame, where a 16m <u>BS or</u> RS can transmit to subordinate 16m RSs and the 16m MSs.
- DL Receive Zone: An integer multiple of subframes located in the 16m zone of the DL of the 16m RS frame, where a 16m RS can receive from its superordinate station.

- UL Transmit Zone: An integer multiple of subframes located in the 16m zone of the UL of the 16m RS frame, where a 16m RS can transmit to its superordinate station.
- UL Receive Zone: An integer multiple of subframes located in the 16m zone of the UL of the <u>16m BS frame or 16m RS</u> frame, where a 16m <u>BS or</u> RS can receive from its subordinate 16m RSs and the 16m MSs.
- <u>Network Coding Transmit Zone: An integer multiple of subframes located in the DL of</u> the frame of the Odd Hop 16m RS which is directly attached to the BS, where an Odd Hop 16m RS can transmit network coded transmissions to the BS and Even Hop RS. Transmissions to the MS in this zone are FFS.
- Network Coding Receive Zone: An integer multiple of subframes located in the DL of the BS or Even Hop RS frame, where an BS or Even Hop 16m RS can receive network coded transmissions from the Odd Hop RS.

The Network Coding Transmit Zone is optional and is present only in the frame of a 16m RS which is directly attached to the BS. The Network Coding Receive Zone is optional and is present in the BS and Even Hop 16m RS frames only.

[Delete figure 34 from page 70]

[Delete the text that follows figure 34 on page 70 lines 3-11 and page 71 lines 1-2 up till the end of section 11.4.4]