

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	Harmonized Relay Frame Structure
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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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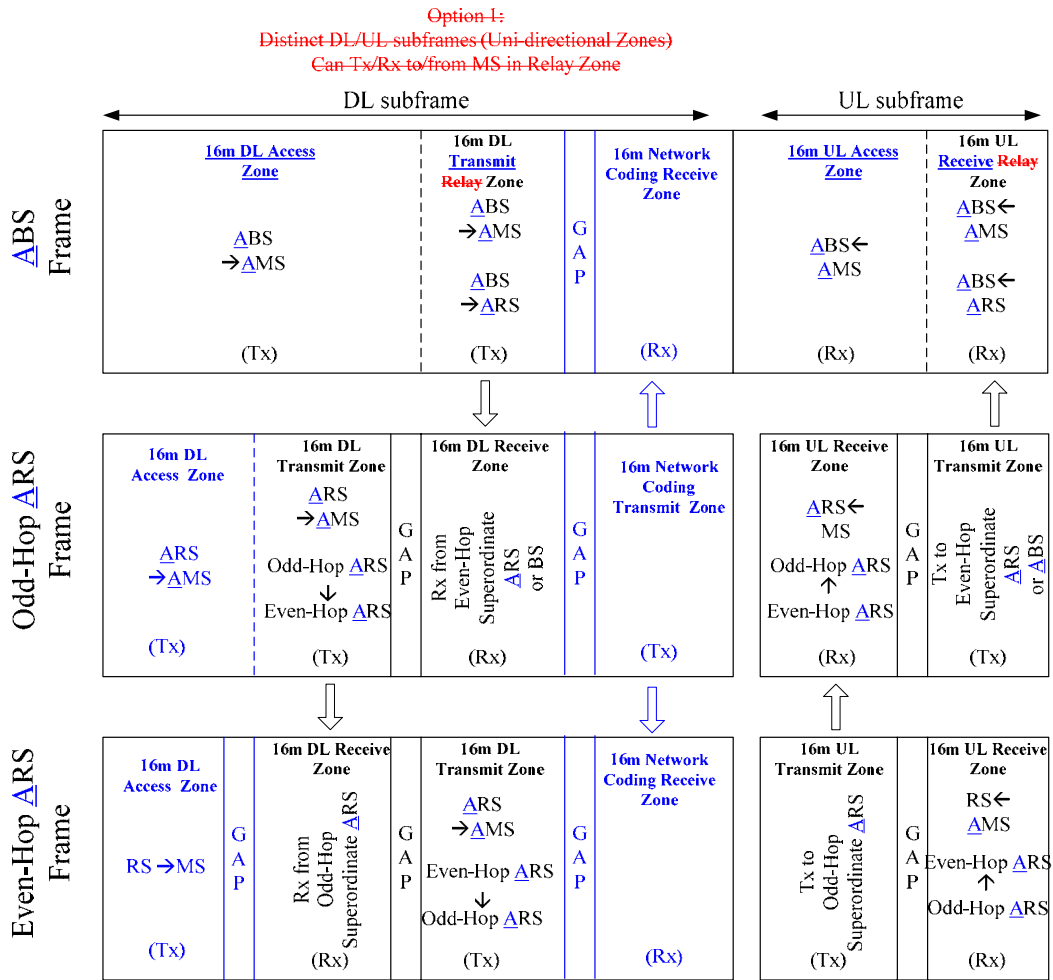
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Text Proposal

[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]



[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 Mzone of the DL of the ABS frame or ARS frame, where a ABS or an ARS can transmit to the AMSs. 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 Mzone of the DL of the ABS frame, where a ABS can transmit to the ARSs and the AMSs.~~
- UL Access Zone: An integer multiple of subframes located in the Mzone of the UL of the ABS frame, where an ABS can receive from the AMSs.
- ~~UL Relay Zone: An integer multiple of subframes located in the Mzone of the UL of the ABS frame, where an ABS can receive from the ARSs and the AMSs.~~
- DL Transmit Zone: An integer multiple of subframes located in the Mzone of the DL of the ABS frame or 16m ARS frame, where an ABS or ARS can transmit to subordinate ARSs and the AMSs.
- DL Receive Zone: An integer multiple of subframes located in the Mzone of the DL of the ARS frame, where an ARS can receive from its superordinate station.

- UL Transmit Zone: An integer multiple of subframes located in the Mzone of the UL of the ARS frame, where a ARS can transmit to its superordinate station.
- UL Receive Zone: An integer multiple of subframes located in the Mzone of the UL of the ABS frame or ARS frame, where a ABS or ARS can receive from its subordinate ARSs and the AMSs.
- Network Coding Transmit Zone: An integer multiple of subframes located in the DL of the frame of the Odd Hop ARS which is directly attached to the ABS, where an Odd Hop ARS can transmit network coded transmissions to the ABS and Even Hop ARS. Transmissions to the AMS in this zone are FFS.
- Network Coding Receive Zone: An integer multiple of subframes located in the DL of the ABS or Even Hop ARS frame, where an ABS or Even Hop ARS can receive network coded transmissions from the Odd Hop ARS.

If the ABS supports network coding, the presence of the aforementioned zones is determined by the ABS depending on the number of hops and the ARS capabilities. The Network Coding Transmit Zone may be present in a ARS frame if the ARS supports network coding. If the Network Coding Transmit Zone is present, it appears only in the frame of a ARS which is directly attached to the ABS. The Network Coding Receive Zone may be present only in the frames of the ABS and the even hop ARS that is two hops away from the ABS, if the ARS and the ABS support network coding.

[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]