IEEE P802.11
Wireless LANs

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| Proposed Draft Text for MLO Multi-Link Channel Access: Capability Signaling |
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Abstract

This submission proposes draft text for MLO Multi-Link Channel Access: Capability Signaling based on the following portions of the SFD:

Revisions:

* Rev 0: Initial version of the document.

The common info part of the basic ML element transmitted by a non-AP MLD in a (Re)Association Request frame shall include a field that indicates the maximum number of affiliated STAs in the non-AP MLD that support simultaneous exchange of Data frames (n).

* A field value that corresponds to n = 1 indicates that the non-AP MLD is a single radio MLD.
* A field value that corresponds to n = 2 or more indicates that the non-AP MLD is a multi-radio MLD.

[Motion 146, #SP340, [30] and [257]]

The common part of the basic ML element transmitted by an MLD contains an EMLSR Mode subfield and an EMLMR Support subfield.

[Motion 146, #SP341, [30] and [257]]

***Editing instructions formatted like this are intended to be copied into the TGbe Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGbe Editor: Editing instructions preceded by “TGbe Editor” are instructions to the TGbe editor to modify existing material in the TGbe draft. As a result of adopting the changes, the TGbe editor will execute the instructions rather than copy them to the TGbe Draft.***

***TGbe editor: Please change the subclauses below follows:***

**35.3.13.4 Capability signaling**

An MLD can indicate capability to support exchanging frames simultaneously by affiliated STAs on a set of links to another MLD in Basic variant Multi-Link element. When a STA affiliated with a non-AP MLD sends a (Re)Association Request frame, the Number of Radios subfield in the common info field of the Basic variant Multi-Link element indicates the non-AP MLD is a multi-radio MLD or single radio MLD. The value of Number of Radios subfield equals to the number of radios of the non-AP MLD minus 1. The Number of Radios subfield is set to 0 to indicate that the non-AP MLD is a single radio MLD, and is set to 1 or more to indicate that the non-AP MLD is a multi-radio MLD. A multi-radio MLD operating on multiple links can announce whether it supports transmission on one link concurrent with reception on the other link for each pair of links, in which case the pair of link is STR or NSTR. The two links of each link pair are on different channels.

NOTE—If an MLD supports transmission on link 1 concurrent with reception on link 2, but cannot support transmission on link 2 concurrent with reception on link 1, this pair of links is NSTR.

The ability of a non-AP MLD to perform STR on a pair of setup links may change after multi-link setup. The non-AP MLD may use TBD signaling on any enabled link to inform the AP MLD about the ability change to perform STR.

The limitation of updating frequency of the ability to perform STR as well as the switching delay is TBD.

***TGbe editor: Please change the subclauses below follows:***

**35.3.14 Enhanced multi-link single radio operation**

A non-AP MLD may operate in the EMLSR mode on the enabled links between the non-AP MLD and its associated AP MLD.

***Editor’s Note: Per the authors of 20/1291r12, the name of the EMLSR mode is TBD.***

An MLD with dot11EHTEMLSROptionImplemented equal to true shall set the EMLSR mode subfield of the Common Info field of the Basic variant Multi-Link element to 1; otherwise, the MLD shall set the EMLSR mode subfield to 0.

**35.3.15 Enhanced multi-link multi-radio operation**

A non-AP MLD may operate in the EMLMR mode on a specified set of the enabled links between thenon-AP MLD and its associated AP MLD. The specified set of the enabled links in which the EMLMR mode is applied is called EMLMR links.

***Editor’s Note: Per the authors of 20/1440r7, the name of the EMLMR mode is TBD.***

An MLD with dot11EHTEMLMROptionImplemented equal to true shall set the EMLMR Support subfield of the Common Info field of the Basic variant Multi-Link element, which indicates MLD level capabilities, to 1; otherwise, the MLD shall set the EMLMR Support subfield to 0.

**Straw Poll: Do you support to incorporate the proposed draft text in document 11-21/xxxxr0 to the next versioin of TGbe Draft?**

**Result: Yes/No/Abstain**