

# Comment resolution for EPON multicast LLID



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#### Addition of multicast LLID

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Comments #234, #235 & #236 add multicast LLID rules to EPON. This was proposed and discussed previously, but the comments do not make sufficient changes to match the proposal.

## Specific issues

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Grandfathering of existing equipment - The new feature must be optional to allow currently compliant equipment to stay compliant

The multicast LLID use must be specified as downstream only and precluded from the registration process

The filtering descriptions must be unambiguous

The use of LLID vs logical\_link\_id must be consistent

The PICS must be updated to reflect the new feature

## Change #235 & #236 resolution

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Following the paragraph that begins with "If the device is an ONU ...," add the following sentence as a third bullet item:

"f) If the device supports the multicast LLID feature, the received mode bit is 0 and the received logical\_link\_id value matches an assigned multicast\_link\_id, then the comparison is considered a match."

## Change variable definitions for LLID

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## For subclause 65.1.3.1 - change the definition for logical\_link\_id as follows:

" This variable shall be set to the broadcast value of 0x7FFF for the unregistered ONU MAC.

Enabled OLT MACs may use any value for this variable. If the optional multicast LLID feature is supported, the OLT may use a multicast\_link\_id along with the mode bit set to 0.

Registered ONU MACs may use any value other than 0x7FFF or a multicast\_link\_id for this variable."

## Change variable definitions for LLID

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## For subclause 76.2.6.1.1 - change the definition for logical\_link\_id as follows:

" This variable shall be set to the broadcast value of 0x7FFF for the unregistered ONU MAC.

Enabled OLT MACs may use any value for this variable. If the optional multicast LLID feature is supported, the OLT may use a multicast\_link\_id along with the mode bit set to 0.

Registered ONU MACs may use any value other than the reserved values listed in Figure 76–4 or a multicast\_link\_id for this variable."

#### Add variable definitions for mLLID

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For subclause 65.1.3.1 – add the definition for multicast\_link\_id as follows:

"multicast\_link\_id

Value: 15 bits

Enabled OLT MACs that support the optional multicast LLID feature may use any value for this variable. This variable is used, along with a mode bit reset to 0, to derive the multicast LLID.

#### Add PICS for mLLID

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#### Table 65.4.4.2 add:

FS4	multicast_LLID	65.1.3.1	Supports multicast LLID,	0	Yes []
	support		multicast_link_id variable		No [ ]

#### Table 65.4.4.3 add:

PM5a	multicast_LLID	65.1.3.2	If multicast LLID matches	*FS4	Yes []
	matching		accept the packet	: <b>M</b>	No [ ]

#### Add PICS for mLLID

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#### Table 76.5.4.2 add:

FS	4 multicas	st_LLID	76.2.6.1.1	Supports multicast LLID,	0	Yes [ ]	
	support			multicast_link_id variable		No [ ]	

#### Table 76.5.4.3 add:

PM5a	multicast_LLID	76.2.6.1.3.2	If multicast LLID matches	*FS4	Yes []
	matching		accept the packet	:M	No [ ]

#### Questions...

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### Feel free to email questions <a href="mailto:hbarrass@cisco.com">hbarrass@cisco.com</a>

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