

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

CI **FM** SC **FM** P7 L13 # 106
 Law, David HPE
 Comment Type **E** Comment Status **X**
 Please change 'IEEE P802.3.2/802.3cf' to read 'IEEE P802.3.2 (IEEE 802.3cf)' on line 13 and 14.
 SuggestedRemedy
 See comment.
 Proposed Response Response Status **O**

CI **FM** SC **FM** P7 L16 # 110
 Law, David HPE
 Comment Type **E** Comment Status **X**
 Please add the list of IEEE 802.3 working group at the beginning of the IEEE P802.3.2 (IEEE 802.3cf) working group ballot.
 SuggestedRemedy
 See comment.
 Proposed Response Response Status **O**

CI **FM** SC **FM** P9 L18 # 107
 Law, David HPE
 Comment Type **E** Comment Status **X**
 Jonathan Goldberg is now the IEEE 802.3 IEEE Staff Liaison.
 SuggestedRemedy
 Please change 'Lisa Perry' to read 'Jonathan Goldberg'.
 Proposed Response Response Status **O**

CI **FM** SC **FM** P10 L # 156
 Anslow, Pete Ciena
 Comment Type **E** Comment Status **X**
 Comment #226 against D2.0 was ACCEPT with suggested remedy:
 "Make the copyright year 2018 in all sections of the draft."
 However, the copyright year in the TOC is still 2013.
 Also, line numbers are missing from the TOC
 SuggestedRemedy
 Make the copyright year 2018 in the TOC and add line numbers to the TOC.
 Proposed Response Response Status **O**

CI **00** SC **0** P L # 158
 Anslow, Pete Ciena
 Comment Type **E** Comment Status **X**
 Comment #229 against D2.0 was ACCEPT with suggested remedy:
 "Remove the blank pages between clauses"
 However, the blank pages are still there at the end of sections 1, 2, 3, 4, and 6.
 SuggestedRemedy
 Remove the blank pages between clauses
 Proposed Response Response Status **O**

CI **00** SC **0** P L # 157
 Anslow, Pete Ciena
 Comment Type **E** Comment Status **X**
 The footer in all sections of the draft except the frontmatter do not comply with the requirements of 9.1.2 of the IEEE style manual.
 SuggestedRemedy
 Update the footer in all sections of the draft to contain:
 "Copyright © 2018 IEEE. All rights reserved.
 This is an unapproved IEEE Standards Draft, subject to change."
 with centred alignment.
 Proposed Response Response Status **O**

Cl 00 SC 0 P10 L # 162
 Marris, Arthur Cadence Design Syste

Comment Type E Comment Status X

The subclause headings are not in a consistent order.

Why are 5.1 and 5.3.2 both named the same "YANG module structure"

Why do some sections have a section for security considerations and others do not?

Shouldn't section 8.4 come before section 8.3?

SuggestedRemedy

Rename subclauses 5.3.2, 6.5.2, 7.3.2 and 8.5.2

Make section 8.4 for security come before section 8.3 for the object mapping

Remove "7.2.1 EPON architecture highlights" and promote the subclauses below 7.2.1.

Also consider whether the contents of 7.2.1 are really relevant to this standard.

Proposed Response Response Status O

Cl 00 SC 0 P25 L81 # 183
 Seda, Marta Calix

Comment Type E Comment Status X

mpcp-logical-link-admin-state typedef description contains a mixture of state and config data. If something is not persistent (e.g., reset, registration action, power down), it should be represented as a netconf action (one time action). As currently defined, it is unclear how the actions of registering/de-registering occur (e.g., deregistered enum value has a read and set description - if I issue mpcp-logical-link-admin-state with value of deregistered, what happens? Do I set it continually to be deregistering?). It seems it would be cleaner to make the mpcp-logical-link-admin-state as a read-only attribute that represents the logical link state and represent reset, power-down, registering set actions as netconf actions.

SuggestedRemedy

updated comment (4/25/2018):
 The attached seda_3cf_02_0518_ieee802-ethernet-pon.yang line 159-199, 450 shows a proposal where actions are used for power/reset/register and the mpcp-logical-link-admin-state is only used to retrieve the status.

Proposed Response Response Status O

Cl 00 SC 0 P77 L33 # 172
 Seda, Marta Calix

Comment Type E Comment Status X

The epon YANG code and tree shows that you have put the fec-capability under the fec-supported YANG feature.
 '+--ro fec-capability? fec-capability {fec-supported}?

Page 85 defines the fec-supported yang feature to have the values unknown, supported and unsupported.

SuggestedRemedy

The fec-capability feature is defined as:

```
feature
fec-supported {
description
"This object indicates the support of operation of the optional
FEC sublayer of the 1000BASE-PX PHY specified in IEEE Std 802.3,
65.2. The value of 'unknown' is reported in the initialization,
for non FEC support state or type not yet known. The value of
'not supported' is reported when the sublayer is not supported.
The value of 'supported' is reported when the sublayer is
supported. This object is applicable for an OLT, with the
same value for all logical links, and for an ONU.
All objects in the fec/statistics container have a zero value
when the interface is not supporting FEC.";
```

YANG feature are either there or not (they don't assume integer values as described). I would recommend cleaning this up and instead using the below definition.

```
feature fec-supported {
description "FEC is supported }
```

A YANG user may want to know whether the device has FEC support or not. The fec-capability leaf/attribute should therefore not be under YANG feature fec-supported). (remove the if-feature on page 117 line 31/32).

Updated comment (4/24/18)

For your convenience, this issue has been fixed in the attached seda_3cf_02_0518_ieee802-ethernet-pon.yang (line 2072).

Proposed Response Response Status O

Cl 00 SC 0 P98 L29 # 174
 Seda, Marta Calix

Comment Type E Comment Status X

I could not find a corresponding 802.3.1 MIB object that matches ompe-pkts-in description.

SuggestedRemedy

What is ompe-pkts-in equivalent to in the 802.3.1 MIB model? It seems to aggregate ONUPONcastLLID and OLTPONcastLLID (however the present ieee snmp MIBs don't define it this way).

Proposed Response Response Status O

Cl 00 SC 0 P112 L3 # 177
 Seda, Marta Calix

Comment Type E Comment Status X

mcpq-queue-threshold-count-max is defined as a RW attribute. 802.3.1 dot3ExtPkgObjectReportMaximumNumThreshold is defined as a Read-only attribute. Note that the description of the attribute is also read.

SuggestedRemedy

Please fix by adding a config false statement in the YANG file.

updated comment (4/24/18):
 the attached seda_3cf_02_0518_ieee802-ethernet-pon.yang line 838 fixes this.

Proposed Response Response Status O

Cl 1 SC 1 P13 L4 # 108
 Law, David HPE

Comment Type TR Comment Status X

I have a number of concerns in relation to the first paragraph of the overview text, including its alignment with the definitions found in IEEE Std 802.3-2015 subclause 1.4 'Definitions':

[1] Is it correct that these YANG models are for 'Ethernet links', instead aren't they for the end stations. A point to point full duplex 'Ethernet link' doesn't just have a YANG model, it will have two, one in each of the two end stations on the link. Similarly for a shared media 'Ethernet link' where instead of a model it will have as many YANG models as there are end stations.

[2] CSMA/CD can operate over both 'shared media' (a 'mixing segment', see IEEE Std 802.3-2015 subclause 1.4.277) such as coax, and 'point-to-point' media (a 'link segment', see IEEE Std 802.3-2015 subclause 1.4.255) such as twisted pair. Based on this the statement that 'This document defines YANG modules for shared media Ethernet links using CSMA/CD, dedicated Ethernet links in point-to-point ...' precludes YANG models for CSMA/CD operation over link segments which I don't think is correct. I believe a YANG model is provided for CSMA/CD operation regardless of the segment type.

[3] One of the potential components of a 'dedicated Ethernet point-to-point link' is a Midspan PSE. Since subclause 6.2 of YANG module of PSEs states 'The module augments the ieee802-ethernet-interface YANG module with attributes for PoE function' it appears that the PSE YANG module can only be associated with an 'Ethernet interface'. Since a Midspan PSE doesn't have an 'Ethernet interface' it appears to me the PSE YANG module is only applicable to Endpoint PSEs. Similarly one of the potential components of a 'shared media Ethernet link' is a repeater, however this is no YANG module provided for Repeaters.

Based on all the above it seems that the draft provides a YANG model for an Ethernet end station ('data terminal equipment (DTE)', see IEEE Std 802.3-2015 subclause 1.4.173).

SuggestedRemedy

Suggest that the first paragraph be changed to read 'This standard defines YANG modules for Ethernet data terminal equipment (DTE) specified in IEEE Std 802.3. This includes DTEs operation on mixing segments, using either CSMA/CD or multipoint control protocol (MPCP), operation on link segments, and operation as Power Sourcing Equipment (PSE).'

Proposed Response Response Status O

Cl 1 SC 1 P13 L9 # 109
 Law, David HPE

Comment Type E Comment Status X

I would suggest that an edited version the second paragraph of Clause 1 'Overview' be moved to be the 'Introduction' text in the frontmatter which hasn't been provided yet.

SuggestedRemedy

{1] Delete the second paragraph of Clause 1 'Overview'.

[2] Add the following new 'Introduction' text to the frontmatter immediately before the Table of Contents.

Introduction

<BOX>

This introduction is not part of IEEE Std 802.3.2-20XX, IEEE Draft Standard for Ethernet YANG Data Model Definitions.

</BOX>

This initial version of this standard is based on the managed object definitions provided in IEEE Std 802.3TM-201X. IEEE Std 802.3 will continue to evolve. New Ethernet capabilities are anticipated to be added within the next few years, as amendments to IEEE Std 802.3. This may results in amendments or revision to IEEE Std 802.3.2.

Proposed Response Response Status O

Cl 1 SC 1.2 P13 L # 184
 Seda, Marta Calix

Comment Type E Comment Status X

This section describes the 802.3/draft folder however does not list out the multiple files you have in that folder nor its purpose. Also if you go up two levels (in github), you have a draft folder containing yang types.

SuggestedRemedy

This document would benefit with descriptions around the structure that you have (or intending to have). For example, add a paragraph that states:

The following YANG modules are contained in that folder:

. ieee802-ethernet-pon.yang (IEEE Std 802.3, Clause 64/77 Ethernet PON YANG model)
 .. Etc

The following IETF modules are used: // It is useful to understand what other SDO modules you are augmenting to.

- ietf-interfaces, etc

Proposed Response Response Status O

Cl 1 SC 1.2 P13 L27 # 111
 Law, David HPE

Comment Type ER Comment Status X

Subclause 10.4.3 'Purpose' of the IEEE-SA Standards Style Manual states that 'For new and revision projects, the purpose (if included) of the draft shall be within the parameters of the purpose given on the PAR, as determined by the balloting group voting on the draft.'

Since the IEEE P802.3.2 PAR item 5.4 'purpose' reads 'The purpose of the standard is to define YANG models for IEEE Std 802.3 and publish these models in a machine-readable format.' suggest that all the other text that has been added about where the machine-readable files can be found and what to do in the case of discrepancies between the machine-readable YANG modules and pdf should be moved to a separate subclause.

SuggestedRemedy

Move all the subclause 1.2 'Purpose' text, with the exception of the first paragraph which match the purpose text in the PAR, to a new subclause.

Proposed Response Response Status O

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

Cl 1 SC 1.4 P L # 186
 Seda, Marta Calix
 Comment Type E Comment Status X
 NETCONF over TLS is not mentioned in the first paragraph (RFC 5539).
 SuggestedRemedy
 It is true that IETF mandates NETCONF over SSH. Some mention of NETCONF over TLS should be added to this paragraph (you could take IETF's position that it is optional).
 Proposed Response Response Status O

Cl 3 SC 3 P18 L7 # 101
 Slavick, Jeff Broadcom Inc
 Comment Type E Comment Status X
 Definitions don't begin with what you're defining that's already been stated.
 SuggestedRemedy
 Change 3.1 data model: To be "3.1 data model: Description of how data is represented and accessed."
 Proposed Response Response Status O

Cl 1 SC 1.4 P13 L55 # 91
 Zhuang, Yan Huawei Technologies
 Comment Type ER Comment Status X
 "The YANG module defined in this standard is designed to be accessed..." There are 5 modules but one model defined...
 SuggestedRemedy
 change it to "The YANG modules defined in this standard are..." or "The YANG model defined in this standard is..."
 Proposed Response Response Status O

Cl 3 SC 3 P18 L10 # 102
 Slavick, Jeff Broadcom Inc
 Comment Type E Comment Status X
 Definitions don't begin with what you're defining that's already been stated.
 SuggestedRemedy
 Remove "A YANG module defines a" from the definition text for YANG module.
 Proposed Response Response Status O

Cl 2 SC 2 P16 L49 # 92
 Zhuang, Yan Huawei Technologies
 Comment Type ER Comment Status X
 IETF 7223bis which is A YANG Data Model for Interface Management has been published as RFC 8343.
 SuggestedRemedy
 replace all RFC 7223 to RFC 8343.
 p16,line49
 p28,line36
 p33,line12
 p33,line31
 p34,line28
 p34,line47
 p36,line23

 Proposed Response Response Status O

Cl 5 SC 5.2 P23 L9 # 103
 Slavick, Jeff Broadcom Inc
 Comment Type TR Comment Status X
 In Table 501 aAutoNegAdminControl is really acAutoNegAdminControl and has a sub-clause that can be referenced.
 SuggestedRemedy
 Change aAutoNegAdminControl to acAutoNegAdminControl and the cross reference to 30.6.1.2.2 in Table 5-1
 Proposed Response Response Status O

Cl 5 SC 5.2 P23 L23 # 104
 Slavick, Jeff Broadcom Inc

Comment Type **TR** Comment Status **X**

Per comment D2.0 comment #207 all MIB/RFC fields were suppose to be moved into Table 5-2. However, dot3HCInPFCFrames and dot3HCOuPFCFrames are still in Table 5-1.

SuggestedRemedy

Move these fields into Table 5-2.

Proposed Response Response Status

Cl 5 SC 5.3.2.1 P28 L36 # 42
 Trowbridge, Steve Nokia

Comment Type **E** Comment Status **X**

RFC 7223 is the former RFC specifying the interface model. It is the none-NMDA version. Recently IETF approved an update which is NMDA compliant: RFC 8343. As IEEE follows the NMDA approach and as the updated interface model reached RFC status it would be better to refer to RFC 8343.

SuggestedRemedy

Replace:
 "IETF RFC 7223"
 by:
 "IETF RFC 8343"
 In analogy: change this reference throughout the full document.

Proposed Response Response Status

Cl 5 SC 5.3.2.1 P28 L62 # 43
 Trowbridge, Steve Nokia

Comment Type **ER** Comment Status **X**

There is a difference between the content in pdf and in Git: the git version also contains a reference.
 This reference statement in Git uses tab characters which does not make it well aligned
 The same problem appears for the next lines, i.e. the typedef for eth-if-speed-type.
 (line 40 to 44 in git).

SuggestedRemedy

Assure the content of the pdf and the git is identical. Probably add the reference statement in the pdf.
 Correct the indentation in the YANG module (Git).

Proposed Response Response Status

Cl 5 SC 5.3.2.1 P28 L63 # 126
 Remein, Duane Huawei

Comment Type **TR** Comment Status **X**

The draft seems to be missing several lines from the file on Github.

SuggestedRemedy

Restore the following lines in the draft which immediately follow the description. Note that the Github file seems to contain tab characters which should be replaced with spaces as is done below.

reference "IEEE Std 802.3-2018, unless dated explicitly";

```
typedef eth-if-speed-type {
  type decimal64 {
    fraction-digits 3;
  }
  units "Gb/s";
  description
    "Used to represent the configured, negotiated, or actual speed
    of an Ethernet interface in Gigabits per second (Gb/s),
    accurate to 3 decimal places (i.e., accurate to 1 Mb/s)";
}
```

Proposed Response Response Status

Cl 5 SC 5.3.2.1 P29 L35 # 44
 Trowbridge, Steve Nokia

Comment Type **E** Comment Status **X**

This is a continuation of D2.0 comment 339 in general and comment 340 in specific. The data node "duplex" is read-write. Depending on the datastore this data node can contain 'the configured, negotiated, or actual' value. Just as for the data node "speed". This is not well reflected in the description of the typedef 'duplex-type', it is better reflected in the description of the typedef 'eth-if-speed-type'.

SuggestedRemedy

Replace:
 "The current duplex mode of operation of an Ethernet interface."
 by:
 "Used to represent the configured, negotiated, or actual duplex mode of an Ethernet interface."

Proposed Response Response Status **O**

Cl 5 SC 5.3.2.1 P30 L21 # 45
 Trowbridge, Steve Nokia

Comment Type **E** Comment Status **X**

This is a continuation of D2.0 comment 339 in general and comment 342 in specific. The typedef "pause-fc-direction-type" mentions configuration and operational state. The support of pause frames can also be negotiated. It might be worth to accentuate this by modifying the description similar to the description of the typedef 'eth-if-speed-type'.

SuggestedRemedy

Replace:
 "Enumerates the possible PAUSE frame based flow control settings that can be used in explicit configuration, or when reporting the operational state"
 by:
 "Used to represent the configured, negotiated, or actual PAUSE frame based flow control setting."

Proposed Response Response Status **O**

Cl 5 SC 5.3.2.1 P29 L48 # 127
 Remein, Duane Huawei

Comment Type **TR** Comment Status **X**

There are several discrepancies between the module in the draft and the module on Github. In the draft there are no long lines in the description whereas in Github there are several.

SuggestedRemedy

Correct the long lines in the Github.
 fixed in remain_3cf_4_0518

Proposed Response Response Status **O**

Cl 5 SC 5.3.2.1 P30 L58 # 39
 Boyd, Joey ADTRAN

Comment Type **T** Comment Status **X**

Since you can have Ethernet interfaces which do not support auto-negotiation, this container should have a presence statement.

SuggestedRemedy

Add the following:

 presence
 "The presence of this container indicates that auto-negotiation is supported on this Ethernet interface.";

Proposed Response Response Status **O**

Cl 5 SC 5.3.2.1 P30 L63 # 46
 Trowbridge, Steve Nokia

Comment Type E Comment Status X

This is a continuation of D2.0 comment 339, i.e. assure all read-write objects have a good definition.
 One possible solution is to put all the leaf specific information into the description of the corresponding leaf (and this was the underlying assumption for the various D2.0 comments). I hereby assume that the IEEE preference is to have also some description at container level. Ok, but then the description is modified accordingly.

SuggestedRemedy

Replace:
 "This leaf allows the advertised duplex value in the negotiation to be restricted.
 If not specified then the default behavior is to negotiate all available values for the particular type of Ethernet PHY associated with the interface."
 by:
 "This container contains a data node that allows the advertised duplex value in the negotiation to be restricted.
 If not specified then the default behavior for the duplex data node is to negotiate all available values for the particular type of Ethernet PHY associated with the interface."

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P31 L1 # 128
 Remein, Duane Huawei

Comment Type TR Comment Status X

There is a discrepancy between the module in the draft and the module on Github. In the draft "behaviour" does not appear. If I download the module from Github the misspelling appears in the description for the auto-negotiation container. It seems that the module text shown on pg 31 line 1 in the draft misrepresents the Github module.

SuggestedRemedy

Correct the misspelling in the Github,
 This fix is included in remain_3cf_4_0518.

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P31 L11 # 47
 Trowbridge, Steve Nokia

Comment Type E Comment Status X

This is a continuation of D2.0 comment 339 in general and comment 342 in specific.
 For a management interface one expects to define that via configuration data one instructs how the system shall behave, and via operational data the system reports back. The local configuration is not affected by the peer device capabilities/configuration.

SuggestedRemedy

Remove the last sentence, i.e. replace:
 "If auto-negotiation is enabled, and PAUSE frame based flow control has not been explicitly configured, then the default PAUSE frame based flow control capabilities that are negotiated allows for bi-directional or egress-only PAUSE frame based flow control to be negotiated (depending on the peer device capabilities/configuration)."
 By:
 "If auto-negotiation is enabled, and PAUSE frame based flow control has not been explicitly configured, then the default PAUSE frame based flow control capabilities that are negotiated allows for bi-directional or egress-only PAUSE frame based flow control."

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P31 L35 # 48
 Trowbridge, Steve Nokia

Comment Type E Comment Status X

This is a continuation of D2.0 comment 339 in general.
 Assigning a default automatically means the leaf will always have a value, also when the interface does not support auto-negotiation. Add some description for it.

SuggestedRemedy

Add at the end of the to decription
 "For interface types that do not support auto-negotiation then the related configuration data is ignored.";

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P31 L38 # 49
 Trowbridge, Steve Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 339 in general.
 The leaf "negotiation-status" has 4 values. Shall the object exist on interfaces that do not support auto-negotiation? If yes, which value?

SuggestedRemedy

Proposal: yes the object exists for all Ethernet interfaces. Therefore introduce an extra value:
 enum no-negotiation {
 description
 "No auto-negotiation is executed. This can be because auto-negotiation is not supported on that type of interface, or because auto-negotiation is not enabled."
 [and restrict the use of value 'unknown' for the situation auto-negotiation is applicable but the status is ... unknown.

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P32 L17 # 50
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is a continuation of D2.0 comment 339 in general and comment 340 in specific.
 Leaf duplex: the statement "The default value is implementation-dependent." is in conflict with specifying a default in the type definition, see P29 line 32. Note that not specifying a default value creates a 3rd situation, i.e. the leaf has no value.
 At minimum the 2 statements shall be made consistent. Hereby I assume the approach is as in the description of the leaf duplex and I propose to improve it.

SuggestedRemedy

1. Remove p29 line 32, i.e. remove 'default full'.
 2. P32 line 18: add some more description, i.e.
 Replace:
 "The default value is implementation-dependent"
 by:
 "The leaf is optional for configuration and if not configured then the applied value is implementation-dependent. The operational datastore shall always contain the actually applied value".

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P32 L38 # 51
 Trowbridge, Steve Nokia

Comment Type E Comment Status X

This is a continuation of D2.0 comment 339 in general and comment 341 in specific.
 The description of the leaf "speed" can be improved.

SuggestedRemedy

Replace:
 "The default value is implementation-dependent"
 by:
 "The leaf is optional for configuration and if not configured then the applied value is implementation-dependent. The operational datastore shall always contain the actually applied value".

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P32 L47 # 52
 Trowbridge, Steve Nokia

Comment Type E Comment Status X

This is a continuation of D2.0 comment 339 in general.
 The description for the leaf "direction" can be improved.

SuggestedRemedy

Replace:
 "Indicates which direction PAUSE frame based flow control is enabled in, or whether it is disabled. The default flow-control settings are vendor specific. If auto-negotiation is enabled, then PAUSE based flow-control is negotiated by default.
 The default value is implementation-dependent."
 By:
 "If auto-negotiation is enabled, then PAUSE based flow-control is negotiated by default. The configuration of this leaf indicates for which direction PAUSE frame based flow control is negotiated, or whether it is disabled. If not configured then the applied value is implementation-dependent. The operational datastore shall always contain the actually applied value".

Proposed Response Response Status O

CI 5 SC 5.3.2.1 P34 L2 # 53
 Trowbridge, Steve Nokia
 Comment Type E Comment Status X
 This is a continuation of D2.0 comment 339 in general and comment 343 in specific.
 leaf pfc/enable: improve the description "The default value is implementation-dependent"
 SuggestedRemedy
 Replace:
 "The default value is implementation-dependent"
 by:
 "The leaf is optional for configuration and if not configured then the applied value is
 implementation-dependent. The operational datastore shall always contain the actually
 applied value".
 Proposed Response Response Status O

CI 5 SC 5.3.2.1 P35 L11 # 54
 Trowbridge, Steve Nokia
 Comment Type T Comment Status X
 This is a continuation of D2.0 comment 339 in general.
 leaf force-flow-control: improve the description "The default value is implementation-
 dependent"
 simultaneously the leaf has a default value, see p 34 line 56. This is a contradiction.
 Solution: either remove the default statement (and improve the description), or remove the
 line from the description. Here the first is assumed.
 SuggestedRemedy
 1. remove the default statement from p34 line 56.
 2. Replace:
 "The default value is implementation-dependent"
 by:
 "The leaf is optional for configuration and if not configured then the applied value is
 implementation-dependent. The operational datastore shall always contain the actually
 applied value".
 Proposed Response Response Status O

CI 5 SC 5.3.2.1 P35 L62 # 129
 Remein, Duane Huawei
 Comment Type E Comment Status X
 "capabilities" misspelled twice. Also on pf 87 line 61
 SuggestedRemedy
 Change to "capabilities" (Included in remain_3cf_3_0518 for pg 87 remain_3cf_4_0518 for
 pg31).
 Proposed Response Response Status O

CI 5 SC 5.3.2.1 P36 L2 # 55
 Trowbridge, Steve Nokia
 Comment Type T Comment Status X
 leaf "auto-negotiation" is part of a config false container but still has a default value. This is
 an inconsistency. Default values are not relevant in config false leaves.
 SuggestedRemedy
 Remove the "default false" statement.
 Proposed Response Response Status O

CI 5 SC 5.3.2.1 P36 L45 # 56
 Trowbridge, Steve Nokia
 Comment Type E Comment Status X
 This is a continuation of D2.0 comment 338.
 The description of the container includes "A frame that is counted by an instance of this
 object is also counted by the corresponding instance of 'in-errors' leaf defined in the ietf-
 interfaces YANG module (IETF RFC 7223)."
 First: this description is not part of an object so it is not clear what it refers to.
 2nd: it is in contradiction with the statement in section 5.1 paragraph 2 that states that this
 IETF specified counter is not supported.
 SuggestedRemedy
 Remove the paragraph:
 "A frame that is counted by an instance of this object is also counted by the corresponding
 instance of 'in-errors' leaf defined in the ietf-interfaces YANG module (IETF RFC 7223)."
 Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P36 L58 # 40
Boyd, Joey ADTRAN

Comment Type E Comment Status X

The context of all of these counts is the Ethernet frame. The parent container is 'frames', the units are frames and the descriptions refer to frames. In light of that, I believe the leaf names should reflect 'frames' instead of 'pkts'. It is understood that the IETF use 'pkts' and using 'pkts' provide some consistency but this model is dealing exclusively with frames.

SuggestedRemedy

Change all leaf names to use 'frames' instead of 'pkts'.

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P42 L14 # 130
Remein, Duane Huawei

Comment Type E Comment Status X

In most cases where the word description appears in the description text it is surrounded by single quotes, not so here.

SuggestedRemedy

Surround the word with single quotes.
This fix is included in remain_3cf_4_0518

Proposed Response Response Status O

Cl 5 SC 5.3.2.1 P43 L19 # 131
Remein, Duane Huawei

Comment Type E Comment Status X

This sentence does not make sense:
"A count of occurrences of the transition from state LPI_DEASSERTED to state LPI_ASSERTED of the LPI transmit state diagram is the RS. ..."

SuggestedRemedy

Change to (observe indenting and line feeds):
"A count of occurrences of the transition from state LPI_DEASSERTED to state LPI_ASSERTED in the LPI transmit state diagram of the RS. ..."
This fix is NOT INCLUDED in remain_3cf_4_0518

Proposed Response Response Status O

Cl 5 SC 5.3.2.2 P46 L57 # 93
Zhuang, Yan Huawei Technologies

Comment Type T Comment Status X

missing statements request half-duplex interfaces derived from ethernetCsmacd.

SuggestedRemedy

add "derived-from-or-self(..if:type, 'ianaift:ethernetCsmacd') to "when" statements.
P46, Line 57:
when "derived-from-or-self(..if:type, 'ianaift:ethernetCsmacd') and eth-if:duplex = 'half'"
p47, Line 21:
when "derived-from-or-self(..if:type, 'ianaift:ethernetCsmacd') and ../eth-if:duplex = 'half'"
p47, line50:
when "derived-from-or-self(..if:type, 'ianaift:ethernetCsmacd') and ../eth-if:duplex = 'half'"

Proposed Response Response Status O

Cl 5 SC 5.3.2.3 P46 L64 # 94
Zhuang, Yan Huawei Technologies

Comment Type ER Comment Status X

change the wording "deprecated" in description.

SuggestedRemedy

change the description to:
"Augment with Ethernet interface configuration parameters for half duplex."

Proposed Response Response Status O

Cl 5 SC 5.3.2.4 P47 L56 # 95
Zhuang, Yan Huawei Technologies

Comment Type ER Comment Status X

incorrect description

SuggestedRemedy

change the description to statistics:
"Augment with statistics for half duplex Ethernet interface."

Proposed Response Response Status O

Cl 5 SC Table 5-1Table 5-2T P L # 191
 Seda, Marta Calix

Comment Type E Comment Status X

Use of more YANG friendly terms.

SuggestedRemedy

One table header is titled "corresponding ieee802-ethernet-interface YANG data nodes". Shouldn't the header be relabeled "Corresponding ieee802-ethernet-interface YANG module"? (swap the term data node with module).

The 2nd to last column has a header called Data Node. The column content contain leaf names. Would it be more accurate to relabel this header instead to "Leaf Name"?.

The last column has a header titled R/W. YANG supports the ability to declare something as config true/false. (the term R/W isn't used in YANG). I personally prefer keeping this column (it is short and to the point) instead of swapping the contents to YANG terms. Would it be possible to move this column to the left of the Reference column?

Proposed Response Response Status O

Cl 6 SC 6.5.2 P L # 167
 David Tremblay Hewlett Packard Enter

Comment Type E Comment Status X

Include reference to Clause 145, where applicable

SuggestedRemedy

add clause 145 reference for multi-pair PSE and any other applicable locations

Proposed Response Response Status O

Cl 6 SC 6.5.2 P56 L1 # 132
 Remein, Duane Huawei

Comment Type TR Comment Status X

There is a discrepancy between the module in the draft and the module on Github. In the draft "auto-negotiation" does not appear. If I download the module from Github the misspelling appears in the description for the negotiation-status leaf. It seems that the module text shown on pg 31 line 51 in the draft misrepresents the Github module.

SuggestedRemedy

Correct the misspelling in the Github

Proposed Response Response Status O

Cl 6 SC 6.5.2 P56 L15 # 133
 Remein, Duane Huawei

Comment Type E Comment Status X

Numerous editorial changes to descriptions including: Sentence capitalization, ending periods, and tab replacement with spaces. A few typo corrections included that are detailed in other comments.

SuggestedRemedy

See remein_3cf_1_0518 ieee802-ethernet-pse diff.docx

Proposed Response Response Status O

Cl 6 SC 6.5.2 P56 L37 # 96
 Zhuang, Yan Huawei Technologies

Comment Type TR Comment Status X

The prefix "yang" is not defined in ieee802-ethernet-pse module. Missing import of "ietf-yang-types"

SuggestedRemedy

```
add import statement for ietf-yang-types:
import ietf-yang-types {
  prefix yang;
  reference "IETF RFC 6991";
}
```

Proposed Response Response Status O

Cl 6 SC 6.5.2 P58 L10 # 159
 Anslow, Pete Ciena

Comment Type E Comment Status X

Comment #234 against D2.0 was ACCEPT with suggested remedy: "Change "30.15.1.3" to "30.15.1.1.3" [since 30.15.1.3 does not exist] However, this change has not been implemented.

SuggestedRemedy

Change "30.15.1.3" to "30.15.1.1.3"

Proposed Response Response Status O

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

Cl 6 SC 6.5.2 P59 L2 # 112
 Remein, Duane Huawei
 Comment Type T Comment Status X
 Is this description for the power class or the state?
 SuggestedRemedy
 Change:
 "initializing, true state not yet known only for PoDL PSE." To:
 "Initializing, true Power Class not yet known (only for PoDL PSE)."
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P60 L32 # 115
 Remein, Duane Huawei
 Comment Type TR Comment Status X
 What is "pethPsePortPowerPairsControl" I could not find another reference to this in the draft. This looks like a carryover from Cl 30 (See 30.12.2.1.8 aLldpXdot3LocPowerPairControlable)
 SuggestedRemedy
 Replace with correct reference (not sure what that is). Note the sentence should end in a period.
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P59 L48 # 113
 Remein, Duane Huawei
 Comment Type E Comment Status X
 "Augements"? Misspelled.
 SuggestedRemedy
 change to "Augments"
 (included in remein_3cf_1_0518)
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P60 L47 # 116
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Wording: "Describes the capability of controlling the power pairs functionality to switch pins for sourcing power."
 SuggestedRemedy
 Change to: "Describes the ability to control switching the power sourcing pins of the PSE."
 (may need to be on two lines)
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P60 L19 # 114
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Description can stand some wording improvements: "whether to enable the PSE function on the interface."
 SuggestedRemedy
 Change to:
 "When true enables the PSE function on the interface, when false disables the PSE function on the interface."
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P61 L25 # 117
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Wording: "This counter is incremented when the PSE state diagram enters the state POWER_DENIED";
 The SD doesn't enter states, the PSE does.
 SuggestedRemedy
 Change to:
 "This counter is incremented when the PSE enters the POWER_DENIED state."
 (may need to be on multiple lines).
 Proposed Response Response Status O

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

Cl 6 SC 6.5.2 P61 L36 # 118
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Wording: "This counter is incremented when the PSE state diagram enters the state SIGNATURE_INVALID."; The SD doesn't enter states, the PSE does.
 SuggestedRemedy
 Change to: "This counter is incremented when the PSE enters the SIGNATURE_INVALID state."; (may need to be on multiple lines).
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P61 L59 # 121
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Wording: "This counter is incremented when the PSE state diagram enters the state ERROR_DELAY_OVER."; The SD doesn't enter states, the PSE does.
 SuggestedRemedy
 Change to: "This counter is incremented when the PSE enters the ERROR_DELAY_OVER state."; (may need to be on multiple lines).
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P61 L36 # 119
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Wording: "This counter is incremented when the PSE state diagram enters the state ERROR_DELAY_SHORT, per IEEE Std 802.3, Figure 33-9."; The SD doesn't enter states, the PSE does.
 SuggestedRemedy
 Change to: "This counter is incremented when the PSE enters the ERROR_DELAY_SHORT state, per IEEE Std 802.3, Figure 33-9."; (may need to be on multiple lines).
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P62 L46 # 122
 Remein, Duane Huawei
 Comment Type TR Comment Status X
 Incorrect type "type uint64;" Description and Cl 30 indicate this is a signed number.
 SuggestedRemedy
 Change type to int64
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P61 L47 # 120
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Wording: "This counter is incremented when the PSE state diagram transitions directly from the state POWER_ON to the state IDLE due to tmpdo_timer_done being asserted"; The SD doesn't enter states, the PSE does.
 SuggestedRemedy
 Change to: "This counter is incremented when the PSE transitions directly from the POWER_ON state to the IDLE state due to tmpdo_timer_done being asserted"; (may need to be on multiple lines).
 Proposed Response Response Status O

Cl 6 SC 6.5.2 P62 L51 # 123
 Remein, Duane Huawei
 Comment Type T Comment Status X
 What is "aPSEActualPower"? It's clearly in the reference but it describes the accuracy of the YANG leaf actual-power. Shouldn't that be in the description instead?
 SuggestedRemedy
 Change: "An integer value indicating the accuracy associated with aPSEActualPower in +/- milliwatts."; To: "An integer value indicating the accuracy associated with actual-power in +/- milliwatts.";
 Proposed Response Response Status O

CI 6 SC 6.5.2 P63 L7 # 124
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Description can stand some wording improvements: "whether to enable the PSE function on the interface."
 SuggestedRemedy
 Change to:
 "When true enables the PSE function on the interface, when false disables the PSE function on the interface."
 Proposed Response Response Status O

CI 6 SC 6.5.2 P64 L38 # 134
 Remein, Duane Huawei
 Comment Type E Comment Status X
 We should be clear which port we are talking about: "power class of the port"
 SuggestedRemedy
 Change to "Power class of the PSE port."
 Proposed Response Response Status O

CI 6 SC 6.5.2 P64 L65 # 135
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Wording: "This counter is incremented when the PSE state diagram enters the state SIGNATURE_INVALID."
 The SD doesn't enter states, the PSE does.
 SuggestedRemedy
 Change to:
 "This counter is incremented when the PSE enters the SIGNATURE_INVALID state."
 (may need to be on multiple lines).
 Proposed Response Response Status O

CI 6 SC 6.5.2 P66 L18 # 136
 Remein, Duane Huawei
 Comment Type TR Comment Status X
 Incorrect type "type uint64;"
 Description and CI 30 indicate this is a signed number.
 SuggestedRemedy
 Change type to int64
 Proposed Response Response Status O

CI 7 SC 7.2.1.1 P68 L56 # 164
 Gorshe, Steve Microsemi Corp.
 Comment Type TR Comment Status X
 Now that reference to 10G-EPON has been added, some additional updates are required.
 The first location is the list of reference clauses that begins here.
 SuggestedRemedy
 Modify the paragraph beginning in line 56 to replace references to "EPON" with "1G-EPON" and add the following new paragraph and list:
 "The IEEE layering architecture of a 10G-EPON interface is defined in the diagram of Figures 56-3 and 56-4 in IEEE Std 802.3. The following clauses in IEEE Std 802.3 define the corresponding layers of an 10G-EPON interface:
 — Clause 30: Management
 — Clause 75: PMD for 10G-EPON media (burst-mode PMD)
 — Clause 77: MPCP (Multipoint Control Protocol), which defines the Multipoint architecture and control protocol for the media access of 10G-EPON.
 — Clause 76: Reconciliation Sublayer and Physical Coding Sublayer, which defines a number of extensions to standard Gigabit Ethernet PCS, i.e.,
 a) Definition of the optional (frame-based) FEC for 10G-EPON
 b) PMA for 10G-EPON
 Proposed Response Response Status O

CI 7 SC 7.2.1.7 P74 L3 # 165
 Gorshe, Steve Microsemi Corp.

Comment Type E Comment Status X

Is it correct that this sub-clause does not elaborate on 10G-EPON FEC since it mandatory and hence not a management parameter?

SuggestedRemedy

If the assumption of the comment is correct, it could be helpful to the reader to note that in the introductory paragraph of 7.2.1.7.

Proposed Response Response Status O

CI 7 SC 7.2.1.7 P74 L34 # 166
 Gorshe, Steve Microsemi Corp.

Comment Type TR Comment Status X

The Figure 7-5 title needs to be modified, since it only applies to 1G-EPON.

SuggestedRemedy

Modify the Figure 7-5 title to read "1G-EPON FEC protected frame"

Proposed Response Response Status O

CI 7 SC 7.3 P76 L51 # 137
 Remein, Duane Huawei

Comment Type T Comment Status X

"thresholds"? What is a thresholds?

SuggestedRemedy

replace thresholds with thresholds (this change is included in remain_3cfr_3_0518)

Proposed Response Response Status O

CI 7 SC 7.3 P76 L51 # 138
 Remein, Duane Huawei

Comment Type TR Comment Status X

There is a discrepancy between the module in the draft and the module on Github. In the draft "threholds" appears once in the Tree hierarchy. If I download the pon module from Github the misspelling appears twice. It seems that the module text shown on pg 101 line 24 and 31 in the draft misrepresents the Github module.

SuggestedRemedy

Correct the misspelling in Github and re-integrate the module into the draft. Correct the misspelling in the Tree hierarchy of the draft.

Proposed Response Response Status O

CI 7 SC 7.3 P79 L10 # 139
 Remein, Duane Huawei

Comment Type E Comment Status X

The style used for the type instruction is inconsistent within the module and between other modules. Sometime it is a one-line instruction, sometimes on two-lines without indentation and sometimes it is on two-lines with indentation. This also is an issue with the range instruction within a type.

SuggestedRemedy

Use a one-line instructions exclusively. So for example this:

```
type
uint64 {
  range
  "0 .. 32767";
}
```

becomes this:

```
type uint64 {
  range "0 .. 32767";
}
```

(this change is included in remain_3cfr_3_0518)

Proposed Response Response Status O

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

Cl 7 SC 7.3 P88 L25 # 140
 Remein, Duane Huawei
 Comment Type E Comment Status X
 The style used for the units instruction is inconsistent within the module and between other modules. Sometime it is a one-line instruction, sometimes on two-lines without indentation and sometimes it is on two-lines with indentation.
 SuggestedRemedy
 Use a one-line instructions exclusively (this change is included in remain_3cfr_3_0518).
 Proposed Response Response Status O

Cl 7 SC 7.3 P88 L28 # 141
 Remein, Duane Huawei
 Comment Type E Comment Status X
 The style used for the config instruction is inconsistent within the module and between other modules. Sometime it is a one-line instruction, sometimes on two-lines without indentation and sometimes it is on two-lines with indentation.
 SuggestedRemedy
 Use one-line instructions exclusively (this change is included in remain_3cfr_3_0518).
 Proposed Response Response Status O

Cl 7 SC 7.3.2 P88 L20 # 41
 Boyd, Joey ADTRAN
 Comment Type E Comment Status X
 The counters in the EPON YANG module use the xxx-in and xxx-out naming convention while those in the Ethernet YANG modules use the in-xxx and out-xxx format just as ietf-interfaces does. It would provide greater consistency to use the in-xxx and out-xxx format for the EPON YANG module..
 SuggestedRemedy
 Change naming of counter values from xxx-in to out-xxx and from xxx-out to in-xxx.
 Proposed Response Response Status O

Cl 7 SC 7.3/2 P78 L26 # 163
 Marris, Arthur Cadence Design Syste
 Comment Type E Comment Status X
 7223 is yellow
 SuggestedRemedy
 Correct formatting of "7223" here and elsewhere in the document.
 Proposed Response Response Status O

Cl 8 SC 8.3 P127 L11 # 160
 Anslow, Pete Ciena
 Comment Type ER Comment Status X
 Required comment #228 against D2.0 was ACCEPT IN PRINCIPLE with response starting: "Several TBD instances are addressed by individual comments. The remaining items are addressed below:"
 However, there are still two instances of "TBD" in the draft.
 SuggestedRemedy
 Replace them with suitable text. Until this is done, the draft is not ready to progress to Sponsor ballot (hence Required comment).
 Proposed Response Response Status O

Cl 8 SC 8.4 P127 L11 # 105
 Slavick, Jeff Broadcom Inc
 Comment Type TR Comment Status X
 The rx-fault Data node has a reference of {TBD}
 SuggestedRemedy
 Replace the {TBD}s with appropriate mapping for the rx-fault entry.
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P28 L17 # 125
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Numerous editorial changes in descriptions including: ending periods, several long lines shortened , and a few style (always begin text on new line).
 SuggestedRemedy
 See remain_3cf_4_0518 ieee802-ethernet-interface diff.docx
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P133 L15 # 142
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Numerous editorial changes to descriptions including: Sentence capitalization, ending periods, tab replacement with spaces and style consistency. A few typo corrections included that are detailed in other comments.
 Style changes include:
 1) description always start on new line.
 2) type instructions on one line (see separate comment).
 3) units instructions on one line (see separate comment).
 4) config instructions on one line (see separate comment).
 SuggestedRemedy
 See remain_3cf_2_0518 ieee802-ethernet-link-oam diff.docx
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P133 L28 # 57
 Trowbridge, Steve Nokia
 Comment Type E Comment Status X
 RFC 7223 is the former RFC specifying the interface model. It is the none-NMDA version. Recently IETF approved an update which is NMDA compliant: RFC 8343.
 As IEEE follows the NMDA approach and as the updated interface model reached RFC status it would be better to refer to RFC 8343.
 SuggestedRemedy
 Replace:
 "IETF RFC 7223"
 by
 "IETF RFC 8343"
 In analogy: change this reference throughout the full document.
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P133 L43 # 58
 Trowbridge, Steve Nokia
 Comment Type TR Comment Status X
 This is a continuation of D2.0 comment 367.
 There is a difference between the content in pdf and in Git: the git version does not contain the "import ieee802-ethernet-interface { prefix "eth-if"; }" statement, which is correct; while the pdf version still contains this statement.
 On p133 line 60 it also makes this statement in text which is incorrect too.
 SuggestedRemedy
 1. Remove the import statement on line 43.
 2. Remove the statement on line 60.
 "This YANG module augments the 'ieee802-ethernet-interface' module."
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P133 L43 # 97
 Zhuang, Yan Huawei Technologies
 Comment Type TR Comment Status X
 imported module ieee802-ethernet-interface not used in ieee802-ethernet-link-oam module.
 SuggestedRemedy
 remove the import of ieee802-ethernet-interface.
 Proposed Response Response Status O

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

Cl 8 SC 8.5.2 P133 L47 # 143
 Remein, Duane Huawei
 Comment Type E Comment Status X
 Typo "Working"
 SuggestedRemedy
 fixed in remain_3cf_2_0518
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P133 L62 # 59
 Trowbridge, Steve Nokia
 Comment Type ER Comment Status X
 There is a difference between the content in pdf and in Git: the git version also contains a reference.
 This reference statement in Git uses tab characters which does not make it well aligned
 SuggestedRemedy
 Assure the content of the pdf and the git is identical.
 Probably: add the reference statement in the pdf.
 Correct the indentation by replacing 'tab' by spaces in the YANG module (in Git).
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P134 L13 # 144
 Remein, Duane Huawei
 Comment Type TR Comment Status X
 There are several discrepancies between the module in the draft and the module on Github. In the draft there are no long lines in the description whereas in Github there are several.
 SuggestedRemedy
 Correct the long lines in the Github.
 fixed in remain_3cf_2_0518
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P134 L28 # 60
 Trowbridge, Steve Nokia
 Comment Type TR Comment Status X
 This is a continuation of D2.0 comment 345. Basically this is the same comment as comment 344 (which is accepted in principle) but for another feature.

The description of "feature link-monitoring" says the device supports link monitoring. From the description it is not clear whether this means support for initiating a threshold crossing event to the peer side, or support receiving and reporting on events received from the peer side, or both.

SuggestedRemedy
 Split into 2 features to allow announcing the support for both procedures separately.
 Make it clear in the description what it is about.
 And apply the definition for all corresponding data.

Replace:

```
feature link-monitoring {
  description
    "This feature means the device supports Link Monitoring.";
  reference
    "IEEE Std 802.3, 57.1.2:c:1,30.3.6.1.6 aOAMLocalConfiguration, and
    30.3.6.1.7 aOAMRemoteConfiguration";
}
```

By:

```
feature link-monitoring-local {
  description
    "This feature means the device monitors the link at the local
    side and can generate Link Event OAMPDUs to the peer device.";
  reference
    "IEEE Std 802.3, 57.1.2:c:1,30.3.6.1.6 aOAMLocalConfiguration, and
    30.3.6.1.7 aOAMRemoteConfiguration";
}
feature link-monitoring-remote {
  description
    "This feature means the device can process Link Event OAMPDUs
    received from the peer device and report itself about this event
    on its own management interface.";
  reference
    "IEEE Std 802.3, 57.1.2:c:1,30.3.6.1.6 aOAMLocalConfiguration, and
    30.3.6.1.7 aOAMRemoteConfiguration";
}
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P134 L36 # 61
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is a continuation of D2.0 comment 346. Basically this is the same comment as comment 344 (which is accepted in principle) but for another feature.

The description of "feature remote-mib-retrieval" says the device supports remote MIB retrieval. From the description it is not clear whether this means support initiating a variable requests to the peer side, or support receiving and replying to variable requests received from the peer side, or both.

SuggestedRemedy

Split into 2 features to allow announcing the support for both procedures separately. Make it clear in the description what it is about. And apply the definition for all corresponding data.

Replace:

```
feature remote-mib-retrieval {
  description
    "This feature means the device supports remote MIB retrieval.";
  reference
    "IEEE Std 802.3, 57.1.2:c:2,30.3.6.1.6 aOAMLocalConfiguration, and 30.3.6.1.7 aOAMRemoteConfiguration";
}
```

By:

```
feature remote-mib-retrieval-initiate {
  description
    "This feature means the device supports data retrieval from the peer device. I.e. the device can send Variable Requests OAMPDUs to the peer side and process the received Variable Response OAMPDUs.";
  reference
    "IEEE Std 802.3, 57.1.2:c:2,30.3.6.1.6 aOAMLocalConfiguration, and 30.3.6.1.7 aOAMRemoteConfiguration";
}
feature remote-mib-retrieval-respond {
  description
    "This feature means the device allows the peer device to retrieve data from the managed device. I.e. the device can process received Variable Requests OAMPDUs and respond with Variable Response OAMPDUs.";
  reference
    "IEEE Std 802.3, 57.1.2:c:2,30.3.6.1.6 aOAMLocalConfiguration, and 30.3.6.1.7 aOAMRemoteConfiguration";
}
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P137 L29 # 145
 Remein, Duane Huawei

Comment Type E Comment Status X

"config" should be spelled out in description

SuggestedRemedy

fixed in remain_3cf_2_0518

Proposed Response Response Status O

Cl 8 SC 8.5.2 P138 L9 # 31
 Boyd, Joey ADTRAN

Comment Type T Comment Status X

Length is not sufficient to represent an OUI using the hex-string type. The pattern of the hex-string type is HH:HH:HH meaning it would take an 8 character string to represent the OUI.

SuggestedRemedy

Change to:

```
typedef vendor-oui {
  type yang:hex-string {
    length 8;
  }
  description
    "24-bit Organizationally Unique Identifier";
  reference
    "IEEE Std 802-2001, Clause 9";
}
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P138 L24 # 146
 Remein, Duane Huawei
 Comment Type T Comment Status X
 Description states "IEEE Std 802.3 OAM admin is enabled" wording is misleading. Similar issue line 30 with disabled state
 SuggestedRemedy
 Change to "IEEE Std 802.3 OAM is in the enabled admin state." (line 24) and "IEEE Std 802.3 OAM is in the disabled admin state." (line 30).
 fixed in remain_3cf_2_0518
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P138 L33 # 147
 Remein, Duane Huawei
 Comment Type E Comment Status X
 description is a fragment. OAM should be capitalized in a description.
 SuggestedRemedy
 change to read: "The admin state of the OAM function on an interface."
 fixed in remain_3cf_2_0518
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P138 L61 # 148
 Remein, Duane Huawei
 Comment Type E Comment Status X
 "unix" should be capitalized.
 SuggestedRemedy
 Capitalize Unix.
 Proposed Response Response Status O

Cl 8 SC 8.5.2 P139 L19 # 62
 Trowbridge, Steve Nokia
 Comment Type TR Comment Status X
 This is a new comment but also a bit an indirect continuation of D2.0 comment 345. The background of the comment is to assure by YANG syntax that only relevant data nodes are defined and where needed this might be device specific by using features, in this case it relates to the feature link-monitoring.
 The understanding is that for the notification 'non-threshold-data' (page 151, line 35) the threshold related data nodes are not applicable and therefore these data nodes should not be present in the notification.
 It contains these data nodes because it uses the common grouping "event-details". This is not device dependent and therefore can not be resolved by a feature. There is only one solution: split the grouping into 2 separate groupings.

Within these data nodes it is written "The default value is implementation-dependent". At the same time the node is mandatory. This is inconsistent. One of both must be removed.
 SuggestedRemedy

Split the grouping "event-details" into 2 groupings: "event-details" and "threshold-event-details". The container "threshold" is removed from the first and added in the new separate grouping "threshold-event-details". Then adapt the use statements where needed:

1. remove the container thresholds:
 delete from page 139 line 19 up to page 140 line 3 (the 2nd "}").

2. insert the new grouping e.g. at page 140 line 31 containing the container "threshold" as defined now (note: it includes the if-feature statement with an update)

```

grouping threshold-event-details {
  description
    "Nodes describing a threshold event, used in the event log and in
    notifications";
  reference
    "IETF RFC 4878, Dot3OamEventLogEntry";

  container threshold {
    when "../event-type = 'threshold-event-type'" {
      description
        "These nodes only apply to threshold event types";
    }
    if-feature "link-monitoring-local or link-monitoring-remote";
    description
      "Nodes specific to threshold (link monitoring) events";

    leaf threshold-event-type {
      type threshold-event-enum;
      mandatory true;
      description

```

```

    "The type of threshold event";
    reference
    "IEEE Std 802.3, 57.5.3";
  }
  leaf window {
    type uint64;
    mandatory true;
    description
    "Size of the window in which the event was generated. Units
    are dependent on the threshold event type.";
  }
  leaf threshold {
    type uint64;
    mandatory true;
    description
    "Size of the threshold that was breached during the window.
    Units are dependent on the threshold event type.";
  }
  leaf value {
    type uint64;
    mandatory true;
    description
    "Breaching value. Units are dependent on the threshold
    event type, and match that of the threshold.";
  }
}
}
}

```

```

  refine event-type {
    must ". = 'threshold-event-type'" {
      description
      "This leaf is set to 'threshold-event-type'";
    }
  }
}
uses threshold-event-details;
}

```

5. and keep the notification non-threshold-event as is and then this will not longer contain the data nodes for a threshold-event.

Proposed Response Response Status

CI 8 SC 8.5.2 P139 L40 # 32

Boyd, Joey ADTRAN

Comment Type T Comment Status X

The leaf node, window, is mandatory yet has text in the description which states "The default value is implementation-dependent". This statement could be confusing from a NETCONF/YANG perspective in that the 'mandatory true' statement implies that the node does not have a default value and must be configured by the client.

SuggestedRemedy

Remove the last sentence in the description, "The default value is implementation-dependent."

Proposed Response Response Status

CI 8 SC 8.5.2 P139 L49 # 33

Boyd, Joey ADTRAN

Comment Type T Comment Status X

The leaf node, threshold, is mandatory yet has text in the description which states "The default value is implementation-dependent". This statement could be confusing from a NETCONF/YANG perspective in that the 'mandatory true' statement implies that the node does not have a default value and must be configured by the client.

SuggestedRemedy

Remove the last sentence in the description, "The default value is implementation-dependent."

Proposed Response Response Status

3. Assure threshold data nodes are still available in the log by adding a new uses statement:

```

list event-log-entry {
  key "index";
  description
  "Ethernet Link OAM event log entry";
  leaf index {
    type uint64;
    description "Index of this event in the event log";
  }
  uses event-details;
  uses threshold-event-details;
}

```

4. Assure the threshold data nodes are still available in the notification "threshold-event" by adding a new uses statement:

```

notification threshold-event {
  if-feature "link-monitoring-local or link-monitoring-remote";
  description
  "This notification is sent when a local or remote threshold
  crossing event is detected.";
  uses event-details {

```

Cl 8 SC 8.5.2 P140 L38 # 34
Boyd, Joey ADTRAN

Comment Type E Comment Status X

The counters in the ELO YANG module use the xxx-rx and xxx-tx naming convention while those in the Ethernet YANG modules use the in-xxx and out-xxx format just as ietf-interfaces does. It would provide greater consistency to use the in-xxx and out-xxx format for the ELO YANG module..

SuggestedRemedy

Change naming of counter values from xxx-tx to out-xxx and from xxx-rx to in-xxx.

Proposed Response Response Status O

Cl 8 SC 8.5.2 P140 L58 # 63
Trowbridge, Steve Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf unique-event-notification-tx {
type yang:counter64;

By:
leaf unique-event-notification-tx {
if-feature link-monitoring-local;
type yang:counter64;

Proposed Response Response Status O

Cl 8 SC 8.5.2 P141 L2 # 64
Trowbridge, Steve Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf unique-event-notification-rx {
type yang:counter64;

By:
leaf unique-event-notification-rx {
if-feature link-monitoring-remote;
type yang:counter64;

Proposed Response Response Status O

Cl 8 SC 8.5.2 P141 L12 # 66
Trowbridge, Steve Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf duplicate-event-notification-rx {
type yang:counter64;

By:
leaf duplicate-event-notification-rx {
if-feature link-monitoring-remote;
type yang:counter64;

Proposed Response Response Status O

CI 8 SC 8.5.2 P141 L12 # 65

Trowbridge, Steve

Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf duplicate-event-notification-tx {
type yang:counter64;

By:
leaf duplicate-event-notification-tx {
if-feature link-monitoring-local;
type yang:counter64;

Proposed Response Response Status O

CI 8 SC 8.5.2 P141 L62 # 68

Trowbridge, Steve

Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf variable-request-rx {
type yang:counter64;

By:
leaf variable-request-rx {
if-feature remote-mib-retrieval-respond;
type yang:counter64;

Proposed Response Response Status O

CI 8 SC 8.5.2 P141 L53 # 67

Trowbridge, Steve

Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf variable-request-tx {
type yang:counter64;

By:
leaf variable-request-tx {
if-feature remote-mib-retrieval-initiate;
type yang:counter64;

Proposed Response Response Status O

CI 8 SC 8.5.2 P142 L8 # 69

Trowbridge, Steve

Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf variable-response-tx {
type yang:counter64;

By:
leaf variable-response-tx {
if-feature remote-mib-retrieval-respond;
type yang:counter64;

Proposed Response Response Status O

CI 8 SC 8.5.2 P142 L18 # 70

Trowbridge, Steve

Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and comment 360. Basically: make the counters feature dependent.

SuggestedRemedy

Replace:
leaf variable-response-rx {
type yang:counter64;

By:
leaf variable-response-rx {
if-feature remote-mib-retrieval-initiate;
type yang:counter64;

Proposed Response Response Status O

CI 8 SC 8.5.2 P143 L18 # 149

Remein, Duane

Huawei

Comment Type TR Comment Status X

This is more a question than a comment but I don't see how these groupings, discovery-remote and discovery-local (pg 144 line 25), map into CI 30. The ref is to 30.2.6.1.3 (aOAMMode) and 30.3.6.1.7 (aOAMDiscoveryState) but these two sections seem unrelated.

How is this properly related to CI 30?

SuggestedRemedy

Upon receiving a good understandable explanation I will withdraw this comment (unless some corrective action needs to be taken).

Proposed Response Response Status O

CI 8 SC 8.5.2 P143 L18 # 89

Trowbridge, Steve

Nokia

Comment Type T Comment Status X

The grouping 'discovery-remote' is about reporting information received from the peer side. How can this have a default value? How can this be implementation dependent? Propose to remove such statements.

SuggestedRemedy

Change the former definition of discovery-grouping to:
grouping discovery-remote {
description
"Nodes describing the discovery process remote end of a link.";
leaf mode {
type mode;
description
"Mode (passive/active).";
reference
"IEEE Std 802.3, 30.3.6.1.3";
}
container functions-supported {
description
"The Link OAM functions supported by this interface";
reference
"IEEE Std 802.3, 30.3.6.1.7";
leaf uni-directional-link-fault {
type boolean;
description
"Unidirectional link fault support.";
}
leaf loopback {
type boolean;
description
"Remote Loopback support.";
}
leaf link-monitoring {
type boolean;
description
"Link monitoring support.";
}

leaf mib-retrieval {
type boolean;
description
"MIB variable retrieval support.";
}
}
}

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

Proposed Response Response Status

Cl 8 SC 8.5.2 P143 L19 # 150

Remein, Duane Huawei

Comment Type E Comment Status X

description wording "Nodes describing the discovery process remote end of a link."

SuggestedRemedy

Change to: "Nodes describing the remote end discovery process of a link."
This fix is NOT INCLUDED in remain_3cf_2_0518

Proposed Response Response Status

Cl 8 SC 8.5.2 P143 L60 # 35

Boyd, Joey ADTRAN

Comment Type T Comment Status X

The module defines a feature 'remote-mib-retrieval' to make this optional yet this node does not use the appropriate 'if-feature' statement.

SuggestedRemedy

Change to:

leaf mib-retrieval {
if-feature "remote-mib-retrieval";
type boolean;
description
"MIB variable retrieval support.
The default value is implementation-dependent.";
}

Proposed Response Response Status

Cl 8 SC 8.5.2 P144 L27 # 151

Remein, Duane Huawei

Comment Type E Comment Status X

description wording "Nodes describing the discovery process local end of a link.";

SuggestedRemedy

Change to: "Nodes describing the local end discovery process of a link."
This fix is NOT INCLUDED in remain_3cf_2_0518

Proposed Response Response Status

Cl 8 SC 8.5.2 P144 L45 # 71

Trowbridge, Steve Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 361 and also makes the analogy with comment 339: i.e. assure the device behaviour is always well defined.

The leaf "discovery-local/functions-supported/uni-directional-link-fault" :
361: add the if feature statement
339: Clarify the description in analogy with the comments on the ethernet PHY model.

SuggestedRemedy

Replace:

leaf uni-directional-link-fault {
type boolean;
description
"Unidirectional link fault support.
The default value is implementation-dependent.";
}

by:

leaf uni-directional-link-fault {
if-feature uni-directional-link-fault;
type boolean;
description
"Unidirectional link fault support.
This affects the setting of the 'Unidirectional Support' bit
in the OAM configuration field put in the Information OAMPDU.
This bit indicatess to the peer device that it can send OAM
PDUs on links that are operating in unidirectional mode
(traffic flowing in one direction only).

The leaf is optional for configuration and if not configured then the applied value is implementation-dependent. The operational datastore shall always contain the actually applied value.";

Proposed Response Response Status

Cl 8 SC 8.5.2 P144 L52 # 72
Trowbridge, Steve Nokia

Comment Type E Comment Status X

This is a continuation of D2.0 comment 362 and also makes the analogy with comment 339: i.e. assure the device behaviour is always well defined.

The understanding of the leaf "loopback" is that this affects the setting of the 'OAM Remote Loopback support' bit in the OAM configuration field put in the Information OAMPDU.

SuggestedRemedy

Replace:

```
leaf loopback {
  if-feature remote-loopback-initiate;
  type boolean;
  default true;
  description
    "Remote Loopback support";
}
```

By:

```
leaf loopback {
  if-feature "remote-loopback-initiate or remote-loopback-respond";
  type boolean;
  default true;
  description
    "Remote Loopback support.
    This affects the setting of the 'OAM Remote Loopback Support'
    bit in the OAM configuration field put in the Information
    OAMPDU. This bit indicates to the peer device that
    the OAM entity can initiate and respond to loopback
    commands.";
}
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P144 L61 # 73
Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is a continuation of D2.0 comment 345. Basically: make the data nodes feature dependent.

The container link-monitor has a leaf "link-monitoring". The understanding: this affects the setting of the 'Link events' bit in the OAM configuration field put in the Information OAMPDU. this relates to both directions.

The container also contains a list "event-type". Assumption: these provide the threshold for use at the local side.

Therefore: remove the feature at the container level and introduce the proper feature at data node level.

SuggestedRemedy

1. Replace:

```
container link-monitor {
  if-feature link-monitoring;
  description
    "Configure link monitor parameters";
}
```

By:

```
container link-monitor {
  if-feature "link-monitoring-remote or link-monitoring-local";
  description
    "Configure link monitor parameters";
}
```

2. Replace:

```
leaf link-monitoring {
  type boolean;
  default true;
  description "Enable or disable monitoring";
}
```

By:

```
leaf link-monitoring {
  type boolean;
  default true;
  description
    "Enable or disable monitoring
    This affects the setting of the 'Link Events' bit in the
    OAM configuration field put in the Information OAMPDU.
    This bit indicatess to the peer device that the OAM entity
    can send and receive Event Notification OAMPDU.";
}
```

3. Replace:

```
list event-type {
```

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

key threshold-type;
description

By:

list event-type {
if-feature link-monitoring-local;
key threshold-type;
description

Proposed Response Response Status

Cl 8 SC 8.5.2 P144 L62 # 36

Boyd, Joey ADTRAN

Comment Type **E** Comment Status **X**

Some 'if-feature' statements place quotes around the name of the feature, while this one does not.

SuggestedRemedy

Provide consistency in format by encasing all feature names in double quotes, e.g. if-feature "link-monitoring".

Proposed Response Response Status

Cl 8 SC 8.5.2 P145 L11 # 90

Trowbridge, Steve Nokia

Comment Type **TR** Comment Status **X**

The list event-type has as key the threshold-type. In the description of this leaf it refers to a default value. This is inconsistent: the key is always mandatory and a default is not applicable.

SuggestedRemedy

Replace:

```
list event-type {
  key threshold-type;
  description
    "A list containing at most one entry for each of the
    threshold event types. If there is no entry for a
    particular event type, the default values are used for
    both window size and threshold.";
  leaf threshold-type {
    type threshold-event-enum;
    description
      "The type of threshold event for which this list entry is
      specifying the configuration.
      The default value is implementation-dependent.";
    reference
      "IEEE Std 802.3, 57.5.3";
  }
}
```

By:

```
list event-type {
  if-feature link-monitoring-local;
  key threshold-type;
  description
    "A list containing at most one entry for each of the
    threshold event types. If there is no entry for a
    particular event type, the default values are used for
    both window size and threshold.";
  leaf threshold-type {
    type threshold-event-enum;
    description
      "The type of threshold event for which this list entry is
      specifying the configuration.";
    reference
      "IEEE Std 802.3, 57.5.3";
  }
}
```

Proposed Response Response Status

Cl **8** *SC* **8.5.2** *P***145** *L***34** # **152**
 Remein, Duane Huawei
Comment Type **T** *Comment Status* **X**
 The structure of this description leaves much to be desired. Although I generally dislike the idea of indenting within a description I think in this case it is warranted.
SuggestedRemedy
 See remain_3cf_10_0518.pdf.
Proposed Response *Response Status* **O**

Cl **8** *SC* **8.5.2** *P***146** *L***6** # **74**
 Trowbridge, Steve Nokia
Comment Type **E** *Comment Status* **X**
 The description of the leaf "window" does specify a default value in the description. At the same time it states "The default value is implementation-dependent". This is a contradiction.
SuggestedRemedy
 Proposed to keep the specified default values and remove the last statement:
 Symbol Period:
 Units: number of symbols
 Default: number of symbols in one second for the underlying physical layer
 Min: number of symbols in one second for the underlying physical layer
 Max: number of symbols in one minute for the underlying physical layer
 Frame:
 Units: deciseconds
 Default: 1 second
 Min: 1 second
 Max: 1 minute
 Frame Period:
 Units: number of frames
 Default: number of minFrameSize frames in one second for the underlying physical layer
 Min: number of minFrameSize frames in one second for the underlying physical layer
 Max: number of minFrameSize frames in one minute for the underlying physical layer
 Frame Seconds:
 Units: deciseconds
 Default: 60 seconds
 Min: 10 seconds
 Max: 900 seconds.";
Proposed Response *Response Status* **O**

Cl 8 SC 8.5.2 P146 L41 # 75
 Trowbridge, Steve Nokia

Comment Type T Comment Status X

This comment is a continuation of comment 363 (couple to the right feature) and extended in analogy with comment 339: i.e. assure the device behaviour is always well defined

The leaf "discovery-local/functions-supported/mib-retrieval" is read-write and contains in the description "The default value is implementation-dependent".

Clarify the description in analogy with the comments on the ethernet PHY model.

SuggestedRemedy

Replace:

```
leaf mib-retrieval {
  type boolean;
  description
    "MIB variable retrieval support.
    The default value is implementation-dependent.";
}
```

By:

```
leaf mib-retrieval {
  if-feature "remote-mib-retrieval-initiate or remote-mib-retrieval-respond";
  type boolean;
  description
    "MIB variable retrieval support.
    This affects the setting of the 'Variable Retrieval' bit in
    the OAM configuration field put in the Information OAMPDU.
    This bit indicates to the peer device that the OAM entity
    can send and receive Variable Request and Response
    OAMPDUs.
```

The leaf is optional for configuration and if not configured then the applied value is implementation-dependent. The operational datastore shall always contain the actually applied value.;

```
}
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P147 L15 # 76
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This comment is a continuation of comment 344 and others. I.e. use the proper feature.

The grouping discovery-info, leaf operational-status is:

- presented with an if-feature coupling it to the support of loopback. The set of values cover much more, e.g. disabled, link-fault, passive-wait.

Therefore the leaf should exist without if-feature.

- defined as read-write. An operational state should be read-only.

- there is a conflict between: a parameter being mandatory and having a default value.

Beside, default values only apply to read-write. Therefore remove the statement about the implementation specific default.

SuggestedRemedy

Replace:

```
leaf operational-status {
  if-feature "remote-loopback-initiate or remote-loopback-respond";
  type operational-state;
  mandatory true;
  description
    "Operational status.
    The default value is implementation-dependent.";
  reference
    "IETF RFC 4878, dot3OamOperStatus; IEEE Std 802.3, 30.3.6.1.4,
    30.3.6.1.10, and 30.3.6.1.11";
```

By:

```
leaf operational-status {
  type operational-state;
  config false;
  mandatory true;
  description
    "Operational status.";
  reference
    "IETF RFC 4878, dot3OamOperStatus; IEEE Std 802.3, 30.3.6.1.4,
    30.3.6.1.10, and 30.3.6.1.11";
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P147 L28 # 77
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This comment is a continuation of comment 365.
 I.e. use the proper feature.

The typedef loopback-status allows to report both for the local as for the perceived remote status (initiating, local-loopback, ...)

SuggestedRemedy

Replace the if-feature statement:
 "if-feature "remote-loopback-initiate"

By
 "if-feature "remote-loopback-initiate or remote-loopback-respond"

Proposed Response Response Status O

Cl 8 SC 8.5.2 P148 L24 # 78
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This comment is a continuation of D2.0 comment 366.

The augment statement should be written more general in YANG 1.1 syntax.

SuggestedRemedy

Replace:
 " augment "/if:interfaces/if:interface" {
 when "if:type = 'ianaift:ethernetCsmacd' or if:type = 'ianaift:ptm'" {"

By
 " augment '/if:interfaces/if:interface' {
 when
 "derived-from-or-self(if:type, 'ianaift:ethernetCsmacd') or
 derived-from-or-self(if:type, 'ianaift:ptm') " {"

Proposed Response Response Status O

Cl 8 SC 8.5.2 P148 L24 # 37
 Boyd, Joey ADTRAN

Comment Type T Comment Status X

The description says that this augments the Ethernet interface model yet just augments the generic interface list (as it should).

SuggestedRemedy

Change augment description to:

description
 "Augments the interface model with nodes
 specific to Ethernet Link OAM";

Proposed Response Response Status O

Cl 8 SC 8.5.2 P148 L64 # 153
 Remein, Duane Huawei

Comment Type ER Comment Status X

It strikes me as very odd to have a question as a description.

SuggestedRemedy

Change to read (observe indenting and line brakes):
 "A uni-directional link-fault has been detected by the
 local device.";

Proposed Response Response Status O

Cl 8 **SC 8.5.2** **P150** **L4** # **79**
 Trowbridge, Steve Nokia
Comment Type **T** **Comment Status** **X**
 This is a continuation of D2.0 comment 368.

 The leaf "rx-fault" is declared mandatory. However, not all interfaces will support unidirectional link fault detection.

 Therefore make the leaf optional.
SuggestedRemedy
 Replace:
 leaf rx-fault {
 if-feature uni-directional-link-fault;
 type boolean;
 config false;
 mandatory true;
 description
 By:
 leaf rx-fault {
 if-feature uni-directional-link-fault;
 type boolean;
 config false;
 description
Proposed Response *Response Status* **O**

Cl 8 **SC 8.5.2** **P150** **L18** # **82**
 Trowbridge, Steve Nokia
Comment Type **T** **Comment Status** **X**
 similar reasoning as for remote-error-symbol-period-log-entries
SuggestedRemedy
 Add an if-feature statement:
 leaf remote-error-frame-period-log-entries {
 if-feature "link-monitoring-remote";
 type yang:counter64;
Proposed Response *Response Status* **O**

Cl 8 **SC 8.5.2** **P150** **L26** # **83**
 Trowbridge, Steve Nokia
Comment Type **T** **Comment Status** **X**
 similar reasoning as for remote-error-symbol-period-log-entries
SuggestedRemedy
 Add an if-feature statement:
 leaf remote-error-frame-second-log-entries {
 if-feature "link-monitoring-remote";
 type yang:counter64;
Proposed Response *Response Status* **O**

Cl 8 **SC 8.5.2** **P150** **L11** # **81**
 Trowbridge, Steve Nokia
Comment Type **T** **Comment Status** **X**
 similar reasoning as for remote-error-symbol-period-log-entries
SuggestedRemedy
 Add an if-feature statement:
 leaf remote-error-frame-log-entries {
 if-feature "link-monitoring-remote";
 type yang:counter64;
Proposed Response *Response Status* **O**

Cl 8 SC 8.5.2 P150 L37 # 84
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is a continuation of D2.0 comment 350.

The major problem with issue with the current model is that there is a indication about on which interface the loopback shall be performed. This can be solved by making the rpc an action and put it inside the container 'link-oam' because then the action is executed within the context of an interface (i.e. use YANG 1.1 syntax) .

SuggestedRemedy

Update the version in git and replace the rpc by an action put inside the container link-oam. I.e. insert after page 150 line 32 (i.e. after the closing bracket of container 'statistics', BEFORE the closing bracket of line 34 (i.e; the closing bracket of container 'link-oam'.

```

action remote-loopback {
  if-feature remote-loopback-initiate;
  description
    "Start/stop remote loopback on the specified interface.";
  reference
    "IEEE Std 802.3, 57.1.2:b";
  input {
    leaf enable {
      type boolean;
      mandatory true;
      description
        "Whether to enable or disable remote loopback.";
    }
  }
  output {
    leaf success {
      type boolean;
      mandatory true;
      description
        "True if the operation was successful, false otherwise.";
    }
    leaf error-message {
      type string;
      description
        "If the operation failed, optionally used to provide extra
        details.";
    }
  }
}
    
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P150 L50 # 155
 Remein, Duane Huawei

Comment Type E Comment Status X

We could be more informative than: "True if the operation was successful, false otherwise."

SuggestedRemedy

Change to (observe indentation and line breaks):
 "True if the remote-loopback was successful,
 false otherwise.";

Proposed Response Response Status O

Cl 8 SC 8.5.2 P150 L50 # 154
 Remein, Duane Huawei

Comment Type E Comment Status X

description wording:
 "Whether to enable or disable remote loopback.
 The default value is implementation-dependent.";

SuggestedRemedy

Change to:
 "When true enables remote loopback,
 When false disables remote loopback,
 The default value is implementation-dependent.";

Proposed Response Response Status O

Cl 8 SC 8.5.2 P150 L52 # 38
 Boyd, Joey ADTRAN

Comment Type T Comment Status X

As the leaf, 'enable', is mandatory, the statement about the default value does not apply.

SuggestedRemedy

Remove the last sentence in the description, "The default value is implementation-dependent."

Proposed Response Response Status O

Cl 8 SC 8.5.2 P150 L56 # 80
Trowbridge, Steve Nokia

Comment Type T Comment Status X

This is a continuation of D2.0 comment 345 and 369. I.e. define the features per direction of the EFM OAM procedure, and couple the counters to the correct feature.

Assumption: the local counters can always be presented to the management interface, independent of whether these counters are communicated to the peer device via an Event notification OAMPDU. Therefor these counters are not coupled to a feature.

The remote counters shall be coupled to the feature "link-monitoring-remote" because if the peer device does not send the data then the local device can not report to the management system.

SuggestedRemedy

Add an if-feature statement:

```
leaf remote-error-symbol-period-log-entries {
  if-feature "link-monitoring-remote";
  type yang:counter64;
}
```

Proposed Response Response Status O

Cl 8 SC 8.5.2 P151 L9 # 161
Anslow, Pete Ciena

Comment Type TR Comment Status X

The "Editorial Comment" that states that "Alignment is needed."

SuggestedRemedy

Do the necessary alignment and remove the "Editorial Comment". Until this is done, the draft is not ready to progress to Sponsor ballot (hence Required comment).

Proposed Response Response Status O

Cl 8 SC 8.5.2 P151 L17 # 85
Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is a continuation of D2.0 comment 351.

The major problem with the notification 'threshold-event' has not been solved: the notification does not identify which interface this reporting is about. This can be solved by moving the notification inside the container 'link-oam' because then the notification is sent within the context of an interface (i.e. use YANG 1.1 syntax)

SuggestedRemedy

Move the definition of the notification after page 150 line 32 (i.e. after the closing bracket of container 'statistics', BEFORE the closing bracket of line 34 (i.e. the closing bracket of container 'link-oam').

Proposed Response Response Status O

Cl 8 SC 8.5.2 P151 L18 # 86
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is a continuation of D2.0 comment 345
 I.e. split the feature for link-monitoring into one per direction, and then apply the correct feature to the corresponding data nodes.

The feature indicates the threshold-event shall be sent for 2 possible reasons:
 - the local side detected a threshold crossing and sent an event-notification to the peer device
 - the device received an event-notification from the peer device.
 The description suggests use for only on direction: at the local side.
 Assumption: feature use is correct and description needs to be modified accordingly.

SuggestedRemedy

Replace:
 notification threshold-event {
 if-feature "link-monitoring-local or link-monitoring-remote";
 description
 "This notification is sent when a local threshold crossing event is detected.";

By:
 notification threshold-event {
 if-feature "link-monitoring-local or link-monitoring-remote";
 description
 "This notification is sent when a local or remote threshold crossing event is detected.";

Proposed Response Response Status O

Cl 8 SC 8.5.2 P151 L35 # 87
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is a continuation of D2.0 comment 352.

The major problem with the notification 'non-threshold-event' is the same as for the notification 'threshold-event' and needs to be solved in the same way. I.e. there is a notification but no indication about the interface for which the notification is applicable. A second problem has been mentioned in another comment: it contains threshold crossing related data nodes which are not applicable.

SuggestedRemedy

Move the definition of the notification after page 150 line 32 (i.e. after the closing bracket of container 'statistics', BEFORE the closing bracket of line 34 (i.e; the closing bracket of container 'link-oam'.

(To realize it does not contain the threshold crossing related data nodes the grouping "event-details" has been split into 2 groupings.

Proposed Response Response Status O

CI 8 SC 8.5.2 P151 L35 # 88
 Trowbridge, Steve Nokia

Comment Type TR Comment Status X

This is continuation of D2.0 comment 349.

D2.0 suggested to have a method for resetting the EFM OAM statistics but it was kept in comment so it did not exist. Having this method was/is considered useful and therefore the suggestion was to define it. From YANG syntax perspective it is suggested to define it using YANG 1.1 syntax and define it as an action.

Hereby we provide the corresponding YANG.

SuggestedRemedy

Below action to be added to efm-oam augmented table. I.e. define the notification after page 150 line 32 (i.e. after the closing bracket of container 'statistics', BEFORE the closing bracket of line 34 (i.e.; the closing bracket of container 'link-oam').

```

action reset-stats {
  description
    "Reset Ethernet Link OAM statistics on this interface";
  output {
    leaf success {
      type boolean;
      mandatory true;
      description
        "True if the operation was successful, false otherwise.";
    }
    leaf error-message {
      type string;
      description
        "If the operation failed, optionally used to provide extra
        details.";
    }
  }
}
    
```

Proposed Response Response Status O

CI 8 SC 8.5.3 P148 L25 # 98
 Zhuang, Yan Huawei Technologies

Comment Type TR Comment Status X

ianaift:ptm is not found/defined in iana-if-type in RFC 7224.

SuggestedRemedy

define a new identity for ptm as:

```

identity ptm {
  base ianaift:iana-interface-type;
  description
    "For ptm.";
  reference
    "?";
}
    
```

change the augmentation to:

```

when "if:type = 'ianaift:ethernetCsmacd' or if:type = 'link-oam:ptm'"
    
```

Proposed Response Response Status O

CI 8 SC 8.5.4 P148 L25 # 99
 Zhuang, Yan Huawei Technologies

Comment Type TR Comment Status X

missing {} and description for "when" statement.

SuggestedRemedy

change codes to:

```

when "if:type = 'ianaift:ethernetCsmacd' or if:type = 'link-oam:ptm'" {
  description "Applies to Ethernet interfaces";
}
description
  "Augments Ethernet interface model with nodes
  specific to Ethernet Link OAM";
    
```

Proposed Response Response Status O

Cl **8** SC **8.5.5** P**151** L**18** # **100**
 Zhuang, Yan Huawei Technologies

Comment Type **TR** Comment Status **X**

feature "link-monitoring-remote" and "link-monitoring-remote" is not defined in module ieee802-ethernet-link-oam

SuggestedRemedy

remove the statement "if-feature "link-monitoring-local or link-monitoring-remote";"

Proposed Response Response Status **O**

Cl **about ie** SC **Question about ieee80** P L # **170**
 Seda, Marta Calix

Comment Type **E** Comment Status **X**

I was expecting to see a more hierarchical container model for epon YANG (along the lines of how http://www.ieee802.org/3/1/public/mib_modules/20130411/802dot3dot1C9mib.txt is organized). For example:

Add a container for mpcp-control:

```
+-- mpcp-control
  +--mpcp-admin-state?
  +--mpcp-oper-status?
  +--mpcp-logical-link-admin-state?, etc
+-- fec
  +-- fec-mode, etc
+-- ompe-control
  +-- ompe-mode, etc
```

SuggestedRemedy

I was surprised to see so many leaf-names at the root level. Adding containers would improve the readability of the tree. This is a stylistic comment.

Updated comment (4/25/2018)

In the attached seda_3cf_02_0518_ieee802-ethernet-pon.yang and seda_3cf_01_0518_ieee802-ethernet-pon.tree show a possible containment model you could use (so as to make it easier for users of this YANG file to find related attributes).

Proposed Response Response Status **O**

Cl **ieee-802** SC **ieee-802-ether-pon.yan** P L # **182**
 Seda, Marta Calix

Comment Type **E** Comment Status **X**

The YANG file readability could be improved by removing carriage returns after units, range, config, type statements. This is a stylist comment.

For example,
 config
 false;

could be changed to:
 config false;

SuggestedRemedy

updated comment (4/25/2018):

The attached seda_3cf_02_0518_ieee802-ethernet-pon.yang has removed extra carriage returns to improve readability (easier to see how information is grouped together).

Proposed Response Response Status **O**

Cl **ieee-802** SC **ieee-802-ether-pon.yan** P L # **181**
 Seda, Marta Calix

Comment Type **E** Comment Status **X**

The file contains tabs. Tabs should be removed.

SuggestedRemedy

updated comment (4/25/18): the existence of tabs was noticed in the github document (the pdf file "masks" the problem). Tabs exists in lines 36-39, 1495,2460. The final version of the YANG file should remove them.

Proposed Response Response Status **O**

CI Inconsi **SC Inconsistency** **P** **L** # 190
Seda, Marta Calix

Comment Type **E** **Comment Status** **X**

In some cases the pdf file and the YANG files in github differ (e.g., ieee802-ethernet-interface contains a reference statement in github that is missing in the pdf).

SuggestedRemedy

It would be good to have a "single source of truth" location. I would prefer to pull the YANG files from github (than have to compare what is in the word document against what is in github and then spend time adding it to the YANG file).

Proposed Response **Response Status** **O**

CI Missing **SC Missing** **P** **L** # 185
Seda, Marta Calix

Comment Type **E** **Comment Status** **X**

There is no description that explains your branching philosophy. For example, if a user wants to pull the latest YANG file, should they be using the "master branch"? For amendment or corrigendums, what branch will contain the particular YANG file of interest

SuggestedRemedy

I would recommend fixing this. When I go to github, I see multiple branches. The convention that you intend to use needs clarification. For example, will the latest YANG files be in the "master" branch? What about pull requests that you may be reviewing (but haven't approved yet) (are those part of master or some other branch (say development)? After a release is approved, what branch name convention are you going to use? Is there the possibility that you may have multiple YANG versions (one for example for Issue 1; another one for Corrigendum 1, etc).

Proposed Response **Response Status** **O**

CI Missing **SC Missing** **P** **L** # 187
Seda, Marta Calix

Comment Type **T** **Comment Status** **X**

None of the YANG modules contain a revision.

SuggestedRemedy

I would highly recommend that the revision statement (it helps identify what revision you are dealing with). Without this information, it is difficult to discern the maturity of the YANG file. Please refer to <https://tools.ietf.org/html/rfc6087#page-12> for YANG best practices to follow. Please note that pyang --lint when run against the ieee YANG files flags this as an error.

```
For Example,
revision 2018-04-18 {
  description
    "Initial revision.";
  reference
    "IEEE Std 802.3-2018, Clause 64/77, unless dated explicitly
    IEEE Std 802.3.1-2013, Clause 9, unless dated explicitly";
}
```

Updated comment (4/24/2018):

In the attached seda_3cf_02_0518_ieee802-ethernet-pon, this pyang error has been fixed (someone noted that I should provide more examples on how to fix this issue).

Proposed Response **Response Status** **O**

CI Missing **SC Missing** **P** **L** # 189
Seda, Marta Calix

Comment Type **E** **Comment Status** **X**

The github repository contains the YANG files and the pdf file contains the tree and YANG code.

SuggestedRemedy

It would be helpful to put the YANG tree along with the YANG code. Otherwise one has to run pyang to derive the YANG tree. In most cases a developer will prefer to use YANG files instead of the pdf file.

Proposed Response **Response Status** **O**

Cl Missing SC Missing P L # 180
Seda, Marta Calix

Comment Type E Comment Status X

802.3.1 dot3RecognizedMulticastIDsTable/dot3RecognizedMulticastID is missing.

SuggestedRemedy

updated comment (4/25/18):
the attached seda_3cf_02_0518_ieee802-ethernet-pon.yang line 1075-1087 fixes this issue.

Proposed Response Response Status O

Cl Missing SC Missing P L # 176
Seda, Marta Calix

Comment Type E Comment Status X

802.3.1 dot3ExtPkgControlTable/dot3ExtPkgObjectRegisterAction is missing.

SuggestedRemedy

Updated comment (4/25/18):

In the SNMP model, you could set a virtual interface to register/re-register/de-register. In the YANG model it is unclear how you do this. mpcp-logical-link-admin-state is read/write leaf that uses the mpcp-logical-link-admin-state typedef. Within the mpcp-logical-link-admin-state leaf, there are descriptions on how to "set" the powerup/down action. The registration actions are listed as read only. It seems that a netconf action would be more appropriate to request that you want to register, re-register or de-register an interface. If the interface can't honor that request, the netconf command is rejected.

For your convenience, seda_3cf_02_0518_ieee802-ethernet-pon.yang line 2223-2235, 365-388, and seda_3cf_01_0518_ieee802-ethernet-pon.tree line 91-93 proposes the support of netconf actions for registration actions of the interfaces.

Proposed Response Response Status O

Cl Missing SC Missing P L # 175
Seda, Marta Calix

Comment Type E Comment Status X

802.3.1 dot3ExtPkgControlTable/dot3ExtPkgObjectPowerDown object is missing.

SuggestedRemedy

Updated comment (4/25/18):
It is unclear how you set the interface to power down or up in the current YANG. mpcp-logical-link-admin-state is read/write leaf that uses the mpcp-logical-link-admin-state typedef. Within the mpcp-logical-link-admin-state leaf, there is a description that "when you set operational or disable state" that you cause these events to occur. That is a problem in itself because you have defined mpcp-logical-link-admin-state to be an enum (you can only have those choices at a time). So what if I wanted to have the interface in power-up state and register it as well? It seems that a netconf action would be more appropriate to indicate that you want the interface to power down or go back to the operating state. If the interface can't honor that request, the netconf command is rejected.

seda_3cf_02_0518_ieee802-ethernet-pon.yang line 2197-2209, 318-344, and seda_3cf_01_0518_ieee802-ethernet-pon.tree line 85-87 proposes the support of netconf actions to power-up and power-down the interfaces.

Proposed Response Response Status O

Cl Missing SC Missing P L # 171
Seda, Marta Calix

Comment Type E Comment Status X

Other sections of the pdf document text map the YANG objects to the 802.3 MIB objects. The section on epon doesn't include such table (I would think it would be helpful to include for developers who already implemented EPON SNMP).

SuggestedRemedy

Add a table that maps the YANG containment/leaves to the SNMP MIB.

Updated comment (4/25/18):
For your convenience, seda_3cf_03_0518_YANG-SNMP_Mapping shows the YANG to SNMP mappings.

Proposed Response Response Status O

Comments Received

IEEE P802.3cf D2.1 YANG Data Model Definitions 1st Working Group recirculation ballot comments

Cl Missing SC Missing P98 L29 # 173
Seda, Marta Calix

Comment Type T Comment Status X
802.3.1 dot3OmpEmulationTable/ONUPONcastLLID and OLTPONcastLLID is not supported.

SuggestedRemedy
Updated comment (4/24/18)
For your convenience, the attached seda_3cf_02_0518_ieee802-ethernet-pon.yang and seda_3cf_01_0518_ieee802-ethernet-pon.tree has has added these two missing counters. The appear in seda_3cf_02_0518_ieee802-ethernet-pon.yang in lines 1551 through 1607, and in seda_3cf_01_0518_ieee802-ethernet-pon.tree on lines 52 & 53.

Proposed Response Response Status O

Cl pyang e SC pyang errors P L # 188
Seda, Marta Calix

Comment Type E Comment Status X
The github repository (<https://github.com/YangModels/yang/blob/master/standard/ieee/802.3/draft/ieee802-ethernet-interface.yang>) seems to have some formatting issues.
1) Line 40-45, seems to have extra spaces or tabs (unexpected aligning).
2) if you run pyang --lint against the files, I am getting some minor errors.
3) if you run pyang --max-line-length=70, there are many lines that exceed the recommended 70 characters. (BBF uses 70 as max line length)

SuggestedRemedy
Before publishing a standard, please make sure that you are not getting tool errors (the errors I am seeing are minor).

Updated comment (4/24/2018):
In the attached seda_3cf_02_0518_ieee802-ethernet-pon, the pyang errors have been fixed.

Proposed Response Response Status O

Cl updated SC updated comment P L # 179
Seda, Marta Calix

Comment Type E Comment Status X
802.3.1 dot3ExtPkgOptIfTransmitAlarm is missing.

SuggestedRemedy
updated comment (4/25/18)
IETF is working on an alarm module. You may want to think about how you want this netconf alarm to be represented relative to that module (e.g., what base notification identity to use). I don't have a good solution for this (you could add to the ieee text the alarm notifications that need to be supported).

Proposed Response Response Status O

Cl updated SC updated comment P104 L14 # 178
Seda, Marta Calix

Comment Type E Comment Status X
Container statistics-trx is missing a suspected flag attribute.

SuggestedRemedy
updated comment (4/24/18):
Eventually I found where the suspect flag went. It got mapped to trx-data-reliable. trx-data-reliable needs to be moved within container statistics-trx.

The attached seda_3cf_02_0518_ieee802-ethernet-pon.yang (line 2021-2034) and seda_3cf_01_0518_ieee802-ethernet-pon (line 75) show examples of how this could be fixed.

Proposed Response Response Status O

Cl YANG fi SC YANG file names P L # 168
Seda, Marta Calix

Comment Type E Comment Status X
If you look at the file naming convention of other SDOs, it uses the convention <sdo>-<whateverthis is about>.yang. All IEEE Github files start with ieee802 (in the 802 folder). Likewise in the 801 folder, the file prefix is ieee801.

SuggestedRemedy
Could the YANG file names follow conventions used by other SDOs? (rename them ieee-802-...). (add a "-" between ieee and 802). That would align the convention with the file naming conventions of IETF and BBF.

Proposed Response Response Status O

CI YANG p SC YANG prefixes P L # 169

Seda, Marta Calix

Comment Type E Comment Status X

There is a recommendation in IETF YANG best practices that the prefix start with the <SDO> name (e.g., ieee-eth-pon). In searching through your YANG files, it looks like you don't follow that.

(see <https://tools.ietf.org/html/draft-ietf-netmod-ietf-6087bis-20#page-18>):

It is suggested that a stable prefix be selected representing the entire organization. All normative YANG modules published by the IETF MUST begin with the prefix "ietf-". Another standards organization, such as the IEEE, might use the prefix "ieee-" for all YANG modules.

SuggestedRemedy

I have to note that while IETF states this in their best practices, they don't enforce it in their YANG files. BBF on the other hand does enforce that rule and uses bbf-<feature> as prefixes. This is a stylistic comment.

Proposed Response Response Status O