Cl **00** *SC* **0** *P* **0** *L* **0** # 632
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **R** *Big Ticket Item AUI*

Draft does not conform to the model shown in Figure 22-1 in that there is no AUI specified.

SuggestedRemedy

Include the specification of an AUI to the specification in order to make this new PHY a fully-fledged and compatible member of the family of 10 Mb/s interfaces.

Response *Response Status* **U**

REJECT.

Consensus not to change. Refer to motion 9 from Unconfirmed_minutes_3cg_0918.pdf

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Cl **00** *SC* **13** *P* *L* **3** # 661
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **R** *Big Ticket Item Repeaters*

When we added this note we thought we were through with 10 Mb/s and half duplex forever. That appears not to be the case.

SuggestedRemedy

Remove the note and update clause 13 appropriately to add 10BASE-T1S as a full fledged member of the 10 Mb/s CSMA/CD family.

Response *Response Status* **U**

REJECT.

Consensus not to change. Refer to motion 9 from Unconfirmed_minutes_3cg_0918.pdf

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Cl **22** *SC* **22** *P* **25** *L* **1** # 658
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **R** *Big Ticket Item PLCA*

The proposed changes in this clause are at odds with the statement in the approved criteria on compatibility that states "As a PHY amendment to IEEE Std 802.3, the proposed project will use (the existing) MII"

SuggestedRemedy

Remove clause 148 and related text from the draft. If PLCA is desired as an addition to the standards family it should be placed appropriately at MAC Control or higher within the layer structure and have its own CFI.

Response *Response Status* **U**

REJECT. Group to discuss.

Straw Poll: Reject comment #658 because 1) PLCA is compatible and operates with the CSMA CD MAC, not as a MAC function and 2) PLCA operates as a reconcillation sublayer and does not change the PLS service primitives.

Y: 27
N: 2
A: 7

Cl **22** *SC* **22.2.2.4** *P* **25** *L* **13** # 292
KIM, YONG NIO

Comment Type **TR** *Comment Status* **R** *PLCA*

The strike outs "Other. shall have no effect upon the PHY". This proposed change could potentially make existing systems non-compliant.   So this potentially violates CRD (compatibility) and may cause other issues.

SuggestedRemedy

please fix it.

Response *Response Status* **W**

REJECT.

This text has not been deleted. An additional pair of TXD values have been inserted, which result in the text being moved to page 25, line 21 of draft 2.0.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Cl* **22** Page 1 of 9
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn *SC* **22.2.2.4** 3/9/2019 4:05:34 PM
SORT ORDER: Clause, Subclause, page, line

Cl **22**　　*SC* **22.2.2.4**　　　　*P* **25**　　　*L* **22**　　　# 294
KIM, YONG　　　　　　　　　　NIO

Comment Type　**TR**　　*Comment Status*　**R**　　　　　*PLCA*
The sentence "Other.shall.. upon the PHY"

SuggestedRemedy
Unneceesary text. But if you feel it is necessary, define what "shall have no effect" means, so that it could be added to the PICS and tested.

Response　　　　　*Response Status*　**W**
REJECT.

This is not new text. It is present in clause 22.2.2.4 of 802.3-2018. Removing this sentence may cause backward compatibility issues.

An additional pair of TXD values have been inserted, which result in the text being moved to page 25, line 21 of draft 2.0.

Cl **22**　　*SC* **22.2.2.5**　　　　*P* **25**　　　*L* **46**　　　# 295
KIM, YONG　　　　　　　　　　NIO

Comment Type　**TR**　　*Comment Status*　**R**　　　　　*PLCA*
The proposed sentence "Assertion of the TX_ER signal shall not affect.".potentially make existing systems non-compliant. So this potentially violates CRD (compatibility) and may cause other issues.

SuggestedRemedy
please fix it.

Response　　　　　*Response Status*　**W**
REJECT.

No change is being made to the original clause 22 "shall not affect" text. The modification is the addition of "(with the exception of 10BASE-T1S and 10BASE-T1L)". The idea, which has been discussed in the group, is that we don't want to preclude using TX_ER with new 10BASE-T PHYs, so an exception has been added.

Cl **30**　　*SC* **30.2.1**　　　　*P* **30**　　　*L* **25**　　　# 301
KIM, YONG　　　　　　　　　　NIO

Comment Type　**TR**　　*Comment Status*　**A**　　　　　*Management*
oPLCA 30.3.9 block is misplaced.   It is mutually exclusive with oMACMergeEntity and oOMPEmulation and possibly others.

SuggestedRemedy
Please fix it so that they are not mutually exclusive with compatible entities.

Response　　　　　*Response Status*　**W**
ACCEPT IN PRINCIPLE.

Move oPLCA under oPHYentity in Figure 30-3

Jon Lewis to implement change.

Cl **30**　　*SC* **30.3.9.2.4**　　　*P* **32**　　　*L* **22**　　　# 311
KIM, YONG　　　　　　　　　　NIO

Comment Type　**TR**　　*Comment Status*　**A**　　　　　*Management*
There is no description on how NodeID=0 is assigned (or elected).   How each NodeID is assured to be unique.   How duplicate NodeID (error condition) is handled.

SuggestedRemedy
Please add details or references to these behaviors.

Response　　　　　*Response Status*　**W**
ACCEPT IN PRINCIPLE.

Accomodated by #598 which specifies locally unique NodeID within a collision domain.

Description or requirements of assignment of parameters in the management entity is beyond the scope of this standard.

Cl **30**　　*SC* **30.5.1.1.4**　　　*P* **33**　　　*L* **47**　　　# 313
KIM, YONG　　　　　　　　　　NIO

Comment Type　**TR**　　*Comment Status*　**R**　　　　*Big Ticket Item AUI*
If 10BASE-T1S PHY supports CSMA/CD, then it should operate similiarly to 10BASE5, etc WRT to MAU not available/avialable as stated in second paragarph.

SuggestedRemedy
Please add appropriate references of media loopback.   Current references are only to AUI

Response　　　　　*Response Status*　**W**
REJECT.

Consensus not to change. Refer to motion 9 from Unconfirmed_minutes_3cg_0918.pdf

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **30**　　Page 2 of 9
SC **30.5.1.1.4**　　3/9/2019 4:05:34 PM

Cl **45**   *SC* **45.2.3.58c**   *P* **47**   *L* **19**   # 274
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **R**   *PLCA*

If PLCA network does not work with repeaters, and a single multiple access segment cannot go beyond <nn> of nodes, why is the field much greater than necessary?   It would be appropriate to set the value range to be the same as the actual segment max, and set the rest of the bits as reserved.

SuggestedRemedy

Please do so.

Response   *Response Status* **W**

REJECT.

PLCA does not have a maximum size specified in Clause 148.

Cl **45**   *SC* **45.2.3.58c**   *P* **47**   *L* **25**   # 273
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **A**   *PLCA*

Does the network segment work fine when nodes initialize with all defaults (in this case nodeID=255)?   If so, then please explain how it works in CL147.   If not, please explain why the default value matter.

SuggestedRemedy

Please reference appropirate part of CL147 that describes NodeID=255 default operation, or delete, or add other clarifications needed.

Response   *Response Status* **W**

ACCEPT IN PRINCIPLE.

Replace "The default value of bits 3.2289.7:0 is 255." with, "The configurarion of local_nodeID is beyond the scope of this standard. When PLCA operation is disabled these values have no effect."

Cl **45**   *SC* **45.2.3.58d.1**   *P* **47**   *L* **44**   # 275
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **R**   *PLCA*

Default value of 20 bit times seems exceessive for system that initailize with the value, when E2E delay for 25 m is 1.25 BT.   Adding RX latency (148.4.5.1) delta, which is not spec'ed but the worst case (one could be at 0 us and another could be at 4 us in 147.11) the value could be 41.25 us for 25 m segment.   None of these equate to 20 bit times default.

SuggestedRemedy

Please spec appropriate default for system operation when systems initialize from default.

Response   *Response Status* **W**

REJECT.

Commenter does not provide sufficient remedy. The default value for PLCA TO_TIMER was considered by the Task Force.

Cl **45**   *SC* **45.2.3.58e.3**   *P* **48**   *L* **45**   # 276
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **A**   *Big Ticket Item PLCA_EN*

PLCA is not a part of PCS.   Need to move this bit to appropirate layer (RS) register

SuggestedRemedy

Please do so.

Response   *Response Status* **W**

ACCEPT IN PRINCIPLE.

Move *all* PLCA related bits to a dedicated subclause / address range in Clause 45. This includes registers to be added after accepting #556.

Implement changes marked with #276 in http://www.ieee802.org/3/cg/public/Sept2018/beruto_02_Cl_45_d2p0_proposed.pdf

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TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **45**   Page 3 of 9
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **45.2.3.58e.3**   3/9/2019 4:05:34 PM
SORT ORDER: Clause, Subclause, page, line

Cl **45**   *SC* **45.2.3.58e.4**   *P* **48**   *L* **50**   # 277
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **A**   *Big Ticket Item PLCA_EN*
PLCA is not a part of PCS.   Need to move this bit to appropirate layer (RS) register

SuggestedRemedy
Please do so.

Response   *Response Status* **W**
ACCEPT IN PRINCIPLE.

Move *all* PLCA related bits to a dedicated subclause / address range in Clause 45. This includes registers to be added after accepting #556.

Implement changes marked with #277 in
http://www.ieee802.org/3/cg/public/Sept2018/beruto_02_Cl_45_d2p0_proposed.pdf

Cl **45**   *SC* **45.2.3.58f.1**   *P* **49**   *L* **27**   # 278
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **A**   *Big Ticket Item PLCA_EN*
PLCA is not a part of PCS.   Need to move this bit to appropirate layer (RS) register

SuggestedRemedy
Please do so.

Response   *Response Status* **W**
ACCEPT IN PRINCIPLE.

Move *all* PLCA related bits to a dedicated subclause / address range in Clause 45. This includes registers to be added after accepting #556.

Implement changes marked with #278 in
http://www.ieee802.org/3/cg/public/Sept2018/beruto_02_Cl_45_d2p0_proposed.pdf

Cl **147**   *SC* **147**   *P* **145**   *L* **1**   # 659
Thompson, Geoff   GraCaSI S.A.

Comment Type **TR**   *Comment Status* **R**   *Big Ticket Item AUI*
There is no AUI defined in the draft. The AUI is an essential element of all 802.3 10 Mb/s PHY specifications. This is particularly true in the case of half duplex applications where it is used as a timing test point for calculating the delay used in CSMA/CD round trip timing sums (Ref: Table 4-2). An AUI definition point is also needed (even if it never appears externally on a piece of equipment) in order to be able to include the cl. 9 repeater in networking configurations. Even though (almost) no one else remembers it or thinks it is relevant, the c. 9 repeater is a valuable tool in the network kit. It has a very, very low transister count when compared to a bridge and much lower delay (~ 9 bit times) and jitter (not dependent on packet length) such that it is a superior element for time sensitive applications in terms of cost and performance.

SuggestedRemedy
Define and specify the AUI (no connector specification required) for the 10BASE-T1S PHY for use as a functional test point, a timing test point and a standardized element edge for IP implementations of the PHY.

Response   *Response Status* **U**
REJECT.

Consensus not to change. Refer to motion 9 from Unconfirmed_minutes_3cg_0918.pdf

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **147**   Page 4 of 9
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **147**   3/9/2019 4:05:34 PM
SORT ORDER: Clause, Subclause, page, line

Cl **147**   *SC* **147.1**   *P*   *L* **22**   # 637
Thompson, Geoff   GraCaSI S.A.

Comment Type **TR**   *Comment Status* **R**   *ig Ticket Item PLCA_SCOPE*

The inclusion of PLCA in this project is (1) a layer violation and (2) out of scope for a Physical Layer project according to clause 1.1 of the standard. Inclusion of PLCA conflicts with paragraph 3 of the responses to the "Compatibility" criteria of the CSD.

SuggestedRemedy

Remove this paragraph from the draft and related text from this project. If PLCA is desired as an addition to the standards family it should be placed appropriately within the layer structure and have its own CFI.

Response   *Response Status* **U**

REJECT.

PLCA maps existing MAC PLS primitives to MII, which is in-line with what an RS is supposed to do. PLCA is defined as a reconciliation sublayer, which has been considered part of a Physical Layer specification project. As long as this is the case, the text belongs in the subclause.

Straw Poll: I support rejecting this comment with the rationale above.
Y: 25
N: 1
A: 5

Cl **147**   *SC* **147.1.1**   *P*   *L* **26**   # 638
Thompson, Geoff   GraCaSI S.A.

Comment Type **TR**   *Comment Status* **R**   *Big Ticket Item AUI*

The text and Fig 147-1 do not align to Fig 1-1 of the standard which is intended to comprehensively cover 802.3.

SuggestedRemedy

Remove Fig 147-1 and reference Fig 1-1 or duplicate the 10 Mb/s portion of 1.1 here. Alter the implementation of 10BASE-T1S to align to the 1.1 model.

Response   *Response Status* **U**

REJECT.

Consensus not to change. Refer to motion 9 from Unconfirmed_minutes_3cg_0918.pdf

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Cl **147**   *SC* **147.2**   *P*   *L* **34**   # 642
Thompson, Geoff   GraCaSI S.A.

Comment Type **TR**   *Comment Status* **R**   *Big Ticket Item Primitives*

The claim is that this PHY uses the MII, the reference to 40.2 is to the GMII

SuggestedRemedy

Change the reference to an MII clause and use the same primitives as existing 10/100 PHYs without alteration.

Response   *Response Status* **U**

REJECT.

The reference is identical to that in c96 100BASE-T1. This is a reference to "Service primitives and interfaces", not MII.

Straw poll to reject comment with the above rationale:
Y: 9
N: 0
A: 21

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **147**   Page 5 of 9
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **147.2**   3/9/2019 4:05:34 PM
SORT ORDER: Clause, Subclause, page, line

Cl **147** *SC* **147.3.1** *P* *L* **3** # 643
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **A** *EZ*

It is not clear from the description whether "PCS Reset" produces a level or a pulse on its output. i.e. does it take a !PCS Reset to complete the reset and release the device for operation.

SuggestedRemedy

Clarify

Response *Response Status* **U**

ACCEPT IN PRINCIPLE.
WORK WITH PIER ON THIS
Change this:
====
PCS reset initializes all PCS functions. The PCS Reset function shall be executed whenever one of the following conditions occur:
a) Power on (see 36.2.5.1.3).
B) The receipt of a request for reset from the management entity.
PCS Reset shall set pcs_reset = ON while any of the above reset conditions holds true. All state diagrams take the open-ended pcs_reset branch upon execution of PCS Reset. The reference diagrams do not explicitly show the PCS Reset function.
====
to this:
====
PCS reset initializes all PCS functions. The PCS Reset function shall be executed whenever any of the following conditions occur:
a) Power on causes power_on = TRUE (see 36.2.5.1.3) while pcs_reset = OFF.
B) The receipt of a request for reset from the management entity (see 3.2291.15 in 45.2.3.58e.1), independently from the current state of pcs_reset.
All state diagrams take the open-ended pcs_reset branch upon execution of PCS Reset.
PCS Reset shall keep pcs_reset = ON until the complete execution of the PCS Reset function, after which it is set to pcs_reset = OFF. The reference diagrams do not explicitly show the PCS Reset function.
====

Cl **147** *SC* **147.3.2.2** *P* *L* **44** # 645
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **R** *ig Ticket Item PLCA_SCOPE*

PLCA is out of scope for this project and a layer violation for a PHY project.

SuggestedRemedy

Remove this variable and its descriptive paragraph.

Response *Response Status* **U**

REJECT.

See comment #637 for rationale.

Cl **147** *SC* **147.3.2.2** *P* *L* **50** # 646
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **R** *ig Ticket Item PLCA_SCOPE*

PLCA is out of scope for this project and a layer violation for a PHY project.

SuggestedRemedy

Remove the remainder of PCLA from this project draft.

Response *Response Status* **U**

REJECT.

See comment #637 for rationale.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Cl* **147** Page 6 of 9
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn *SC* **147.3.2.2** 3/9/2019 4:05:34 PM
SORT ORDER: Clause, Subclause, page, line

Cl **147** *SC* **147.3.5** *P* *L* **10** # 648
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **R** *Big Ticket Item Repeaters*

Collision detect as described here purports to detect a collision between this station and one other station. It does not descibe any way to detect a collision between any other two or more stations.

SuggestedRemedy

Add collision detection based on energy received. Lack of this aspect constitues a lack of completeness in the basic function of the specified device and therefore the draft. Restart the initial WG Ballot.

Response *Response Status* **U**

REJECT.
PHYs detect activity on the bus, specific detection of collision is not required, nor is the method.

Commenter indicates that his concern is reliable detection of activity with an arbitrary number of transmitters.

Straw Poll:
I support:
REJECT - PHYs detect activity on the bus, specific detection of collision is not required, nor is the method.
Y:7
N:2
A:11

I support:
ACCEPT. (commenter's proposed resolution is: Add collision detection based on energy received. Restart the initial WG Ballot.)
Y:0
N:9

TFTD

Cl **147** *SC* **147.3.7** *P* *L* **1** # 650
Thompson, Geoff GraCaSI S.A.

Comment Type **TR** *Comment Status* **R** *ig Ticket Item PLCA_SCOPE*

PLCA is out of scope for this project and a layer violation for a PHY project.

SuggestedRemedy

Remove the entirety of cl. 147.3.7.

Response *Response Status* **U**

REJECT.

See comment #637 for rationale.

Cl **148** *SC* **148** *P* **173** *L* # 287
KIM, YONG NIO

Comment Type **TR** *Comment Status* **A** *PLCA*

CL 4.3.3 variable definition of carrierSense is in conflict with how CL173 PLCA is using carrier sense. "The overall event of activity on the physical medium is signaled to the MAC sublayer by the variable carrierSense". And "var carrierSense: Boolean;
In half duplex mode, the MAC sublayer shall monitor the value of carrierSense to defer its own transmissions when the medium is busy. The Physical Layer sets carrierSense to true immediately upon detection of activity on the physical medium. After the activity on the physical medium ceases, carrierSense is set to false. Note that the true/false transitions of carrierSense are not defined to be precisely synchronized with the beginning and the end of the frame, but may precede the beginning and lag the end, respectively. (See 4.2 for details.) In full duplex mode, carrierSense is undefined."   CL173 use of carrier sense is in conflict w/ CL4.   These conflicted use are pervasive, e.g. CL148.4.6.1 holds carrier_on active even when there is no activity on the physical medium.

SuggestedRemedy

Either include CL4 carrier sense related maintanance changes as a part of PLCA, or change PLCA to work with CL4 carrier sense as defined.

Response *Response Status* **W**

ACCEPT IN PRINCIPLE.

Accomodated by #649.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general *Cl* **148** Page 7 of 9
COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn *SC* **148** 3/9/2019 4:05:34 PM
SORT ORDER: Clause, Subclause, page, line

Cl **148**   *SC* **148**   *P* **173**   *L* **1**   # 656

Thompson, Geoff   GraCaSI S.A.

Comment Type   **TR**   *Comment Status* **R**   *ig Ticket Item PLCA_SCOPE*

The inclusion of PLCA in this project is (1) a layer violation and (2) out of scope for a Physical Layer project according to clause 1.1 of the standard. Inclusion of PLCA conflicts with paragraph 3 of the responses to the "Compatibility" criteria of the CSD.

SuggestedRemedy

Remove clause 148 and related text from the draft. If PLCA is desired as an addition to the standards family it should be placed appropriately within the layer structure and have its own CFI.

Response   *Response Status* **U**

REJECT.

See comment #637 for rationale.

Cl **148**   *SC* **148.1**   *P* **173**   *L* **14**   # 657

Thompson, Geoff   GraCaSI S.A.

Comment Type   **TR**   *Comment Status* **A**   *ig Ticket Item PLCA_SCOPE*

According to this text, "PLCA is designed to work on top of CSMA/CD". Therefore it is mispositioned in the stack by being placed within the PHY which is below the CSMA/CD mechanism.

SuggestedRemedy

Remove clause 148 and related text from the draft. If PLCA is desired as an addition to the standards family it should be placed appropriately at MAC Control or higher within the layer structure and have its own CFI.

Response   *Response Status* **U**

ACCEPT IN PRINCIPLE.

Proposed resolution in Clause_148_r2p0_resolution.pdf. Changes are marked with #657 in the right boxes.

NOTE: Intention was to specify that PLCA is not a replacement of CSMA/CD but instead it's a method that works in conjuction with CSMA/CD functions.

Cl **148**   *SC* **148.2**   *P* **173**   *L* **25**   # 286

KIM, YONG   NIO

Comment Type   **TR**   *Comment Status* **R**   *PLCA*

"..round-robin fashion every time the PHY with node ID = 0 signals a BEACON on the medium, indicating the start of a new cycle" -- this specification does not describe how a node ID=0 is selected (or elected), and how the system handles duplicate node id=0 or absense of node id=0.   Also not specified are node id conflict (duplicate node id s)

SuggestedRemedy

The draft is not complete without these specifications. Specify these to complete the spec.   Ethernet std has management optional, config rules are known, and required protocol to config are specified (e.g. channel traninig)

Response   *Response Status* **W**

REJECT.
No consensus to change
Commenter is referred to comment 598 with respect to node ID assignment and management operation.

Cl **148**   *SC* **148.4.2**   *P* **176**   *L*   # 289

KIM, YONG   NIO

Comment Type   **TR**   *Comment Status* **R**   *ig Ticket Item PLCA_SCOPE*

RS is defined in CL1 "1.4.425 Reconciliation Sublayer (RS): A mapping function that reconciles the signals at the Media Independent Interface (MII) to the Media Access Control (MAC)-Physical Signaling Sublayer (PLS) service definitions. (See IEEE Std 802.3, Clause 22.)", and consistent with CL22.1.1.   Even when MII signals are used to convery signals for EEE, it is still performing reconciliation.   PLCA is using signals in RS (collision, carrier-sense, etc) while creating a completely different and new medium access control (MAC) method.   PLCA function does not belong in RS.

SuggestedRemedy

Move PLCA outside of RS (which only translates MII signals to PLS signals, for the dataplane as well as control like EEE states, not a new media access control method. And if necessary, revise CSD and objectives as appropirate.

Response   *Response Status* **W**

REJECT.

See comment #637 for rationale.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   *Cl* **148**   Page 8 of 9
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   *SC* **148.4.2**   3/9/2019 4:05:34 PM
SORT ORDER: Clause, Subclause, page, line

Cl **148**   *SC* **148.4.4.1.2**   *P* **178**   *L* **51**   # 603
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **A**   *PLCA*

"A Commit request shall not.. PHY. RX_DV.." has two problems.   What PHY is "the PHY", and how does the PHY know not to assert RX_DV signal in accordance to CL148 state diagram.

SuggestedRemedy

Please fix it. If fixable.

Response   *Response Status* **W**

ACCEPT IN PRINCIPLE.

As stated in the same subclause "PHY specifications are free to map the COMMIT request to any suitable line coding as long as the requirement defined herein are met."

The purpose of this sentence is to ensure that whatever mapping is chosen in specific PHY clauses for the COMMIT request, this one is not interpreted as normal data (asserting RX_DV).

Suggested resolution should clarify this better.

Proposed resolution in Clause_148_r2p0_resolution.pdf. Changes are marked with #comment number in the right boxes.

NOTE: CRS assertion is not to be specified here (it's implicit in CRS definition). See resolution of #649

Cl **148**   *SC* **148.4.4.1.2**   *P* **178**   *L* **51**   # 602
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **A**   *PLCA*

"thus request, the PHY shall asset the CRS..." has two problems. What PHY is "the PHY", and how does PHY assert CRS in accordance to CL148 state diagram

SuggestedRemedy

Please fix it. If fixable.

Response   *Response Status* **W**

ACCEPT IN PRINCIPLE.
Solved by #603 and #649

Cl **148**   *SC* **148.4.5.1**   *P* **181**   *L* **50**   # 604
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **R**   *ig Ticket Item PLCA_SCOPE*

PLCA Control state diagram (Fig 148-5) and related text seems to describe Token bus-like medium access control funciton (without details on how the token (BEACON) is initialized, how duplilcate tokens are handled (duplicate nodeID=0), how lost token (null nodeID=0) is handled).   This is NOT appropriate function for RS (CL22) layer that conveys (translates) signals between PLS and MII

SuggestedRemedy

Move CL148 function so CL4 MAC Clause where it belongs.   Make approporate changes to CRD and objectives list, if deemed needed.

Response   *Response Status* **W**

REJECT.

See comment #637 for rationale.

Cl **148**   *SC* **148.4.6.1**   *P* **187**   *L* **54**   # 605
KIM, YONG   NIO

Comment Type **TR**   *Comment Status* **R**   *t Item HALF_DUPLEX_802.1*

PLCA Data state diagram (Fig 148-6) introduces a new behavior WRT media loopback when transmitting.   Prior to CL148, CL4 half-duplex MAC reflects all TX packets back to RX (reflected by the half-duplex medium).   CL4 full-duplex MAC does not reflect any TX back to RX.   There is recognized inconsistancy in 802.1 MAC Services defintion (e.g. thought experiment -- how does broadcast frame transmitted by a bridge to a half-duplex medium behave as per std, and how does a system actually behave)? This statemachine introduces a new behavior for the half-duplex MAC, where the TX is not reflected back to RX. An EXISTING system that is not aware of 802.3cg behavior would IGNORE (with half-duplex MAC) RX when it is also TX, when in fact RX is independant transmission that must be received (otherwise packet was transmited to the network and lost silently by being ignored (reflected).

SuggestedRemedy

While the 802.1 MAC services issues has nothing to do with 802.3cg scope, the 802 and 802.3 compatibility is IN scope, because by introducing a different behavior. Existing systems (MACs and Bridges) would potentally not process any RX that is coincidental with its own TX.   Please fix it, if fixible.   8802.1 MAC Services maintanance change may be required be reviewed together with this issue.

Response   *Response Status* **W**

REJECT.

PLCA is compatible with the clause 4 MAC as specified in 802.3. Maintenance on clause 4 or other Standards is outside the scope of this project. The P802.3cg Task Force Chair will forward this comment to 802.3 Maintenance for consideration.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Clause, Subclause, page, line

Cl **148**   Page 9 of 9
SC **148.4.6.1**   3/9/2019 4:05:34 PM