

P802.3ah Draft 1.1a Comments

C 63 S 63.1 P 376 L # 99018
Wei, Dong SBC Communication

Comment Type TR Comment Status D D1.0 #415

2BASE-TL is a much better PHY for the long-reach objective than 2PASS-TL due to the following reasons:

- 1) 2BASE-TL has a significantly better simulated rate/reach performance than 2PASS-TL for most noise models that are commonly used;
- 2) Lab/field testing and deployment have shown that the real-world performance of 2BASE-TL-type technologies (e.g., SHDSL, HDSL2/4) is very close to their simulated performance, and that of 2PASS-TL-type technologies (e.g., ADSL) is significantly below their simulated performance.
- 3) 2BASE-TL is a basis system in T1.417 and hence its deployment in the public access network is protected. 2PASS-TL does not have this advantage.
- 4) 2BASE-TL is a mature and proven technology, and 2PASS-TL is new and untested.
- 5) 2BASE-TL supports repeater mode, which is a common requirement for business applications. 2PASS-TL does not support repeater mode. Therefore, 2BASE-TL can be deployed on long loops and hence can achieve much broader market potential than 2PASS-TL.

SuggestedRemedy

Delete the entire subclause (from Page 376 to Page 541).

Proposed Response Response Status W

COMMENT UNRESOLVED

This is an opinon. This would require a vote in the Task Force to overturn the adoption of 2 candidate PHYs and adopt only one PHY to meet the objective.

Those in favor of rejecting the comment:

Yes: 15
No: 8

C 63 S 63.1 P 376 L # 99017
Wei, Dong SBC Communication

Comment Type TR Comment Status D D1.0 #414

The PHY described in this subcluse is based on ADSL2 (G.992.3). ADSL2 is not a standardized technology in the U.S. In fact, any standardized DSL technology in the U.S. must be based on an ANSI standard. There does not exist any ANSI standard on which ADSL2 is based. As a future ANSI standard, the P802.3ah draft should not adopt any non-standardized DSL technology in the U.S.

SuggestedRemedy

Delete the entire subclause (from Page 376 to Page 541).

Proposed Response Response Status W

COMMENT UNRESOLVED

Covered by response to 99018

C 63 S 63.1 P 376 L # 99019
Wei, Dong SBC Communication

Comment Type TR Comment Status D D1.0 #416

The PHY described in this subcluse is based on ADSL2 (G.992.3) Annex J. Since Annex J was developed primarily for some European countries where ADSL-over-ISDN is the dominant ADSL variant, G.992.3 does not specify the performance requirements of Annex J for North America. Therefore, Annex J is not suitable for deployment in the U.S. As a future ANSI standard, the P802.3ah draft should not adopt this PHY.

SuggestedRemedy

Delete the entire subclause (from Page 376 to Page 541).

Proposed Response Response Status W

COMMENT UNRESOLVED

Covered by response to 99018

C 63 S 63.1 P 383 L 1 # 99117
WEI, DONG SBC Communication

Comment Type TR Comment Status D D1.1 #638

This comment is the same as Comment #415 on Draft 1.0.

2BASE-TL is a much better PHY for the long-reach objective than 2PASS-TL due to the following reasons:

- 1) 2BASE-TL has a significantly better simulated rate/reach performance than 2PASS-TL for most noise models that are commonly used;
- 2) Lab/field testing and deployment have shown that the real-world performance of 2BASE-TL type technologies (e.g., SHDSL, HDSL2/4) is very close to their simulated performance, and that of 2PASS-TL-type technologies (e.g., ADSL) is significantly below their simulated performance.
- 3) 2BASE-TL is a basis system in T1.417 and hence its deployment in the public access network is protected. 2PASS-TL does not have this advantage.
- 4) 2BASE-TL is a mature and proven technology, and 2PASS-TL is new and untested.
- 5) 2BASE-TL supports repeater mode, which is a common requirement for business applications. 2PASS-TL does not support repeater mode. Therefore, 2BASE-TL can be deployed on long loops and hence can achieve much broader market potential than 2PASS-TL.

SuggestedRemedy

Delete the entire subclause (from Page 383 to Page 409).

Proposed Response Response Status W

COMMENT UNRESOLVED

Covered by response to 99018

P802.3ah Draft 1.1a Comments

C 63 S 63.1 P 383 L 1 # 99115
WEI, DONG SBC Communication

Comment Type TR Comment Status D D1.1 #640

This comment is the same as Comment #414 on Draft 1.0.

The PHY described in this subclause is based on ADSL2 (G.992.3). ADSL2 is not a standardized technology in the U.S. In fact, any standardized DSL technology in the U.S. must be based on an ANSI standard. There does not exist any ANSI standard on which ADSL2 is based. As a future ANSI standard, the P802.3ah draft should not adopt any non-standardized DSL technology in the U.S.

SuggestedRemedy

Delete the entire subclause (from Page 383 to Page 409).

Proposed Response Response Status W

COMMENT UNRESOLVED
Covered by response to 99018

C 63 S 63.1 P 383 L 1 # 99116
WEI, DONG SBC Communication

Comment Type TR Comment Status D D1.1 #639

This comment is the same as Comment #416 on Draft 1.0.

The PHY described in this subclause is based on ADSL2 (G.992.3) Annex J. Since Annex J was developed primarily for some European countries where ADSL-over-ISDN is the dominant ADSL variant, G.992.3 does not specify the performance requirements of Annex J for North America. Therefore, Annex J is not suitable for deployment in the U.S. As a future ANSI standard, the P802.3ah draft should not adopt this PHY.

SuggestedRemedy

Delete the entire subclause (from Page 383 to Page 409).

Proposed Response Response Status W

COMMENT UNRESOLVED

Covered by response to 99018

C 63 S 63.1.1 P 383 L 30 # 99118
Kimpe, Marc ADTRAN

Comment Type TR Comment Status R D1.1 #32

The specification should be consistent all PHYs proposed for clause 63. Either modifications to existing standards should be included or no modifications to existing. Operation of annex J over POTS is not a standard. The comment also applies to the following sections:
63.1.1.3 page 384 line 15
63.1.1.4.2 page 386 line 12
63.1.3.10 page 395 line 6 to 13
63.1.3.13.1.3 page 397 line 16

SuggestedRemedy

Remove the annex J over POTS option.

Proposed Response Response Status U

REJECT.

Refer to baseline(slide 26) proposed as basis for the draft.

Votes to reject the comment: 20
Votes opposed: 0

P802.3ah Draft 1.1a Comments

C 63 S 63.1.2.11 P 389 L 5054 # 99119
 Artman, Doug Texas Instruments

Comment Type T Comment Status D D1.1 #797

G.992.3 supports 3 forms of On-line Reconfiguration (OLR): Bitswap, Dynamic Rate Repartioning (DRR) and Seamless Rate Adaptation (SRA). Bitswap adjusts the number of bits applied to specific tones while keeping the total number of bits allocated constant. DRR also keeps the total number of bits constant, but readjusts the number of bits allocated to different latency paths. SRA is capable of modifying not only the bit distribution among all carriers but can also modify the overall data rate by adjusting the total number of bits allocated. In G.992.3 bitswap is required while DRR and SRA are optional. The EFM Task Force needs to decide whether they want to maintain support for DRR and SRA for 2PASS-TL. The other relevant subclauses in Clause 63 are 63.1.2.11.1, 63.1.2.11.1.1, 63.1.2.11.1.2 and 63.1.3.16.

SuggestedRemedy

EFM should maintain support for bitswap but simplify the OLR protocol and eliminate support for DRR and SRA. DRR is not required with only a single latency path and SRA has no utility if we are nailing the data rate up at 2 Mbps. It is suggested to modify the referenced subclauses as necessary to remove support for DRR and SRA.

Proposed Response Response Status W

COMMENT UNRESOLVED

Vote to reject

YES: 8

NO: 12

Vote to accept

YES: 10

NO: 5

C 63 S 63.1.5 P 406 L 29 # 99120
 Kimpe, Marc ADTRAN

Comment Type TR Comment Status R D1.1 #33

The title of clause 63.1.5 is "PSD Masks and Transmit Power- EFM Long Reach system operating in the frequency band over POTS". Clause 63 was meant to include the standard by reference with deviation from the standard highlighted, yet clause 63.1.5 does not exist within annex J and is listed here.

SuggestedRemedy

- 1- Clearly mark what are the changes with respect to existing standards.
- 2- remove all sections related to annex J over POTS.

Proposed Response Response Status U

REJECT.

Refer to baseline(slide 26) proposed as basis for the draft.

See resolution of comment 32.

C 63 S 63.3.1.2 P 412 L 3443 # 99121
 Artman, Doug Texas Instruments

Comment Type TR Comment Status D D1.1 #811

The agreement reached in 802.3ah was to reference G.shdsl as one of the potential long reach PHYs. This text is referring to "Enhanced SHDSL" or G.shdsl.bis which is a potential standard currently being discussed in other standards bodies. Although there are agreements in ITU-T to support higher data rates in G.shdsl.bis, there are no agreements on how this is to be accomplished. We should keep our reference to what was agreed in EFM, G.shdsl, and potentially consider later revisions of G.shdsl in a subsequent revision of the EFM standard.

SuggestedRemedy

Remove the value of 81 and reference to subclause editor's note in line 34, and remove the subclause editor's note in lines 37-43.

Proposed Response Response Status W

COMMENT UNRESOLVED

Vote:

Accept Doug's remedy: 11

Against: 9

C 63 S 63.3.1.2 P 544 L 3238 # 99032
 Artman, Doug Texas Instruments

Comment Type TR Comment Status D D1.0 #430

The agreement reach in 802.3ah was to reference G.shdsl as one of the potential long reach PHYs. This text is referring to "Enhanced SHDSL" or G.shdsl.bis which is a potential standard currently being discussed in other standards bodies. Although there are agreements in ITU-T to support higher data rates in G.shdsl.bis, there are no agreements on how this is to be accomplished. We should keep our reference to what was agreed to in EFM, G.shdsl, and potentially consider later revisions of G.shdsl in a subsequent revision of the EFM standard.

SuggestedRemedy

Remove the value of 81 and reference to subclause editor's note in lines 32 and 33, and remove the subclause editor's note in lines 34-38.

Proposed Response Response Status W

COMMENT UNRESOLVED

Duplicate of 811

P802.3ah Draft 1.1a Comments

C 63 S 63.4.1.2 P 415 L 5054 # 99122
 Artman, Doug Texas Instruments
 Comment Type TR Comment Status D D1.1 #814
 There are no agreements yet within ITU-T as to how to create a G.shdsl.bis, and we should remove all references to this. Previous agreements in 802.3ah were limited to G.shdsl.
 SuggestedRemedy
 Remove this note.
 Proposed Response Response Status W
 COMMENT UNRESOLVED
 Covered by comment 811

C 63 S 63.4.1.2 P 547548 L 52541 # 99037
 Artman, Doug Texas Instruments
 Comment Type TR Comment Status D D1.0 #433
 There are no agreements yet within ITU-T as to how to create an G.shdsl.bis, and we should remove all references to this. Previous agreements in 802.3ah were limited to G.shdsl.
 SuggestedRemedy
 Remove this note.
 Proposed Response Response Status W
 COMMENT UNRESOLVED
 Covered by comment 811

C 63 S 63.4.1.3.3 P 416 L 2931 # 99123
 Artman, Doug Texas Instruments
 Comment Type TR Comment Status D D1.1 #815
 This note refers to a standard which does not yet exist and has no substantial technical agreements yet. We should remove this note and keep our references to G.shdsl.
 SuggestedRemedy
 Remove this note.
 Proposed Response Response Status W
 COMMENT UNRESOLVED
 Covered by comment 811

C 63 S 63.4.1.3.3 P 548 L 2122 # 99038
 Artman, Doug Texas Instruments
 Comment Type TR Comment Status D D1.0 #434
 This note refers to a standard which does not yet exist and has no substantial technical agreements yet. We should remove this note and keep our references to G.shdsl.
 SuggestedRemedy
 Remove this note.
 Proposed Response Response Status W
 COMMENT UNRESOLVED
 Covered by comment 815

C 63 S 63.4.8.1 P 421 L 3033 # 99124
 Artman, Doug Texas Instruments
 Comment Type TR Comment Status D D1.1 #816
 There have been no agreements within 802.3ah to include an enhanced version of SHDSL, and discussion in ITU-T has not yet reached the point where agreements on expanding the bandwidth of SHDSL have been made. We should remove this note and keep our references to G.shdsl (as agreed earlier).
 SuggestedRemedy
 Remove this note.
 Proposed Response Response Status W
 COMMENT UNRESOLVED
 Covered by comment 813

C 63 S 63.4.8.1 P 553 L 1719 # 99039
 Artman, Doug Texas Instruments
 Comment Type TR Comment Status D D1.0 #435
 There have been no agreements within 802.3ah to include an enhanced version of SHDSL, and discussion in ITU-T has not yet reached the point where agreements on expanding the bandwidth of SHDSL have been made. We should remove this note and keep our references to G.shdsl (as agreed earlier).
 SuggestedRemedy
 Remove this note.
 Proposed Response Response Status W
 COMMENT UNRESOLVED
 Covered by comment 816