# Next steps for EEE Draft

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# Clause list

	Comment/ Qualifier	Clause	Subclauses	Editor
Energy Efficient Ethernet	New	78		Dimitry Taich
Twisted pair				
10BASE-T		14		Mandeep Chadha
100BASE-TX	Full Duplex	24, 25		Joseph Chou
1000BASE-T	Full Duplex	40		Adam Healey
10GBASE-T		55		Gavin Parnaby
Backplane		69		David Koenen
1000BASE-KX		36, 70		David Koenen
10GBASE-KX4		48, 71		David Koenen
10GBASE-KR		49, 72		David Koenen

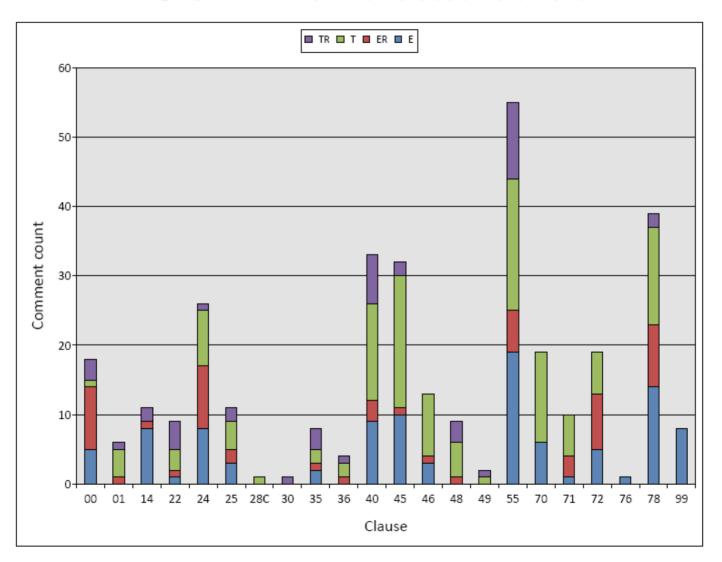
# Clause list 2

	Comment/ Qualifier	Clause	Subclauses	Editor
MAC interfaces				
MIII		22		Hugh Barrass
GMII		35		Hugh Barrass
XGMII		46		Hugh Barrass
Autoneg Twisted pair		28		Jeff Lapak/Hugh Barrass
Autoneg Backplane		73		Jeff Lapak/Hugh Barrass
GDMO		30		Hugh Barrass
Management		45		Hugh Barrass

#### Status

- D1.0 was published  $\sim 10/8$ 
  - This draft was mostly complete
  - Clause 55 and Backplane clauses had limited scrutiny
- We received a large number of comments
  - − ~300 total vs 85 on D0.9
- Consistency of notation and terminology across PHYs remains an issue

### Comment statistics



#### Nomenclature

- Partial definition from prior meetings
  - 10BASE-T EEE will be referred to as 10BASE-Te
  - For rest of T family and backplane:
    - No new name because EEE is an option
    - xMII sends TX\_LP\_IDLE (this is the name of the signal)
    - In response the PHY, depending on PHY type, will either:
      - Put its Transmitter into a low power transmit state
      - Or send LPI signals to link partner and wait for LPI signals back
        - » Then put its transmitter into a low power transmit state
  - Same philosophy will be applied in the receive direction
- Many more terms need reconciliation across PHYs
  - We will start with Base-T phys and editors will take a first cut at this
  - Then carry this through to management, xMII & Backplane

#### **TBDs**

- ~33 lines with TBDs
  - 19 of these in clause 55
    - 11 Refer to figure numbers
  - ~5 in backplane clauses
  - ~8 instances in clause 78
    - Most will fall out of fixes in other clauses
- Missing items from draft
  - Test modes for LPI related functions in all PHYs
  - Management and register definitions for registers whose definition is not clear yet

# Hugh Barrass's proposal

Editor for lots of clauses

# Proposal on handling comments

- ~33 lines with TBDs
  - 19 of these in clause 55
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## Clause 22, 28C, 30

• All "easy T's" – only require a brief review

- Clause 22 241, 24, 242, 94 (TR), 281 (TR), 282 (TR), 266 (TR)
- Clause 28C 48
- Clause 30 171 (TR) editor to produce first draft of Clause 30.

# Clause 35, 36

- Easy T's only require a brief review
- Clause 35 5 (TR), 6 (TR), 207, 336 (TR),
  206
- Clause 36 7 (TR)

• Clause 36 - 49, 50 - change to state machine

## Clause 46, 48

- Easy T's only require a brief review
- Clause 46 29, 168, 219, 33, 334, 32, 31, 218, 333
- Clause 48 34 (TR), 63, 291, 337 (TR), 35, 67
- Clause 48 64, 65 change to state machine
- Clause 48 267 (TR, reject) wording
- Clause 48 66 randomness

### Clause 45

- Easy T's only require a brief review
- 214, 88, 193, 98, 89, 194, 90, 9, 97

- 91, 60, 58, 61 relocate indicator bits
- 96 (reject) semantics
- 100, 59, 216, 62, 165 (ER), 99 reduced energy modes

# Easy E's

- Easy E's use a bucket motion:
- Clause 22 285, 240
- Clause 35 173, 159
- Clause 36 160
- Clause 45 215, 11, 92, 93, 12, 101, 217
- Clause 46 247, 28, 30, 169 (ER)
- Clause 48 332 (ER)
- Clause 35 172; 45 10, 13, 14 (rejects)