

IEEE 802.3WG

Opening Plenary Report

IEEE P802.3bj
100 Gb/s Backplane and Copper Cable
Task Force

John D'Ambrosia

San Antonio, Tx, USA, Nov 2012

IEEE P802.3bj Task Force Organization

John D'Ambrosia	Task Force Chair
Adam Healey	Chief Editor, Editor, Clauses 91 & 93, Miscellaneous
Hugh Barrass	Editor, Clauses 30, 45, 80-83, 85
Matt Brown	Editor, Clause 94
Chris DiMinico	Editor, Clause 92, Annex 92A
Kent Lusted	Secretary

Reflector and Web

- To subscribe to the 100GCU reflector, send an email to:

ListServ@ieee.org

with the following in the body of the message (do not include “<>”):

```
subscribe stds-802-3-100GCU <yourfirstname> <yourlastname>  
end
```

- Send 100GCU reflector messages to:

STDS-802-3-100GCU@listserv.ieee.org

- Task Force web page URL:

<http://www.ieee802.org/3/bj/index.html>

IEEE P802.3bj 100 Gb/s Backplane and Copper Cable Task Force Project Documents

- **PAR**

- http://www.ieee802.org/3/bj/PAR_approved_0911.pdf
- Draft PAR modification (pending 802 EC/SA-STDBD approval)-
http://www.ieee802.org/3/bj/P802_3bj_PAR_modification_101012.pdf

- **5 Criteria** (pending 802 EC Approval)

- http://www.ieee802.org/3/bj/5C_0712.pdf

- **Objectives**

- http://www.ieee802.org/3/bj/objectives_0712.pdf

- **Adopted Timeline (To be Revisited)**

- http://www.ieee802.org/3/bj/timeline_0911.pdf

Task Force Private Area

- URL: <http://www.ieee802.org/3/bj/private/index.html>
 - Username: XXXXXX
 - Password: XXXXXXXXX
- Write it down...
- Note - The drafts within are posted for your review only, and neither the drafts nor access information should be copied or redistributed to others in violation of document copyrights.

IEEE P802.3bj Task Force Objectives

- Support full-duplex operation only
- Preserve the 802.3 / Ethernet frame format utilizing the 802.3 MAC
- Preserve minimum and maximum FrameSize of current 802.3 standard
- Support a BER of better than or equal to 10^{-12} at the MAC/PLS service interface
- Define a 4 lane PHY for operation over a printed circuit board backplane with a total channel insertion loss of ≤ 35 dB at 12.9 GHz**
- Define a 4 lane PHY for operation over a printed circuit board backplane with a total channel insertion loss of ≤ 33 dB at 7.0 GHz**
- Define a 4-lane 100 Gb/s PHY for operation over links consistent with copper twin-axial cables with lengths up to at least 5m.
- To define optional Energy-Efficient Ethernet operation for 100G Backplane and Twinaxial cable PHYs specified in P802.3bj*
- To define optional Energy-Efficient Ethernet operation for 100GBASE-CR10***
- To define optional Energy-Efficient Ethernet operation for 40GBASE-CR4 and 40GBASE-KR4***

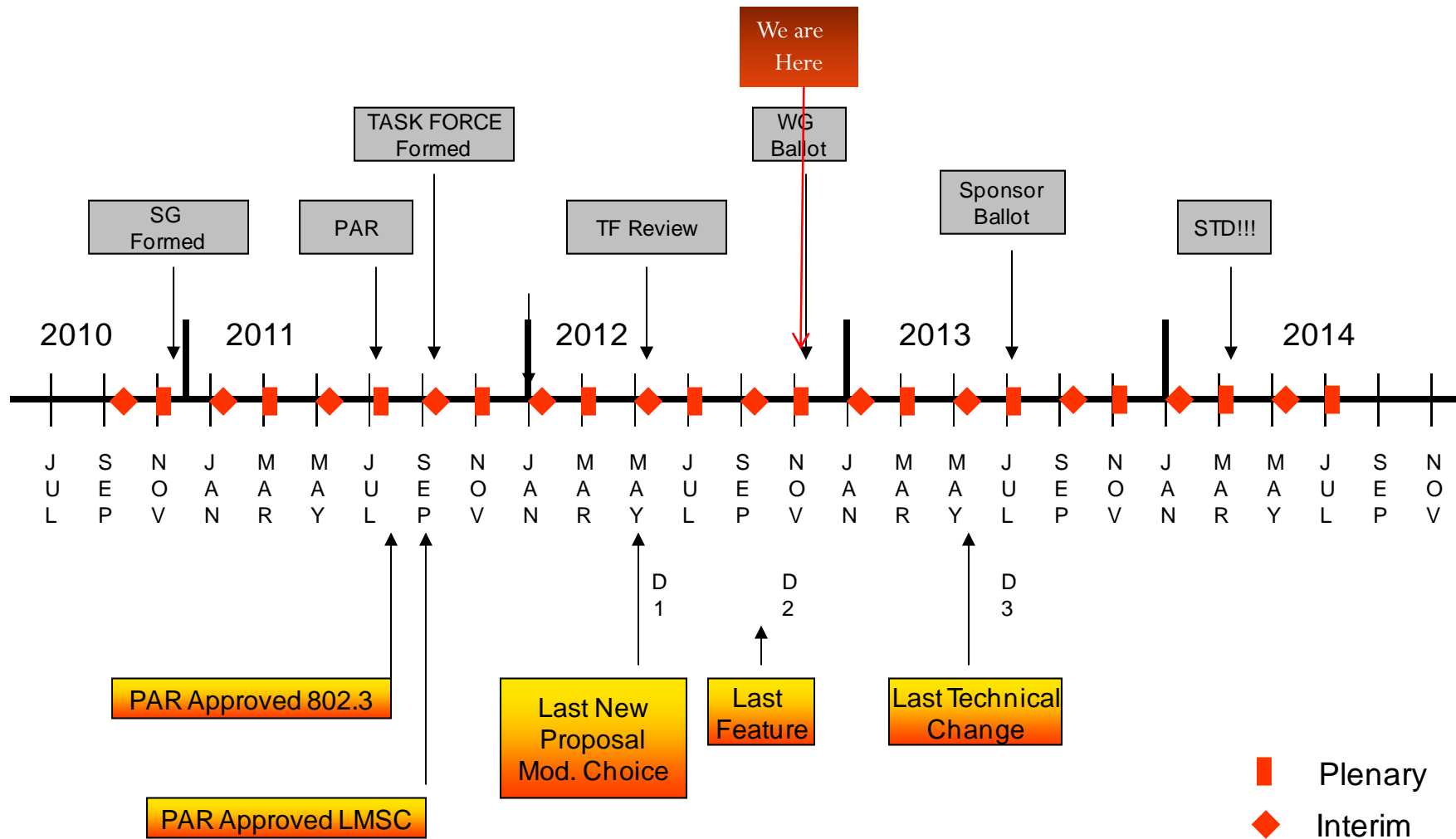
Objectives approved by IEEE 802.3 WG July 2011 IEEE 802 Plenary

* Objective approved by IEEE 802.3 WG Nov 2011 IEEE 802 Plenary

** Objectives approved by IEEE 802.3 WG Mar 2012 IEEE 802 Plenary

*** Objectives approved by IEEE 802.3 WG July 2012 IEEE 802 Plenary

Adopted Timeline



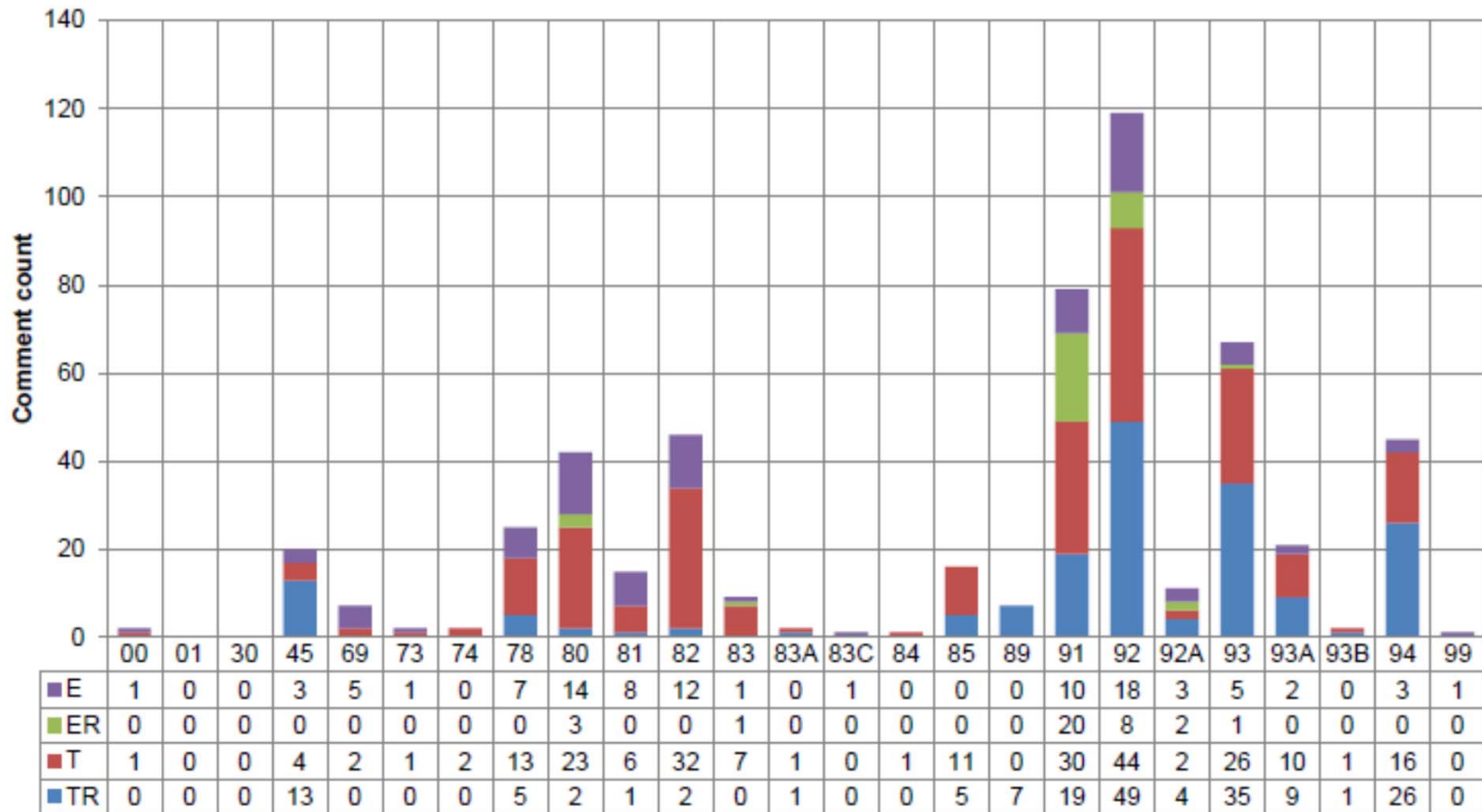
http://www.ieee802.org/3/bj/timeline_0911.pdf

Activities Since July 2012 Plenary

- Draft 1.1
 - posted 13 August 2012
 - Task Force review closed 4 September 2012
 - 499 comments from 26 participants
- Sept 2012 Interim
 - Thanks ITU
 - 83 Attendees
 - 23 Technical Presentations
 - 2 ad hocs ran (EEE / FEC) to resolve comments – parallel tracks
 - Resolved all comments (43 comments D1.0 + comments against D1.1)
- Draft 1.2
 - posted 15 October 2012
 - Task Force review closed 30 October 2012
 - 408 comments from 33 participants
 - Multiple ad hoc calls (Thanks all!) running to resolve issues

Comment summary: 412 T(R), 130 E(R)

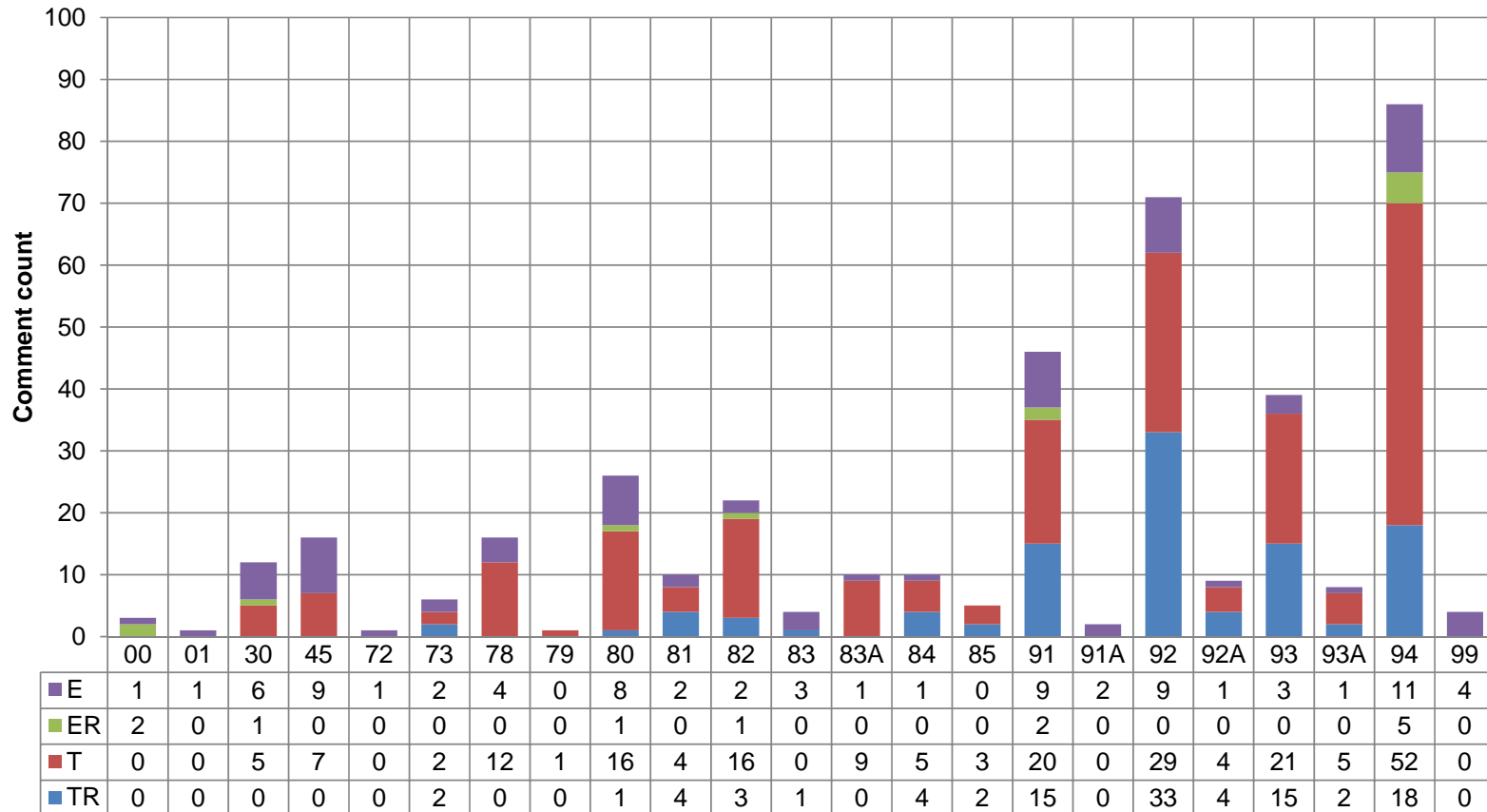
IEEE P802.3bj D1.1 2nd Task Force review



“R” (required) denotes that the commenter indicated the comment must be satisfied in order to change a “do not approve” vote to an “approve” vote. Since Task Force review is not a ballot, these comments will be processed as though they were technical (T) or editorial (E) as appropriate.

D1.2 Comment summary: 315 T(R), 93 E(R)

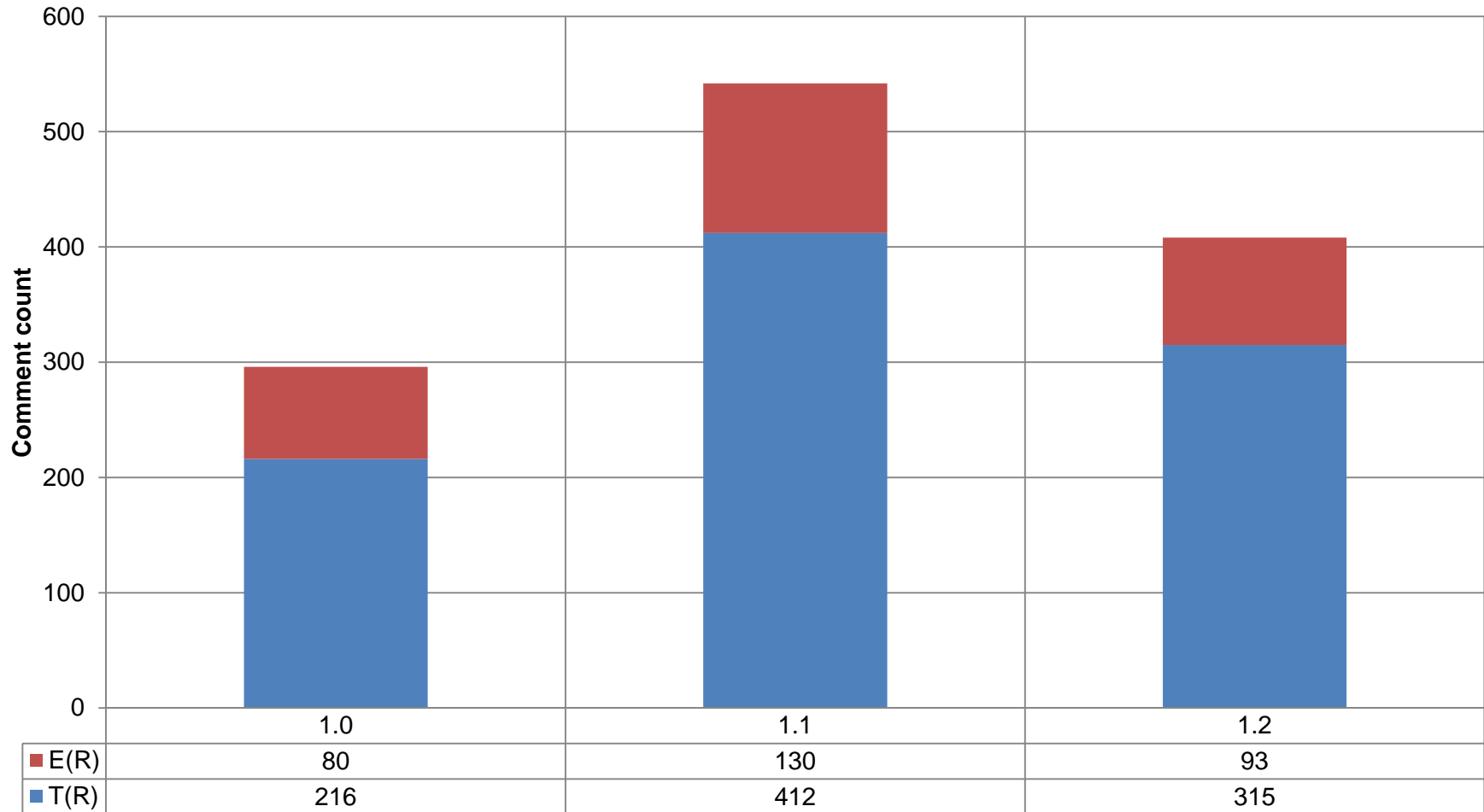
IEEE P802.3bj D1.2 3rd Task Force review



“R” (required) denotes that the commenter indicated the comment must be satisfied in order to change a “do not approve” vote to an “approve” vote. Since Task Force review is not a ballot, these comments will be processed as though they were technical (T) or editorial(E) as appropriate.

Comment History

IEEE P802.3bj Task Force review



Goals for the meeting week

- PAR modification submitted for consideration at this meeting.
 - Respond to any appropriate comments
- Draft 1.2 Comment Resolution
 - Hear related technical presentations
- “Big Ticket” Items (see Chief Editor’s Report)
 - **Transmit LPI state (scrambler bypass)**
 - **Timing (TBDs)**
 - **LLDP**
 - **“OTN Support”**
- Lay the ground work for Draft 1.3 and the next meeting

Thank You!