## Clause 141: PMD

• Major Items (big ticket items)

Item	Owner
<ol> <li>Interface definition between PMD and PMA (primitives, interface type – serial versus parallel, etc.)</li> </ol>	Duane Remein
2. Wavelength channel allocation (141.4)	Ed Harstead
3. Tables with power budget parameters	Upstream 25Gbps: Ed Harstead Downstream 25Gbps: Ed Harstead Downstream 2x25Gbps: Dekun Upstream 2x25Gbps: Dekun
<ul> <li>Definitions of optical parameters and measurement methods (141.7)         <ul> <li>initial discussion was started, but we need much more, including details (reference model, reference points, especially for multi-lane system, measurement methods – description or reference to other groups, if available)</li> <li>Insertion loss does not need likely much effort (same reference as in 10G-EPON)</li> <li>Wavelength and spectral width measurement, Optical power measurements, Extinction ratio measurements, needs revision and confirmation it is OK as is, if RMS Is used</li> <li>Remaining subclauses need material (if applicable at all)</li> </ul> </li> </ul>	John Johnson
5. Environmental, safety, and labeling (141.8) needs review and reconfirmation these will be still applicable	Text already there, depend on comments (Bill Powell)
6. Characteristics of the fiber optic cabling (141.9) does need review and reconfirmation – it does not seem like new types of fiber cabling are used for PON, so it should be largely OK as is	Text already there, depend on comments
7. (141.2) Names of PMDs, power budget classes, and mapping between them	Glen Kramer

## Clause 142: PCS

• As is, clause contains just some material copied from 10G-EPON PCS that is not likely going to change once line code selection is completed. Material needed to describe the following functions:

Item	Owner
Transmit direction and Receive direction operation (general block	Duane Remein
diagram)	
2. FEC encoding and FEC decoding	Mark Laubach
3. Scrambler and Descrambler	Finished
4. Gearbox just above PMA	(later)
5. PMA operation	(later)
6. Data Detector	Duane (Marek, Glen)
7. Data Synchronizer for ONU and OLT (142.2.3.1/2)	Glen Kramer (Marek)
8. BER monitor on receive side	(later)
9. Filling the extra capacity due to 256b/257b	Glen/Heaven (need text)

<sup>•</sup> It is assumed that Idle Deletion / Insertion similar to 10G-EPON will not be needed due to operation of MPRS

## Clause 143: MPRS

- 143.5: Glen to provide text asymmetric rates
- Remainder to be addressed through comments.

## Clause 144: MPCP

• We have only MPCPDU definitions at this time, without actual operation of MPCP in NG-EPON system. Materials needed for the following items:

Item		Owner
1. MPCP	in NG-EPON: Overview	Marek Hajduczenia
2. Multip	oint MAC Control operation	Marek Hajduczenia
a.	Principles of Multipoint MAC Control	
b.	Multipoint transmission control, Control Parser, and Control	
	Multiplexer	
3. Multip	oint Control Protocol (MPCP)	Marek Hajduczenia
a.	Principles of Multipoint Control Protocol	
b.	Discovery processing	
C.	Report Processing	
d.	Gate Processing	
4. Opera	tion with asymmetric data rate	
5. Chann	el Control Protocol (CCP) and CCPDU definitions	Glen Kramer
6. Messa	ges for sync pattern and SoB delimiter	Hajduczenia