# Big Ticket Items for P802.3bs

- January 2015 Interim Meeting

# Big Ticket Items - PCS

- PCS proposal
  - gustlin_3bs_02_0115
- Actions:
  - Slide 11 per gustlin_3bs_02 are work items
  - PMD selection influence PCS and FEC
  - Need burst error nature to select PCS and FEC
  - Error model by PMD type?

# Big Ticket Items - FEC

- FEC reference presentations
  - wang_x_3bs_01_0115.pdf
- Actions:
  - PMD selection
  - BERin required by PMD
  - Try to eliminate unacceptable FEC options e.g. in wang_x_3bs_01
  - 4x100G or 1x400G FEC striping
  - Impact of overspeed on PMD error rates

# Big Ticket Items - PMA

- PMA reference presentations:
  - Slavick_3bs_01_0115.pdf
  - Wang_t_3bs_01_0115.pdf
  - Gustlin_3bs_02_0115.pdf
- Actions:
  - PMD selection and electrical interfaces will impact Muxing scheme

# Big Ticket Items - Arch

- Proposal:
  - dambrosia_3bs_02b_0115.pdf
- Actions:
  - None

# Big Ticket Items - EEE

- Proposal:
  - marris_3bs_01_0115.pdf
- Actions:
  - None

# Big Ticket Items - OTN

- proposal
  - trowbridge_3bs_01a_0115.pdf
- Actions:
  - none

# Big Ticket Items – Electrical Interfaces

- proposals
  - Goergen_3bs_03a_0115.pdf
- Actions:
  - none

# Big Ticket Items – C2**C** CDAUI-8

- proposals
  - PAM4:  li_3bs_01a_0115.pdf
- Actions:
  - Refine proposal and COM model
  - Test data from industry products, when available
  - Power
  - Simulations on adopted channel
  - Industry channel data for simulation purposes
  - Package effects

# Big Ticket Items – C2**C** CDAUI-8

- proposals
  - NRZ: palkert_3bs_02_0115.pdf
- Actions:
  - Refine proposal and COM model
  - Test data from industry products, when available
  - Power
  - Simulations on adopted channel
  - Industry channel data for simulation purposes
  - Package effects

# Big Ticket Items – C2**M** CDAUI-8

- proposals
  - NRZ: palkert_3bs_01_0115.pdf
  - PAM4:  brown_3bs_01a_0115.pdf
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - Refine proposal ILD/xtalk
  - Test data from industry products, when available
  - Power
  - Simulations on adopted channel
  - Industry channel data for simulation purposes
  - Package effects
  - Test procedures and reference receivers with channel simulations

# Big Ticket Items - LPPI

- Actions:
  - C2C and C2M interaction across the 3 reaches
  - Refine proposal and build consensus

# Big Ticket Items – 10km SMF PMD

- proposals
  - Cole_3bs_01_0115.pdf (NRZ)
  - Cole_3bs_02_0115.pdf (PAM4)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity

# Big Ticket Items – 10km SMF PMD

- proposals
  - Kojima_3bs_01a_0115.pdf (NRZ)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity

# Big Ticket Items – 10km SMF PMD

- proposals
  - Takahara_3bs_01_1114 (DMT)
  - corbeil_3bs_01_0115 (DMT)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity
  - Optical loss budget model
  - interoperability

# Big Ticket Items – 500m SMF PMD

- proposals
  - Cole_3bs_03a_1114 (NRZ)
  - Cole_3bs_04a_1114 (PAM4)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity

# Big Ticket Items – 500m SMF PMD

- proposals
  - Welch_3bs_01a_0115 (PAM4)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity
  - More Test results (prefer real data on all proposals)

# Big Ticket Items – 500m SMF PMD

- proposals
  - Lewis_3bs_01a_1114 (DMT)
  - Corbeil_3bs_01_0115 (DMT)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity
  - Optical loss budget model
  - interoperability

# Big Ticket Items – 2km SMF PMD

- proposals
  - Cole_3bs_01_0115.pdf (NRZ)
  - Cole_3bs_02_0115.pdf (PAM4)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity

# Big Ticket Items – 2km SMF PMD

- proposals
  - Kojima_3bs_01a_0115 (NRZ)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity

# Big Ticket Items – 2km SMF PMD

- proposals
  - Lewis_3bs_01a_0115 (PAM4)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity

# Big Ticket Items – 2km SMF PMD

- proposals
  - Lewis_3bs_01a_1114.pdf (DMT)
  - Corbeil_3bs_01_0115.pdf  (DMT)
- Actions:
  - Evaluate Coupling between electrical and optical interfaces
  - RX Technical feasibility
  - Dispersion penalty worst case (in SMF ad hoc)
  - TDP.  MPI
  - RX sensitivity
  - Optical loss budget model
  - interoperability