

# Work items for November 2013

(updated 10/30/2013 in PHY conf call)

IEEE P802.3bn EPoC PHY Task Force

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# Downstream Items

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- FEC (Marek)
  - Active / Passive, FDD / TDD
- Continuous Pilot Insertion (Avi, Christian, Jin)
- Randomizer and Symbol Mapper (Jin)
  - Bit Loading
  - Scattered Pilots
  - Sub-carrier configuration (e.g QAM level, pilot use, etc.)
- Exclusion rules (Steve, Leo)
- Time and Frequency Interleaving (Name Rich, Avi)
- IFFT (IDFT) (Leo)
- Cyclic Prefix and Windowing (mostly done, Leo)
  - OFDM Symbol definition ( useable symbol + CP + postfix, picture, etc.)
- Burst Structure
- Burst Marker (Syed, Leo)
- Burst Control / Local Gates
- Data Detector (Marek)
- Channel “bonding” (Mark, Avi, ...)

# Upstream Items

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- FEC (Marek)
  - Active / Passive, FDD / TDD
  - Codeword Filling (FDD: Rich, TDD: Steve, Christian)
  - MPCP Impact (Duane)
- Pilots
  - Pilot Structure (coupled with RB)
- Exclusion rules (Steve, Leo)
- 1D / 2D Mapping ( )
- Frequency Interleaving (Duane, Avi)
- Scrambling / Randomization
- Cyclic Prefix and Windowing (mostly done, Leo)
- Resource Block / Burst Structure (Marek, Sanjay G.)
- Burst Markers (Syed, Leo)
- Data Detector (Marek)
- Probing (Leo, Syed)
- Pre-equalization (Leo)

# PHY Link

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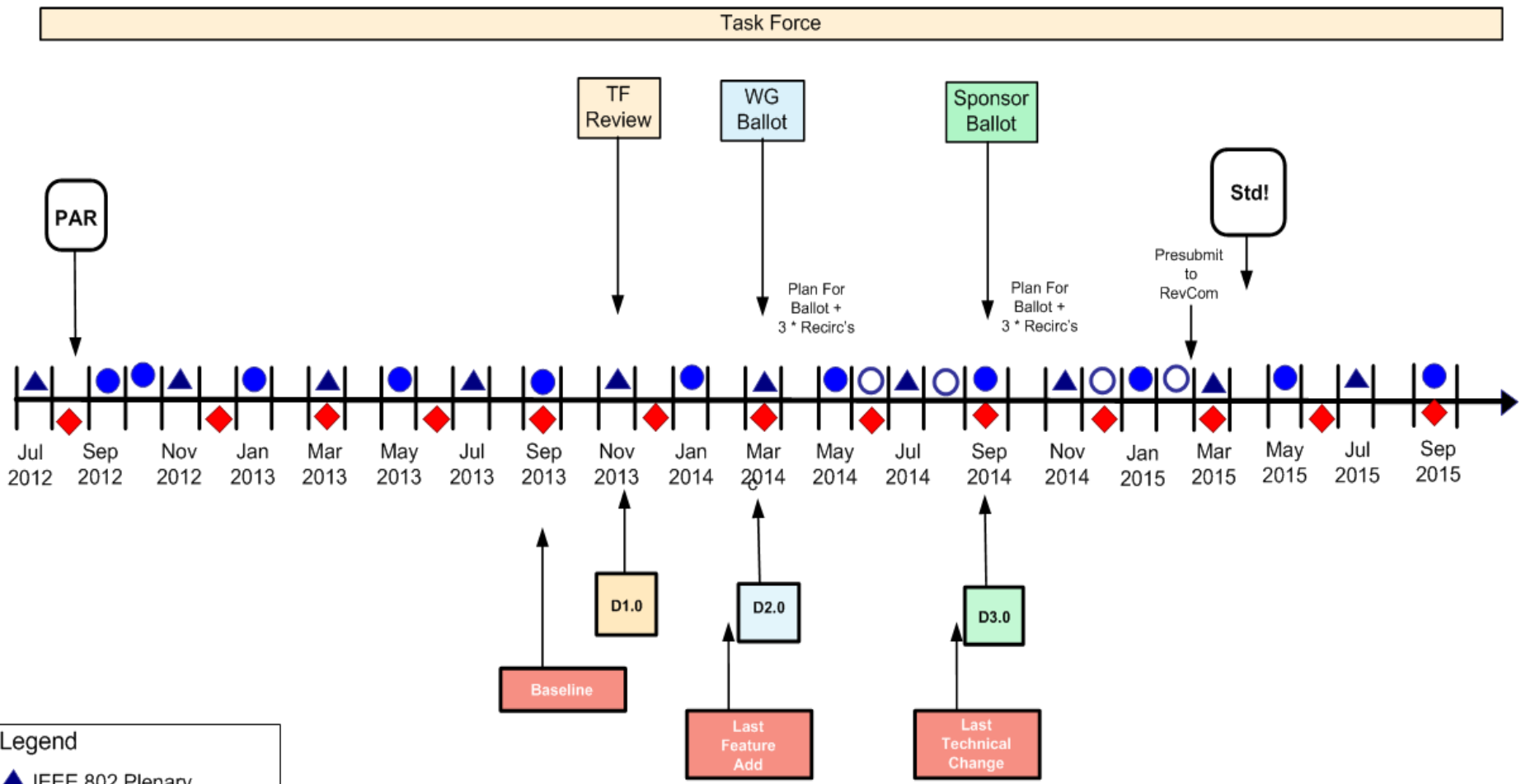
- PHY Link and procedures (Avi, Duane, Jin)
  - “Bring up” through auto-negotiation to Linked
  - “Ranging” and symbol synchronization (Bill, Leo, Avi, Hesham)
  - Includes periodic maintenance
- PHY Link acquisition
  - “Lock” and “lost sync” procedures

# System Issues

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- PHY path diagrams (Avi, Mark)
  - PCS, PMA
  - DS and US
- FEC CRC-40 baseline text (Marek, Rich, BZ)
- Sublayer interfaces (Marek, Mark)
  - Clocking / jitter
- MPCP Interoperation
  - Gate / Report ( )
  - MAC Discovery and registration verification ( )
- Transmitter Power and Fidelity (Saif, Joe)
- Performance
  - Error rates
  - Latency / Jitter
- RF Spectrum (Steve)
- Electrical Input / Output (Saif, Mark)
- Proactive Network Management (PNM), (Bruce, Rich, Hesham)

# Task Force Timeline (updated 3/21/13)



**Legend**

- ▲ IEEE 802 Plenary
- IEEE 802 Interim
- ◆ IEEE-SA Standards Board

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# Thank You!