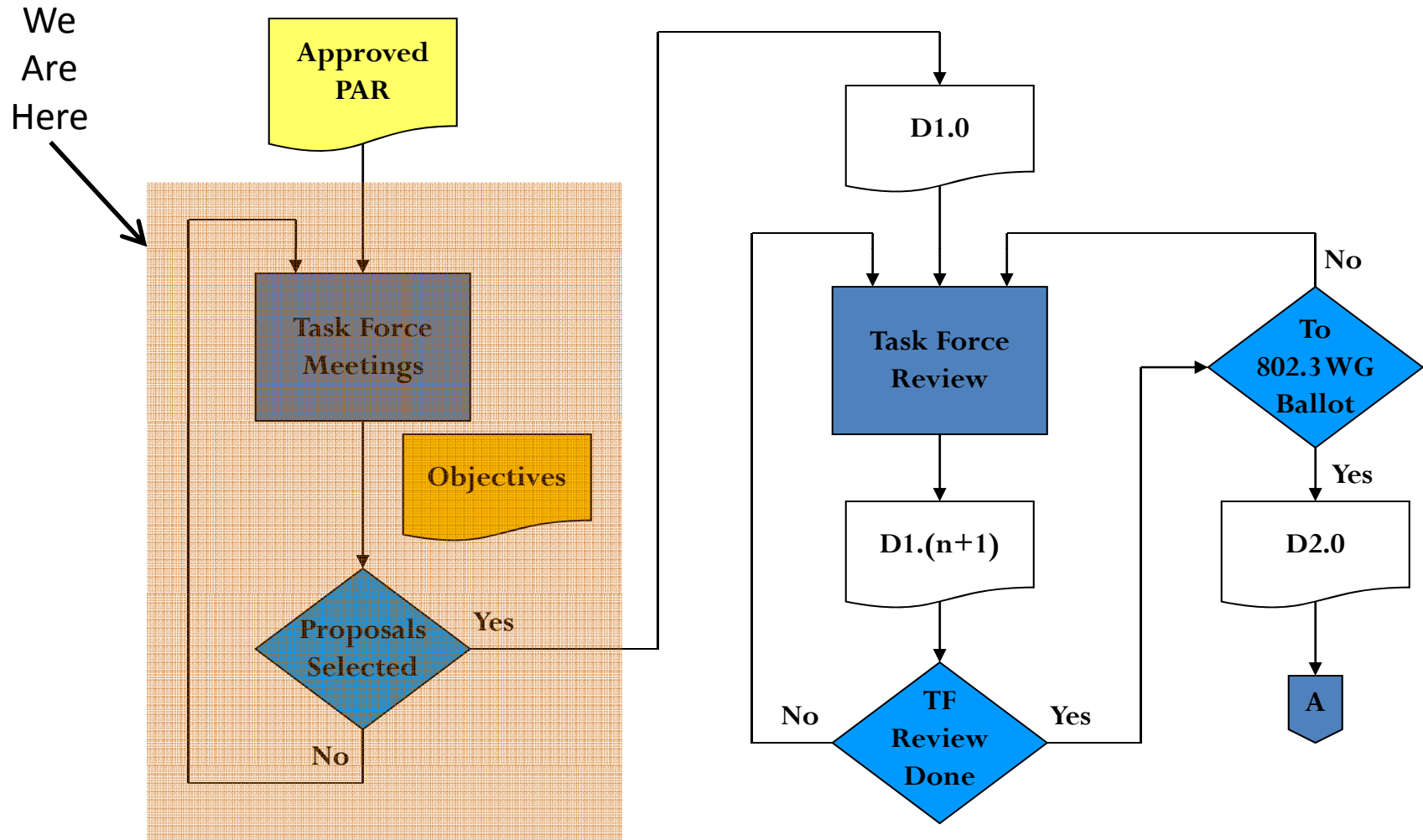


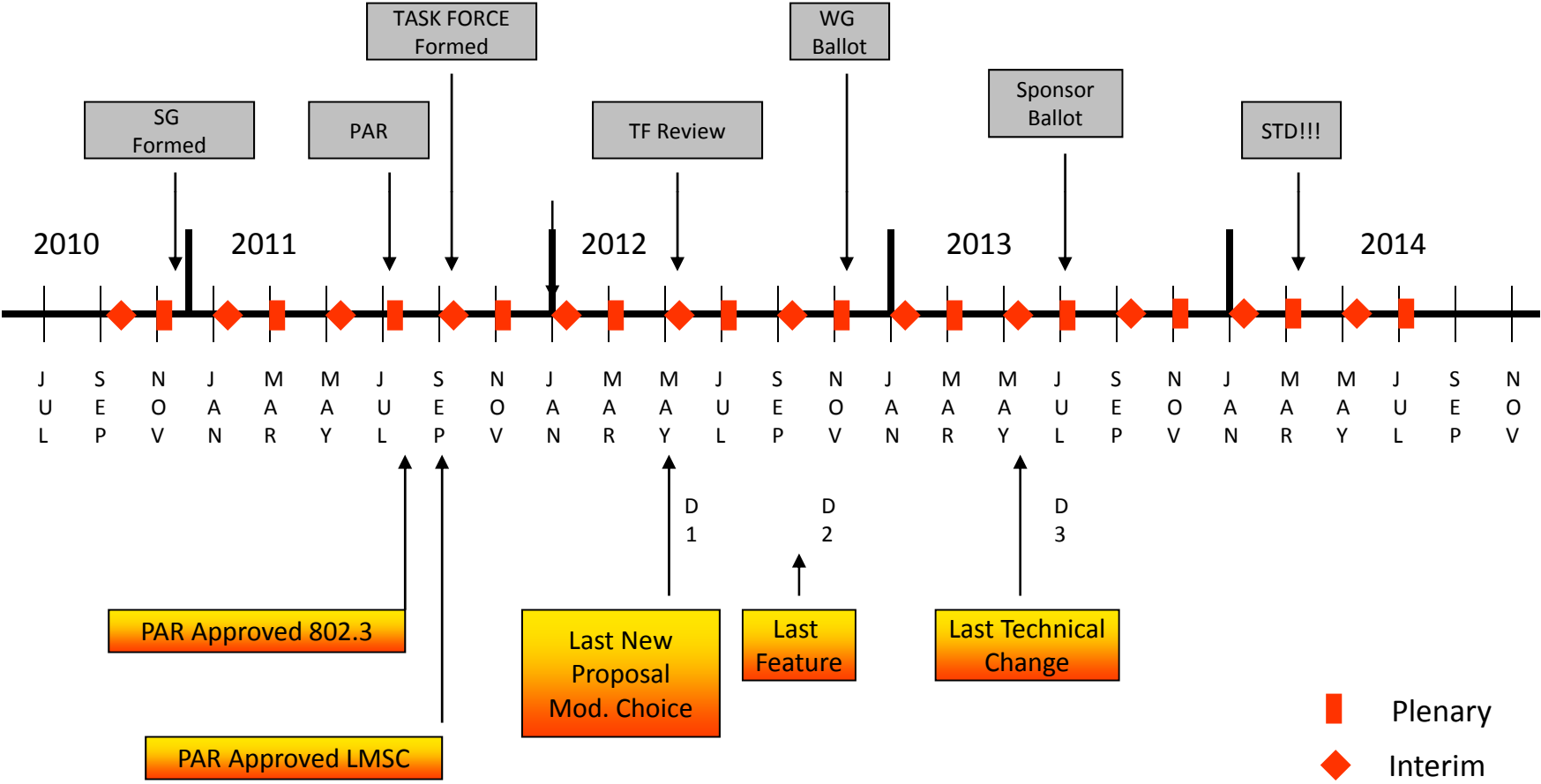
IEEE P802.3bj Task Force  
Questions... Questions... Decisions!

John D'Ambrosia, Dell  
November 29, 2011

# Overview of IEEE 802.3 Standards Process (2/5) – Task Force Comment Phase



# Adopted Timeline



Adopted by Task Force @ Sep-11 IEEE 802.3 Interim

# Key Dates

- May 2012
  - Last New Choice
  - Modulation Choice
- Leave May 2012 – Task Force Review
- Leave Sept 2012 – Last New Feature
- Leave Nov 2012 – WG Ballot

# Top List

- The Channel
  - Definition of “Improved FR-4”
  - Definition of host trace
- Signaling – NRZ / PAM-4 / Full duplex 8 lane
- Architecture
- FEC / Encoding
- EEE
- Test Specifications

# Other issues

- MDI
- Autonegotiation

**EXCERPT AND ADAPTED FROM  
FRAZIER\_02\_1107.PDF –  
“THE PATH TO WORKING GROUP BALLOT”**

# PAR approval to baseline proposal selection

- Once the PAR has been approved, the Task Force may review and evaluate concrete technical proposals
- Technical proposals are usually presented in the form of a slide deck
  - They may be accompanied by a white paper, but this is rare
- Proposals will evolve and be refined over the course of a few meetings
  - Details are “fleshed out”, bugs and issues are resolved
- Competing proposals are welcome!
  - Many are called, but few are chosen
- Task Force members must study all of the proposals
  - You will need to understand them in order to vote on them
- Some proposals will die for lack of support
- The best proposals gain support over time



# PAR approval to baseline proposal selection

- Baseline proposals form the bases for the first draft of the standard
- A baseline proposal must contain sufficient detail so that an editor can draft text without having to infer any significant technical material
  - baseline proposals must be complete and definitive
  - options, choices, items that are “too be defined” are undesirable
- A baseline proposal should have a limited scope
  - They typically address one objective
- A baseline proposal must demonstrably meet the “5 Criteria”

# PAR approval to baseline proposal selection

- In a major project multiple baseline proposals must be developed
  - In order to address all of the objectives
- This requires coordination
  - For example, PMDs must work with PMAs, and vice versa
- A coherent set of baseline proposals can be pulled together in to what is referred to as a “blue book”
  - In the good ol’ days, we actually bound the printed proposals into a book
  - Sometimes this helps, sometimes it doesn’t!
- In the ideal scenario, a complete set of baseline proposals enjoys strong support, and the complete set is ready for adoption simultaneously
  - If some area is lagging either in completeness or degree of consensus, then that area may need to be “spun out” into a separate project.

# Baseline proposal selection

Welcome to the main event!

- In a series of votes, baseline proposals are voted up, or down
  - $\geq 75\%$  voting in favor is required for adoption
- This usually occurs during a single session
- Motions are usually of the form:
  - Adopt the material presented in xxxxx\_01\_xxxx.pdf as a basis for the first draft of IEEE P802.3xx
  - Moved:
  - Second:
  - Technical  $\geq 75\%$  Y: N: A:

# Baseline proposals to first draft

- Once a set of baseline proposals has been adopted, the editorial team goes to work writing the first draft
- The editorial team consists of volunteers from the Task Force
  - Usually appointed by the Task Force chair, and confirmed by the Task Force
  - One editor is typically appointed for each clause of the draft
- Our “Editor-in-Chief” (Adam Healey) will supervise the work of the editorial team

# Baseline proposals to first draft

- The editors create the draft using Adobe Framemaker, using templates provided by IEEE staff, and following the IEEE Style Manual
  - If you aspire to be an editor, you need to become a whiz at Framemaker, and study the IEEE Style Manual
  - All drawings, figures and tables are also created in Framemaker
  - The IEEE staff editors are happy to provide very helpful tutorials
- The process of creating the first draft usually takes about one month

# Task Force Review

- Once the first draft has been created, the Task Force review process can begin
- The first draft must be adopted by the Task Force as the basis for the next draft, with any changes agreed to by the Task Force
  - Changes are captured by the editors in the form of notes
- This is usually accomplished with a series of motions, one for each clause, using the form:

Adopt the text of draft D1.0 Clause XX, with the changes described in <filename>, as the basis for D1.1

Moved:

Second:

Technical  $\geq 75\%$  Y: N: A:

# Task Force Review

- From D1.1 onwards, it is usually best to follow a more formal review and comment process
- Use the comment tools that have been developed in 802.3
  - a good subject for a future presentation
- Consider this as practice for the Working Group ballot phase
- Subsequent drafts are created based on the resolution of comments, following a motion of the form:

Adopt the text of draft D1.n, with the changes described in  
in the comment database, as the basis for D1.n+1

Moved:

Second:

Technical  $\geq 75\%$  Y: N: A:

# Task Force Review

- After each Task Force review and comment iteration, the editors create a new draft
- It is very important to make the comment resolution instructions precise, complete, and internally consistent
  - The clause editor should usually be the person driving the comment database application during comment resolution meetings
- Depending on the volume and complexity of comments, it may take a week to a month to create a new draft
- It may be necessary to hold ad hoc meetings or additional interim meetings to resolve difficult issues
- Editors must identify any technical material that they place in the draft that was not formally adopted by the Task Force
  - Such as when an ad hoc meeting produces the material



# Preparing for working group ballot

- The Task Force review period typically requires 3 or 4 meetings
- The goal of the Task Force review is to produce a draft that is complete, with no open technical issues
- “Complete” means that
  - All of the project objectives are met
  - All of the 5 Criteria are met
  - The PAR title, scope, purpose and need are met
  - All essential requirements are definitively stated
  - “Features” should not be added after the Task Force review has been completed

# Preparing for working group ballot

- It is important to remember that Working Group (and especially Sponsor) ballots are like solid fuel rockets
  - Once you light them, you can't turn them off
- The decision to proceed to Working Group ballot is the most serious and carefully considered decision that the Working Group makes during the course of a project (and yes, it requires a  $\geq 75\%$  majority)
- The decision to proceed to Working Group ballot can only be made at a Working Group plenary meeting

# Preparing for Working Group Ballot

- From the IEEE 802.3 Working Group operating rules:

## **2.8.2 Draft Standard Balloting Requirements**

Before a draft is submitted to WG letter ballot it shall in addition have met the following requirements:

- a) It must be complete with no open technical issues.
- b) It must be made available for pre-view by the membership by the Monday prior to the plenary week. If any changes are made to the draft after the draft was made available for pre-view the textual changes shall be presented for review during the closing plenary immediately prior to the vote for approval to go to WG ballot.
- c) It must be formatted according to the IEEE style selected by the WG Chair. This style will be selected to minimize the editorial work required for publication of the draft.
- d) It must be approved for submittal to WG ballot at the WG closing plenary.

The following additional condition shall be met for a WG letter ballot to be considered valid:

- a) Of the returned ballots the abstention rate must be less than 30%.

# Summary – To Working Group Ballot

- The development of baseline proposals is the first responsibility of the Task Force
- Baseline proposals must have sufficient detail to form the bases of the first draft of the standard
- Baseline proposals must be adopted by a  $\geq 75\%$  majority
- Editors create the first draft based on the baseline proposals
- The Task Force review period employs a semi-formal comment and resolution process, that is like a rehearsal for Working Group ballot
- Before proceeding to Working Group ballot, the draft must be complete, with no open technical issues
- Stay tuned for information about the Working Group and Sponsorballoting processes