IEEE P802.3as
Frame Expansion Task Force

Report to 802.3 CSMA/CD WG

Atlanta, Georgia

14 March 2005

Agenda

- Reflector and web
- IEEE 802.3 standards process
- Objectives
- Report on January interim
- Proposed frame format changes
- Project timeline
- Plan for week

Reflector and Web

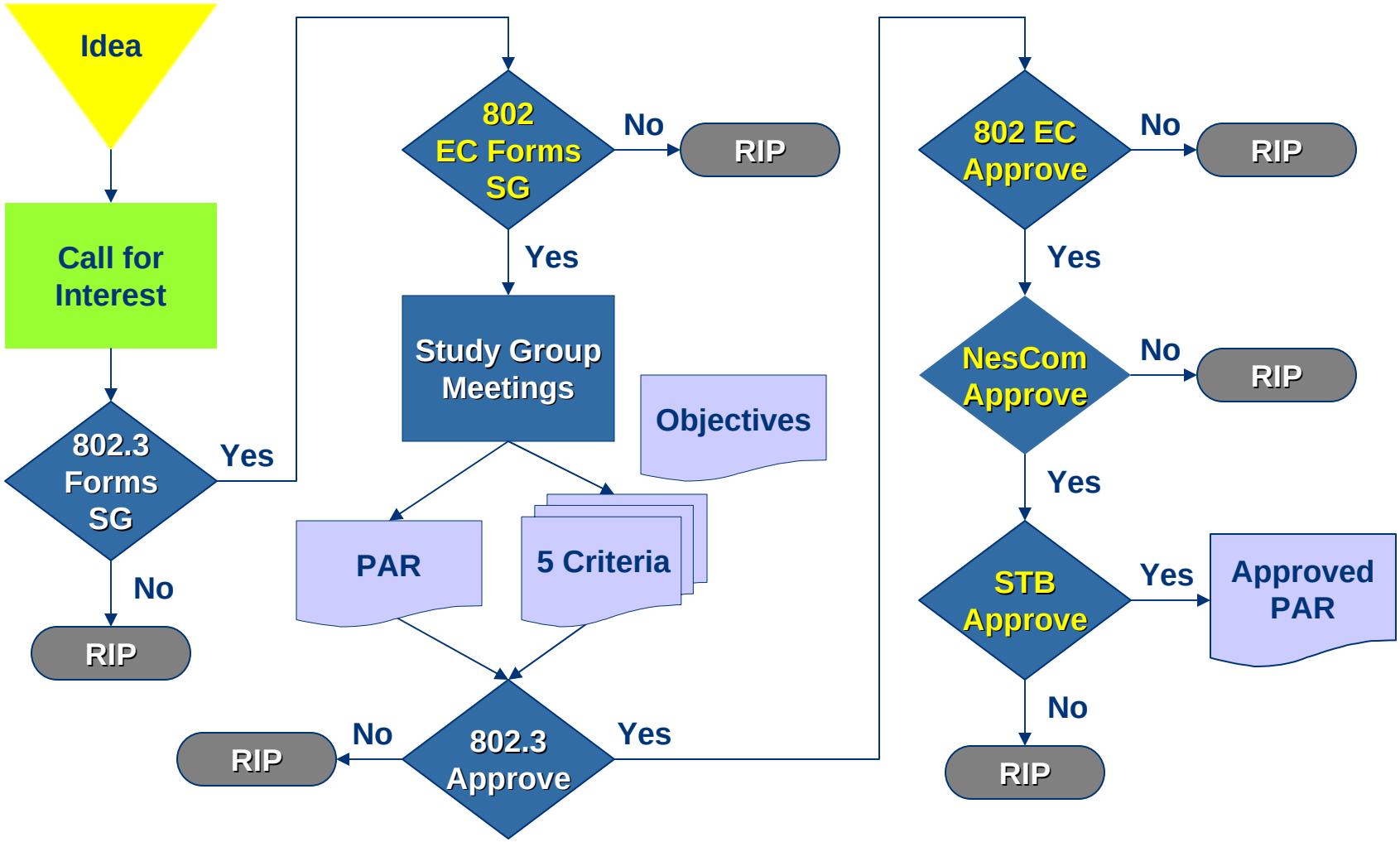
- List subscribers: 64 (as of 3/14)
- To subscribe to the Frame Expansion TF reflector send an email to:

  listserv@ieee.org
- with the following in the body of the message:

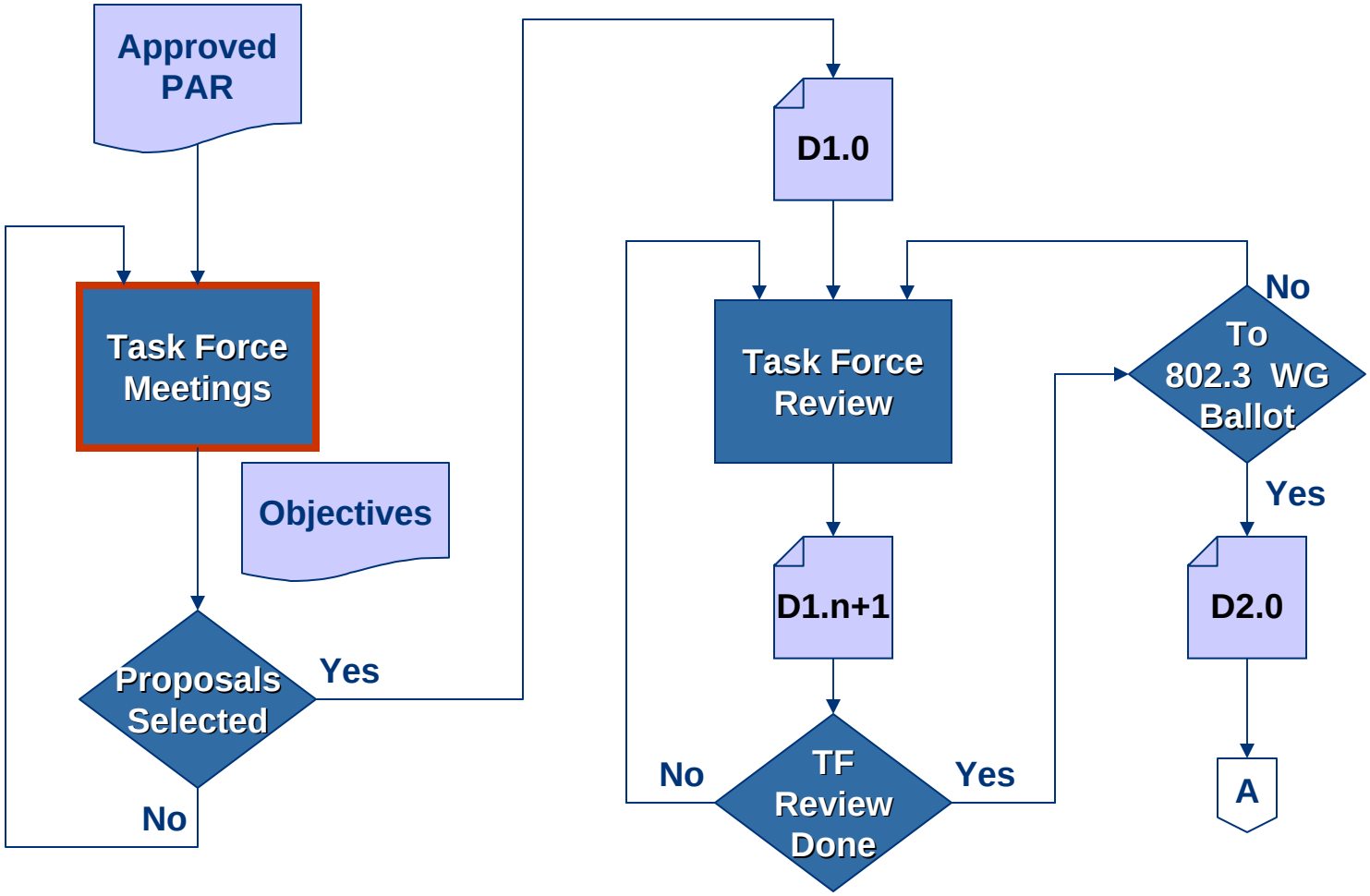
  subscribe stds-802-3-fe <first name> <last name>
- Frame Expansion TF web page URL:

  http://www.ieee802.org/3/as/

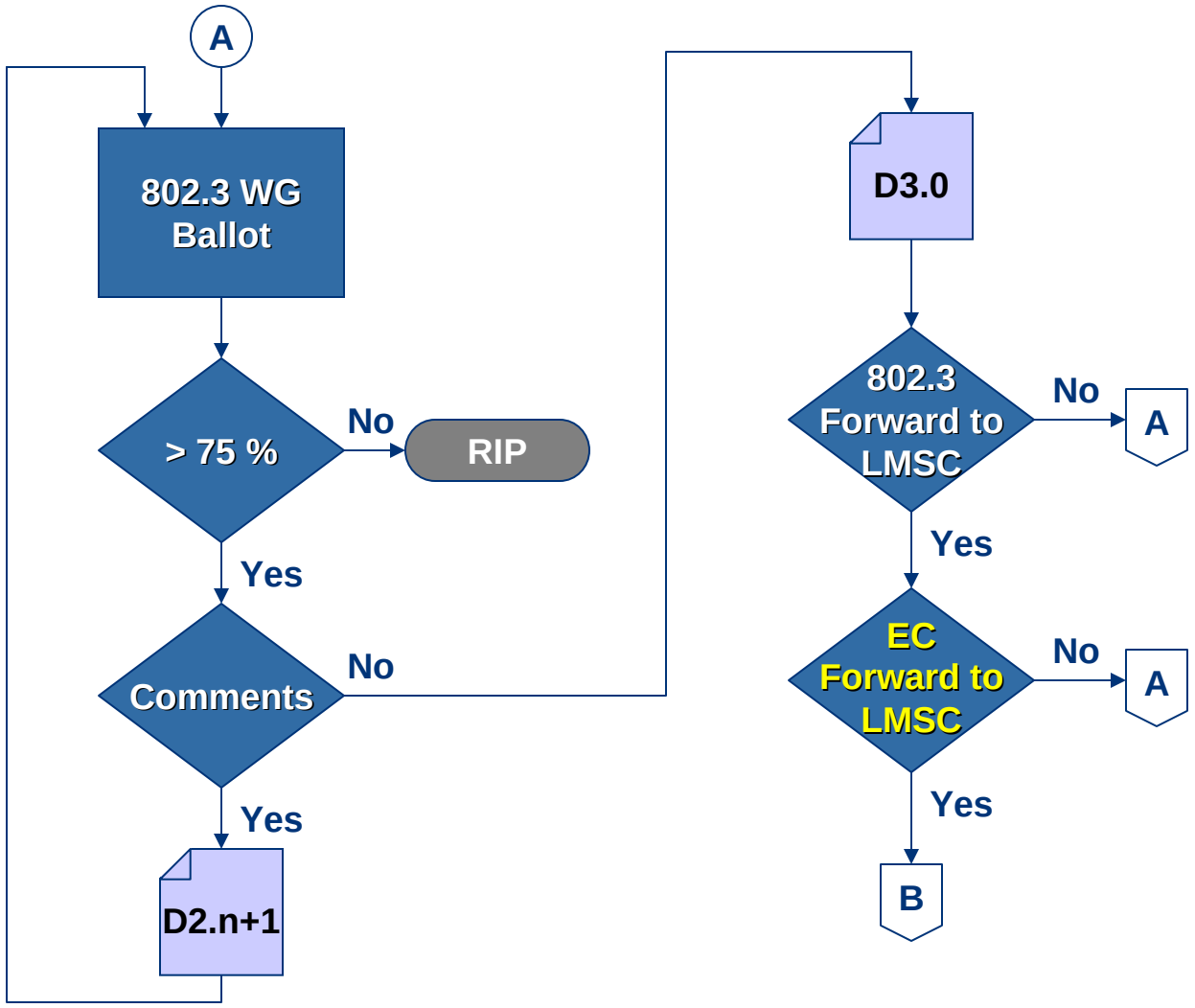
IEEE 802.3 Standards Process (1/4)



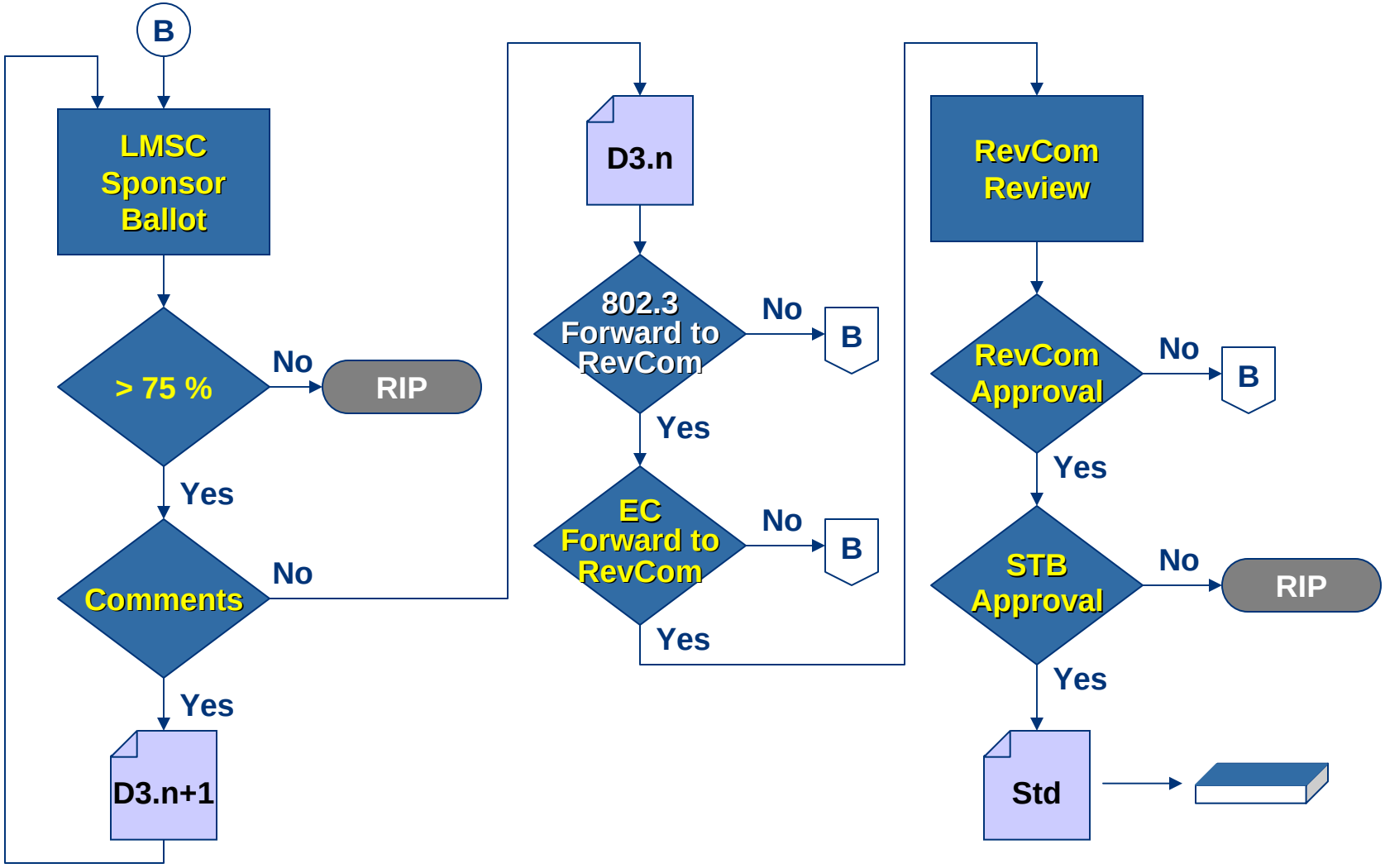
IEEE 802.3 Standards Process (2/4)



IEEE 802.3 Standards Process (3/4)



IEEE 802.3 Standards Process (4/4)



Objectives

1) Preserve the IEEE 802.3 MAC data service interface
2) Preserve the basic frame format
3) Maintain the maximum data field length (1500 octets)
4) Increase the maximum frame size exclusively for optional prefix and suffix fields in envelope frames
5) Redefine the Tagged frame format as an envelope frame format
6) At a minimum, support:
   a) IEEE 802.1Q Virtual Bridged LANs
   b) IEEE 802.1ad Provider Bridges
   c) IEEE 802.1AE MACSec
   d) ITU-T SG15 Ethernet transport encapsulations
7) Investigate and define the largest maximum frame size with minimal impact to existing networks and standards

Approved by IEEE 802.3 WG on 18-Nov-2004

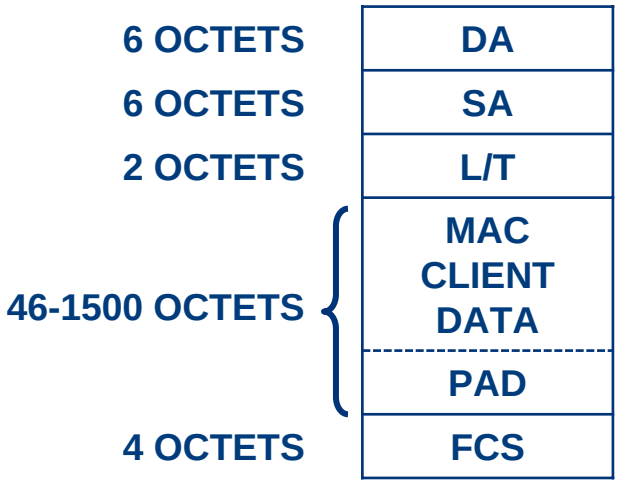
January Interim

- 1-day interim, Sacramento
  - Co-located with 802.1, P802.3ar
- Reviewed proposed changes to Clauses 3 and 4
- Held joint meeting with 802.1
  - Formed architectural approach to modifying 802.3 to support larger frame size
- Appointed Glenn Parsons, Nortel as Editor

Pre-January 2005 approach

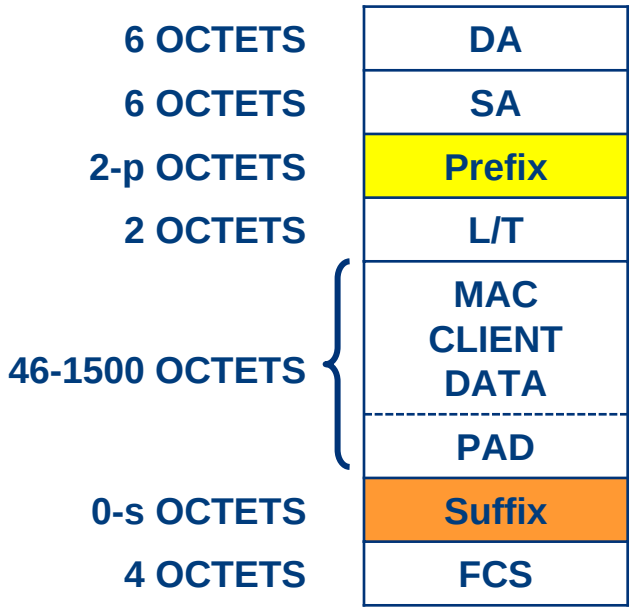
Existing

Figure 3-1 MAC frame format



Replaces Tagged frame format

Figure 3-3 Envelope MAC frame format



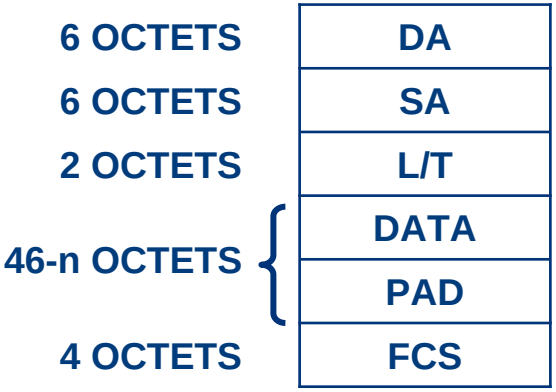
p is 2 to max[2, TBD – suffixSize]

s is 0 to max[0, TBD – prefixSize]

Post-January 2005 approach

Consolidated, simplified

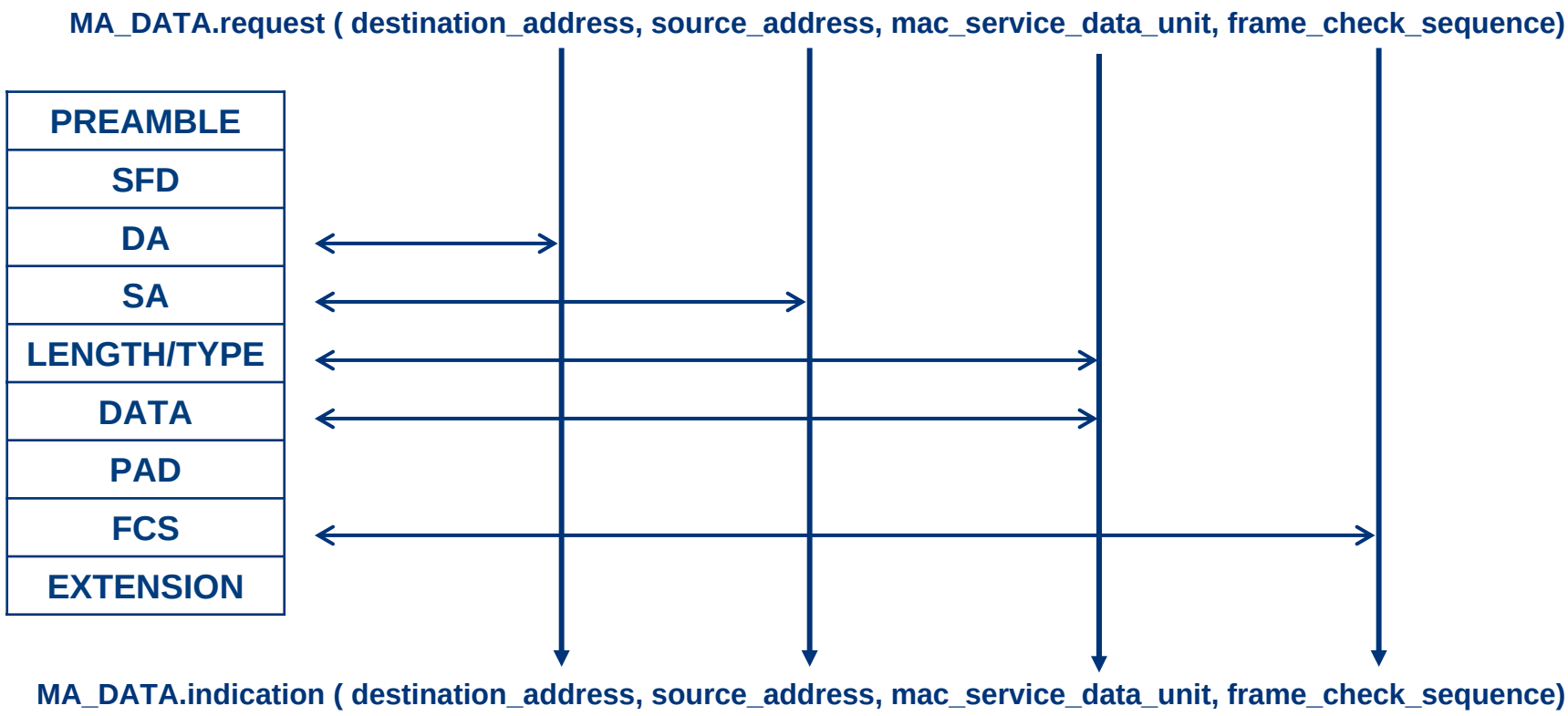
Figure 3-1 MAC frame format



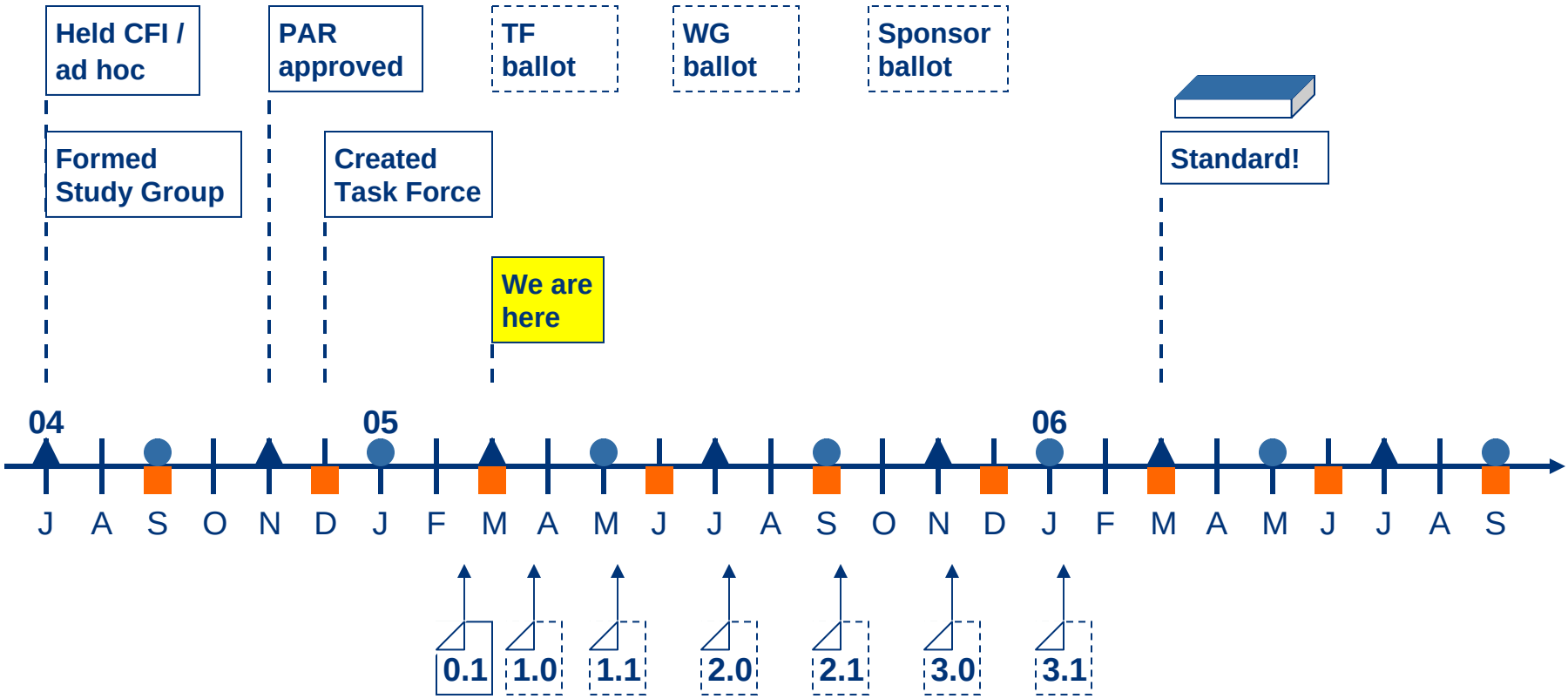
Where n = 1500 untagged frame
n = 1504 802.1Q tagged frame
n = TBD envelope frame

New figure 3-2

Figure 3-2 Service primitive mappings to frame fields



Possible timeline



Legend

- IEEE 802 Plenary
- IEEE 802.3 Interim
- IEEE-SA Standards Board

Plans for the week

Day	Time	Room	Activity
Wed 3/16	8:30a-12p	Montreal	Opening Review D0.1 (no official status)
	3:45p	Hanover	Status update to 802.1
	4:30p	Montreal	Resume P802.3as
Thu 3/17	10:30am-12p	Montreal	P802.3as closing session

- **Note:**
  - **In the 802.3 closing session on Thursday afternoon, the new frame size will be chosen**