802.3ad
Link Aggregation Task Force

November 10, 1999

Kauai, Hawaii

Link Aggregation Agenda

- Introductory Remarks and Introductions
- Call for Patents
- Approval of July and September minutes
- Working Group Ballot report
- Project Status and Schedule
- WG Ballot (d2.1) Comment Resolution
- AOB
- Plans for future meetings

Highlights

- Conducted Working Group Ballot on draft 2.0 following the July plenary meeting.

- Resolved all WG Ballot comments at the interim meeting in York in September.

- Conducted WG Recirculation Ballot on draft 2.1.

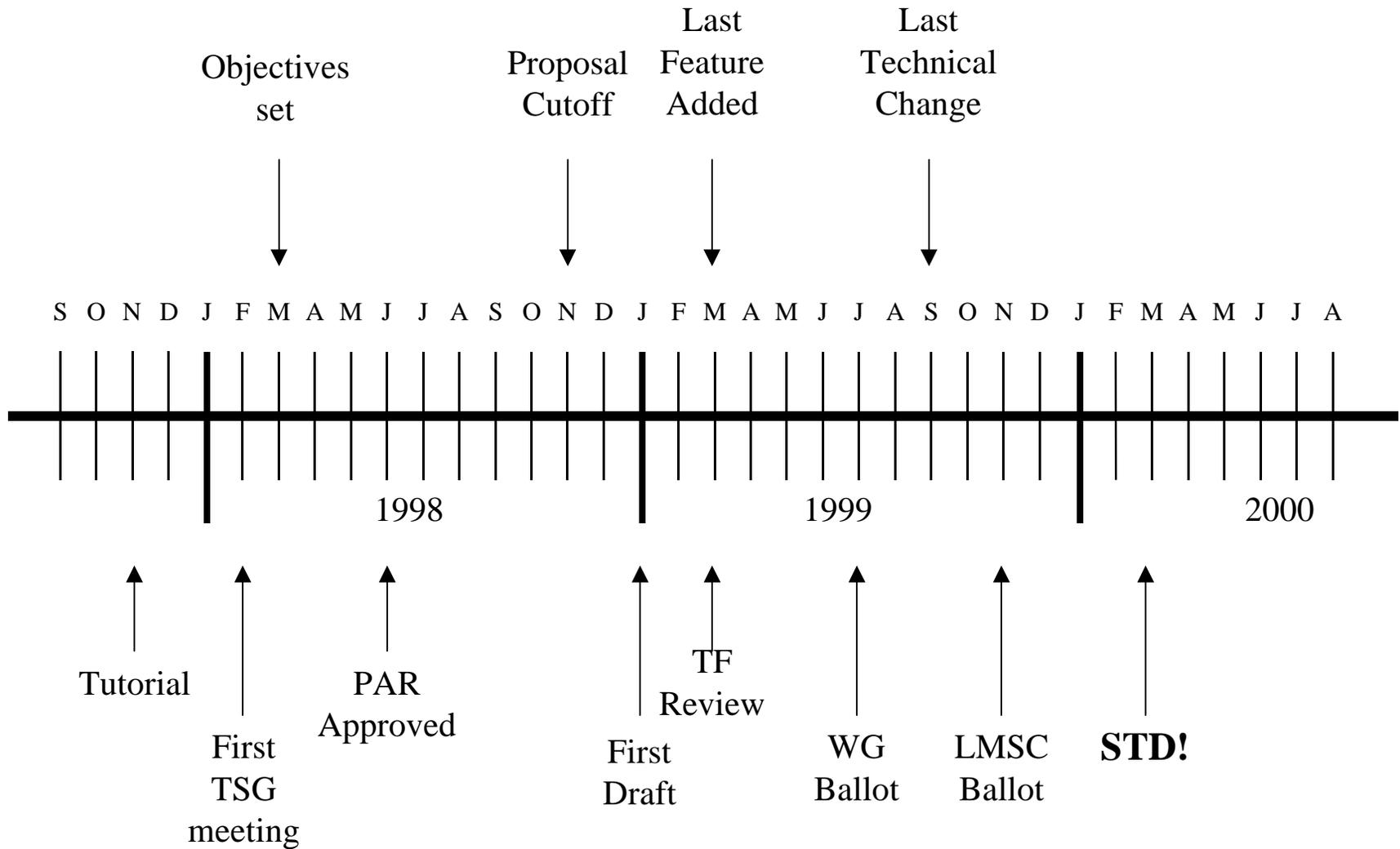- Prepared to proceed to LMSC Ballot.

Working Group Ballot Results

- Ballot results: Approved
  - Response Ratio (>50%):   114/174 = 65.5%
  - Abstention Ratio (<30%):   32/114 = 28.1%
  - Approval Ratio (>75%):   76/82 = 92.7%
- Comments received: 216
  - 115 Editorial
  - 9   Editorial Required
  - 65   Technical
  - 27   Technical Required

WG Recirculation Ballot Results

- Ballot results: 100% Approval Ratio
  - One new "Approve" ballot received
  - All previous "Disapproves" converted to "Approve"

- Comments received: 16
  - 9 Editorial
  - 0 Editorial Required
  - 3 Technical
  - 3 Technical Required
  - 1 Procedural

802.3ad Timeline

Objectives
set

Proposal
Cutoff

Last
Feature
Added

Last
Technical
Change

S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A

1998   1999   2000

Tutorial

First
TSG
meeting

PAR
Approved

First
Draft

TF
Review

WG
Ballot

LMSC
Ballot

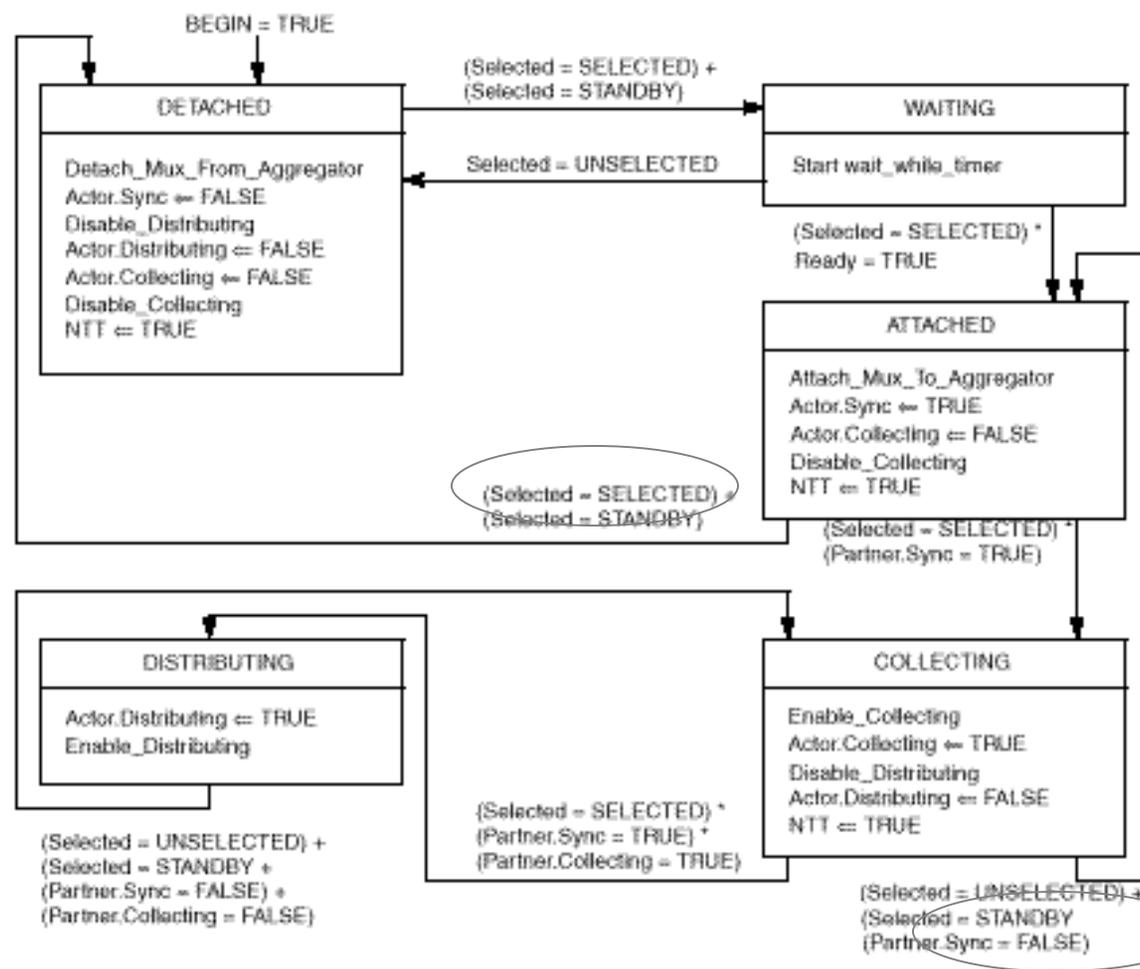**STD!**

Plans for Completion

- WG Recirculation Ballot: Oct. 11 - 25
- **802.3 Plenary meeting:**   **Nov. 8 - 12**
- *2nd WG Recirc (if necessary):*   *Nov. 15 - 29*
- *Interim meeting (if necessary):*   *Dec. 2 - 3*
- LMSC Invitation to ballot close: Nov. 29
- LMSC (Sponsor) Ballot: Dec. 6 - Jan. 10
- **Interim meeting:**   **Jan. 20 - 21**
- LMSC Recirculation: Jan. 28 - Feb. 11
- *Interim meeting (if necessary):*   *Feb. 14 - 15*
- *2nd LMSC Recirc (if necessary):*   *Feb. 17 - Mar. 2*
- RevCom submittal deadline: Feb. 18
- **802.3 Plenary meeting:**   **Mar. 6 - 9**
- **NesCom/RevCom/SB meeting:**   **Mar. 28 - 30**

Details, details

- Invitation letter to Sponsor ballot pool closes 11/29. Will require extraordinary effort to qualify email addresses, finalize balloting pool, and issue the ballot by 12/6.

- Options for resolution of technical comments on draft 2.1:
  - Conduct a 2nd recirculation ballot.
  - Issue the Sponsor ballot with an "errata" page.

BEGIN = TRUE

DETACHED

Detach_Mux_From_Aggregator
Actor.Sync ⇐ FALSE
Disable_Distributing
Actor.Distributing ⇐ FALSE
Actor.Collecting ⇐ FALSE
Disable_Collecting
NTT ⇐ TRUE

(Selected = SELECTED) +
(Selected = STANDBY)

WAITING

Start wait_while_timer

Selected = UNSELECTED

(Selected = SELECTED) *
Ready = TRUE

ATTACHED

Attach_Mux_To_Aggregator
Actor.Sync ⇐ TRUE
Actor.Collecting ⇐ FALSE
Disable_Collecting
NTT ⇐ TRUE

(Selected = SELECTED) *
(Selected = STANDBY)

(Selected = SELECTED) *
(Partner.Sync = TRUE)

DISTRIBUTING

Actor.Distributing ⇐ TRUE
Enable_Distributing

COLLECTING

Enable_Collecting
Actor.Collecting ⇐ TRUE
Disable_Distributing
Actor.Distributing ⇐ FALSE
NTT ⇐ TRUE

(Selected = UNSELECTED) +
(Selected = STANDBY +
(Partner.Sync = FALSE) +
(Partner.Collecting = FALSE)

(Selected = SELECTED) *
(Partner.Sync = TRUE) *
(Partner.Collecting = TRUE)

(Selected = UNSELECTED) +
(Selected = STANDBY
(Partner.Sync = FALSE)

The following abbreviations are used in this diagram:
Actor.Sync: Actor_Oper_Port_State.Synchronization
Actor.Collecting: Actor_Oper_Port_State.Collecting
Actor.Distributing: Actor_Oper_Port_State.Distributing
Partner.Sync: Partner_Oper_Port_State.Synchronization
Partner.Collecting: Partner_Oper_Port_State.Collecting

Figure 43-13—Mux Machine state diagram (independent control)

BEGIN = TRUE

DETACHED

Detach_Mux_From_Aggregator
Actor.Sync ⇐ FALSE
Disable_Distributing
Actor.Distributing ⇐ FALSE
Actor.Collecting ⇐ FALSE
Disable_Collecting
NTT ⇐ TRUE

(Selected = SELECTED) +
(Selected = STANDBY)

WAITING

Start wait_while_timer

Selected = UNSELECTED

(Selected = SELECTED) *
Ready = TRUE

ATTACHED

Attach_Mux_To_Aggregator
Actor.Sync ⇐ TRUE
Actor.Collecting ⇐ FALSE
Disable_Collecting_Distributing
Actor.Distributing ⇐ FALSE
NTT ⇐ TRUE

(Selected = SELECTED) +
(Selected = STANDBY)

(Selected = SELECTED) *
(Partner.Sync = TRUE)

COLLECTING_DISTRIBUTING

Actor.Distributing ⇐ TRUE
Enable_Collecting_Distributing
Actor.Collecting ⇐ TRUE
NTT ⇐ TRUE

(Selected = UNSELECTED) +
(Selected = STANDBY
(Partner.Sync ⇐ FALSE)

The following abbreviations are used in this diagram:
Actor.Sync: Actor_Oper_Port_State.Synchronization
Actor.Collecting: Actor_Oper_Port_State.Collecting
Actor.Distributing: Actor_Oper_Port_State.Distributing
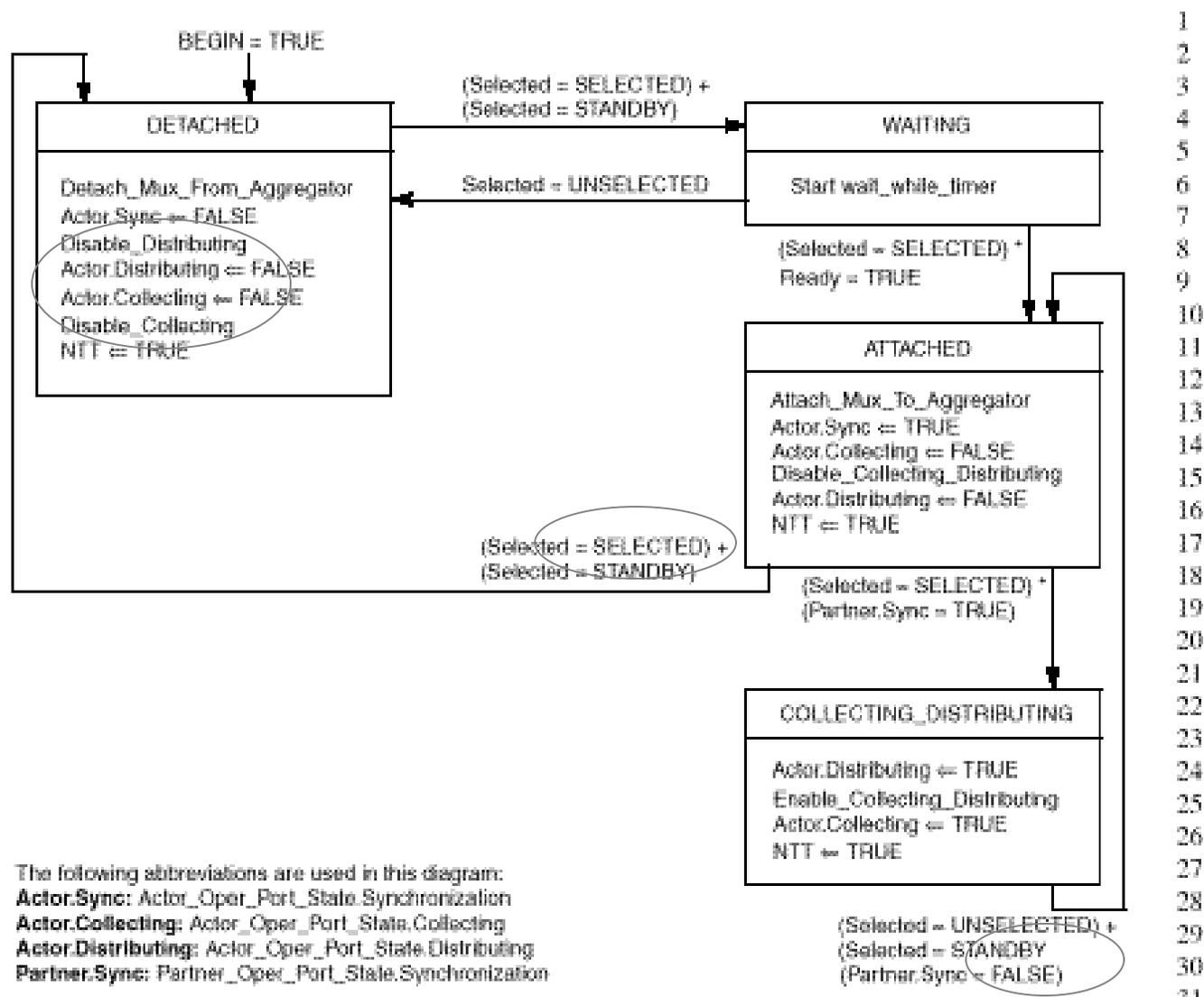**Partner.Sync:** Partner_Oper_Port_State.Synchronization

Figure 43-14—Mux Machine state diagram (coupled control)

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Comment Resolution

- Move that the 802.3ad Task Force recommend to the 802.3 Working Group that the proposed resolutions to all Working Group Ballot recirculation comments be accepted, authorize the editor to prepare draft 3.0 incorporating these resolutions, and proceed with LSMC Sponsor Ballot.
- Moved: Tony Jeffree   Seconded: Mick Seaman
- Y: 24   N: 0   A: 0

Action Items

- Tony Jeffree to make a motion in the 802.1 plenary to assign one of the reserved multicast addresses to Slow Protocols.

- Steve Haddock to make a motion in the 802.3 plenary to assign one of 802.3's reserved Ethertype values to Slow Protocols.

- Les Bell to request the IETF to assign a Root Object ID for the MIB.