
10 Gb/s Ethernet on FDDI-grade MM Fiber Study Group Opening Session

**Bruce Tolley
Cisco Systems**

Turn Cell Phones Off!!



Goals for this Meeting

Review Tutorial

Persuade 802.3 to support our request for a PAR

Hear presentations

Maybe revise PAR and 5 Criteria

Vote on Thursday in plenary 802.3 Plenary

Ground Rules

- 802.3 Rules apply
 - Foundation based upon Robert's Rules of Order
- Anyone in the room may speak
- Anyone in the room may vote
- **RESPECT**... give it, get it
- NO product pitches
- NO corporate pitches
- NO prices!!!
 - This includes costs, ASPs, etc. no matter what the currency
- NO restrictive notices

Inappropriate Topics for IEEE WG Meetings

- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions or market share
- Don't discuss ongoing litigation or threatened litigation
- Don't be silent if inappropriate topics are discussed... do formally object.

If you have questions,
contact the IEEE Patent Committee Administrator
at patcom@ieee.org

Approved by IEEE-SA Standards Board – December 2002

Agenda

- Welcome and Introductions
- Appoint Recording Secretary
- Goals for this Meeting
- Reflector and Web
- Ground Rules

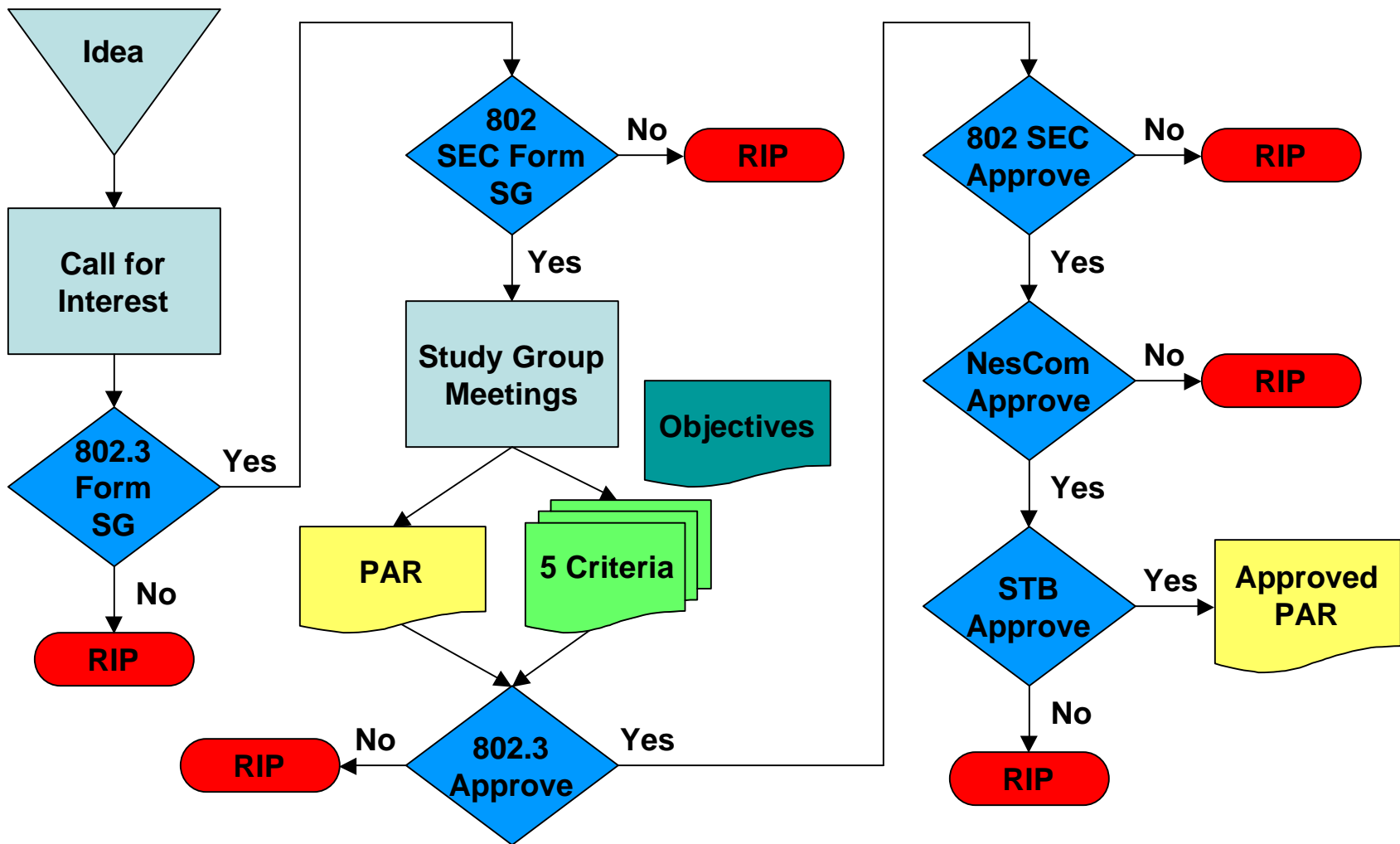
Reflector and Web

- There is a reflector set up
 - To subscribe, use this URL:
<http://www.ieee802.org/3/10GMMFSG/reflector.html>
 - To subscribe via email send this message *stds-802-3-10gmmf* <*your email address*> to majordomo@majordomo.ieee.org
- 10GMMF Study Group web page URL:
 - <http://grouper.ieee.org/groups/802/3/10GMMFSG/index.html>

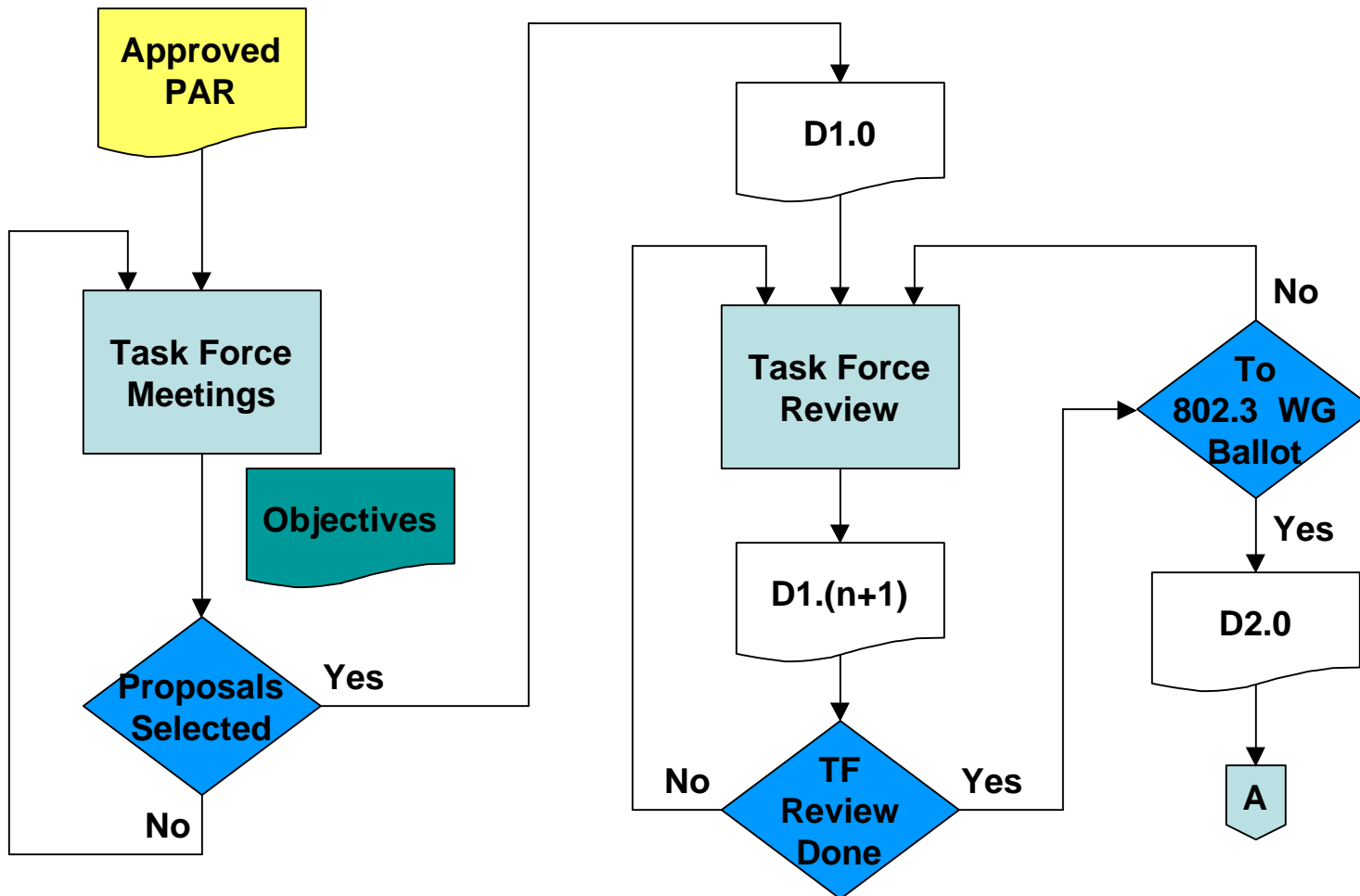
March '04 MMF SG Agenda

Name	Company	Title	Day	Duration	Time
Bruce Tolley	Cisco	Introduction, Agenda Review, ...	Tu	0:15	8:30
John George	OFS	10G over FDDI Grade MMF Study Group Minutes, Vancouver BC	Tu	0:05	8:45
Petar Pepeljuginoski	IBM	Enhanced Spreadsheet Model for 10 Gbps MMF Links	Tu	0:20	8:50
Paul Voois	Clariphy	Extending the 10 Gigabit Ethernet Link Model for EDC	Tu	0:30	9:10
David Cunningham	Agilent	Multimode Fiber Channel Modelling	Tu	0:10	9:40
		Break		0:15	9:50
Petar Pepeljuginoski	IBM	Legacy and OM3 Fiber DMD Characterization @ 1300 nm	Tu	0:25	10:05
Kevin Witt	Vitesse	MMF Channel Experimental & Scaling Simulation	Tu	0:25	10:30
Martin Lobel	Intel	Channel Simulation and estimation of filter complexity	Tu	0:30	10:55
Alan Flatman	LAN	In Premises Optical Fibre Installed Base Analysis to 2007	Tu	0:40	11:25
		Lunch		1:00	12:05
Nick Weiner	Phyworks	Receiver Yield vs. Distance prediction using MMF emulation and simulation	Tu	0:30	13:05
Martin Lobel	Intel	Technical feasibility, constraints and definition of worst case space	Tu	0:30	13:35
Sudeep Bhoja	BBN	EDC coverage simulations on the Cambridge MMF model.	Tu	0:30	14:05
		Break		0:15	14:35
Norm Swenson	Clariphy	Worst case impulse responses for various EDC architectures	Tu	0:30	14:50
Abhijit Shanbhag	Scintera	EDC in a module - Practical issues	Tu	0:20	15:20
Pete Hallemer	Optium	300 meter Transmission Using Optical Mode Filtering and Limited Function EDC	Tu	0:45	15:40
Jen Fiedler	Infineon	EDC Optical Link Budget	Tu	0:20	16:25
Abhijit Shanbhag	Scintera	Compliance Testing for EDC revised	Tu	0:20	16:45
Bruce Tolley	Cisco	Agenda Review, ...	We	0:05	13:00
Abhijit Shanbhag	Scintera	Relaxed Optics Allowances for serial binary NRZ	We	0:20	13:05
Jim Morris	Digital Optics	Design Study for optimized receptacle based launch condition	We	0:20	13:25
Lew Aronson	Finisar	TX Launch Considerations for 10 GbE FDDI Links	We	0:25	13:45
Hank Blauvert	Xponent	Spiral Launch Method for Enhanced Multimode Fiber Bandwidth	We	0:30	14:10

Our SG Job: IEEE Standards Process



IEEE Standards Process (cont.)



Objectives as adopted in Vancouver (1)

- Use the existing 10GBASE-R PCS
- Support a BER of better than or equal to 10^{-12} .
- Support fiber media selected from IEC 60793-2-10: 2003
 - 62.5 μ m
 - 160/500 MHz-km (A1b, 60793-2-10: 2003)
 - 200/500 MHz-km (A1b, 60793-2-10: 2003)
 - 50 μ m
 - 500/500 MHz-km (A1a.1, 60793-2-10: 2003)
 - 400/400 MHz-km (A1a.1, 60793-2-10: 2003)
 - 1500/500 MHz-km (A1a.2, 60793-2-10: 2003)

Objectives as adopted in Vancouver (2)

- Provide a Physical Layer specification which supports link distances of:
 - At least 220m on installed 500MHz.km multimode fiber
 - At least 300m on multimode fiber