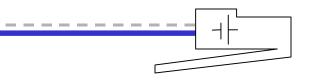
Welcome to the January 2000 **Interim Meeting** of the 802.3 DTE Power via **MDI Study Group** Dallas, TX Steve Carlson, Chair

January 20 - 21, 2000

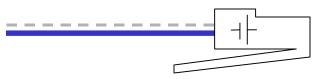
DTE Power via MDI Study Group



Agenda

- Welcome and Introductions
- Select Recording Secretary
- Review / Approve Agenda
- Document Distribution
- E-mail Reflector, Web Site, and Miscellaneous Information
- Objectives for This Week
 - Decide on Voltage, Current, Powering technique
 - Continue to Define Problem Space/Constraints
 - Compare Ideas Vs Objectives
- Call for Patents

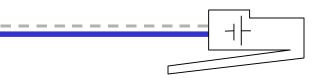
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Agenda

- Presentations related to Objectives (Define Problem Space/Constraints)
- Motions related to Objectives
- Other Presentations
- Strawman Long Term Timeline
- New Business
- Plans for March Plenary Meeting
- Approve Minutes of Kauai Meeting
- Review New Action Items
- Adjourn

DTE Power via MDI Study Group



E-mail Reflector

The IEEE has set up a reflector for this study group:

stds-802-3-pwrviamdi@mail.ieee.org

The reflector can be used for announcements, comments, discussions, or dissemination of information related to the work of this study group The reflector should not be used for recruiting, advertising, soliciting, flaming, whining, subscribing, or unsubscribing To be added to the reflector, send an E- mail containing the following line:

subscribe stds-802-3-pwrviamdi <your email address>

to

majordomo@ mail.ieee.org

To send a message to the DTE Power reflector use the email address: stds-802-3-pwrviamdi @ieee.org

Subscriptions are on an individual basis only No proxy requests or reflectors will be subscribed

> DTE Power via MDI Study Group

IEEE Web Site
Typical Plenary Meeting Plan (DTE Power via MDI will meet during "Task Force"slots): http://grouper.ieee.org/groups/802/3/plenary.html 802.3af 5 Criteria: http://grouper.ieee.org/groups/802/3/power_study/public/nov99/802.3af_5criteria.pdf 802.3af PAR: http://grouper.ieee.org/groups/802/3/power_study/public/nov99/802.3af_PAR.pdf 802.3 Voting Rules http://grouper.ieee.org/groups/802/3/rules/member.html 802.3 Patent Policy
http://grouper.ieee.org/groups/802/3/patent.html
January 20 - 21, 2000 DTE Power via MDI Study

IEEE 802.3 Requirements for Working Group Voting Membership

If you wish to vote on 802.3 standards at the Working Group Ballot stage you need to become a Voting Member of Working Group 802.3.

Membership is by individual, not company.

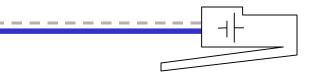
To become a voter:

- Attend and sign the attendance book at least 75% of the sessions of two Working Group 802.3 Plenary meetings (within the last four).
- Full attendance at a two day or more duly constituted Working Group 802.3 Interim Meeting can be substituted for attendance at one plenary.
- Have complete and current contact information recorded in the Working Group 802.3 database.
- Request to become a voter during a Working Group 802.3 Opening or Closing plenary meeting when additions to the voter list are solicited by the Chair from the "Potential Voter" list.

To remain a voter you must:

- Maintain current contact information in the Working Group 802.3 database.
- Have 75% attendance during at least two of the last four plenaries (Attendance at an
- interim can substitute for attendance at no more than 1 plenary).
- Participate in Working Group ballots. You can be dropped for not
- returning or abstaining in two of the last three ballots.





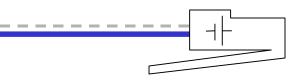
The Attendance Books **SIGN "THE BOOK" EVERY DAY KEEP IT MOVING** IF YOU ARE NEW, SIGN THE NEW-BEES BOOK Put business card in back or fill out address... Sign this book every day; no forward signing DO NOT REMOVE THE BOOK FROM THE ROOM; DO NOT COPY THE BOOK DTE Power via MDI Study Group January 20 - 21, 2000

Future Meetings

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Plenary Meeting - March 6-10 - Hyatt Regency, Albuquerque, NM
Interim Meeting - May 22-26 - Westin Hotel, Ottawa, Canada
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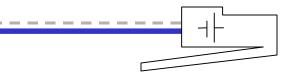
Other plenary meetings can be found in: http://grouper.ieee.org/groups/802/meeting/future.pdf





Objectives for this Meeting

- Priority One
 - Continue to define the constraints
 - Map possible solutions against the constraints
 - Make decision on voltage, current levels based upon data
 - Decide on powering technique



DTE Power Objectives

November 10, 1999 as approved by DTE Power via MDI SG.

(1) Economically provide power over a twisted- pair link segment to a single Ethernet device. To be included:

10BASE-T,

100BASE- TX.

To be considered:

1000BASE- T.

(2) Select one power distribution technique for world- wide use

(3) Not cause damage and interoperate with compliant RJ- 45 MDI Ethernet devices including:

a. Switch- to- switch connections (both supplying power)

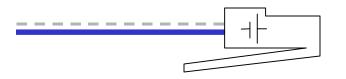
b. Cross- over cables

c. Common mode termination implementations

d. Shorted conductors, pairs or loop- back plug

(4) Define a capability detection function that works with a powered and an unpowered device

DTE Power via MDI Study Group



DTE Power Objectives

(5) Select the voltage, minimum and maximum current and wattage to be supplied

(6) Add appropriate management objects for power capability and status

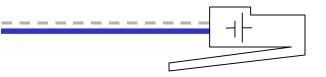
(7) Support current standard, 4- pair, horizontal cabling infrastructure for installed Cat 3 and Cat 5 cabling

(8) Preserve the signal transmission and isolation characteristics of existing equipment and cabling

(9) Maintain normal functionality of Link Integrity Test function in legacy and new devices

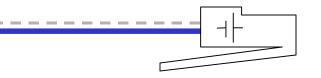
(10) Consider mid- span power insertion, powering over the signal pairs, and interaction with other RJ- 45 interfaces: Token Ring, ATM, FDDI TP- PMD, 1000BASE- T, ISDN, networking test equipment, PBX, IEEE 1394, devices listed in ISO/ IEC 11801 : 1995 Annex G

DTE Power via MDI Study Group



Presentation Guidelines

- Requests for presentation time should be scheduled with the chair one week prior to the meeting
- Presentations should be supplied via e-mail as a PDF file
- Avoid fussy backgrounds or other decorative graphics
- No animations, video clips, etc.
- Goal: to keep the PDF small enough to fit on a single floppy disk



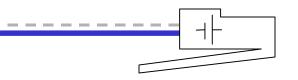
Short-Term Schedule

• January Interim, Dallas

- NESCOM approve PAR
- Continue with real work
- March Plenary, Albuquerque
 - First official meeting of the Task Force
- May Interim, Ottawa
 - Last new proposal accepted

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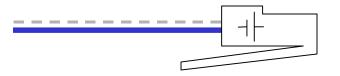
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Presentations

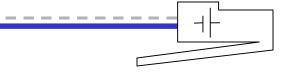
- "Thermal Impedance of SMT LAN Magnetics", Henry Hinrichs, Pulse, Inc.
- "BER vs. Transformer Current", Mike W. Nootbaar, TDK Semiconductor
- "More on Stimulus and Unique Response", Nick Stapleton, 3Com
- "Suggested Method for Autonegotiation and Authentication for Powered Devices", Amir Lehr, PowerDsine Ltd.

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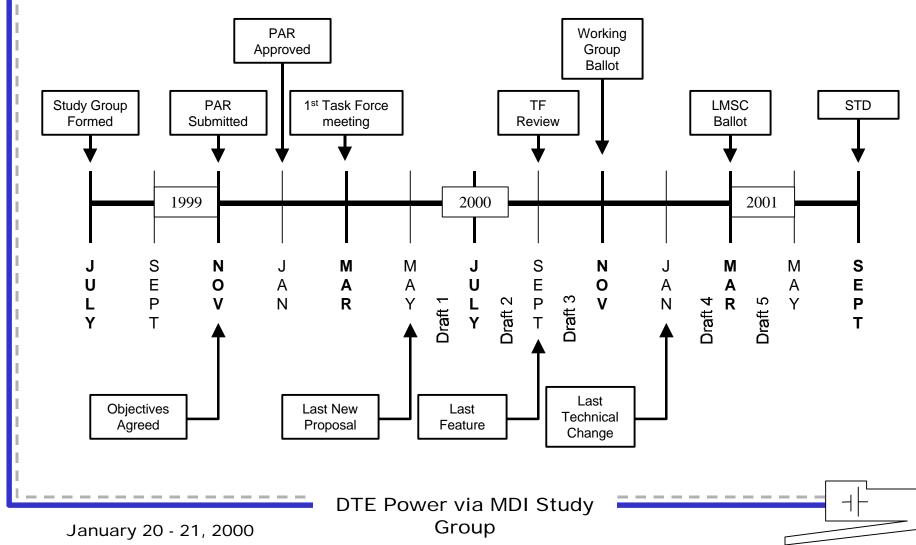


Presentations

- "Power over the DTE A Simple and Low-cost Proposal", Daniel Dove, H-P
- "DTE Power via MDI", Karl Nakamura and Howard Frazier, CISCO Systems
- "DTE Powering System", Arlan Anderson and Jennifer Rasimas, Nortel Networks
- "Power Delivery Calculations and Proposals", Robert Leonowich, Lucent
- "Power Delivery Mechanisms", Robert Leonowich, Lucent







Other Business

- New Business
- Plans for March Meeting
- Approve Minutes of Kauai Meeting
- Review New Action Items
- Adjourn

DTE Power via MDI Study Group

