

Broadband Technologies Task Force



Corporation for Education
Network Initiatives in California

JJ Jamison
Gigabit or Bust Roundtable Meeting
March 18, 2004



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NETWORKS



Agenda

- Welcome
 - JJ Jamison – Director R&E Markets, Juniper Networks and Task Force Chair

- GPON - The Next Big Thing in Optical Access Networks
 - Peter Prosen - Director, Global Pre-Sales Engineering, FlexLight Networks, Inc.

- Municipal Networks - Real Life Experiences
 - Bryan Watson - Senior Account Director, Alcatel
Fiber to the User Team

- Group Discussion - Future Direction

Some Broadband Technologies

- This is all new technology – including 1 Gig NICs
- PONs - Passive Optical Networking
 - APON, EPON, GPON
 - www.lightreading.com/document.asp?doc_id=36246&site=lightreading
- MoCA - Multimedia over Coax Alliance
 - www.mocalliance.org
- Free Space Optics
 - www.freespaceoptics.org
- Broadband Power Line (BPL)
 - www.wave-report.com/tutorials/bpl.htm

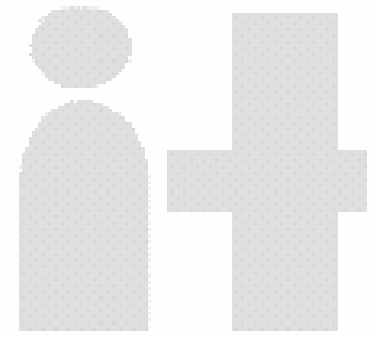
Swedish version of Gigabit or Bust

- Sweden has its own version of a Gigabit or Bust
- IT Commission
 - Chartered to analyze the impact of information technology on Swedish society
 - www.itkommissionen.se/index.html
 - In Swedish
- IT Commission's Study Group for Broadband Infrastructure
 - Presentation by Peter Lothberg (in English)
 - www.canarie.ca/conferences/advnet1999/presentations/lothberg.pdf



Study Group for IT-Infrastructure

- Create the foundation for making broadband digital infrastructure available:
 - at an acceptable cost
 - and to all households, enterprises and governmental agencies
- Identify and describe urgent issues
- Provide seminars and documentation
- Make proposals to the IT-Commission



Proposal for Universal FTTH in Sweden

- One of the products of this effort was a proposal to build a national dark fiber infrastructure that reaches every home
- The final proposal called for connecting 2 million homes at a cost of \$10 billion project cost.
\$5000.00/home
- Since Sweden is a country of 8 million people one could just multiply by three to get an idea of the cost to build the same infrastructure in California, roughly \$30B (just SWAGing it here).

GPON & Municipal Networks Presentations



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BT Task Force Goals

- The goal of this task force is to explore research and development in both industry and academia to determine:
 - if current R&D agendas are developing technologies to allow 1Gbps ubiquitous broadband by 2010
 - what needs to be added to the R&D agendas to drive appropriate technology developments, and
 - areas of prime interest for pilot projects to solve industry-wide issues in large-scale, high-performance network deployment.

BT Task Force Products

- The products of this task force will be:
 - White paper identifying current R&D agendas that foster the deployment of a ubiquitous one gigabit network.
 - Workshop and resultant white paper identifying new R&D drivers for broadband deployment.
 - List of suggested pilot projects.

Possible Next Steps

- Who plans on coming back?
- What is Realistic/Useful?
- More Broadband Technology Presentations?
 - MoCA, Free Space Optics, Broadband Power Line
- Broadband Technology Survey White Paper or web site?
- Other Ideas/Volunteers?

www.cenic.org/GB/taskforces/broadband/broadband.htm

Thanks!

