

1. Cabling survey ad hoc breakout session

1.1. Meeting convened by Bruce Tolley/3Com. Notes recorded by Bruce Tolley 3Com, 6/1/99, IEEE HSSG, Coeur d'Alene, ID

1.2. This document:

1.2.1. Unconfirmed notes for Phase 1: Wish list of what we think we need to know and assessment of what we think we already DO know

1.3. Next step: Meet during lunch Wed 6/2 in Room Bay 1A to discuss how to capture desired information

2. Objectives:

2.1. Gather information to inform possible decisions about HSSG objectives

2.1.1. Examples: How much of the installed base is cover with goals like 100 meters over MM fiber, 300 meters over MM fiber

2.2. To obtain information as granular as possible to measure impact of decisions at the margin

2.2.1. For example, if goal becomes how much of the installed base might not be cover: 90 meters over MM fiber, 240 meters over MM fiber

3. Scope:

3.1. To support HSSG/10 GbE effort and not other efforts, examples FIO, NGIO

3.2. To focus on North America for the sake of expediency. Assumption: North American datacom cabling is not unlike cabling in Europe and Asia. Comment from Europe was that earlier BICSI data confirmed what happens in Europe. Might be possible from BICSI data to break out Europe

3.3. Scope of this exercise is clearly inside the building and between buildings and other types of private networks such as long distance GbE over dark fiber up to 10 km or so.

4. Global issue

4.1. Granularity of data

- 4.1.1. Asking for exact values from a specific instance vs. asking for an expert to summarize his or her typical installation
- 4.1.2. Some participants reported that the AT&T data from 1982 might be useful. Steve Swanson said he could obtain a summary and share with group

5. Intra-building Building backbones

5.1. Lengths of links

5.2. Horizontal and vertical distributions

5.3. Specific data on last install (from BICSI)

5.4. Comment: Group thought we have this data in regard to coverage with max of 300 m. Data is less good on coverage with links less than 300 m.

6. Inter-building backbone links

6.1. Mix of MM Vs SM

6.2. Amt of hybrid fiber

6.3. Percentage of dark fiber available

6.4. Comment: Group thought we need to know this, esp. info on dark fiber and hybrid fiber

7. Rollover/Turnover rate in cabling

7.1. Willingness of network managers to change cabling

7.2. Actual rates of turnovers in recent past vs. future intention

7.3. Value, benefits, reasons for change, role of cost

7.4. Need to know Variables that influence rollover

7.4.1. Variability by location of cabling (example horizontal vs. vertical)

7.4.2. Other variables: length, method of installation, ease of change/access

7.4.3. Method of installation: raceway, duct, tray, in-wall

7.4.4. In building vs. in racks

7.5. Means of capturing the data: BICSI cabling designers vs. actual network managers

7.6. Comment: we REALLY need to know this

8. Installed base of fiber

8.1. By fiber type (MM, SM, 50, 62.5)

8.2. By bandwidth

8.3. By date of install

8.4. Rates of install of hybrid cabling

8.5. Rates of install of new enhanced MM cabling

8.6. Comments:

8.6.1. Group thought we already know the general characteristics of installed base from previous data.

8.6.2. Group thought we need to know recent install trends, esp. in regard to hybrid cabling

9. Dark fiber and access to “dark fiber”

9.1. Where

9.1.1. Inside buildings

9.1.2. Between buildings

9.1.3. Between campus and other facilities (extended LAN or private metro)

9.2. *No of people designing dark fiber in*

9.3. *No of sites that have access to dark fiber*

9.4. *Distances of links*

9.5. *Type of cabling*

9.6. *Cost/value of dark fiber*

9.7. *Comments: Group thought we needed to know this. One participant reported some data might be available from published sources such as RHK*

10. Bundling

10.1. *No of bundles*

10.2. *Avg. no of fibers per bundle*

10.3. *Comments: vendors of fiber and cabling should be able to inform this issue: Lucent, Corning, Siecor*