Agenda

Joint Technology Advisory Committee

1/11/01
7:30 PM
High School Library

Co-Chairs: Terry Lindgren & Dore' Hunter

Agenda topics

1) Joint Meeting with Cable Advisory Committee
2) Greg Hall/Mark Hald Report
3) Other

I. I-Net Infrastructure

A. Completed no later than July 1, 2001

B. A Town Representative should be confirmed to focus and drive the specifics of this charge
   1. The representative for the I-NET in the Town of Acton designated as Mark Hald
   2. A tentative meeting has been scheduled between Greg Hall of Dinsmore Communications and Mark Hald of the Town of Acton to take care of technical issues not requiring the full committee presence.
      (a) Any members are invited to attend.
      (b) Location to be determined.
      (c) Meeting Date and Time - February 7, 1:00 PM in Acton

C. The I-Net contact at the Cable Company should be identified and a meeting should be arranged to review the understanding of responsibilities on both sides.
   1. Who is the contact
   2. What are their timeframes/milestones
   3. What is the physical architecture of the optical points of presence
      (a) Termination types & Counts
      (b) Termination locations
      (c) Manufacturer and model number of equipment
         (i) To confirm compliant operation with Franchise agreement
      (d) Style of Rack/space
   4. What is the physical architecture of the distribution systems in the buildings
      (a) Number of ports
      (b) Levels
      (c) Combining architecture
      (d) filtering
   5. Confirm drops and locations within buildings

D. Items that are the responsibility of the Cable company
   1. All materials in this section ("I-Net Infrastructure") of this document will be provided by the Cable Company

E. Infrastructure - Optical Cable Installation
   1. Optical Fibers Installed, Terminated and tested by the Cable Company
      (a) At minimum - 2 fibers home run from Town Hall to each remote building identified in the franchise agreement.
         (i) 25 buildings identified in the agreement.
      (b) At Minimum (2) Optical fibers run back to the Cable Company's Headend

F. Infrastructure - Equipment and cabling
   1. Town Hall will need optical laser(s) and optical splitters to satisfy as many as 25 outputs.
      (a) 1 output per remote building
   2. Town Hall will need optical receivers with enough ports to satisfy as many as 25 return fiber paths.
      (a) 1 port per remote building
   3. Optical Transceiver/equipment to activate link back to Cable Company Headend
   4. An Optical RF Transceiver (receiver and transmitter) will be needed at each remote building activated on the I-Net.
   5. An RF distribution configuration will be required at each building to satisfy the number of drops to be supported within the given buildings
   6. Distribution drops as required by the Franchise agreement
      (a) To be determined by and coordinated with the Town's representative as described within the franchise agreement.

G. List of items to be provided by the cable company for infrastructure activation:
   1. Head end Components
      (a) Equipment Rack(s)
      (b) Optical laser(s)
      (c) Optical return receivers
      (d) Optical splitters
      (e) Optical Interface Jumpers
      (f) RF Combining network
      (g) Allowing required number of ports plus spares for future applications.
      (h) RF distribution configuration at Town Hall
         (i) Enough ports to satisfy number of drops
      (i) Installed distribution drops as required
   2. Remote building components - per building
      (a) Equipment rack(s)/space
      (b) Optical RF Transceiver
         (i) Receiver and Transmitter
      (c) Optical Interface Jumpers
      (d) RF distribution/combining configuration
         (i) Enough ports to satisfy number of drops
         (ii) At least one insertion point for local insertion
      (e) Installed distribution drops as required

II. Video Application run over I-NET - EMARP

A. Logical EMARP (**E**ducational and **M**unicipal **A**ccess to **R**esidential **P**rogramming) configuration.
   1. To determine an accurate number of components to be provided by the Cable Company, a logical channel configuration for EMARP programming must be defined.
      (a) EMARP programming should be directed toward educational and informational channels
      (b) Some samples are as follows:
         (i) The Learning Channel
         (ii) PBS
         (iii) CNN
         (iv) CNN Headline News
         (v) The Discovery Channel
         (vi) The Weather Channel
         (vii) C-Span
         (viii) C-Span-II
         (ix) PEG Channel - Public
         (x) PEG Channel - Educational
         (xi) PEG Channel - Govt.
         (xii) Animal Planet
         (xiii) History Channel

B. Items that are the responsibility of the Cable company
   1. Video source in the Town Hall for implementation of EMARP
      (a) Enough Tap ports off of subscriber network to satisfy the required number of Channels being processed to EMARP as specified in the Franchise agreement
         (i) As many as 30 channels
         (ii) Actual count should be enough to satisfy EMARP
      (b) Video Converters to implement EMARP
         (i) Qty - Up to 30
         (ii) To be delivered with 45 days of written request
         (iii) Actual count should be enough to satisfy EMARP
      (c) Video processors to implement EMARP
         (i) Qty - Up to 30
         (ii) Actual count should be enough to satisfy EMARP
      (d) Channel Filters as required by design

2. Remote Video Source at each building
   (a) RF Drop from subscriber network as described in section 5.12 of the Franchise agreement
   (b) Video converter for remote building access to subscriber net as described in section 5.12 of the franchise agreement
      (i) To allow one channel to be uniquely broadcast within a given building.
3. List of items to be provided by the cable company for video application activation
   (a) Cable Converters
   (b) Processors
   (c) Racks/space
   (d) Subscriber drops
   (e) Interface jumpers
   (f) Filters and combing equipment as required

III. Data Applications

A. The equipment associated with the transport of data across the I-Net is the responsibility of the Town
B. The Town currently has a quantity of Broadband WAN Bridges
   1. LANcity Generation II
      (a) These will function on the broadband
      (b) The LANcity bridges are no longer manufactured and are ass much as five years outdated.
         (i) Repair and support of these components will be difficult.
   2. The school department also had some LANcity Generation II equipment at one time
      (a) Determine the location of school owned LANcity equipment.
   3. Currently owned equipment runs 10mbs throughput.
C. Due to the age of the existing data equipment, the Town should consider implementing a newer, currently supported product line.
   1. For example - Cisco Broadband solution
D. All buildings requiring data access to the Wide Area Network (WAN) should be identified
   1. A count of required components should be developed
      (a) 1 Bridge per building linked to the WAN
      (b) 1 Headend CMTS (Cable Modem Termination System) device for each isolated data channel on broadband
         (i) Located at Town Hall
         (ii) CMTS is expensive
         (iii) The Town may opt to run their data on an independent channel from theSchool.

~~Test~~ Acceptance Plan

12 x 8 room
Power / UPS