## Minutes of the Harvard Broadband Committee Meeting July 21, 2017 (Volunteer Government Room)

## Committee member Attendees:

- Noyan Kinayman (Chair)
- Olivier Beauchemin
- Maribeth Marcello (Acting Secretary in Jim Dowson's absence)

Matt Caulfield

A quorum was met, having 4 of the required members in attendance. Jim Dowson and Christopher Roy were absent.

The Meeting was called to order at 8:06 pm, and the Agenda was briefly reviewed.

## Reports from Committee Members

- Olivier Beauchemin and Matt Caufield reported on their meeting with Calix, where they received a high level overview of the Calix architecture. Broadband Committee members are invited to register on Calix's customer portal with the harvardbbc login. To summarize, security features, VLAN support and topology capabilities were described. A single ring maxes out at 20 GB. Calix offers 24 X 7 call center support; via CMS application, they showed how to provision GPON. The on-prem device, ONT, has a 5 year lifespan, and it is supported for 7 years after EOL. Calix says a lawful intercept happened just once. They do not offer deep packet inspection. In their Concord deployment, there is no firewall, just raw internet running Cisco's Prime Network Registrar. Calix took the action to put the committee in touch with design firms for lower level network designs; Calix offers free design services for the access layer. An NDA is in progress, and verbally approved. Calix will provide design, delivering a BOM with pricing. It was mentioned that Harvard would need an edifice for non-Calix network gear that's not hardened. Calix agreed to send references, other than the Concord MLP.
- There was discussion about leveraging Concord's MLP, including co-sharing spares between towns, the possibility of joining networks together, the possibility of a fiber link between towns to provide redundancy where traffic could be rerouted in a reciprocal fashion. Harvard could leverage all services that Concord offers. Concord has expertise, as well as a building for housing network gear. The revenue split would need to negotiated so that Harvard was capable of paying down a 30 year bond for its fiber.
- Three ISP options for Harvard include: 1) Two separate buildings where 2 ISPs can be accommodated; 2) A single ISP, and 3) No ISP, since Harvard could be a subscriber to Concord's MLP.

## Actions

- Explore with Ockers and Phoenix whether dark fiber exists between Harvard and Concord. (Olivier Beachemin)
- Explore whether Concord MLP manages Harvard's DHCP Server, or would Harvard have a mini Data Center of its own. (Olivier Beachemin)
- (Unassigned actions) Explore financial modeling and cost models with Concord MLP; develop and examine a heat map of Harvard's take rate (and perhaps a second town survey), based on 1,800 parcels; explore whether fiber requires insurance and whether pole owners charge rent that includes insurance; in general, explore whether Harvard BB can claim municipal space on poles.

Meeting adjourned at 9:37 pm. Motion made by Olivier Beauchemin, and seconded by Matt Caulfield. The motion was approved unanimously, without objection.

Respectfully submitted, Maribeth Marcello