

Electronic Communications
Funding Model Review
Committee

Conclusions

December 2, 2008

Current Funding Model

- Network operation costs about \$3.7m/year
- Approximately \$2.4m of direct network funding is provided
- Remainder of network funding comes from telephone revenue
- Past major network upgrades have been covered via state “Internet-2” funds, special one-time allocations, and the Small Capital request process

Current Funding Model

- Insufficient network operations funds
 - Operation costs have grown to absorb money previously available to implement routine upgrades
 - Wired network: 14,000 connections in 2001; 27,000 now
 - Wireless network: 33 access points in 2001; 760 now; 72k connections per day in 10/2007, 146k/day in 10/2008
- Does not provide funds for regular network enhancements and infrastructure refresh
- Redirects telephone funds to the network, preventing telephone system upgrade required to keep system manageable
- Reliance on telephone funds is problematic

Overall Conclusions

1. The current approach to funding network services is problematic and must be changed.
2. The network is a critical campus resource for research, education and administration. It is essential that UCI network operation be funded at a level that provides highly reliable operation as well as a consistent stream of upgrade funds to maintain its technological currency over time.
3. The current level of funding is not sufficient to keep up with evolving technology and campus needs and must be increased.

Funding Models Explored

- Usage/Connection Based
 - Base fee on numbers of connections, amount of data sent over the network, etc.
 - Encourages sub-optimal decisions such as port sharing; discourages network use
- “Off The Top” (OTT) Funding
 - Increase direct network funding to replace use of telephone funding and cover unmet needs
 - Attractive to committee as it would avoid overhead of recharge systems
 - Would require very significant increase in direct funds (as much as \$1.8m/year)
 - Would not scale as network grows, leaving a potential for a repeat of the current situation

FTE-Based Technology Infrastructure Fee

- Approach (narrowly) favored by committee
- Recognizes the universal need for electronic communication services throughout the campus, across research, education, administration, and public service
- Charge entities for their share of costs based on the number of FTE they have
- Provide technology-neutral funding by bundling telephones into fee structure
- Oversight committee approves 5 year operating/upgrade budget and per-FTE fee

Open Questions / Issues

- The committee felt it important to include students in the FTE scheme, but how? A student technology fee would be ideal, but difficult to gain approval for.
- UCSD uses its FTE-based scheme to make direct charges for network fees against grants; faculty and others are opposed to this (15% of network costs could, in theory, be charged to contracts and grants).
- How should undergraduates, graduates, postdocs, low IT-use employees, UnEx students, and staff who work off campus be weighted?
- How do we implement this to minimize campus-wide administrative overhead and general aggravation, especially in the current budget climate?

Where do we go from here?

- Rapid progress toward changing the funding model seems unlikely.
- Given cutbacks, the administration and campus as a whole will probably be willing to accept a fair amount of operational risk and to postpone upgrades.
- The challenge is to communicate the risks and upgrade needs to ensure postponing upgrades is acceptable or they are considered for “emergency” funding.
- Regardless, in the next few years, the funding model needs to shift to depend less on telephone revenue.
- *Reactions? How hard should we push this?*
- *Review “UCI Network Upgrade Needs” Summary*