Meeting Summary

April 27, 2007
ITFOC on TIER/Repositioning IT projects

Background

The IT Functional Oversight Committee met on Friday, April 27th, to review the status of the Technology Infrastructure for Education and Research program. The ITFOC was asked to review the proposed list of projects to provide recommendations on their alignment with the TIER principles and criteria.

The goal of TIER (aka Repositioning IT) initiative is to change the way UCLA's networks are implemented, managed and maintained. Consolidating multi-tenant intra-building network equipment, expanding the campus or regional backbone structure to reduce inter-building fiber leasing costs, and moving to shared management models within a building and/or functionally or geographically similar region are among the essential criteria of TIER. Most importantly, TIER is intended to go beyond what the Connected program accomplished by addressing the more challenging cultural issues associated with consolidation and shared management of networking on the UCLA campus.

Phase I of TIER focused on creating the foundation of this initiative -- defining the funding principles and design criteria (refer to Appendix 1) to support a "Next Generation" campus network model. As this new network model has evolved, several opportunities and partnerships presented- permitting the implementation of these new network principles as part of an "early adopter" program.

The five emerging "early adopter" projects in 2006-07 were presented for TIER funding. Two projects that were new building construction projects (Broad and CNSI) have already been awarded TIER funds. The projects currently under consideration for TIER funding include the Physics & Astronomy department; Kinross Building (with Library & ORA/OPRS); and 4 buildings within the CHS complex -- Factor (Schools of Nursing and Medicine), Dentistry, Public Health and NPI -- within a broader Medical Sciences Regional network concept.

These early adopters are important in that they help to create a better understanding of the operational impacts and practical application of these new NGN principles and criteria for the evolving network design requirements on the campus community. This knowledge will help to create a realistic plan for a campus-wide rollout by FY 2008.

A preliminary estimate of costs was presented to show that the annual $2.1 million available to support TIER would not meet the 100% financial requirements of these "early adopter" projects over the next four years. As a result, departmental investments in the form of “matching funds” are expected. The level of funding for any of these "early adopter" projects will need to be on a sliding scale basis – a basis that creates a financial incentive to encourage the willingness and commitment for these departmental units to participate in shaping this new cultural and management model, as well as on the needs of the departments to meet its networking needs under the next generation model.
ITFOC Recommendations (blue font represents changes recommended for the TIER Fund Use Principles and Process document in Appendix 1)

1. The ITFOC recommended that OIT take the TIER Fund Use Principles and Process documents for formal review and comment by the Deans and the Academic Senate.

2. Two new network design criteria from the TIER fund Use Principles and Process document were presented. The following represents the recommended changes:
   
   i. Number 8 - All TIER funded equipment will be maintained at current (up-to-date with the current manufacturer supported) operating software levels. STRIKE even in the case where extra funds are secured for maintenance costs.
   
   ii. For design criteria 9 the ITFOC asked that visibility be better defined. In subsequent meetings the wording for number 9 changed from - All TIER funded equipment will provide operational visibility for local, regional, central providers. The TIER project will provide services for network monitoring and diagnostics.

   To:

   iii. Anyone who has operational accountability and responsibility for a network at UCLA should have information and tools available to them to be able to diagnosis, troubleshoot, and solve network problems across UCLA networks.

3. Given that the stated TIER goal is towards consolidation of independent networks to a campus architecture that includes consolidation of intra-building networks and regionalization of inter-building networks the ITFOC recommended that the following language be incorporated into the TIER Fund Use Principles and Process document:

   Independent networks that move to consolidate networks within a building or within a geographical or functional region should be a priority of the TIER program and funding.

4. All of the "early adopter" projects have, to some extent, met the evolving principles and criteria of the next generation network model. However, the ITFOC requested that Physics and Astronomy seek additional consolidation partnerships before TIER funding can be considered.
The ITFOC met to provide initial input on the following question:

“What are the considerations that should guide the most effective use of the TIER funds portion of the TIF for campus infrastructure implementation proposals that fall within TIER project objectives”

Based on the ITFOC input, the following are principles/process statements about how Next Generation Infrastructure for research and education (TIER) funds would be used:

**TIER Fund Use Principles/Process**

1. The Chancellor has assigned a portion of the Technology Infrastructure Fee (TIF), now being collected, to the TIER Project. The EVC and the Office of Finance and Budget have authority over the fund. Approximately $2.1 million per year is collected. The Office of Finance and Budget will determine the precise amount available for TIER for a given FY.

2. TIER funds will be used to further the goals of the TIER project and the criteria and models (when completed) for the next generation campus IT infrastructure for network, email, data center, and security resources and services.

3. TIER funds should be used to compliment an existing funding base. The corollary is that TIER funds should not be used as replacement funds for lost or reassigned funds in a capital project (as an example). Building upon and existing base, TIER funds should be used to position the project to align with the next generation network criteria and eventual architecture.

4. The allocation of TIER funds should be used as an incentive for units to move towards a campus infrastructure architecture that optimizes for both local and campus needs. The allocation of funds should, however, respect and accommodate the fact that individual units have needs that may be different than the needs of other units. OIT will work with departments to achieve balance for both institutional and local needs.

5. It is understood that the criteria and models for TIER are not deterministic but need to evolve and/or be developed as experiences build. In the short term, the TIER project director along with campus technical teams will develop, refine, evolve and publish criteria to which proposals must adhere. Ultimately, these teams will develop the next generation campus infrastructure model and strategies for implementation.

6. The evolving criteria and models will be vetted through the IT governance process, i.e. CSG, CITI, ITPB and other stakeholders with orchestration and oversight through the ITFOC.

7. The call letter for networking projects should come from the Chancellor’s annual strategic planning and budget process.
8. Funding proposals and needs from individual units will be assimilated by OIT into a FY TIER spending plan. Accordingly, proposals will have to demonstrate that any proposed expenditure is aligned to the goals of the TIER project and align with the next generation network criteria and model (when completed). In developing a FY proposal OIT will consult with the departments involved. When opportunities or urgent requirements are present, OIT will accommodate proposals outside of the FY plan. Funding proposals must also align with the goals of the TIER project and align with the next generation campus network criteria and model (when completed).

9. FY plans, and when appropriate proposals outside the FY plan, will be reviewed by the ITFOC with comments to the ITPB. Comments from the ITPB will be forwarded to the EVC and the Office of Finance and Budget for consideration. OIT will have the review and endorsement authority of a given FY plan or proposals outside the FY plan. The Office of Finance and Budget will make final decision and release TIER funding.

For FY 06/07 the early criteria for the next generation network model for which proposals for funding must align:

1. Funding must be consistent with the provision of a non-duplicative and/or non-overlapping networking service within a given geographical space. (i.e. TIER funds will not be used to install multiple, overlapping networks in a building when a simpler network structure would suffice).

2. Any department/group for which funding is being provided must commit to being part of the next generation network (NGN) model as it becomes established under the assumption that the unit is not negatively impacted.

3. A network design and configuration must be vetted by the NGN working group and the Campus Network Architect for technical compliance with the expected NGN model (this is an evolving process; standards that are approved in the beginning may not be the final standards six to twelve months later).

4. Any unit that has campus network responsibility should have appropriate visibility into campus networks.

5. Adherence of networks to evolving security standards should be auditable by the appropriate security office - currently that responsibility is with the OIT security Officer and the Applied security Task Force.

6. All network build-outs or upgrades, independent of funding source, should adhere to the campus network model.

7. Network equipment purchased through TIER funds, should, where appropriate, become available for redistribution. These exchanges should be facilitated to ensure that a local unit is not disadvantaged and that benefits of the exchange accrue to local units and the campus.

8. All TIER funded equipment will be maintained at current (up-to-date with the current manufacturer supported) operating software levels, even in the case where extra funds are secured for maintenance costs.

9. All TIER funded equipment will provide operational visibility for local, regional, central providers. The TIER project will provide services for network monitoring and diagnostics.