

# **Telecommunications and Informatics Task Force (TITF)**

## **2002 Request for Proposals**

### **I. Introduction**

Technological advances that strive to make information available anywhere, anytime, continue to have profound economic and social implications on our lives. Whereas much can be done today with existing high-speed networks and wireless systems that extend our access to information to almost anywhere, the demand for faster, more reliable and more secure access continually fuels further technological advances. At the same time, new industries, such as e-commerce, video on demand and voice over IP, to name a few, spurred on by advances in engineering, place further demands on new technologies. Given the scope and importance of this field, Texas A&M University seeks excellence in research and education, both in the generation of new telecommunication and information technologies and in their applications.

Towards achieving excellence in the telecommunications and informatics areas, Texas A&M, through the Offices of the Provost and Vice President for Research, has made available \$2M per year, starting with the 2000-2001 academic year, for a three year period. This is the second RFP planned for these funds. The Telecommunications and Informatics Task Force (TITF), charged to guide the use of these funds for maximum impact, has decided to allocate a substantial fraction of the funds to promote a small number of major funding initiatives at funding levels of \$250-\$750K, as well as a number of smaller-scope proposals. Proposals that fall in the small-scope category should have budgets in the range of \$50-\$250K. The distinction between the two funding levels is not one of quality, but one of scope. All funds must be expended within three years from the time the funds are made available to the Principal Investigator (PI).

Both proposal levels are aimed at creating new or enhancing existing programs at Texas A&M which will have the potential to become nationally known in the academic research and/or educational arenas. Existing programs that request funding must show that they have achieved some level of external recognition already and indicate how the additional funding can further enhance their visibility. New program proposals should indicate how they draw on existing resources, as well as how they will contribute to the paramount importance of achieving the TITF ultimate goal of national excellence.

### **II. General Areas of Focus**

Proposals should fall into one of the following categories:

- Basic research;
- Telecommunications and information technology applications;
- Regulatory, societal and policy issues; and
- Education.

A. Basic research proposals should aim at creating or enhancing programs through cutting-edge research and aid in the development and generation of algorithms and systems for future telecommunications and informatics systems. Examples in this category include:

1. Wireless and wireline telecommunication systems;
  2. Communication networks;
  3. Security, statistical signal processing, imaging, pattern recognition and classification;
  4. Data access, storage, and mining;
  5. Knowledge representation and ontology; and
  6. Quantum and biophysical computing.
- B. Telecommunications and information technology application proposals make use of telecommunications and information technologies to enhance educational, economic, or other applied goals. Examples in this category include:
1. Electronic commerce;
  2. Visualization and imaging;
  3. Digital libraries;
  4. Telemedicine;
  5. Environmental and bio-informatics;
  6. Cyber security; and
  7. Public Communication.
- C. Regulatory, social, and public policy proposals include interpretation of information, studies of the impact of communication and information technology on society and the influence of technology alternatives on telecommunication policy. Examples include:
1. Ethical and societal impact of information technology, e.g., rights and obligations concerning privacy of data and ownership in the virtual domain;
  2. Spectrum allocation issues;
  3. Balancing corporate and individual interests in telecommunication policy;
  4. Organizational impact of telecommunications systems and informatics; and
  5. Distance education and technology mediated instruction.
- D. Education proposals are those that develop or expand programs leading to degrees, certificates, or other credentials relevant to telecommunications and informatics. In evaluating such proposals, in addition to the goal of achieving excellence, a major criterion will be actual or anticipated demand from industry or academe for individuals with the education contemplated. Examples of educational programs in this category include:
1. Bioinformatics (including genome informatics, biodiversity informatics, bioethics);
  2. Humanities informatics (including new media studies and digital arts and culture);
  3. Architectural informatics (including ambient workspaces and visualization);
  4. Human Centered Computing (including computer-human interaction, intelligent user interfaces, collaborative systems and information visualization)

Note: Conversion of existing courses or development of new courses for distance delivery will not be funded by this program.

### **III. Letter of Intent**

In order for a proposal to be considered a Letter of Intent must be submitted via e-mail to [melanieb@tamu.edu](mailto:melanieb@tamu.edu) no later than 5:00 PM, **January 25, 2002**. Letters received after that date will not be considered.

Letters of intent should include the Title of the Proposal, Principal Investigator's name, address, email, and a short description of the proposed work. If the names of co-PIs are available, those should be provided as well. The description must not exceed 300 words.

Principal Investigators are encouraged to discuss their plan with their department heads and colleges as well as external supporters prior to the submission of the Letter of Intent. Indications of potential for internal and/or external matching funds, if any, should be included in the letter.

Letters of Intent will be reviewed by the TITF for programmatic fit and will also serve as an aid in identifying external reviewers. PIs will be notified of the results of the review within approximately one week of submission.

#### **IV. Proposal Format**

Proposals should adhere to the following format (in sequence):

- A. Title Page (available on TITF web site): The title, the names, affiliations and signatures of up to six principal investigators, the proposal scope (small/large), anticipated duration of project, and the total budget requested.
- B. Project Summary: Up to one-page summary of the proposed program (12-point font, one-inch margins) describing the essence of the proposal in layman's terms.
- C. Proposal Narrative: Up to four pages for small-scope proposals and up to eight pages for large scope proposals. All should use 12-point font in Times New Roman, one-inch margins on all sides. The proposal narrative should clearly state why the project has the potential to achieve national excellence. It should:
  1. Describe the scope of the program and its importance;
  2. Discuss other programs in the country and how they are similar or different to what is proposed;
  3. Discuss the educational aspects of the proposed program; and
  4. Discuss ways to leverage funds received from this initiative.
- D. Annual and Cumulative Budget and Justification. Fringe benefits must be included for salaries. No indirect costs shall be included.
- E. Institutional Commitments and Other Support. The Task Force will look very favorably at proposals that can leverage TITF funds through other support.
- F. Two-Page Resumes of (up to six) Principal Investigators (NSF style).

#### **V. Proposal Evaluation**

Proposals will be first screened by the TITF to assure they fall within the scope of the initiative. Proposals that are deemed relevant will be sent to appropriate external reviewers. After receipt of the external reviews, the TITF will consolidate the reviews and provide a summary to the Council of Deans for review and comment. Based on these reviews and any

comments from the Council of Deans, the TITF will then rank and recommend the proposals to the Vice President for Research and Provost, who will make the final funding decisions.

The ultimate criterion for selection is whether a proposed program has the potential to become nationally visible in research and/or education. To assess this potential, the TITF will rate the following:

1. Innovativeness and technical merit of the proposal;
2. Importance and scope of the proposed program (if successful, does it mean anything?);
3. Competence and leadership of key personnel;
4. Impact on graduate programs;
5. Likelihood of long-term success;
6. Interdisciplinary potential of proposed work;
7. Institutional resources and support; and
8. Matching resources from public or private sources.

## **VI. Proposal Deadline**

The deadline for receipt of proposals is **March 4, 2002**. Ten paper copies of a completed proposal should be submitted by the deadline to:

Telecommunications and Informatics Task Force  
c/o Office of the Vice President for Research  
1112 TAMU  
310 Administration Building  
College Station, TX 77843-1112

Note: Proposals arriving after the deadline will not be considered.

## **VI. PI Resources**

Guidelines, forms, and other resources for this RFP can be obtained from the TITF web site at: <http://titf.tamu.edu>. Questions or comments about the RFP should be directed to the TITF co-chairs: Dr. Joobin Choobineh, Tel: 845-4048, [jchoobineh@cgsb.tamu.edu](mailto:jchoobineh@cgsb.tamu.edu) or Dr. Costas N. Georghiades, [c-georghiades@tamu.edu](mailto:c-georghiades@tamu.edu), Tel: 845-7408.