DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

Technology Innovation Program (TIP) Seeks Comments on White Papers

AGENCY: National Institute of Standards and Technology (NIST), Department of Commerce.

ACTION: Notice.

SUMMARY: The National Institute of Standards and Technology’s (NIST) Technology Innovation Program (TIP) announces that it is seeking comments on white papers prepared by TIP staff from any interested party, including academia; Federal, state, and local governments; industry; national laboratories; and professional organizations/societies. The white papers are posted on TIP’s Web site (URL). Comments will assist in the further refinement of areas of critical national need and the associated technical challenges that could be addressed in future TIP competitions.

DATES: The suggested dates for submission of comments on white papers are: November 9, 2009 through September 30, 2010.

ADDRESSES: Comments on white papers must be submitted to TIP using the comment button found on the first and last page of each white paper.

FOR FURTHER INFORMATION CONTACT: Thomas Wiggins at 301–975–5416 or by e-mail at thomas.wiggins@nist.gov.

SUPPLEMENTARY INFORMATION:

Background Information: The Technology Innovation Program (TIP) at the National Institute of Standards and Technology (NIST) was established for the purpose of assisting U.S. businesses and institutions of higher education or other organizations, such as national laboratories and nonprofit research institutions, to support, promote, and accelerate innovation in the United States through high-risk, high-reward research in areas of critical national need. The TIP statutory authority is Section 3012 of the America Creating Excellence in Technology, Education, and Science (COMPETES) Act, Public Law 110–69 (August 9, 2007), 15 U.S.C. 278n. The TIP implementing regulations are published at 15 CFR part 296. TIP holds competitions for funding based on addressing areas of critical national need. TIP identifies and selects topics for areas of critical national need based on input from within NIST, the TIP Advisory Board, the science and technology communities, and from the public. TIP is interested in receiving input on the identification and definition of problems that are sufficiently large in magnitude that they have the potential to inhibit the growth and well-being of our nation today.

This announcement explains the process for submitting comments on TIP white papers. Comments on white papers from experts in other Federal agencies are valued and welcome, and will enable TIP to complement the efforts of other mission agencies and avoid duplication of their efforts, thereby leveraging resources to benefit the nation. The key concepts, enumerated below, are the foundation of TIP and should assist all commenters in providing input that will help TIP develop and refine an effective white paper:

a. An area of critical national need means an area that justifies government attention because the magnitude of the problem is large and the associated societal challenges that need to be overcome are not being addressed, but could be addressed through high-risk, high-reward research.

b. A societal challenge is a problem or issue confronted by society that when not addressed could negatively affect the overall function and quality of life of the nation, and as such, justifies government attention. A societal challenge is associated with barriers preventing the successful development of solutions to the area of critical national need. TIP’s purpose is to provide funding that will enable U.S. businesses and institutions of higher education or other organizations, such as national laboratories and nonprofit research institutions, to tackle technical issues that can be addressed through high-risk, high-reward research. The results of the high-risk, high-reward research should have the potential for transformational results.

c. A transformational result is a potential project outcome that enables disruptive changes over and above current methods and strategies. Transformational results have the potential to radically improve our understanding of systems and technologies, challenging the status quo of research approaches and applications.

For an understanding of how these white papers were developed, and for detailed instructions on how to prepare and submit your own white papers to TIP, refer to A Guide for Preparing and Submitting White Papers on Areas of Critical National Need. The guide is available on the TIP Web site at http://www.nist.gov/tip/guide_for_white_papers.pdf.

In this call for comments on white papers, TIP is seeking information to further develop and refine the areas of critical national need as defined in the 2009 competition on Civil Infrastructure, and the 2009 competition on Manufacturing, as well as information to assist TIP in further defining other topic areas under development. TIP may use comments received to further develop the definition and scope of the critical national needs suggested by these topic areas, and to additionally identify and explain specific societal challenges that require a technical solution within these critical national need areas. Do not include ideas for specific proposals in your comments on the white paper (i.e., do not discuss your specific solution to the problem). This solicitation for comments on white papers is neither a Request for Proposals (RFP) nor should it be viewed as a request for proposals. Rather, it is a way to include ideas from the public to identify problems that justify government support and can be addressed by technological innovations that are not currently being sufficiently supported to meet the challenge.

Comments on white papers must not contain proprietary information. Submission of comments on a white paper means that the author(s) agrees that all the information in the comments on the white paper can be made available to the public. Information contained in these comments on white papers will be considered and combined with information from other resources—including the vision of the Administration, NIST, other government agencies, technical communities, the TIP Advisory Board, and other stakeholders—to develop the scope of future competitions and to shape TIP’s collaborative outreach. Comments on white papers are a valuable resource that adds to TIP’s understanding of the significance and scope of critical national needs and associated societal challenges. The comments on the white papers submitted could be shared with the Administration, NIST, other government agencies, technical communities, the TIP Advisory Board, other stakeholders and the public as...
part of the selection process for future competitions.

This current call for comments on white papers pertains to the four areas of critical national need shown below. However, TIP intends to post additional white papers for comments over the coming months.

Civil Infrastructure: Civil infrastructure constitutes the basic fabric of the world in which we live and work. It is the combination of fundamental systems that support a community, region, or country. The civil infrastructure includes systems for transportation (airport facilities, roads, bridges, rail, waterway locks) and systems for water distribution and flood control (water distribution systems, storm and waste water collection, dams, and levees). New construction approaches and materials to improve the infrastructure and for mitigating the expense of repairing or replacing existing infrastructure appear to be areas with the potential for specific societal challenges we within this area of critical national need.

The 2009 Civil Infrastructure competition, based on the white paper Advanced Sensing Technologies and Advanced Repair Materials for Civil Infrastructure: Water Systems, Dams, Levees, Bridges, Roads, and Highways, dated March 2009, emphasizes technologies to detect corrosion, cracking, delamination and other structural damage in water resources systems such as water and wastewater pipelines, dams, levees and waterway locks, as well as bridges and roadways. The white paper for the 2009 Civil Infrastructure competition can be found at http://www.nist.gov/tip/wp_cmts/index.html.

Manufacturing: R&D projects in manufacturing could enable better, more cost-effective use of advanced materials in innovative products. New and improved materials underlie many new product innovations. High-strength alloys, aluminum and magnesium are used to build stronger, lighter and safer vehicles; superalloys are used to make higher efficiency gas turbines; composites make larger, more efficient wind turbine blades and higher performance aircraft; and nanomaterials are finding their way into better performing batteries, energy storage devices, high voltage transmission lines and healthcare applications.

The 2009 Manufacturing competition, based on the white paper Accelerating the Incorporation of Materials Advances into Manufacturing Processes, dated March 2009, addresses improved technologies to produce these new materials and to rapidly integrate them into products while maintaining the material’s unique properties. The white paper for the 2009 Manufacturing competition can be found at http://www.nist.gov/tip/wp_cmts/index.html.

Energy (proposed topic area): The proposed topic area within the critical national need area of energy is based on the draft white paper Technologies to Enable a Smart Grid, which outlines the technologies that will be required to enable a reliable smart grid approach to electric power distribution, demand, and response control, grid connectivity, and the integration of renewable energy sources into the grid. The proposed topic aims to address research in energy storage systems and the integration of stored energy into the grid system, advanced sensors and their energy sources to be deployed along the grid, and communication and control technologies (high voltage power electronics). The draft white paper for the proposed topic of Energy can be found at http://www.nist.gov/tip/wp_cmts/index.html.

Healthcare (proposed topic area): The proposed topic area with the critical national need of Healthcare is based on the draft white paper Advanced Technologies for Proteomics, Data Integration and Analysis and Biomanufacturing for Personalized Medicine, which outlines the platform technologies that will be needed to enable a personalized approach to safer and more cost-effective healthcare. The proposed topic specifically aims to address research needs for: Non-invasively analyzing proteins in real time in live tissues, animal models and humans; linking genomic, proteomic and other disparate datasets with patient-specific data to understand disease susceptibility and response to treatment; and cost-effective high-throughput biopharmaceutical manufacturing. The draft white paper for the proposed topic of Healthcare can be found at http://www.nist.gov/tip/wp_cmts/index.html.


Patrick Gallagher,
Deputy Director.

COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

Procurement List Proposed Additions and Deletions

AGENCY: Committee for Purchase From People Who Are Blind or Severely Disabled.

ACTION: Proposed additions to and deletions from Procurement List.

SUMMARY: The Committee is proposing to add to the Procurement List services to be furnished by the nonprofit agencies employing persons who are blind or have other severe disabilities, and to delete products and services previously furnished by such agencies.

Comments Must Be Received on or Before: December 7, 2009.


FOR FURTHER INFORMATION OR TO SUBMIT COMMENTS CONTACT: Barry S. Lineback, Telephone: (703) 603–7740, Fax: (703) 603–0655, or email CMTEFedReg@AbilityOne.gov.

SUPPLEMENTARY INFORMATION:

This notice is published pursuant to 41 U.S.C. 47(a)(2) and 41 CFR 51–2.3. Its purpose is to provide interested persons an opportunity to submit comments on the proposed actions.

Additions

If the Committee approves the proposed additions, the entities of the Federal Government identified in this notice for the services will be required to provide the services listed below from the nonprofit agencies employing persons who are blind or have other severe disabilities.

Regulatory Flexibility Act Certification

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered for this certification were:

1. If approved, the action will not result in any additional reporting, recordkeeping or other compliance requirements for small entities other than the small organizations that will provide the services to the Government.

2. If approved, the action will result in authorizing small entities to provide the services to the Government.

3. There are no known regulatory alternatives which would accomplish the objectives of the Javits-Wagner-O’Day Act (41 U.S.C. 46–48c) in