July 30, 2014

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY (FFO)
NIST Advanced Manufacturing Technology Consortia (AMTech) Program, Planning Awards

EXECUTIVE SUMMARY

- **Federal Agency Name:** National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC)

- **Funding Opportunity Title:** NIST Advanced Manufacturing Technology Consortia (AMTech) Program, Planning Awards

- **Announcement Type:** Initial

- **Funding Opportunity Number:** 2014-NIST-AMTECH-01

- **Catalog of Federal Domestic Assistance (CFDA) Number:** 11.619 Arrangements for Interdisciplinary Research Infrastructure

- **Dates:** Required Pre-Applications must be received electronically through Grants.gov no later than 11:59 p.m. Eastern Time, Friday, September 5, 2014. Pre-Applications received after this date will not be reviewed or considered. Review of Pre-Applications, selection, and notification to applicants is expected to be complete on or about Wednesday, September 24, 2014. Selected applicants will then be invited to submit a Full Application. Full Applications must be received electronically through Grants.gov no later than 11:59 p.m. Eastern Time, Friday, October 31, 2014. Full Applications received after this deadline will not be reviewed or considered. The anticipated start date for the awards issued under this FFO is expected to be within the second quarter of calendar year 2015.

  NIST strongly recommends that applicants do not wait until the last minute to submit either a Pre- or Full Application. NIST will not make any allowances for late submissions, including but not limited to incomplete Grants.gov registration. To avoid any potential processing backlogs due to last minute Grants.gov registrations, applicants are highly encouraged to start their Grants.gov registration process at least four (4) weeks prior to the Pre-Application due date.

  When developing your submission timeline, keep in mind that a free annual registration process in the electronic System for Award Management (SAM) (*see* Section VI.2.b. of this FFO) takes on average fourteen (14) business days for new registrations, and between seven (7) and ten (10) business days for renewal registrations. The SAM registration process will likely take more time if problems are encountered. Also, please keep in mind that applicants using Grants.gov will receive a series of receipts over a period of up to two (2) business days before learning via a validation or rejection whether a Federal agency's electronic system has received its application.

- **Application Submission Address:** See Section IV. in the Full Announcement Text of this FFO.

- **Funding Opportunity Description:** NIST is soliciting applications for Planning Awards from eligible applicants to establish new and strengthen existing industry-driven consortia that identify and support basic and applied research on long term, pre-competitive and enabling technology development for advanced manufacturing. These consortia address major technological barriers that inhibit the growth of advanced manufacturing in the U.S.; identify and prioritize research projects supporting long term industrial research needs; engage in a range of eligible activities including but not limited to creating new or updating industry-driven, shared-vision technology roadmaps; and catalyze the development of a technology infrastructure and American excellence in advanced manufacturing.

- **Anticipated Amounts:** Approximately $5.6 million may be available from FY 2014 appropriations to fund new AMTech Planning Awards (*see* Section II.2.of this FFO).

- **Funding Instrument:** Cooperative agreement.

- **Who Is Eligible:** Eligible applicants are any U.S. organization, excluding commercial organizations and federal entities, located within the United States, such as non-profit organizations, accredited institutions of higher education, and state, tribal, and local governments.

  An eligible organization may work individually or include proposed subrecipients, contractors and/or unfunded collaborators in a project application, effectively forming a team or consortium. In a team or consortium, eligible subrecipients are the same types of organizations eligible to be applicants and commercial organizations. Thus, commercial organizations may participate in teams or consortia as subrecipients or contractors, as unfunded collaborators, or as third parties that help to accelerate project results or help move them into routine or commercial use.

  Federal entities may participate in teams or consortia as contractors, informal collaborators, or in other roles allowed by law, consistent with each entity's authorities, policies, and procedures. A proposed technical collaboration with NIST technical staff is subject to the procedures in Section VI.2.c. of this FFO, and NIST's costs should not be included in the application. If approved, NIST's technical collaboration would be as described within Section II.1.of this FFO.

  The NIST Hollings Manufacturing Extension Partnership, and its National Innovation Marketplace program, may be a useful resource for connecting applicants with potential subrecipients, contractors or other collaborators.

  NIST will only consider one Pre-Application per applicant.

- **Cost Sharing Requirements:** This program does not require cost sharing.

- **Public Website, Frequently Asked Questions (FAQs) and Webinars:** An AMTech public website exists (http://www.nist.gov/amo) and provides information pertaining to this AMTech Funding Opportunity. NIST anticipates that a "Frequently Asked Questions" section will be maintained and updated as needed to provide additional guidance and clarifying information that may arise related to this Funding Opportunity. Any amendments to this FFO will be announced through Grants.gov.

  Questions from applicants pertaining to this Funding Opportunity; AMTech eligibility, evaluation criteria, selection factors, or selection process; or the general characteristics of a competitive AMTech proposal will not be considered on an informal basis. Applicants must submit all such questions in writing to amtech@nist.gov. Questions submitted to NIST/AMTech may be posted on the AMTech website (http://www.nist.gov/amo) as part of a FAQ document.

  NIST plans to hold informational webinars on the NIST Advanced Manufacturing Technology Consortia (AMTech) Program, Planning Awards competition. The webinars will be held within 3 weeks after posting of this FFO. The webinars will provide general guidance on preparing applications and provide an opportunity for the public to ask questions about the program. Proprietary technical discussions about specific project ideas will not be permitted, and NIST will not critique or provide feedback on any project ideas during the webinar or at any time before submission of an application to NIST. There is no cost for the webinars, but participants must register for each in advance. Participation in the webinars is not required for the submission of an application. The webinars will be recorded and a link to the recordings will be available for public access on the AMTech website (http://www.nist.gov/amo). Additional, information concerning the webinars and advance registration is available at: http://www.nist.gov/amo/funding.cfm.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

The statutory authority for the Advanced Manufacturing Technology Consortia (AMTech) Program is 15 U.S.C. § 272(b)(1) and (b)(4).

AMTech Scope. This AMTech FFO solicits applications for Planning Awards from eligible applicants to establish new and strengthen existing industry-driven consortia that identify and support basic and applied research on long term, pre-competitive and enabling technology development for advanced manufacturing. AMTech consortia will:

- Address major technological barriers that inhibit the growth of advanced manufacturing in the U.S.;
- Identify and prioritize research projects supporting long term industrial research needs;
- Engage in eligible activities including but not limited to creating new or updating broadly available industry-driven, shared-vision technology roadmaps; and
- Catalyze the development of a technology infrastructure and American excellence in advanced manufacturing.

AMTech Rationale. Manufacturing plays a critical role in the American economy, underpins U.S. innovation, and is essential to national security. The health and performance of the U.S. manufacturing sector has become a topic of national interest and concern. For example, the National Science and Technology Council (NSTC) indicated in a 2012 report, "a gap exists between research and development (R&D) activities and the deployment of technological innovations in domestic production of goods," contributing significantly, for example, to the growing trade deficit in high-value-added, advanced technology products.[1]

A report by the President's Council of Advisors on Science and Technology (PCAST), "Capturing Domestic Competitive Advantage in Advanced Manufacturing,"[2] emphasizes this concern noting that the United States has been steadily losing research and development activities linked to manufacturing - and associated high-skilled jobs - to other nations. The report warns that the continued loss of America's leadership in developing innovative technologies for advanced manufacturing will undermine our capacity to compete in global markets and includes sixteen recommendations, including public-private partnerships, to foster ecosystems in advanced manufacturing technologies. The report explains advanced manufacturing in the context of these national concerns.

> *"Advanced manufacturing is a family of activities that (a) depend on the use and coordination of information, automation, computation, software, sensing, and networking, and/or (b) make use of cutting edge materials and emerging capabilities enabled by the physical and biological sciences, for example nanotechnology, chemistry, and biology. It involves both new ways to manufacture existing products, and the manufacture of new products emerging from new advanced*

[1] National Science and Technology Council (NSTC), "A National Strategic Plan for Advanced Manufacturing", February 2012, p 2, http://www.whitehouse.gov/sites/default/files/microsites/ostp/iam_advancedmanufacturing_strategicplan_2012.pdf.

[2] President's Council of Advisors on Science and Technology, July 2012, "Report to the President on Capturing Domestic Competitive Advantage in Advanced Manufacturing", AMP Steering Committee Report, http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast_amp_steering_committee_report_final_july_17_2012.pdf.

technologies."[3]

As part of a proposed, comprehensive strategy to revitalize America's leadership role, the PCAST report recommends support for new applied research programs for advanced manufacturing. This includes efforts that support new public-private partnerships that would develop broadly applicable and precompetitive technologies, create and disseminate new design methodologies for manufacturing, and promote the development of shared technology infrastructure to support advances in existing manufacturing industries.

On July 22, 2011, NIST published a Request for Information (RFI) in the Federal Register inviting information from the public on how to structure the then proposed new AMTech Program.[4] A total of 55 responses from industry, academia, and private citizens were received.[5] Also in 2011, the NIST Visiting Committee on Advanced Technology (VCAT), in consultation with the NIST Director, created a Subcommittee on Manufacturing that reviewed the PCAST and NSTC reports, studied the importance of advanced manufacturing, reviewed the responses to the AMTech Program RFI, provided recommendations for Design Principles, and issued a report that endorsed "the AMTech Program as a model public-private partnership for supporting technological innovation and facilitating its deployment to support advanced manufacturing".[6]

NIST recognizes the immediate need to encourage the research community, government agencies, and industry by "… incentivizing the formation of and providing resources to industry-driven consortia that will support basic and applied research on long term, pre-competitive and enabling technology development" for the manufacturing industry, as recommended to NIST by the Visiting Committee on Advanced Technology.[6] Following these recommendations, AMTech is designed to fill a critical funding gap for early stage technology development by creating and strengthening new and existing industry-driven consortia that are focused on developing advanced technologies to address major technical problems that inhibit the growth of advanced manufacturing.

AMTech Planning and Project Awards. In 2013, NIST launched the AMTech Program to establish new and strengthen existing industry-driven consortia to identify and prioritize research projects supporting long term industrial research needs. The AMTech Program provides funding to industry-driven consortia that develop advanced technologies to address major technological and related barriers that inhibit the growth of advanced manufacturing in the U.S. and the global competitiveness of U.S. companies. Two types of awards are envisioned as part of AMTech: Planning Awards and Project Awards. Planning Awards are a means to attract broad and committed stakeholder involvement (industry, government and academia), identify critical gaps in advanced manufacturing technology infrastructure, create industry-driven technology roadmaps that guide research to address industry problems, and produce well-founded industry-driven plans for the entire R&D lifecycle. Once fully implemented and subject to the availability of funding, it is envisioned that AMTech will provide additional funding to consortia in the form of Project Awards to perform research that addresses these critical needs and advances the research agenda derived from AMTech Planning Awards.

On May 8, 2014, NIST announced the first set of AMTech awards selected from the 2013 AMTech competition (http://www.nist.gov/amo/fundedawards.cfm).[7] These awards were for activities that are within

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[3] President's Council of Advisors on Science and Technology, June 2011, "Report to the President on Ensuring American Leadership in Advanced Manufacturing", p ii, http://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-advanced-manufacturing-june2011.pdf

[4] http://www.gpo.gov/fdsys/pkg/FR-2011-07-22/pdf/2011-18580.pdf.

[5] http://www.nist.gov/public_affairs/releases/amtech-120711.cfm.

[6] Visiting Committee on Advanced Technology (VCAT) of the National Institute of Standards and Technology, U.S. Department of Commerce, February 2013, "2012 Annual Report", http://www.nist.gov/director/vcat/upload/VCAT-Mfg-Summary-Recommendations.pdf.

[7] Grants.gov, http://www.grants.gov/web/grants/view-opportunity.html?oppId=238327.

the scope of Planning Awards. In 2013, as well as with this FFO, NIST was/is seeking applications for planning activities that are within the scope of Planning Awards, as described in the previous paragraph. With this 2014 AMTech FFO, NIST seeks to increase the number of industry sectors and organizations that participate in AMTech technology partnerships across geographic regions and company size.

Regardless of the type of organization that leads a consortium, for purposes of this funding opportunity, an industry-driven consortium, in its broadest sense, is a collaborative partnership that includes broad participation and commitment by companies of all sizes, universities and government agencies, with the objective of participating in a common activity or pooling of resources for achieving common goals that are determined and led by industry. Through this process, collaborators come together to focus on objectives and to form a consensus on industry-driven goals, resource needs, and planning objectives representative of a broad range of firms involved across stages of the value chain. In this context, the value chain is the interlinked collection of value-adding activities undertaken commonly by multiple sellers and buyers that convert inputs into outputs, create value, and help to create competitive advantage.

For the purpose of this FFO, a *"technology roadmap"* is a strategic decision-making tool that identifies problems, not solutions, and the time frame in which these solutions need to be addressed. One perspective of technology roadmapping is as follows:

> *"Technology roadmapping is a flexible technique that is widely used within industry to support strategic and long-range planning. The approach provides a structured (and often graphical) means for exploring and communicating the relationships between evolving and developing markets, products and technologies over time. It is proposed that the roadmapping technique can help companies survive in turbulent environments by providing a focus for scanning the environment and a means of tracking the performance of individual, including potentially disruptive, technologies. Technology roadmaps are deceptively simple in terms of format, but their development poses significant challenges. In particular the scope is generally broad, covering a number of complex conceptual and human interactions."*[8]

Furthermore, for the purposes of this FFO, *"technology infrastructure"* is defined as the "industrial commons" that allows manufacturers to refresh their technological base from a set of shared knowledge assets and physical facilities. This knowledge-based infrastructure includes common resources, such as standards for system interfaces, measurement and test methods, and process control systems, that allow firms within a supply chain or even firms that compete with one another to align their diverse product and process capabilities, and to accelerate innovation and subsequent market penetration. Additionally, technology infrastructure includes platform technologies that many firms in an industrial cluster can take advantage of, but that no single firm can typically produce on its own. Some examples include, but not limited to areas such as nanomaterial processing, additive manufacturing, advanced robotics, "smart" manufacturing, and green chemistry.[9]

Expected AMTech Impacts. NIST envisions that the expected impacts from the AMTech Program will be to strengthen U.S. advanced manufacturing, accelerate technology development and adoption, and improve global competitiveness of U.S. companies. AMTech-supported consortia will enable technology development and create the infrastructure necessary for more efficient transfer of technology. U.S. industries and companies that have experience in technology consortia development and/or roadmapping

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[8] Robert Phaal, Clare J.P. Farrukh, David R. Probert, Technology Roadmapping - A Planning Framework for Evolution and Revolution, Technological Forecasting and Social Change, Elsevier, Volume 71, Issues 1–2, January–February 2004, pp 5–26, available online from ScienceDirect at http://www.sciencedirect.com/science/article/pii/S0040162503000726.

[9] National Science and Technology Council (NSTC), "A National Strategic Plan for Advanced Manufacturing", February 2012, p 8, http://www.whitehouse.gov/sites/default/files/microsites/ostp/iam_advancedmanufacturing_strategicplan_2012.pdf.

activities have demonstrated a strengthened capacity and capability to lead, innovate and compete within the global marketplace. Thus, over time the AMTech Program will:

- Increase the number of industry sectors and organizations that participate in technology partnerships across geographic regions and company size;
- Identify critical pre-competitive, enabling manufacturing processes and platform technologies with potential transformational impact, and create pathways to translate these advancements into commercial reality by U.S. manufacturers;
- Unlock capital and spur industry-driven research that arises from the partnerships and roadmaps that are created;
- Spur more efficient technology transfer, diffusion and knowledge dissemination among the partnerships forged from AMTech and across U.S. advanced manufacturing supply chains; and
- Strengthen the capacity of new small and medium-sized companies to become successful enterprises.

This FFO announces a funding opportunity for Planning Awards only and funding of activities to establish new or strengthen existing industry-driven consortia and technology planning activities solely. Funding will not be awarded for the performance of research activities. Proposed projects should clearly demonstrate how the envisioned effort complements and does not duplicate other technology consortia and/or roadmapping projects already underway, including those previously funded by the NIST AMTech Program (*see* http://www.nist.gov/amo/fundedawards.cfm), or other projects funded by the Department of Commerce or other Federal agencies.

The contact person for this Program is Frank Gayle, and he may be reached at (301) 975-2830, or via e-mail at frank.gayle@nist.gov.

II. Award Information

1. **Funding Instrument.** The funding instrument used in this program will be a cooperative agreement. The nature of NIST's "substantial involvement" will generally be NIST collaboration and involvement in the direction of the scope of work. Additional forms of substantial involvement that may arise are described in the Department of Commerce (DoC) Grants and Cooperative Agreements Manual: http://www.osec.doc.gov/oam/grants_management/policy/documents/FINAL%20Master%20DOC%20Grants%20Manual%202013%20(03.01.13)_b.pdf.

2. **Funding Availability.** NIST plans that approximately $5.6 million may be available in total from FY 2014 appropriations to fund the total number of projects of up to approximately two (2) years in duration, in the range of approximately $250,000 to $500,000 total federal funding per project, subject to the availability of funds. Individual projects less than $250,000 will also be considered. NIST will determine the number of awards selected and whether projects will be funded in whole or in part, taking into account the effective fulfillment of program objectives and in accordance with the review and selection process in Section V. of this FFO.

   NIST reserves the right to retain any unfunded meritorious applications submitted under this FY 2014 competition and issue additional awards in 2015 and beyond, subject to the availability of funding, to those meritorious applications in accordance with this FFO.

   If funds become available for AMTech Project Awards, referenced in Section I of this FFO, NIST will assess whether the available amounts and effective advancement of the program mission warrant limiting eligibility to recipients of previous AMTech awards for planning activities. If so, NIST may directly notify previous AMTech recipients for planning activities of the Project Award funding process.

3. **Multi-Year Funding Policy.** When an application for a multi-year award is approved, funding will usually be made available to recipients for only the first year of the program. If a project is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to extend the period of performance and/or make available additional funding is at the sole discretion of NIST. Continued funding will be contingent upon satisfactory performance, continued relevance to the mission and priorities of NIST, and the availability of funding.

III. Eligibility Information

1. **Eligible Applicants.** Eligible applicants are any U.S. organization, excluding commercial organizations and federal entities, located within the United States, such as non-profit organizations, accredited institutions of higher education, and state, tribal, and local governments.

   An eligible organization may work individually or include proposed subrecipients, contractors and/or unfunded collaborators in a project application, effectively forming a team or consortium. In a team or consortium, eligible subrecipients are the same types of organizations eligible to be applicants and commercial organizations. Thus, commercial organizations may participate in teams or consortia as subrecipients or contractors, as unfunded collaborators, or as third parties that help to accelerate project results or help move them into routine or commercial use.

   Federal entities may participate in teams or consortia as contractors, informal collaborators, or in other roles allowed by law, consistent with each entity's authorities, policies, and procedures. A proposed technical collaboration with NIST technical staff is subject to the procedures in Section VI.2.c. of this FFO, and NIST's costs should not be included in the application. If approved, NIST's technical collaboration would be as described in Section II.1.of this FFO.

   The NIST Hollings Manufacturing Extension Partnership, and its National Innovation Marketplace program, may be a useful resource for connecting applicants with potential subrecipients, contractors or other collaborators.

   NIST will only consider one Pre-Application per applicant.

2. **Cost Sharing or Matching.** This program does not require cost sharing.

3. **Other.**

   Pre-Applications. For this FFO, NIST requires Pre-Applications. Only applicants whose Pre-Application has been selected will be invited to submit a Full Application.

IV. Pre-Application / Full Application Submission Information

1. **Address to Request Application Package.** The application package for Pre-Applications and the application package for Full Applications will both be made available on www.grants.gov. The application package for Pre-Applications consists of the SF-424 form. See Section IV.2 of this FFO for more details about the Pre-Application. The application package for Full Applications consists of standard forms, SF-424, SF-424A, SF-424B, SF-LLL, and the CD-511, and is available at www.grants.gov. Additional details about the Full Application are found in Section IV.3. of this FFO. The application packages may be requested by contacting the NIST personnel listed below:

   Karen Williams, National Institute of Standards and Technology, 100 Bureau Drive, Stop 4700, Gaithersburg MD 20899. Phone (301) 975-2397 or (301) 975-2830, e-mail: karen.williams@nist.gov.

2. **Required Pre-Application Submission, Form and Documents.** A Pre-Application must be received by NIST electronically through Grants.gov no later than 11:59 p.m. Eastern Time, Friday, September 5, 2014 in order to be considered for funding. Selected applicants will then be invited to submit a Full Application.

The Pre-Application must contain the following:

(1) SF-424, Application for Federal Assistance. The SF-424 must be signed by an authorized representative of the applicant organization. The FFO number 2014-NIST-AMTECH-01 should be identified in item 12 of the SF-424. The list of certifications and assurances referenced in item 21 of the SF-424 is not needed for the Pre-Application.

(2) **Abbreviated Proposal**. A word-processed document, written by the applicant, of no more than four (4) pages. The Abbreviated Proposal should include the following information:

Abbreviated Technical Narrative. The narrative should describe the relevance of the proposed project to the program as described in Section I. of this FFO and address all of the following:

(1) The Evaluation Criteria in accordance with Section V.1.a. through c. of this FFO, which includes:
   a) Identifying and Addressing Significant Technical Challenges with Substantive National Impacts;
   b) Consortium and/or Roadmapping Development Plan; and
   c) Resource Availability and Qualifications.
(2) The degree to which the proposed project is reflective of broad-based industry need;
(3) The extent to which the scope of the proposed project is complementary to the research programs and research goals of NIST's advanced manufacturing programs, as described at http://www.nist.gov/manufacturing-portal.cfm; and
(4) The degree to which the proposed project complements and does not duplicate the portfolio of FY 2013 AMTech awards, such as technology, challenges being addressed, and stage of development of consortium (*see* http://www.nist.gov/amo/fundedawards.cfm), or other projects funded by the Department of Commerce or other Federal agencies.

The Pre-Application word-processed document should be attached by clicking on "Add Attachments" found in item 15 of the SF-424, Application for Federal Assistance. This will create a zip file that allows for transmittal of the documents electronically via Grants.gov.

3. Full Application Submission.

a. Required Full Application Forms and Documents

Only an applicant whose Pre-Application has been selected by NIST and who has been invited to submit a Full Application is permitted to submit a Full Application to NIST for this funding opportunity of the AMTech Program. Full Applications submitted by applicants who were not selected by NIST within the Pre-Application phase, and Full Applications submitted by applicants who did not submit a Pre-Application, will be returned to the applicants without review. The Full Application must contain the following:

(1) SF-424, Application for Federal Assistance. The SF-424 must be signed by an authorized representative of the applicant organization. The list of certifications and assurances referenced in item 21 of the SF-424 is contained in the SF-424B. Applicants should enter total budget information for all years of the project in item 18 on the SF-424.

(2) SF-424A, Budget Information - Non-Construction Programs. This form should reflect anticipated expenses for each year of the project, considering all potential cost increases, including cost of living adjustments.

(3) SF-424B, Assurances - Non-Construction Programs.

(4) CD-511, Certification Regarding Lobbying.

(5) SF-LLL, Disclosure of Lobbying Activities. (if applicable)

(6) Technical Proposal. The Technical Proposal is a word-processed document of no more than twenty (20) pages within a Full Application responsive to the applicable program description(s) (*see* Section I. of this FFO) and the Evaluation Criteria (*see* Section V.1. of this FFO). Any information beyond the twenty (20) page limit will not be considered during the evaluation process. The Technical Proposal should contain the following information:

(a) Executive Summary. A concise summary/abstract of the proposed technology consortium development and/or roadmapping project. The project summary/abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as NIST may make it available to the public after awards are issued. The Executive Summary must not exceed one (1) single-sided page.

(b) Table of Contents. (This does not contribute to the number of pages.)

(c) Identifying and Addressing Significant Technical Challenges with Substantive National Impacts. A description sufficient to permit evaluation of the application in accordance with the Identifying and Addressing Significant Technical Challenges with Substantive National Impacts Evaluation Criterion (*see* Section V.1.a. of this FFO).

Technical challenges in any area of advanced manufacturing will be considered provided they require solutions that include the development of highly innovative, transformational technologies that are broadly deployable to diverse manufacturing applications. The proposed project should clearly demonstrate how the envisioned effort complements and does not duplicate other technology consortia and/or roadmapping projects already underway, including those previously funded by the NIST AMTech Program.

The applicant should present their scope and vision for the proposed project, including the goal(s), objective(s) and national outcomes; the technical challenges that need to be addressed; the importance and significance of the challenges to be addressed within the context of national needs, existing industry capabilities, and ongoing and existing efforts; and the potential for substantive national impacts enabled as a result of the activities being proposed.

The consortium development and/or roadmapping project being proposed should identify and address significant technical challenges in manufacturing that are common to an industry or a sector, for example, critical gaps, technologies, skill sets, infrastructure, or other significant challenges. The project and activities being proposed should have the potential to significantly advance pre-competitive manufacturing processes and platform technology research, advance the state of the art, and contribute to the U.S. knowledge base in critical advanced manufacturing sectors.

The project being proposed should address critical national advanced manufacturing needs and demonstrate that by successfully addressing the significant technical challenges identified, there will be a strong potential for having substantive national economic impacts and enhance U.S. advanced manufacturing competitiveness. The project activities being proposed should have a strong potential to revitalize the U.S. leadership role in manufacturing and lead to the development of solutions that can provide U.S. manufacturers with a sustainable global competitive advantage.

(d) Consortium and/or Roadmapping Development Plan. A description sufficient to permit evaluation of the application in accordance with the Consortium and/or Roadmapping Development Plan Evaluation Criterion (*see* Section V.1.b. of this FFO).

The description should include well-founded plans for the entire life cycle, including project development and execution, breadth of value chain engagement, knowledge and technology diffusion, and pathways to adoption. Participation by the full value chain, including small- and medium-sized firms, is desirable. Technical Proposals should describe:

i. The methods that will be used to select, assess, and organize projects, participants, and outcomes that will make up the proposed consortium development activity and/or technology roadmapping.
ii. The methods and degree to which industry leadership is reflected within the consortium and/or roadmapping development plan, including key organizations and leadership.
iii. How the value chain, and potential stakeholders will be involved in developing the proposed consortium development activities and/or technology roadmap, including but not limited to: a) systems integrators, b) end users of the technology, c) actual developers of the technology, and d) researchers who have the knowledge to create new technologies.
iv. The processes by which the value chain and relevant stakeholders will be brought together to assess the technology challenge(s) and form a consensus, including but not limited to: a) forums for gathering technical information (e.g. workshops, meetings, conferences, surveys, etc.), and b) the means by which information will be correlated and consolidated into the final roadmap or other project outcomes.

Teaming and partnerships are encouraged. Thus, if an incorporated industry consortium is the applicant, a partnership should be proposed to engage other relevant entities to participate in the proposed activities and work towards consortium development. As additional partners are added to offer key expertise, access to facilities, or specialized goods and services, discuss what each brings to the project and what each will do. If a new industry consortium is envisioned but is not the applicant, partnerships with other relevant entities needed to accomplish the proposed activities and consortium development should be described. In all cases, required Letters of Commitment and/or optional Letters of Interest should be provided (*see* Sections IV.3.a.(11). and IV.3.a.(12). of this FFO).

AMTech-supported consortia will enable technology development and create the infrastructure necessary for more efficient transfer of technology. Thus, each consortium will have a critical role in technology diffusion and will establish principles for the management of intellectual property. The plan and approach to be fulfilled by the consortium for technology transfer, to accelerate the project results and/or move them into routine or commercial use, should be described.

Creation of financially viable industry-driven technology consortia and sustainable roadmapping activities that will have a significant and enduring impact on the U.S. manufacturing sector is a key goal of AMTech. The Technical Proposal should describe the sustainability models for the proposed consortium development and/or roadmapping activities during and after the award period, including funding, participants and collaborations, and how the consortium will pursue projects that result from the technology roadmapping needs identification. The commitment and leveraging of participation by public, private, and academic institutions should be discussed as part of the team's sustainability planning. Thus, the sustainability plan should document the approaches to be pursued and address the questions "what, how, where, when, why, and by whom". It should also include the plan to obtain and/or leverage complementary additional or external resources or support for consortium actions post award.

Measurable success criteria and how project progress will be monitored and documented for the proposed efforts should be described as part of the project's progress monitoring system. Appropriate interim and final key milestones for each year of the plan should be provided. A timeline, preferably using a tool such as a Gantt chart, should be included to logically illustrate the timing and interrelationships of major tasks and key subtasks, and identify the parties responsible for their completion.

(e) Resource Availability and Qualifications. A description sufficient to permit evaluation of the application in accordance with the Resource Availability and Qualifications Evaluation Criterion (*see* Section V.1.c. of this FFO).

The resources and budget for the proposed project and its activities must demonstrate its appropriateness and cost-effectiveness with respect to carrying out the work and objectives of the Technical Proposal. Please note: the budget and budget narrative should only include the federal funds being requested.

A description of the proposed consortium management model, including the operational or management structure and distribution of key management activities among consortium members, must be provided. This should also include the methods to be used and by which industry leadership and the value-chain will drive the consortium's programs and efforts.

The qualifications of key personnel and participating organizations who will be assigned to work on the proposed project must be provided. This includes:

- Qualifications and experience with regard to the significant challenges identified and being addressed;
- Past experience leading programs or projects similar in nature, purpose, or scope to those described in this FFO;
- Any track record in carrying out similar work by members of the proposing team, when available; and
- Experiences working collaboratively with a wide variety of organizations, including accredited institutions of higher education; non-profit organizations; consortia; commercial organizations of all sizes; independent research organizations; standards development organizations; Federal entities; and state, tribal, and local governments.

(7) Table of Abbreviations and Acronyms. (This does not contribute to the total number of pages.) An alphabetical list of all abbreviations and acronyms and their meaning.

(8) Table of Funded Project Participants and Unfunded Informal Collaborators. (This does not contribute to the total number of pages.) Provide a table that identifies all organizations that will participate in and contribute to the project, known at the time of the application submission. The table should consist of an alphabetically ordered list, by organization, of all Funded Project Participants and all Unfunded Informal Collaborators. The table should include the organization's name, address, administrative role, scope of work (funded participants only) and proposed funding amount (funded participants only). Administrative roles are: applicant, subrecipient, or contractor for funded participants; or collaborator if they will not receive funding.

(9) Bibliographic List of References. (This does not contribute to the total number of pages.) A complete bibliographic listing of all references used within the application.

(10) Resumes of Key Personnel. (These do not contribute to the total number of pages.) Provide a one (1) page resume for each key person identified in the application. Information on any pages beyond the first page of each resume will not be considered.

(11) **Required Letters of Commitment.** (These do not contribute to the total number of pages.) Letters that commit specific resources (not funding) to the project in the event that the application is funded are required from all of the following that apply:

a) If the applicant's application includes subawards or contracts to known third parties, in some cases effectively forming a team, as described in Section III.1, a Letter of Commitment from an authorized organization representative of each known proposed subrecipient and contractor should be included. Each letter should indicate the submitting organization's willingness to participate as a contractor or subrecipient, as applicable, describe what work they will do in relation to the Technical Proposal, and specify the associated cost of the proposed subaward or contract to the applicant (*see* Section I. of this FFO).

b) If key personnel who are willing to fill vacancies on the applicant's or subrecipient's staff are identified by the applicant, a Letter of Commitment from each identified person should be included. The letter from each such individual, or group of individuals, should indicate the relationship of the writer to the applicant and how the writer will help fulfill the efforts described in the Funding Opportunity Description (*see* Section I. of this FFO).

Letters of Commitment should not be letters submitted by non-proposing entities wishing to vouch for the applicant's (or entities associated with the applicant) knowledge, skills, and abilities or entities to conduct the proposed work. These should be in the form of a Letter of Interest (*see* Section IV.3.a.(12) of this FFO).

(12) **Letters of Interest.** (These do not contribute to the total number of pages.) Optional letters that indicate willingness from any third party to help accelerate establishment of a new or strengthening of an existing industry-driven technology consortium and/or consortium project results. This may include letters from unfunded collaborators who will participate as unfunded team members, potential organizations involved across stages of the value chain, or strategic partners who can aid in any element of the plan to realize impact. Letters of Interest should outline the nature and importance of the collaboration or involvement being offered. Letters of Interest may also be from non-proposing entities wishing to vouch for the applicant's knowledge, skills, and abilities or entities to conduct the proposed work.

(13) **Budget Narrative.** The Budget Narrative for the project as a whole should provide a detailed breakdown of each of the object class categories as reflected on the SF-424A.

The budget justification should address all of the budget categories (personnel, fringe benefits, equipment, travel, supplies, other direct costs and indirect costs). The written justification should include the necessity and the basis for the cost. Only allowable costs should be included in the budget. Information on cost allowability is available in the Supplemental Information, Section B.1 of the DoC Pre-Award Notice Requirements for Grants and Cooperative Agreements, which are contained in the Federal Register notice of December 17, 2012 (77 FR 74634), and are available at https://www.federalregister.gov/articles/2012/12/17/2012-30228/department-of-commerce-pre-award-Notice-requirements-for-grants-and-cooperative-agreements. Information needed for each category is as follows:

a) **Personnel** - At a minimum, the budget justification for all personnel should include the following: name, job title, commitment of effort on the proposed project (in hours or effort level), salary rate, and total direct charges on the proposed project, description of the role of the individual on the proposed project and the work to be performed.

b) **Fringe Benefits** - Fringe benefits should be identified separately from salaries and wages and based on rates determined by organizational policy. The items included in the fringe benefit rate (health insurance, parking) should not be charged under another cost category.

c) **Equipment** - Equipment is defined as an item of property that has an acquisition cost of $5,000 or more (unless the organization has established lower levels) and an expected service life of more than one year. Any items that do not meet the threshold for equipment can be included under the supplies line item. The budget justification should list each piece of equipment, the cost, and a description of how it will be used and why it is necessary to the successful completion of the proposed project. Please note that any general use equipment (computers, etc.) that is charged directly to the award, should be allocated to the award according to expected usage on the project.

d) **Travel** - For travel costs associated with travel required by the recipient to complete the project, the budget justification for travel should include the following: destination; names/number of people traveling; dates and/or duration; mode of transportation, lodging and subsistence rates; and description of how the travel is directly related to the proposed project. For travel that is yet to be determined, please provide best estimates based on prior experience. If a destination is not known, an approximate amount may be used with the assumptions given for the location of travel.

e) **Supplies** - A list of each supply, and the breakdown of the total costs by quantity or unit of cost. Include the necessity of the cost for the completion of the proposed project.

f) **Contracts/Subawards** - Each contract or subaward should be treated as a separate item. Describe the services provided and the necessity of the subaward or contract to the successful performance of the proposed project.

g) **Other Direct Costs** - For costs that do not easily fit into the other cost categories, please list the cost and the breakdown of the total costs by quantity or unit of cost. Include the necessity of the cost for the completion of the proposed project. Only allowable costs can be charged to the award.

For awards that contain subawards or contracts to commercial organizations, audits may be required by an external auditor (CPA or cognizant Federal agency), as specified in the award. If a recipient has never received Federal funding from any Federal agency, a certification may be required from a CPA to determine whether the applicant has a functioning financial management system that meets the provisions of 15 C.F.R. § 14.21 or 15 C.F.R. § 24.20, as applicable. Therefore, costs for these audits and certification should be included in the budget accordingly.

(14) **Indirect Cost Rate Agreement.** If indirect costs are included in the proposed budget, provide a copy of the approved negotiated agreement if this rate was negotiated with a cognizant Federal audit agency. If the rate was not established by a cognizant Federal audit agency, provide a statement to this effect. If the successful applicant includes indirect costs in the budget and has not established an indirect cost rate with a cognizant Federal audit agency, the applicant will be required to obtain such a rate.

When submitting the application electronically via Grants.gov, items IV.3.a.(1) through IV.3.a.(5) above are part of the standard application package in Grants.gov and can be completed through the download application process. **Items IV.3.a.(6) through IV.3.a.(14) must be completed and attached by clicking on "Add Attachments" found in item 15 of the SF-424, Application for Federal Assistance. This will create a zip file that allows for transmittal of the documents electronically via Grants.gov.** Applicants should carefully follow specific Grants.gov instructions at www.grants.gov to ensure the attachments will be accepted by the Grants.gov system. *A receipt from Grants.gov*

indicating an application is received does not provide information about whether attachments have been received.

b. Application Format

(1) E-mail, Hard Copies, or Facsimile (fax) Submissions. Will not be accepted.

(2) Figures, Graphs, Images, and Pictures. Should be of a size that is easily readable or viewable and may be landscape orientation.

(3) Font. Easy to read font (10-point minimum). Smaller type may be used in figures and tables but must be clearly legible.

(4) Line Spacing. Single.

(5) Margins. One (1) inch top, bottom, left, and right.

(6) Page layout. Portrait orientation only except for figures, graphs, images, and pictures (*see* Section IV.3.b.(2) of this FFO).

(7) Page Limit. Four (4) pages, one-sided print for Pre-Applications, and twenty (20) pages, one-sided print for Full Applications.

Page limit includes: Technical Proposal, including Figures (including a time line such as a Gantt chart), Graphs, Images, and Pictures.

Page limit excludes: SF-424, Application for Federal Assistance; SF-424A, Budget Information – Non-Construction Programs; SF-424B, Assurances – Non-Construction Programs; SF-LLL, Disclosure of Lobbying Activities; CD-511, Certification Regarding Lobbying; Budget Narrative; Indirect Cost Rate Agreement; Human Subjects and/or Vertebrate Animal Research Documentation (if applicable); Table of Contents; Table of Abbreviations and Acronyms; Bibliographic List of References; Table of Funded Project Participants and Unfunded Informal Collaborators; One-page Resumes of Key Personnel; Letters of Commitment; Letters of Interest.

(8) Page numbering. Number all pages sequentially.

(9) Paper size. 21.6 by 27.9 centimeters (8 ½ by 11 inches).

(10) Application language. English.

(11) Typed document. All applications, including forms, must be typed.

4. Submission Dates and Times. Required Pre-Applications must be received electronically through Grants.gov no later than 11:59 p.m. Eastern Time, Friday, September 5, 2014. Pre-Applications received after this date will not be reviewed or considered. Assessment of Pre-Applications, selection, and notification to applicants is expected to be complete on or about Wednesday, September 24, 2014. Selected applicants will then be invited to submit a full application. Full applications must be received electronically through Grants.gov no later than 11:59 p.m. Eastern Time, Friday, October 31, 2014. Full Applications received after this deadline will not be reviewed or considered. The anticipated start date for the Planning Awards issued under this FFO is expected to be within the second quarter of calendar year 2015.

NIST strongly recommends that applicants do not wait until the last minute to submit an application. NIST will not make any allowances for late submissions, including but not limited to incomplete Grants.gov registration. To avoid any potential processing backlogs due to last minute Grants.gov

registrations, applicants are highly encouraged to start their Grants.gov registration process at least four (4) weeks prior to the application due date.

When developing your submission timeline, keep in mind that a free annual registration process in the electronic System for Award Management (SAM) (*see* Section VI.2.b. of this FFO) takes on average fourteen (14) business days for new registrations, and between seven (7) and ten (10) business days for renewal registrations. The SAM registration process will likely take more time if problems are encountered. Also, please keep in mind that applicants using Grants.gov will receive a series of receipts over a period of up to two (2) business days before learning via a validation or rejection whether a Federal agency's electronic system has received its application.

5. Intergovernmental Review. Applications under this FFO are not subject to Executive Order 12372.

6. Funding Restrictions. Applications on product development and commercialization are not considered responsive to this FFO. Profit or fee is not an allowable cost for applicants.

7. Other Submission Requirements

a. Pre-Applications and Full Applications must be submitted electronically. All applications must be submitted electronically via Grants.gov at www.grants.gov, under announcement 2014-NIST-AMTECH-01.

(1) Submitters of electronic applications should carefully follow specific Grants.gov instructions to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicating an application is received does not provide information about whether attachments have been received. For further information or questions regarding applying electronically for the 2014-NIST-SSCD-01 announcement, contact Christopher Hunton by phone at (301) 975-5718 or by e-mail at christopher.hunton@nist.gov.

(2) Applicants are strongly encouraged to start early and not wait until the approaching due date before logging on and reviewing the instructions for submitting an application through Grants.gov. The Grants.gov registration process must be completed before a new registrant can apply electronically. If all goes well, the registration process takes three (3) to five (5) business days. If problems are encountered, the registration process can take up to two (2) weeks or more. Applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number (*see* Section VI.2.b. of this FFO) and must maintain a current registration in the Federal government's primary registrant database, the System for Award Management (https://www.sam.gov/), as explained on the Grants.gov Web site. After registering, it may take several days or longer from the initial log-on before a new Grants.gov system user can submit an application. Only authorized individual(s) will be able to submit the application, and the system may need time to process a submitted application. Applicants should save and print the proof of submission they receive from Grants.gov. If problems occur while using Grants.gov, the applicant is advised to (a) print any error message received and (b) call Grants.gov directly for immediate assistance. If calling from within the United States or from a U. S. territory, please call 800-518-4726. If calling from a place other than the United States or a U. S. territory, please call 606-545-5035. Assistance from the Grants.gov Help Desk will be available around the clock every day, with the exception of Federal holidays. Help Desk service will resume at 7:00 a.m. Eastern Time the day after Federal holidays. For assistance using Grants.gov, you may also contact support@grants.gov.

(3) To find instructions on submitting an application on Grants.gov, Applicants should refer to the "Applicants" tab in the banner just below the top of the www.grants.gov home page. Clicking on the "Applicants" tab produces the "Grant Applicants" page.

In addition to following the "Steps" and instructions described in the "Applicant Actions" section and its sub-categories, further detailed instructions are described in "Applicant Resources" and all of its

subcategories. This appears in the box near the top left of the Grant Applicants page. Applicants should follow the links associated with each subcategory.

Applicants will receive a series of receipts during a process of up to two business days before the application is either validated as electronically received by the Federal agency system, or rejected by it. Closely following the detailed information in these subcategories will increase the likelihood of acceptance of the application by the Federal agency's electronic system.

Applicants should pay close attention to the instructions under "Applicant FAQs," as it contains information important to successful submission on Grants.gov, including essential details on the naming conventions for attachments to Grants.gov applications.

All applicants should be aware that adequate time must be factored into applicants' schedules for delivery of their application. Applicants are advised that volume on Grants.gov may be extremely heavy on the deadline date. Refer to important information in Section IV.4. Submission Dates and Times, to help ensure your application is received on time.

If timely application submissions are interrupted by the manifestation a natural disaster, such as a hurricane, blizzard, or similar extreme inclement weather event, or by the aftermath of such an event, such as power outages and/or Federal, public and/or private institution closures, NIST may: (1) consider an appeal for an individual situation involving such circumstances, or (2) extend the due date for all applicants. For an individual appeal, an applicant must request a deadline waiver and present in writing compelling circumstances, related only to such unavoidable causes involving forces of nature, which must be received by the NIST Programmatic and Technical Questions Point of Contact as listed in Section VII., within three business days of the deadline, by 5:00 p.m. Eastern Time. In addition, in the event of Federal government closure on the application deadline day, the deadline will be extended for all applicants to the next business day, under the same conditions described in the FFO. In the event of Federal government closure(s) during the week before the application deadline, NIST will post a statement at the top of the FFO on www.grants.gov and at www.nist.gov/mep/ as soon as practicable indicating whether the deadline is extended for all applicants, under the same conditions described in the FFO. The FFO may be amended to extend the deadline under these and other circumstances. For information on signing up for any amendments to the FFO that may arise, refer to Section IV.5.b. of this FFO.

b. Amendments. Any amendments to this FFO will be announced through Grants.gov. Applicants may sign up on Grants.gov to receive amendments by e-mail, or may request copies from Karen Williams by telephone at (301) 975-2397 or (301) 975-2830, or by e-mail to karen.williams@nist.gov.

V. Application Review Information

1. Evaluation Criteria. The Evaluation Criteria that will be used in evaluating Pre-Applications and Full Applications, and assigned weights, are as follows:

a. Identifying and Addressing Significant Technical Challenges with Substantive National Impacts (0 – 40 points). The quality and technical merit of the proposed consortium development and/or roadmapping project in relation to the significant technical challenges, vision, scope, goals, objectives and national outcomes will be evaluated by assessing the technical impact on national advanced manufacturing technology needs and the potential for substantive national impacts. The following factors will be considered and will be given equal weight within this Evaluation Criterion:

(1) **Impact on Early Stage, Advanced Manufacturing Technology Development**

- The extent to which consortium activities will address major scientific and technological barriers that inhibit the growth of advanced manufacturing in the U.S.

- The importance and significance of the challenges to be addressed by the proposed consortium development activity and/or technology roadmapping activity(ies) within the context of national needs, existing industry capabilities, and ongoing and existing efforts.

- The degree to which the proposed activity(ies) will significantly advance pre-competitive, enabling manufacturing processes and platform technology research, advance the state of the art, and contribute to the U.S. knowledge base in critical advanced manufacturing sectors.

(2) **Substantive National Impacts**

- The extent to which the proposed consortium development and planning activities address critical national advanced manufacturing needs and are likely to produce substantive national economic impacts. The magnitude of the expected payoffs from the proposed solutions.

- The degree to which the proposed activity(ies) has a strong potential to enhance U.S. manufacturing competitiveness in advanced manufacturing, significantly advance pre-competitive, enabling manufacturing technology research and the state of the art, and contribute to the U.S. knowledge base.

- The degree to which the proposed activity(ies) has a strong potential to revitalize the U.S. leadership role in manufacturing, yielding high payoffs for the nation in terms of increased employment and output, and lead to the development of solutions that can provide a sustainable global competitive advantage for U.S. manufacturers.

b. Consortium and/or Roadmapping Development Plan (0 – 40 points). The quality of the plan to perform the proposed work will be evaluated as will the extent to which the application addresses the questions "what, how, where, when, why, and by whom". The following factors will be considered and will be given equal weight within this Evaluation Criterion:

- The overall quality of the consortium and/or roadmapping development plan.

- The degree to which the entire value chain and relevant stakeholders, companies of all sizes, particularly, where appropriate, small- and medium-sized manufacturers, or the consideration of their specific needs, and universities and government agencies are involved across the consortium's activities. This also includes identifying, assessing and selecting critical technical needs or gap areas, developing work flow, and selection or prioritization of technical projects.

- The proficiency to which the consortium development plan will identify and build a consensus regarding long term industry research and technology needs in the advanced manufacturing sector. The degree to which industry leadership is reflected within the funded consortium and/or roadmapping development plan.

- The quality of the technology transfer plan and approach to be fulfilled by the consortium, including realization of U.S. benefits, technology diffusion, and the plan to accelerate the project results and/or move them into routine or commercial use.

- The sustainability of the proposed consortium development and/or roadmapping activities during and after the award period, including the consortium's models for funding, membership and collaborations, and how it will pursue projects that result from the technology roadmapping needs identification. This includes the plan to obtain and/or leverage complementary additional or external resources or support for consortium actions post award.

- The quality and appropriateness of the project's progress monitoring systems and the project's measurable success criteria and the means by which progress will be monitored and

documented. This includes appropriate interim and final key milestones for each year of the plan. The quality of the timeline provided, such as a Gantt chart, and ensuring that it logically illustrates the timing and interrelationships of major tasks and key subtasks, and identifies the responsible parties for their completion.

c. Resource Availability and Qualifications (0 – 20 points). The following factors will be considered and will be given equal weight within this Evaluation Criterion:

- An assessment of the resources and budget against the proposed project scope and activities will be conducted to determine the appropriateness and cost-effectiveness of the proposed resources and budget with respect to carrying out the work and meeting the objectives of the application relative to that described in Section I of this FFO. Note that the budget and budget narrative should only include the federal funds being requested.

- The proposed consortium management model will be assessed, including the operational or management structure, distribution of key management activities among consortium members, and methods by which industry leadership and the value-chain will drive the consortium's programs and efforts.

- The qualifications of each funded team member – both organizations and individuals - and the team as a whole will be evaluated. The qualifications of key personnel and participating organizations who will be assigned to work on the proposed project will be evaluated based upon the quality of the plan provided and the quality of the qualifications, experience and track record in programs, projects and activities related to the purpose or scope of this FFO.

2. Selection Factors. Selection of Full Applications for award will be performed by the Selecting Official, the Director of the NIST Advanced Manufacturing Office, or designee. The Selecting Official may select an application out of rank order based on one or more of the following selection factors:

(1) The results of the reviewers' evaluations;
(2) The Evaluation Panel evaluations;
(3) The availability of funds;
(4) The relevance of an application to the program as described in Section I. of this FFO;
(5) The degree to which the proposed project is reflective of broad-based industry need;
(6) The extent to which the scope of the proposed project is complementary to the research programs and research goals of NIST's advanced manufacturing programs, as described at http://www.nist.gov/manufacturing-portal.cfm; and
(7) The degree to which the proposed project complements and does not duplicate the portfolio of FY 2013 AMTech Planning Awards, such as technology, challenges being addressed, and stage of development of consortium (*see* http://www.nist.gov/amo/fundedawards.cfm), or other projects funded by the Department of Commerce or other Federal agencies.

3. Review and Selection Process

a. Selection of Applicants to Submit Full Applications. Pre-Applications will undergo an initial screening to determine whether or not they are eligible, complete, and responsive to this FFO (see Section I. of this FFO). Any Pre-Application determined to be ineligible, incomplete, and/or non-responsive may be eliminated from further review. However, NIST, in its sole discretion, may continue the review process for a Pre-Application that is missing non-substantive information which may easily be rectified or cured in a Full Application.

Pre-Applications will be reviewed by an Evaluation Team composed of three or more independent, objective Federal employees, knowledgeable in the subject matter of this FFO and its objectives, and who are able to review based on the following criteria:

(1) How well the abbreviated technical narrative addresses the Evaluation Criteria (*see* Section V.1. of this FFO), which includes:
    a. Identifying and Addressing Significant Technical Challenges with Substantive National Impacts;
    b. Consortium and/or Roadmapping Development Plan; and
    c. Resource Availability and Qualifications.
(2) The degree to which the proposed project is reflective of broad-based industry need;
(3) The extent to which the scope of the proposed project is complementary to the research programs and research goals of NIST's advanced manufacturing programs, as described at http://www.nist.gov/manufacturing-portal.cfm; and
(4) The degree to which the proposed scope of the project complements and does not duplicate the portfolio of FY 2013 AMTech awards, such as technology, challenges being addressed, and stage of development of consortium (*see* http://www.nist.gov/amo/fundedawards.cfm), or other projects funded by the Department of Commerce or other Federal agencies.

The Evaluation Team shall select Applicants with merit to submit a Full Application, using a simple pass/fail majority rule by the Evaluation Team.

b. Initial Screening of All Full Applications. All Full Applications received in response to this FFO will be assigned to the NIST Advanced Manufacturing Office and reviewed to determine whether or not they are eligible, complete, and responsive to this FFO (*see* Section I. of this FFO). Any Full Application determined to be ineligible, incomplete, and/or non-responsive may be eliminated from further review. However, NIST, in its sole discretion, may continue the review process for an application that is missing non-substantive information which may easily be rectified or cured. Only Full Applications submitted by an applicant whose Pre-Application was selected and who was invited to submit a Full Application will be reviewed.

c. Review, Selection, and Funding of Full Applications. Full Applications that pass the Initial Screening described above will proceed following the review, ranking and selection process described below.

(1) **Merit Review.** Each Full Application will be reviewed by at least three (3) independent, objective individuals with appropriate professional and technical expertise relating to the topics covered in this FFO. Reviews will be limited to technical and cost matters, based on the Evaluation Criteria (*see* Section V.1 of this FFO). Any mix of Federal and non-Federal reviewers may be used. If non-Federal reviewers are used, the reviewers may discuss the proposals with each other. Reviewers' scores will be determined on an individual basis, not as a consensus. Reviewers will assess the merits of each application against the Evaluation Criteria and assign a score, based on the application's responsiveness Evaluation Criteria, with a maximum score of 100.

(2) **Program Review.** An Evaluation Panel will conduct a programmatic review of the applications that completed merit review. The Evaluation Panel will consist of at least three (3) persons and will be comprised of any mix of NIST staff, and other federal agency employees with appropriate professional and technical expertise. The Evaluation Panel may ask questions of some or all applicants in writing and/or may require teleconferences or site visits with some or all applicants.

(3) **Ranking.** The Evaluation Panel will prepare and provide a final adjectival ranking of the applications to the Selecting Official for further consideration, taking into consideration the relevance of an application to the program goals and objectives described in Section I. of this FFO, the results of the merit reviewers' evaluations, including scores and written comments, and any additional information obtained from the applicant by the Evaluation Panel. The adjectival ratings are:

Fundable, Outstanding;
Fundable, Very Good;
Fundable; or
Unfundable.

For decision-making purposes, Full Applications receiving the same adjectival ranking will be considered to have an equivalent ranking, although their technical review scores, while comparable, will not necessarily be the same.

(4) **Selection.** The Selecting Official, who is the NIST Advanced Manufacturing Office Director, or designee, will make Full Application selections and provide final award recommendations to the NIST Grants Officer. The Selecting Official shall select the most meritorious Full Application(s) following the adjectival ranking, unless a proposal is justified to be selected out of rank based upon one or more of the selection factors described in Section V.2. of this FFO.

NIST reserves the right to negotiate the budget costs with any applicant selected to receive an award, which may include requesting that the applicant remove certain costs. Additionally, NIST may request that the successful applicant(s) modify objectives or work plans and provide supplemental information required by the agency prior to award. NIST also reserves the right to reject an application where information is uncovered that raises a reasonable doubt as to the responsibility of the applicant. NIST may select some, all, or none of the applications, or part(s) of any particular application. NIST may request that fundable applicants consider working together in a combined project if this approach might effectively advance the program mission. The final approval of selected applications and issuance of awards will be by the NIST Grants Officer. The award decisions of the NIST Grants Officer are final.

4. Anticipated Announcement and Award Dates. Review of Pre-Applications and invitations to submit a Full Application are expected to be completed on or about Wednesday, September 24, 2014. Review of Full Applications, selection of successful applicants, and award processing is expected to be completed by May 2015. The earliest anticipated start date for awards under this FFO is expected to be June 1, 2015.

5. Additional Information

a. Application Replacement Pages. Applicants may not submit replacement pages and/or missing documents once a Pre-Application or Full Application has been submitted. Any revisions must be made by submission of a new Pre-Application or Full Application, by the respective submission deadline via Grants.gov.

b. Notification to Unsuccessful Applicants. Unsuccessful applicants that submitted either a Pre-Application or Full Application will be notified in writing.

c. Notification to Selected Applicants. Applicants whose Pre-Application is selected by NIST will be notified in writing and invited by NIST to submit a Full Application.

d. Retention of Unsuccessful Applications. An electronic copy of each non-selected application will be retained for three (3) years for record keeping purposes. After three (3) years, it will be destroyed.

e. Protection of Proprietary Information. When an application includes trade secrets or information that is commercial or financial, or information that is confidential or privileged, it is furnished to the Government in confidence with the understanding that the information shall be used or disclosed only for evaluation of the application. Such information will be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act. Appropriate labeling in the application aids NIST in the identification of what information may be specifically exempt from disclosure. Without assuming any liability for inadvertent disclosure, NIST will seek to limit disclosure of such information to its employees and to outside reviewers when necessary for merit review of the application or as otherwise authorized by law. This restriction does not limit the Government's right to use the information if it is obtained from another source.

f. Changes in Applicant. A successful Pre-Applicant may change the lead entity to another eligible entity identified as part of the application team within the Pre-Application prior to submission of its Full

Application. A successful Pre-Applicant may also revise the requested budget amount within its Full Application prior to submission of the Full Application. The applicant should provide written notice to by mail to Karen Williams, National Institute of Standards and Technology, 100 Bureau Drive, Stop 4700, Gaithersburg MD 20899, or by e-mail to karen.williams@nist.gov. After submission of a Full Application and merit review, further revisions may occur during the negotiation process as described in Section V.3.c.(4) of this FFO.

VI. Award Administration Information

1. Award Notices. Successful applicants will receive an award from the NIST Grants Officer. A sample award cover page, i.e., CD-450, Financial Assistance Award is available at http://ocio.os.doc.gov/s/groups/public/@doc/@os/@ocio/@oitpp/documents/content/dev01_002513.pdf and the DoC Financial Assistance Standard Terms and Conditions (January 2013) are available at http://www.osec.doc.gov/oam/grants_management/policy/documents/DOC_Standard_Terms_and_Conditions_01_10_2013.pdf.

2. Administrative and National Policy Requirements

a. DoC Pre-Award Notification Requirements. The DoC Pre-Award Notification Requirements for Grants and Cooperative Agreements, 77 FR 74634 (December 17, 2012), are applicable to this FFO and are available at https://www.federalregister.gov/articles/2012/12/17/2012-30228/department-of-commerce-pre-award-notification-requirements-for-grants-and-cooperative-agreements.

b. Employer/Taxpayer Identification Number (EIN/TIN), Dun and Bradstreet Data Universal Numbering System (DUNS), and System for Award Management (SAM). All applicants for Federal financial assistance are required to obtain a universal identifier in the form of DUNS number and maintain a current registration in the Federal government's primary registrant database, SAM. On the form SF-424 items 8.b. and 8.c., the applicant's 9-digit EIN/TIN and 9-digit DUNS number must be consistent with the information in SAM (https://www.sam.gov/) and if applicable, the Automated Standard Application for Payment System (ASAP), if the applicant has received prior Federal awards and has received award funding through ASAP. For complex organizations with multiple EIN/TIN and DUNS numbers, the EIN/TIN and DUNS numbers MUST be the numbers for the applying organization. Organizations that provide incorrect/inconsistent EIN/TIN and DUNS numbers may experience significant delays in receiving funds if their application is selected for funding. Confirm that the EIN/TIN and DUNS number are consistent with the information on the SAM and ASAP.

Per 2 C.F.R. Part 25, each applicant must:

(1) Be registered in the CCR before submitting an application noting the CCR now resides in SAM;
(2) Maintain an active CCR registration, noting the CCR now resides in SAM, with current information at all times during which it has an active Federal award or an application under consideration by an agency; and
(3) Provide its DUNS number in each application it submits to the agency.

The applicant can obtain a DUNS number from Dun and Bradstreet. A DUNS number can be created within one business day. The CCR or SAM registration process may take five or more business days to complete. If you are currently registered with the CCR, you may not need to make any changes. However, please make certain that the EIN/TIN associated with your DUNS number is correct. Also note that you will need to update your CCR registration annually. This may take three or more business days to complete. Information about SAM is available at www.sam.gov. *See* also 2 C.F.R. Part 25 and the *Federal Register* notice published on September 14, 2010, at 75 FR 55671.

Please note that a federal assistance award cannot be issued if the designated recipient's registration in the System for Award management (www.sam.gov) is not current at the time of the award.

c. Collaborations with NIST and/or Other Federal Employees. All applications should include a description of any work proposed to be performed by an entity other than the applicant, and the cost of such work should ordinarily be included in the budget.

Collaborations with NIST and/or other Federal employees are not required and do not make an application more or less favorable in the competitive process unless specified in a Program Description or Selection Process. An applicant may propose such collaboration(s).

If an applicant proposes collaboration with NIST, and/or other Federal employees, the statement of work should include a statement of this intention, a description of the collaboration, and prominently identify the employee(s) involved, if known.

Any collaboration by a NIST employee must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the approval of the proposed collaboration. Any unapproved collaboration will be stricken from the application prior to the merit review.

d. Use of NIST Intellectual Property. If the applicant anticipates using any NIST-owned intellectual property to carry out the work proposed, the applicant should identify such intellectual property. This information will be used to ensure that no NIST employee involved in the development of the intellectual property will participate in the review process for that competition. In addition, if the applicant intends to use NIST-owned intellectual property, the applicant must comply with all statutes and regulations governing the licensing of Federal government patents and inventions, described in 35 U.S.C. §§ 200-212, 37 C.F.R. Part 401, 15 C.F.R. § 14.36, and in Section B.21 of the DoC Pre-Award Notification Requirements December 17, 2012 (77 FR 74634). Questions about these requirements may be directed to the Chief Counsel for NIST, (301) 975-2803.

Any use of NIST-owned intellectual property by an applicant is at the sole discretion of NIST and will be negotiated on a case-by-case basis if a project is deemed meritorious. The applicant should indicate within the statement of work whether it already has a license to use such intellectual property or whether it intends to seek one.

If any inventions made in whole or in part by a NIST employee arise in the course of an award made pursuant to this FFO, the United States government may retain its ownership rights in any such invention. Licensing or other disposition of NIST's rights in such inventions will be determined solely by NIST, and include the possibility of NIST putting the intellectual property into the public domain.

e. Research Activities Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects Including Software Testing. Any application that includes research activities involving human subjects, human tissue/cells, or data or recordings involving human subjects, including software testing, must meet the requirements of the Common Rule for the Protection of Human Subjects ("Common Rule"), codified for the Department of Commerce (DoC) at 15 C.F.R. Part 27. In addition, any such application that includes research activities on these topics must be in compliance with any statutory requirements imposed upon the Department of Health and Human Services (DHHS) and other Federal agencies regarding these topics, all regulatory policies and guidance adopted by DHHS, the Food and Drug Administration, and other Federal agencies on these topics, and all Executive Orders and Presidential statements of policy on these topics.

NIST reserves the right to make an independent determination of whether an applicant's research activities involve human subjects. NIST policy also requires a NIST administrative review for research involving human subjects approved by a non-NIST Institutional Review Board (IRB). (15 C.F.R. § 27.112 Review by Institution.) If NIST determines that your application involves human subjects, you will be required to provide additional information for review and approval. If an award is issued, no research activities involving human subjects shall be initiated or costs incurred under the award until the NIST Grants Officer issues written approval. Retroactive approvals are not permitted.

NIST will accept applications that include exempt and non-exempt human subjects research activities. Organizations that have an IRB are required to follow the procedures of their organization for approval of exempt and non-exempt research activities that involve human subjects, if the application is funded. Non-exempt human subjects research activities by either domestic or foreign organizations will be required to have protocols approved by a cognizant active IRB currently registered with the Office for Human Research Protections (OHRP) within the DHHS that is linked to the engaged organizations possessing a currently valid Federal wide Assurance (FWA) on file from OHRP. Information regarding how to apply for an FWA and register an IRB with OHRP can be found at http://www.hhs.gov/ohrp/assurances/index.html. NIST relies only on OHRP-issued FWAs and IRB Registrations for both domestic and foreign organizations for NIST supported research involving human subjects. NIST will not issue its own FWAs or IRB Registrations for domestic or foreign organizations.

The applicant should clearly indicate in the application, by separable task, all research activities believed to be exempt or non-exempt research involving human subjects and the expected institution(s) where the research activities involving human subjects may be conducted.

If an activity/task involves data obtained through intervention or interaction with living individuals or identifiable private information obtained from or about living individuals but the applicant participant(s) believes that the activity/task is not research as defined under the Common Rule, the following may be requested for that activity/task:

> Justification, including the rationale for the determination and in some cases additional documentation, to support a determination that the activity/task in the application is not research as defined under the Common Rule. *See* 15 C.F.R. § 27.102. This may result in a NIST determination. If the applicant participant(s) uses a cognizant IRB that provides an IRB approval, a copy of that IRB approval documentation will be required by NIST. The applicant participant(s) is not required to establish a relationship with a cognizant IRB if they do not have one, but if the applicant participant(s) has a cognizant IRB that requires review of the activity/task, or the applicant participant(s) elects to obtain IRB review, a copy of the IRB approval documentation will be required by NIST.

If the application appears to NIST to include exempt research activities, and the performer of the activity or the supplier and/or the receiver of the biological materials, or data from human subjects ***does not*** have a cognizant IRB to provide an exemption determination, the following information may be requested during the review process so that NIST can evaluate whether an exemption under the Common Rule applies (*see* 15 C.F.R. § 27.101).

a. The name(s) of the institution(s) where the exempt research will be conducted; and/or from which biological materials, or data from human subjects will be provided.
b. A copy of the protocol of the research to be conducted; and/or the biological materials, or data from human subjects to be collected/provided, not pre-existing samples (*i.e.,* will proposed research collect only information without personal identifiable information, will biological materials or data be de-identified and when and by whom was the de-identification performed, how were the materials or data originally collected).
c. For pre-existing biological materials, or data from human subjects, provide copies of the consent forms used for collection and a description of how the materials or data were originally collected and stripped of personal identifiers. If copies of consent forms are not available, explain.
d. Any additional clarifying documentation that NIST may request during the review process in order to make a determination that the activity or use of biological materials or data from human subjects is exempt under the Common Rule (*see* 15 C.F.R. § 27.101).

If the application appears to NIST to include research activities (exempt or non-exempt) involving human subjects, and the performer of the activity has a cognizant IRB, the following information may be requested during the review process:

(1) The name(s) of the institution(s) where the research will be conducted;
(2) The name(s) and institution(s) of the cognizant IRB(s), and the IRB registration number(s);
(3) The FWA number of the applicant linked to the cognizant IRB(s);
(4) The FWAs associated with all organizations engaged in the planned research activity/task-linked to the cognizant IRB;
(5) If the IRB review(s) is pending, the estimated start date for research involving human subjects;
(6) The IRB approval date (if currently approved for exempt or non-exempt research);
(7) If any FWAs or IRB registrations are being applied for, that should be clearly stated.

Additional documentation may be requested by NIST for performers with a cognizant IRB during review of the application, and may include the following for research activities involving human subjects that are planned in the first year of the award:

(1) A signed (by the study principal investigator) copy of each applicable final IRB-approved protocol;
(2) A signed and dated approval letter from the cognizant IRB(s) that includes the name of the institution housing each applicable IRB, provides the start and end dates for the approval of the research activities, and any IRB-required interim reporting or continuing review requirements;
(3) A copy of any IRB-required application information, such as documentation of approval of special clearances (i.e., biohazard, HIPAA, etc.) conflict-of-interest letters, or special training requirements;
(4) A brief description of what portions of the IRB submitted protocol are specifically included in the application submitted to NIST, if the protocol includes tasks not included in the application, or if the protocol is supported by multiple funding sources. For protocols with multiple funding sources, NIST will not approve the study without a non-duplication-of-funding letter indicating that no other federal funds will be used to support the tasks proposed under the proposed research or ongoing project;
(5) If a new protocol will only be submitted to an IRB if an award from NIST is issued, a draft of the proposed protocol may be requested;
(6) Any additional clarifying documentation that NIST may request during the review process to perform the NIST administrative review of research involving human subjects. (*See* 15 C.F.R. § 27.112 Review by Institution.)

For more information regarding human subjects contact Linda Beth Schilling, Senior Coordinator and Policy Advisor for Human & Animal Subjects Research at NIST (e-mail: linda.schilling@nist.gov; phone: (301) 975-2887).

f. Collaborations Making Use of Federal Facilities. All applications should include a description of any work proposed to be performed using Federal facilities.

In addition, if an applicant proposes use of NIST facilities, the statement of work should include a statement of this intention and a description of the facilities. Any use of NIST facilities must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the availability of the facilities and approval of the proposed usage. Any unapproved facility use will be stricken from the application prior to the merit review. Examples of some facilities that may be available for collaborations are listed on the NIST Web site, http://www.nist.gov/user-facilities.cfm.

h. Funding Availability and Limitation of Liability. Funding for the program listed in this FFO is contingent upon the availability of appropriations. In no event will NIST or DoC be responsible for application preparation costs if the program fails to receive funding or is cancelled because of agency priorities. Publication of this FFO does not oblige NIST or DoC to award any specific project or to obligate any available funds.

i. Certifications Regarding Federal Felony and Federal Criminal Tax Convictions, Unpaid Federal Tax Assessments and Delinquent Federal Tax Returns. In accordance with Federal appropriations

law, an authorized representative of the selected applicant(s) may be required to provide certain pre-award certifications regarding federal felony and federal criminal tax convictions, unpaid federal tax assessments, and delinquent federal tax returns.

j. OMB Uniform Administrative Requirements, Cost Principles and Audit Requirements. Please note that on December 26, 2013, OMB published final guidance titled "Uniform Administrative Requirements, Cost Principles, and Audit Requirements" (OMB Uniform Guidance) (https://www.federalregister.gov/articles/2013/12/26/2013-30465/uniform-administrative-requirements-cost-principles-and-audit-requirements-for-federal-awards), which streamlines the language from eight existing OMB circulars, including Cost Principles (OMB Circulars A-21, A-87, A-122) and administrative requirements (OMB Circulars A-102 and A-110), into one consolidated set of guidance applicable to federal assistance awards. Once adopted by the Department of Commerce through the promulgation of updated financial assistance regulations, the OMB Uniform Guidance will supersede DOC's uniform administrative requirements for financial assistance awards, currently set forth in 15 C.F.R. parts 14 and 24. The DOC expects to adopt the OMB Uniform Guidance by December 26, 2014, meaning that the OMB Uniform Guidance will apply to all new awards and to additional funding to existing awards made after December 26, 2014. In addition, the audit requirements of the OMB Uniform Guidance will apply to audits of non-Federal entities beginning on or after December 26, 2014. Therefore, applicants should familiarize themselves with the OMB Uniform Guidance. Additional information on the substance of and transition to the OMB Uniform Guidance may be found at https://cfo.gov/cofar/.

3. Reporting

a. Reporting Requirements. Consistent with the reporting requirements described in Sections A.01 Financial Reports and B.01 Performance (Technical) Reports of the DoC Financial Assistance Standard Terms and Conditions dated January 2013 (http://www.osec.doc.gov/oam/grants_management/policy/documents/DOC_Standard_Terms_and_Conditions_01_10_2013.pdf), the following reporting requirements shall apply:

(1) Financial Reports. Each award recipient will be required to submit an SF-425, Federal Financial Report in triplicate (an original and two (2) copies), on a semi-annual basis for the periods ending March 31 and September 30 of each year. Reports will be due within 30 days after the end of the reporting period.

(2) Performance (Technical) Reports. Each award recipient will be required to submit a technical progress report in triplicate (an original and two (2) copies), on a semi-annual basis for the periods ending March 31 and September 30 of each year. Reports will be due within 30 days after the end of the reporting period. A final technical progress report shall be submitted within 90 days after the expiration date of the award. Two (2) copies of the technical progress report shall be submitted to the Project Manager and the original report to the NIST Grants Officer. Technical progress reports shall contain information as prescribed in 15 C.F.R. § 14.51.

(3) Patent and Property Reports. From time to time, and in accordance with the Uniform Administrative Requirements and other terms and conditions governing the award, the recipient may need to submit property and patent reports.

b. OMB Circular A-133 Audit Requirements. Single or program-specific audits shall be performed in accordance with the requirements contained in OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations," and the related Compliance Supplement. OMB Circular A-133 requires any non-Federal entity (i.e., including non-profit institutions of higher education and other non-profit organizations) that expends Federal awards of $500,000 or more in the recipient's fiscal year to conduct a single or program-specific audit in accordance with the requirements set out in the Circular. Applicants are reminded that NIST, the DoC Office of Inspector General or another authorized Federal agency may conduct an audit of an award at any time. Additionally, applicants should take note of the new financial assistance audit requirements set forth in the recently published OMB Uniform

Administrative Requirements, Cost Principles, and Audit Requirements, which is cited and discussed above in Section VI.2.i. of this FFO.

c. Federal Funding Accountability and Transparency Act of 2006. In accordance with 2 C.F.R. Part 170, all recipients of a Federal award made on or after October 1, 2010, are required to comply with reporting requirements under the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282). In general, all recipients are responsible for reporting sub-awards of $25,000 or more. In addition, recipients that meet certain criteria are responsible for reporting executive compensation. Applicants must ensure they have the necessary processes and systems in place to comply with the reporting requirements should they receive funding. Also see the *Federal Register* notice published September 14, 2010, at 75 FR 55663.

d. Third Party Evaluation. NIST intends to retain a third party to interface with NIST and award recipients for ongoing evaluation and best practice identification during the performance of AMTech awards. Award recipients will be required to participate in this third party evaluation. More detail will be provided as part of the award documentation and at kickoff activities.

VII. Agency Contact(s)

Questions should be directed to the following contact persons:

Subject Area	Point of Contact
Programmatic and technical questions	Frank Gayle Phone: (301) 975-2830 E-mail: frank.gayle@nist.gov Or Karen Williams Phone: (301) 975-2397 or (301) 975-2830 E-mail: karen.williams@nist.gov
Electronic application submission through Grants.gov	Christopher Hunton Phone: (301) 975-5718 E-mail: christopher.hunton@nist.gov Or Grants.gov Phone: (800) 518-4726 E-mail: support@grants.gov
Grant rules and regulations	Scott McNichol Phone: (301) 975-5603 Fax: (301) 840-5976 E-mail: scott.mcnichol@nist.gov

VIII. Other Information

Public Website, Frequently Asked Questions (FAQs) and Webinars: An AMTech public website exists (http://www.nist.gov/amo) and provides information pertaining to this AMTech Funding Opportunity. NIST anticipates that a "Frequently Asked Questions" section will be maintained and updated as needed to provide additional guidance and clarifying information that may arise related to this Funding Opportunity. Any amendments to this FFO will be announced through Grants.gov.

Questions from applicants pertaining to this Funding Opportunity; AMTech eligibility, evaluation criteria, selection factors, or selection process; or the general characteristics of a competitive AMTech proposal will not be considered on an informal basis. Applicants must submit all such questions in writing to amtech@nist.gov. Questions submitted to NIST/AMTech may be posted on the AMTech website (http://www.nist.gov/amo) as part of a FAQ document.

NIST plans to hold informational webinars on the NIST Advanced Manufacturing Technology Consortia (AMTech) Program, Planning Awards competition. The webinars will be held within 3 weeks after posting of this FFO. The webinars will provide general guidance on preparing applications and provide an opportunity for the public to ask questions about the program. Proprietary technical discussions about specific project ideas will not be permitted, and NIST will not critique or provide feedback on any project ideas during the webinar or at any time before submission of an application to NIST. There is no cost for the webinars, but participants must register for each in advance. Participation in the webinars is not required for the submission of an application. The webinars will be recorded and a link to the recordings will be available for public access on the AMTech website (http://www.nist.gov/amo). Additional, information concerning the webinars and advance registration available at: http://www.nist.gov/amo/funding.cfm.