Frequently Asked Questions

For An ASTM ADDITIVE MANUFACTURING CENTER OF EXCELLENCE



Frequently Asked Questions

These "frequently asked questions" (FAQs) are a supplemental resource to the ASTM International (ASTM) Additive Manufacturing (AM) Center of Excellence (CoE) Requests for Proposals (RFP), and are organized according to the RFP structure. The purpose of this informational document is to assist potential ASTM AM CoE applicants to better understand the proposed Center and the 2017 competition. Information contained herein is not intended to supersede, modify, or otherwise alter specific application requirements set forth in the RFP. In all cases, the requirements set forth in the RFP shall prevail over any inconsistencies contained in the below FAQs. New questions and answers will be added periodically, as the need arises.

ASTM Background Information

What is ASTM?

ASTM is a leading non-profit organization, devoted to the development of international standards for a wide range of materials, systems, and services. For over 100 years, ASTM has served society as a leading venue for consumers, industry, and regulators to work collaboratively under a balanced and consensus-based process to craft voluntary consensus standards. ASTM meets the World Trade Organization (WTO) principles for developing international standards, and maintains the attributes outlined in the National Technology Transfer and Advancement Act (NTTAA) for a voluntary consensus standards development organization. ASTM standards are used globally in research and development (R&D), product testing, quality systems, commercial transactions, and more.

What does ASTM do?

Working in an open and transparent process using ASTM's advanced IT infrastructure, ASTM members create the test methods, specifications, classifications, guides, and practices that support industries and governments worldwide. Beyond standards development, ASTM offers certification and declaration through our subsidiary, the Safety Equipment Institute, as well as technical training programs and proficiency testing. All of ASTM's programs complement standards development activities and provide enterprise solutions for companies, government agencies, researchers, and laboratories worldwide.

What makes ASTM different from other standards organizations?

With over 30,000 of the world's top technical experts and business professionals representing 150 countries, ASTM's leadership in international standards development is driven by the contributions of its members, who create the most technically accurate test methods, specifications, classifications, guides, and practices that support industries and governments around the world. ASTM's process requires a 90% approval rating before publication, which instills the trust and acceptance of the standards content in the market and by regulators across the globe. ASTM removes the burden of most administrative tasks for our volunteers, allowing them to focus on technical content development. Finally, ASTM's staff, tools, and resources allow for the rapid evolution of standards development and delivery within an average of 14 months for a new standard and within an average of 6 months for revisions.

Who can be a member of ASTM?

ASTM welcomes and encourages participation from around the world. ASTM's open consensus process ensures worldwide access for all interested individuals. Additionally, the voting model provides one vote per company versus one vote per country or otherwise. The ASTM process is not only open but also balanced, allowing small and large organizations to carry the same weight in committee decision-making. This balance between producers and non-producers ensures the market relevance of ASTM standards.

Center of Excellence (CoE) Background Information

Why does ASTM want to create a Center of Excellence (CoE)?

ASTM recognizes the critical need to develop the world's technology base while educating the next generation of manufacturing professionals. Standards – ASTM's core – help commoditize products. As such, ASTM knows that earlier engagement between standards development and R&D in innovative areas such as AM will benefit industry and ASTM members with cost-efficient manufacturing and safe end-products in the market. ASTM members strive to integrate the standards into solution-driven programs and services. A CoE will allow ASTM to better serve industry with the standards and related programs that meet the needs of industry.

What is the AM CoE's mission statement?

ASTM's mission is to bridge standards development with R&D to better enable efficient development of standards, education and training, certifications, and proficiency testing programs. The CoE will facilitate collaboration and coordination between government, academia, and industry stakeholders to advance AM and expand ASTM and ASTM's partner's capabilities.

What will be the core/major activities of the ASTM CoE?

Dependent on ASTM's partner's interests, core activities include, but are not limited to:

- Bench-marking materials, testing, processes, and machinery for standards development
- Leveraging standards to accelerate standards-related program development
- Serve as a consortium platform for all industry sectors leveraging AM technologies
- Developing global partnerships to develop and meet evolving market needs
- Addressing standards and standards-related program gaps of the AM community

What makes the ASTM AM CoE different from existing AM centers?

ASTM's AM CoE will stand apart from others by transitioning R&D into standards development, which will serve as the baseline of solutions and programs for the AM industry. ASTM's diverse breath of activities incorporates AM processes, feedstock materials and testing, nondestructive evaluation (NDE), fracture and fatigue, as well as aerospace, automotive, medical, naval and pharmaceutical under one umbrella. No current CoE has created this type of connectivity.

Does the COE need to concentrate on any specific industry application, process or materials?

No, ASTM is seeking proposals to build a COE which can capture multiple industry sectors or materials. However, depending on the details of the proposal, a specific focus to one industry for example would not eliminate them from the opportunity. Proposals should specify research topics and a general structure which applicants would envision necessary to meet the objectives of the COE.

How will the CoE operate or be structured?

ASTM's current infrastructure is already set up to support the development of many CoE objectives driven by the AM community. However, ASTM is flexible with how the internal structure may exist, as ASTM understands partner(s) may have preferences or limitations. The structure of the COE will be dependent upon the partners selected and the needs of that specific program.

How will the management structure operate on a day-to-day basis?

Each organization would leverage their appropriate staff to carry out the tasks however a leadership team with contacts for each organization would be dedicated to manage the operations of the COE.

What will a global AM Partnership provide?

Globalization of the marketplace is a reality and the global marketplace is demanding AM technologies. Ensuring standards and related programs have global application will be critical to maximize the impact and acceptance of the CoE developed programs. ASTM is an international organization with the mission to, "Help our world work better." The ASTM AM CoE will facilitate the exchange of ideas and information through structured communications, interaction, and engagement with internal and external experts, and provide easy access to shared information and resources to create this better world.

What will ASTM's role in the CoE be?

ASTM envisions its role as a coordinating one and a resource for program development, which is customizable by the demand of industry partners. Coordination could include meetings, workshops, symposia, and more. Program development could include standards, education, training, certification, and proficiency testing programs, among others.

What will be the role of industry and academia in the CoE?

ASTM does not have a predetermined or specific role for industry and academia; however the level of engagement will be determined by a partner(s).

How will it be funded?

Funding will come from a combination of resources provided by ASTM and a partner(s). Funding may include inkind contributions, direct funding, or a combination thereof. The in-kind support and program development resources from ASTM's related pre-existing activities include ASTM education and training, certification and proficiency testing program development, connection with top AM experts through ASTM's more than 19 AM technology-related technical committees, and the offered workshops, meetings, conferences, and more that are designed for ASTM's over 30,000 members.

What is the maximum amount of funding per year for the 5 years provided by ASTM?

ASTM will provide up to \$250K/year from both in-kind contributions and funds per award. The funding may exceed \$250K/year if more ASTM in-kind contributions are leveraged. ASTM encourages all proposals to develop budgets that achieve the objectives and selection criteria for the AM CoE. ASTM only provides up to \$250K/year but any additional support can be pursued in collaboration with partners from other sources. The details on the distribution of the funding (in-kind/direct cash) will be dependent upon the needs of the project(s).

What can funding be used for?

Funding can primarily be used to cover research and development related costs to support standardization efforts. Salaries of personnel carrying out R&D may be considered within budget allocations. Other costs (e.g. operational costs, administration, etc.) is expected to be covered using partner cost share or in-kind contributions by ASTM.

How does ASTM define R&D projects?

R&D projects will be defined based on a combination of factors. ASTM will consider various road mapping studies that exist in the community as well as technical committee members expertise in addition to close consultation with various industry sectors and government agencies to outline and define R&D projects that will be conducted with partners. In terms of TRL level, these are typically between 3-8 which is a broad range and depends on the nature of a project.

What qualifies as in-kind support from ASTM?

All ASTM development costs related to AM standards, staff time, infrastructure to develop education/training courses, proficiency testing, certification, student scholarships, emerging young professional programs, student project grants, various awards, etc. would be considered as ASTM available resources.

What should a Budget Justification include?

A budget justification may include a summary of the contributions applicants are able to provide, as well as a justification of ASTM funds or in-kind contribution estimations. Funding is not a key component of the selection criteria.

Is a business plan demonstrating the long-term sustainability expected?

No, at this point, ASTM is not looking for a sustainability plan. Moving forward, a sustainability plan can be discussed with selected partners.

Who can apply to this RFP?

See eligibility requirements in the RFP. As an international organization, ASTM is not limiting proposals to any type of organization (i.e. university, SME, corporate R&D, non-profit) or specific region and therefore welcomes proposals from our global stakeholders. ASTM is interested in establishing two centers with physical locations capable of addressing the CoE objectives with no predetermined geographical location. ASTM would consider any international connection as a part of any proposal. Any programs or projects should not involve any International Traffic and Arms Regulations (ITAR) / export-control related technologies.

Are joint proposals acceptable?

Joint proposals are acceptable; however ASTM will only provide funding to the lead organization. The lead organization can determine how they want to distribute any cash/in-kind contribution that they may receive as a part of an agreement to a team member.

Do submittals require all partners be submitted by the time of the proposal or can additional parties/members join later?

It is preferred the submittal include all the partners you wish to be involved in the COE however, additional partners or members can join the effort at a later date with the awarded organization.

What level of commitment is required in a support letter provided by a team member? There is no level of commitments required in letters of support and this is based on the discretion of a supporting team.

Will ASTM provide letters of support for the recipient to seek additional funding? Yes, ASTM will certainly support partners in seeking additional funding in line with objectives outlined in the RFP.

Is it necessary to demonstrate competencies & capabilities in standards development or expected to participate in ASTM committees?

ASTM continues to provide infrastructure and tools to support standard development. There is no change in the process at all and we do not expect a partner take the responsibility for this task. Instead we expect a partner to actively participate in the standard development process. Regarding participation, ASTM encourages participation in the committees and we anticipate direct interaction of CoE partners with our committees. The main objective of the CoE is to support closing gaps in standardization for AM and it is essential to be part of the development.

What is the difference between CoE partner and member or team member? Is it acceptable to operate a center with a core partnership with additional partners being added in the future?

CoE main partners are the lead organizations that will awarded a partnership with ASTM in establishing an AM CoE. ASTM could select up to two partners at this time. Partners could submit a proposal with their potential team members to demonstrate their capabilities. Eventually, upon formation of two centers, additional members can join the CoE. The details of CoE structure will be determined after partners have been selected and most likely the structure will be in a form of a consortium.

Who can be a member of the AM CoE?

This will be impacted by ASTM's partner(s) and projects. Membership will be granted dependent on the potential member meeting the objectives of CoE. Membership details will be determined moving forward.

What are the membership requirements of the AM CoE?

This will be impacted by ASTM's partner(s) and projects. Membership requirements will be dependent upon an applicant's contribution to the CoE objectives. Membership details will be determined moving forward.

Is there a cost to be a member of the AM CoE?

This will dependent upon an applicant's contribution to the CoE objectives and will be determined moving forward.

Who can be a team member in a proposal?

ASTM encourages applicants considering teaming up with other stakeholders not limited to industry, university, government agencies, etc. to strengthen their application.

Is cost share allowed? How about sub-contracting?

ASTM does not require cost share or in kind sharing for this proposal, however, applicants are encouraged to provide cost share to support the CoE, in particular, for operational cost.

How does ASTM define R&D projects?

R&D projects will be defined based on a combination of factors. ASTM will consider various roadmapping studies that exist in the community as well as technical committee members expertise in addition to close consultation with various industry sectors and government agencies to outline and define R&D projects that will be conducted with partners.

How will the COE address intellectual property?

ASTM International in conjunction with partners will avoid areas that involve IP related research. If those areas are entered, ASTM will respect the IP of the partner. Note, the driver behind the COE is standards development, so clarification should be made that ASTM standards are primarily the copyright of ASTM however joint publication opportunities exist where partners wish to explore.

When will the AM CoE open?

ASTM intends to launch the CoE in the first quarter of 2018.

Where will the CoE be located?

This will be impacted by ASTM's partner(s) and the resources necessary to carry out the CoE objectives. ASTM is interested in establishing two centers with physical location capable of addressing the CoE objectives.

What are the future goals of the AM CoE?

This will be impacted by ASTM's partner(s) however; objectives may evolve based on industry need and the CoE's demonstration of leadership in the AM arena. ASTM prides itself in its ability to evolve as industry and technology innovates.

General Questions

Who can I contact for general questions?

Submit all questions in writing by email. Include "General Inquires: ASTM AM CoE" in the subject line, addressed to:

ASTM International Programs and Services Christine DeJong

Email: cdejong@astm.org Phone: +1.610.832.9736