"M-TAC RFI Comments"

Comments will be accepted by email only. Comments must be sent to *diane.henderson@nist.gov* with the subject line "M-TAC RFI Comments."

1. What are the specific types of technology transition and commercialization tools and services that should be provided by M-TACs? Emphasis is on the alignment of these tools and services with the most pressing needs of small and mid-sized U.S. manufacturers.

1.1- In our experience the number one deterrent to the wide scale adoption of new technology into SMEs processes and products is the inherent risk associated with large investments. The costs and time associated with implementing new technology can easily represent several hundreds of thousands of dollars and several months and as such, place SMEs into a major risk position. The SMEs would be well served if the M-TACs were positioned to financially subsidize the upfront costs with an agreed to cost recovery plan to mitigate the upfront risk.

1.2- M-TACs should provide or have ready access to cost-effective design, development, and prototyping tools and services. In addition they should provide or have access to, commercialization services including but not limited to design for manufacture, material and component sourcing, industry certifications (e.g. UL, FCC), etc.

1.3- M-TACs should also provide pro-active services whereby appropriate SMEs are informed of new technologies, research, components and products that are relevant to their business. SMEs do not historically have a significant amount of time to do in depth research of new happenings, information and technology in their respective areas.

a. How would M-TAC services complement the services currently offered by MEP Centers?

In addition to response 1.2, the M-TACs should focus on the "application" of the technology for commercialization purposes, a role not largely covered within the current MEP system. This should include a role of technology or technical integrators, bringing multiple SMEs of perhaps divergent skills together to create a more complete application of technology(ies). Provide complete systems or sub-systems versus individual parts or pieces…larger value add to OEMs.

2. What role should future M-TACs play with respect to supply chain needs? How should OEMs participate? How can industry associations, professional societies, and other appropriate national organizations participate? M-TACs should have an active role as integrator with focus on application (response 1a above) and commercialization services as described in response 1.2. OEMs should participate and be encouraged to "delegate" technical, technology, etc specifications and requirements to the M-TACs who in turn would put together a plan and "team" if required to meet the OEMs needs.

3. Is there a particular long-term scalable and financially sustainable business model that should be implemented by future M-TACs that will enable small and mid-sized U.S. manufacturers to

effectively access and benefit from the technology transition and commercialization assistance and other resources they need? Participating SMEs should be expected and required to pay a success fee based on future revenue as it is realized (pay for performance). The success fee should be variable based on the SME's upfront financial investment to the project. The performance fees would generate funds to sustain the M-TAC beyond the initial public funding years.

a. Because of the programmatic connection to the NIST MEP Program, M-TACs may require cost share. Are there cost share models for future M-TACs that promote scale up to reach nationally dispersed clusters of small and mid-sized manufacturers? If so, what are those models, and why might they be successful? The financial model described above would generate cash match that should provide adequate cost share obligations after the first two or three years.

b. The generation of intellectual property is possible, and even likely as a result of M-TAC operations. What types of intellectual property arrangements and management constructs would promote active engagement of industry in these pilots, especially among small and mid-sized U.S. manufacturers that would be supportive of the business model? As appropriate, please include a set of potential options, and please explain your responses. IP arrangements must be flexible. For instance, if an SME pays 100% for M-TAC services from day one, then they should own any resultant IP. If on the other hand, they enter into a full or partial pay for performance (later) agreement the IP ownership should be shared. Perhaps SME has exclusive rights for a given industry for a set period of time and the M-TAC owns for all other applications.

4. How should an M-TAC's performance and impact be evaluated? What are appropriate measures of success for future M-TACs? Please explain your response including the value of the performance measure to business growth.Show citation box Standard NIST MEP survey impacts and financial reporting. In addition, financial reporting should measure progress achieving financial sustainability.

5. Are there any other critical issues that NIST MEP should consider in its strategic planning for future M-TAC investments that are not covered by the first four questions? If so, please address those issues here and explain your response. N/A